INTRODUCTION

Crises happen. Whatever line of business we are in and wherever we live, we inevitably face moments of danger or suspense, moments when a situation runs the risk of escalating in intensity and either interfering with business-as-usual or stopping it cold.

Crises come in all forms and degrees of intensity. Some let you know they are coming. Others strike without warning. Some are manmade and short-lived, involve few people and, although of concern at the time, are easily survived — like a malfunction of a popular station’s grill at lunchtime or being cited by the health department for a minor violation and having it reported by a local newspaper. At the opposite extreme, crises like Hurricane Katrina and 9/11 devastate everything in their path, force millions into harm’s way and disrupt survivors’ lives and businesses for years. Then there are crises that threaten to devastate communities and even nations on a massive scale — like an influenza pandemic or nuclear, biological and chemical hazard warfare.

Though crises are inevitable, their outcome is not predetermined. “Anyone who can predict and plan for a crisis or turning point in his or her business and personal life stands a far better chance of capitalizing on that opportunity than someone who allows the crisis to sneak up on him unprepared,” writes Steven Fink in Crisis Management: Planning for the Inevitable. Planning for and managing crisis, he says, “is the art of removing much of the risk and uncertainty to allow you to achieve more control over your own destiny.”

In today’s competitive, highly scrutinized business and industry environment, being able to control your own destiny is invaluable. With that in mind, SFM’s Critical Issues Conference Advisory Group selected a timely, prescient theme for this year’s meeting: “Planning for Crisis: Business Continuity for Food Services.” As additional support to its members, SFM introduces this “Crisis Management Toolkit, A Business Continuity Resource Guide.”

Divided into three sections, the toolkit provides a wealth of reliable recommendations about how to prepare for crises and what to do before and after they happen. The contents include big-picture information about crisis planning, risk management and putting together a plan. Offered as well are practical, ready-to-use materials — and supply checklists, contact and business continuity forms, sample business continuity planning guides, emergency supply checklists, reference tables, menus, tips for water and food safety management and much more. Everything here is designed to strengthen your continuity plan and increase its chances for success.

In Section One, “Planning for Crisis Response,” the stage is set for determining if you are at risk for crises and, if so, which ones, and what the possible impact of responding or not responding might be on your operation, your employees and the local community. After risk and response are determined, it is time to develop a pre-emptive, rather than reactive business continuity plan. It’s worth noting that in order for plans to be useful and effective, they must be complete, addressing each and every detail that might arise before, during and after a crisis. Though the process of developing a plan may seem laborious, when faced with a disaster or emergency, every moment of planning will pay off in human safety and business survival.

Section Two is about how to protect and secure your human and physical resources before, during and after different types of natural and manmade crises. Each crisis has its own inherent danger and each has its own agenda for management and survival.

Nothing is more important to crisis planning and response than the need for food and water safety and management. Crises can quickly put water and food supplies in jeopardy, thereby requiring emergency procedures such as boiling water, rationing supplies and systematic rotation of products when they can’t be held at proper temperatures.

Section Three offers sources and resources for all the subjects covered in the toolkit to help you customize your crisis management plan for your risks, your concerns and your business.

Planning for business continuity is an ongoing process. In order for you to keep current and pertinent information on hand, this toolkit is designed for a three-ring binder so you can easily replace and add materials as your own crisis management plan adapts to changing circumstances and priorities.

Lastly, this resource is being offered not just with a sense of industry responsibility, but also a sense of civic responsibility. In crisis situations, we are all dependent on each other. People in foodservice are in a pivotal position to make a special contribution to the welfare of great numbers of people who find themselves in need during a crisis. We hope this supports you when you are called upon to respond.
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**SOURCES & RESOURCES**

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Crisis management requires identifying potential crises and planning how to deal with them. In the face of a real crisis, crisis management includes evaluating the scope and impact of a disaster or emergency and intervening to minimize damage and begin the recovery process. Crisis management often includes a strong focus on public relations to repair any damage to public image and assure stakeholders that recovery is underway and survival is assured.


Crisis as defined in the dictionary as a critical point or situation in the course of anything; a turning point. It is a moment or brief period of danger or suspense, a decisive moment, a crucial time or a situation that has reached a critical phase.

Writes Steven Fink in Crisis Management: Planning for the Inevitable, “From a practical, business-oriented point of view, a crisis is any situation that runs the risk of:

• Escalating in intensity
• Falling under close media or government scrutiny
• Interfering with the normal operations of a business
• Jeopardizing the positive public image presently enjoyed by a company or its officers, or
• Damaging a company's bottom line in any way.”

Crises can be categorized into several categories.

• **Natural**, all of which involve physical threats during disasters and emergencies. Natural crises can include floods and flash floods, hurricanes, tornadoes, earthquakes, volcanoes, severe winter storms and heat waves. They also include influenza, influenza pandemics and other communicable diseases.

• **Manmade**, which also could threaten physical safety and security, consists of terrorism or threats, including nuclear, biological and chemical warfare (NBC), fires, hazardous spills, violence in the workplace, workplace accidents, strike or work stoppages, protests, sexual harassment allegations, extortion threats, security leaks, lawsuits, discrimination allegations, employee threats, employee death or injuries, computer breaches, security leaks, employee scandals, illegal employee behavior, equipment malfunctions, loss of key executives, OSHA violations, rumors that will damage company reputation and whistleblowing.
• **Public relations**, in which negative publicity is generated.
• **Strategic**, including new technology, products or competitors.
• **Financial**, which reduces short-term liquidity or cash flow.

Four different and distinct phases or stages of a crisis are defined by Fink.

1) **Warning (pre-crisis).** This stage alerts you to the fact that a crisis is coming. It is easier to manage a crisis in this stage. As with many illnesses, while it is possible to save a patient's life during the acute stage of an illness, it is much safer and more reliable to take care of the problem before it becomes acute, before it erupts and causes possible complications. Sometimes this stage is hard to recognize or recognizable only after the acute crisis has hit when one is looking back to identify the warning signs that were missed.

2) **Acute crisis.** In many ways, this is the “point of no return.” This phase tells you the crisis has erupted. Though it is often the shortest phase, it may feel like the longest because of its intensity. With proper planning, it will not explode in your face and you may choose when and where you want it to erupt, giving yourself more ability to control the flow, speed, direction and duration of the crisis.

3) **Chronic crisis.** “The clean-up phase or post-mortem can linger indefinitely, sometimes for many years. Crisis management plans can and do shorten this phase.”

4) **Crisis resolution.** In this phase, the company is recovered. But be forewarned: crises historically evolve in cyclical fashion and crisis cycles make it difficult to see where one ends and another begins.

Though crises of one kind or another are inevitable, the outcome is not certain. “Anyone who can predict and plan for a crisis or turning point in her or her business or personal life stands a far better chance of capitalizing on that opportunity than someone who allows the crisis to sneak up on him unprepared,” writes Fink. “Crisis Management is the art of removing much of the risk and uncertainty to allow you to achieve more control over your own destiny.”

According to the Beginner's Guide to Management website, “Crisis management is a means of proactively preparing a company, school or organization for the worst-case scenario. This process involves brainstorming potential crises, then planning how to deal with them in a way that will minimize fallout to your company…Crisis management means identifying the nature of a current crisis, stepping in to minimize damage and recover from the crisis, and even working the public relations angle to prevent harm to the company’s reputation.”

**Identifying Risks & Risk Analysis**

How do you know if you are at risk of having a crisis? How vulnerable are you to crises, whether they are minor or catastrophic? How likely is a crisis to happen? What is the probability? What will be the impact? What is the severity of the foreseeable hazards? How much damage could the crisis cause? What is the cost of responding? How will the response be perceived by those working inside the company, stockholders and other owners, and the public? Based on the answers to these questions, you can determine how to what degree you need to respond.

The approach to determining answers to all these questions is known as risk management. More and more companies are incorporating risk management into their operating procedures to minimize the detrimental effect crises can have on the business and employees.

Risk management is the systematic application of management and engineering principles, criteria and tools to optimize all aspects of safety within the constraints of operational effectiveness, time and cost throughout all operational phases. To apply the systematic risk management process, the composite of hardware, procedures and people that accomplish the objective must be viewed as a system.

One exemplary program that has been adapted by government agencies and corporations for their specific use was developed by the Federal Aviation Administration, “Operational Risk Management,” Chapter 15, FAA System Safety Handbook, December 2000.

Risk management, as discussed throughout FAA’s handbook is pre-emptive, rather than reactive, the introduction states. “This approach is based on the philosophy that it is irresponsible and wasteful to wait for an accident to happen, then figuring out how to prevent it from happening again. We manage risk whenever we modify the way we do something to make our chances of success as great as possible, while making our chances of failure, injury or loss as small as possible. It’s a common-sense approach to balancing the risks against the benefits to be gained in a situation and then choosing the most effective course of action.”

In this and other similarly designed risk management programs, there are several steps. These include:

- Identifying the hazards
- Assessing the risks
- Analyzing risk control measures
- Making control decisions
- Implementing risk controls
- Supervising and reviewing.

**Conduct A Vulnerability Analysis**

Identifying the hazards, assessing the risks and analyzing risk control measures, or, in other words, assessing the probability and potential impact of each crisis, are frequently determined by conducting a “vulnerability analysis.”

The following from the “Emergency Management Guide for Business and Industry,” a publication sponsored by a public-private partnership with the Federal Emergency Management Agency (FEMA), identifies the steps in this facet of risk management.

Use the **Vulnerability Analysis Chart** in this section to guide the process, which entails assigning probabilities, estimating impact and assessing resources, using a numerical system. The lower the score, the better.
List Potential Emergencies
In the first column of the chart, list all emergencies that could affect your facility, including those identified by your local emergency management office. Consider both:
1) Emergencies that could occur within your facility
2) Emergencies that could occur in your community.

Below are some other factors to consider:
Historical: What types of emergencies have occurred in the community, at this facility and at other facilities in the area?
   a) Fires
   b) Severe weather
   c) Hazardous material spills
   d) Transportation accidents
   e) Earthquakes
   f) Hurricanes
   g) Tornadoes
   h) Terrorism
   i) Utility outages

Geographic: What can happen as a result of the facility’s location? Keep in mind:
   a) Proximity to flood plains, seismic faults and dams
   b) Proximity to companies that produce, store, use or transport hazardous materials
   c) Proximity to major transportation routes and airports
   d) Proximity to nuclear power plants.

Technological: What could result from a process or system failure? Possibilities include:
   a) Fire, explosion, hazardous materials incident
   b) Safety system failure
   c) Telecommunications failure
   d) Computer system failure
   e) Power failure
   f) Heating/cooling system failure
   g) Emergency notification system failure.

Physical: What types of emergencies could result from the design or construction of the facility? Does the physical facility enhance safety? Consider:
   a) The physical construction of the facility
   b) Hazardous processes or byproducts
   c) Facilities for storing combustibles
   d) Layout of equipment
   e) Lighting
   f) Evacuation routes and exits
   g) Proximity of shelter areas.

Regulatory: What emergencies or hazards are you regulated to deal with? Analyze each potential emergency from beginning to end. Consider what could happen as a result of:
   a) Prohibited access to the facility
   b) Loss of electric power
   c) Downed communication lines
   d) Ruptured gas mains
   e) Water damage
   f) Smoke damage
   g) Structural damage
   h) Air or water contamination
   i) Explosion
   j) Building collapse
   k) Trapped persons
   l) Chemical release.

Estimate Probability
In the Probability column, rate the likelihood of each emergency’s occurrence. This is a subjective consideration, but useful nonetheless. Use a simple scale of 1 to 5 with 1 as the lowest probability and 5 as the highest.

Assess the Potential Human Impact
Access the potential human impact of each emergency — the possibility of death or injury. Assign a rating in the Human Impact column of the Vulnerability Analysis Chart. Use a 1 to 5 scale with 1 as the lowest impact and 5 as the highest.

Assess the Potential Property Impact
Consider the potential property impact for losses and damages. Again, assign a rating in the Property Impact column, 1 being the lowest impact and 5 being the highest. Consider:
   1) Cost to replace
   2) Cost to set up temporary replacement
   3) Cost to repair.

Assess the Potential Business Impact
Consider the potential loss of market share. Assign a rating the Business Impact column, Use a 1 to 5 scale with 1 as the lowest impact and 5 as the highest. Consider:
   1) Business interruption
   2) Employees unable to report to work
   3) Customers unable to reach facility
   4) Company in violation of contractual agreements
   5) Imposition of fines and penalties or legal costs
   6) Interruption of critical supplies
   7) Interruption of product distribution.

Assess Internal and External Resources
Next assess your resources and ability to respond. Assign a score to your Internal Resources and External Resources. The lower the score, the better.

To help you do this, consider each potential emergency from beginning to end and each resource that would be needed to respond. For each emergency, ask these questions:
• Do we have the needed resources and capabilities to respond?
• Will external resources be able to respond to us for this emergency as quickly as we may need them, or will they have other priority areas to serve?

If the answers are yes, move on to the next assessment. If the answers are no, identify what can be done to correct the problem. For example, you may need to:
   1) Develop additional emergency procedures.
   2) Conduct additional training.
   3) Acquire additional equipment.
   4) Establish mutual aid agreements.
   5) Establish agreements with specialized contractors.

Add the Columns
• Total the scores for each emergency. The lower the score, the better. While this is a subjective rating, the comparisons will help determine planning and resource priorities — the subject of the pages to follow.
You are now ready to develop the plan.

Additional information about vulnerability analyses (from FAA System Safety Handbook, Chapter 15)

Ranking Risks
Based on a vulnerability analysis, you can rank your risks in several categories, reflecting degrees of severity. They are:

- **Identified risk:** This is risk that has been determined to exist using analytical tools. The time and cost of analysis efforts, the quality of the risk management program and the state of the technology involved affect the amount of risk that can be identified.
- **Unidentified risk:** Some risk is not identifiable or measurable but is no less important for that. Mishap investigations may reveal some previously unidentified risks.
- **Total risk:** The sum of identified and unidentified risk. Ideally, identified risk will comprise the larger proportion of the two.
- **Acceptable risk:** The part of identified risk that is allowed to persist after controls are applied. Risk can be determined acceptable when further efforts to reduce it would cause degradation of the probability of success of the operation or when a point of diminishing returns has been reached.
- **Unacceptable risk:** That portion of identified risk that cannot be tolerated, and must be either eliminated or controlled.
- **Residual risk:** The portion of total risk that remains after management efforts have been employed. Residual risk consists of acceptable risk and unidentified risk.

Benefits Defined. Benefits of risk reduction are not limited to reduced mishap rates or decreased injuries but may also be realized as increases in efficiency or mission effectiveness. Benefits are realized through prudent risk-taking. Risk management provides a reasoned and repeatable process that reduces the reliance on intuition.

Acceptability of Risk. Risk management requires a clear understanding of what constitutes unnecessary risk, i.e., when benefits actually outweigh costs. Accepting risk is a function of both risk assessment and risk management and is not as simple as it may first appear.

- Some degree of risk is a fundamental reality.
- Risk management is a process of tradeoffs.
- Quantifying risk does not in itself, insure safety.
- Risk is often a matter of perspective.
- Realistically, some risk must be accepted. How much is accepted, or not accepted, is the prerogative of the decision authority. That decision is affected by many inputs. As tradeoffs are considered and operation planning progresses, it may become evident that some of the safety parameters are forcing higher risk to successful operation completion. When a manager decides to accept risk, the decision should be coordinated whenever practical with the affected personnel and organizations and then documented so that in the future everyone will know and understand the elements of the decision and why it was made.

General Risk Management Guidelines
- All human activity involving technical devices or complex processes entails some element of risk.
- Hazards can be controlled; they are not a cause for panic.
- Problems should be kept in perspective.
- Judgments should be based upon knowledge, experience and mission requirements.
- Encouraging all participants in an operation to adopt risk management principles both reduces risk and makes the task of reducing it easier.
- Good analysis tilts the odds in favor of safe and successful operation.
- Hazard analysis and risk assessment do not replace good judgment; they improve it.
- Establishing clear objectives and parameters in risk management works better than using a cookbook approach.
- No one best solution may exist. Normally, there are a variety of alternatives, each of which may produce a different degree of risk reduction.
- Tact is essential. It is more productive to show a mission planner how he can better manage risk than to condemn his approach as unworkable, risky, unsafe or unsound.
- Seldom can complete safety be achieved.
- There are no “safety problems” in planning or design, only management problems that may cause accidents, if left unresolved.

**SOURCES**

For more on crises and crisis management, including risk management, refer to the following sources and sources in Section Three of the Toolkit.

Fink, Steven, *Crisis Management: Planning for the Inevitable*. Ordering information at www.amazon.com


## Vulnerability Analysis Chart

<table>
<thead>
<tr>
<th>TYPE OF EMERGENCY</th>
<th>Probability</th>
<th>Human Impact</th>
<th>Property Impact</th>
<th>Business Impact</th>
<th>Internal Resources</th>
<th>External Resources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High 5</td>
<td>High Impact 5</td>
<td>1</td>
<td></td>
<td>Weak Resources 5</td>
<td>1 Strong Resources</td>
<td></td>
</tr>
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<td></td>
<td>Low 1</td>
<td>Low Impact</td>
<td></td>
<td></td>
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*The lower the score the better*

*Source:* "Emergency Management Guide for Business and Industry," a publication sponsored by a public-private partnership with FEMA.
Recent terrorist events in the U.S. underscore the importance of workplace evacuation planning. Consequently, OSHA developed an Evacuation Planning Matrix to provide employers with planning considerations and on-line resources that may help employers reduce their vulnerability to a terrorist act or the impact of a terrorist release. Terrorist incidents are not emergencies that OSHA expects an employer to reasonably anticipate. However, if a terrorist release does occur in or near your workplace, an effective evacuation plan increases the likelihood that your employees will reach shelter safely.

Since terrorism can impact employers and workers, OSHA is committed to strengthening workplace planning and preparedness so that employers and workers may better protect themselves and reduce the likelihood that they may be harmed in the event of a terrorist incident. OSHA continues to work with other federal response agencies including the Federal Emergency Management Agency (FEMA), the Environmental Protection Agency (EPA), the U.S. Soldier Biological and Chemical Command (SBCCOM), the Centers for Disease Control and Prevention (CDC) and, within CDC, the National Institute for Occupational Safety and Health (NIOSH) to provide accurate, current information in this rapidly developing area of occupational safety and health.

Assessing the Risk of a Terrorist Release
OSHA draws on the FBI definition of terrorism and defines terrorist release as the release of a chemical, biological, radiological or nuclear material, commonly identified as a Weapon of Mass Destruction (WMD), or of another hazardous substance, performed as a violent act dangerous to human life and intended to further political or social objectives.

In order to use evacuation guidance effectively, an employer must first assess the risk of a terrorist release in the workplace. The level of risk is a combination of workplace vulnerabilities, recognized threat and anticipated consequences of the event. This kind of assessment is not a typical safety and health evaluation. However, guidance on conducting such an assessment is becoming more widely available. For many employers, “Best Practices in Workplace Security,” a homeland security guide developed by the State of South Carolina and available online at www.llr.state.sc.us/workplace/Full%20Report.pdf [PDF], (see in this chapter) can offer valuable assistance. Its Worksite Risk Assessment List [PDF] helps employers assess risk based on the following terrorism risk factors:
- Uses, handles, stores or transports hazardous materials.
- Provides essential services, e.g., sewer treatment, electricity, fuels, telephone, etc.
- Has a high volume of pedestrian traffic.
Has limited means of egress, such as a high-rise complex or underground operations.

Is considered a high profile site, such as a water dam, military installation or classified site.

Is part of the transportation system, such as shipyard, bus line, trucking, airline.

If these risk factors apply to your work site and cannot be eliminated, you may face greater vulnerability to a terrorist release than other workplaces. To assess the potential threat and consequences of a terrorist release at or near your workplace, consult local law enforcement, the local FBI and/or the local emergency planning committee LEPC (see EPA's LEPC database online at www.epa.gov/ceppo/lepclist.htm). You will need information provided by these agencies to complete your overall risk assessment and to determine which of the three risk zones noted below best characterizes your workplace.

Chemical facilities can use the U.S. Department of Justice's Chemical Facility Vulnerability Assessment Methodology, online at www.ojp.usdoj.gov/nij/pubs-sum/195171.htm, to assess workplace vulnerabilities. Although this document also discusses threat and consequence assessment, you still will need input from local law enforcement, local FBI and/or your local LEPCs to complete your evaluation.

Using OSHA's Evacuation Planning Matrix

The matrix is not a compliance tool for conducting a comprehensive compliance evaluation of an emergency plan developed to comply with the Emergency Action Plan Standard (29 CFR 1910.38) or the Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120(q)). Rather, this document covers the general aspects of emergency planning and includes broad questions to help employers review their existing plan in light of an indoor or outdoor terrorist release. The document also offers basic planning and preparedness measures for workplaces in each of three risk zones and on-line resources for assistance. After you complete the terrorism risk assessment, review the description of each risk zone to see where your workplace fits best, then examine the planning considerations for that zone.

NOTICE

OSHA offers this guidance to assist employers and workers who are interested in implementing plans and procedures that may reduce the likelihood of a terrorist incident and reduce the effect of a terrorist release, should a terrorist incident occur at a workplace. However, the guidance does not create legal obligations for employers or create rights for third parties. Legal obligations under the OSHA Act are created by statute, regulations and standards.

Note: If you do not have an emergency plan and want to determine whether OSHA requires you to have one, please see “Does Your Facility Need an Emergency Action Plan?” (www.osha.gov/dep/evacmatrix/evacplan_appa.html).

OSHA Terrorist Release Risk Categories

OSHA shows the zones in the shape of a pyramid to represent how the nation’s workplaces appear to be distributed within the zones. Based on information currently available, the vast majority of American workplaces are at low risk for a terrorist release, i.e., are in the Green Zone. The questions, recommendations and on-line resources in each risk zone build on those in the zone below it. For example, the Yellow Zone includes both the information in the Green Zone and additional information for Yellow Zone workplaces.

Green Zone:

Workplaces that are not likely to be a target for a terrorist release because they are characterized by limited vulnerability, limited threat and limited potential for significant impact (consequence).

Note: If the workplaces near you seem to be in a higher zone, you may wish to review and implement the planning/preparedness considerations in the Yellow Zone.

Yellow Zone:

Workplaces that may be targets because they are characterized by high vulnerability or high threat or a potentially significant impact (consequence), but not more than one of these.

Note: If the workplaces near you seem to be in a higher zone, you may wish to review and implement the planning/preparedness considerations in the Red Zone.

Red Zone:

Workplaces that are most likely to be targets because they are characterized by two or more of the following: high vulnerability, high threat and potentially catastrophic impact (consequence). Such workplaces need to consider sheltering employees in place as well as evacuation, and may consider assigning some terrorist incident response roles to their own employees.

Note: The color-coded risk levels in the Matrix do not equate to the Threat Levels in the Homeland Security Advisory System developed by the Department of Homeland Security. However, employers that place themselves in the Yellow or Red risk levels may consider implementing sequential preparedness measures consistent with those listed in the “Homeland Security Presidential Directive - 3” (describes Threat Levels, at: www.whitehouse.gov/news/releases/2002/03/20020312-5.html) for federal agencies.
Limitations of Guidance
Because of the vast number and types of workplaces in the U.S., the Matrix provides broad information applicable to most workplaces. If you want to modify your plan to address specific considerations, you can get additional information from on-line resources identified. For additional information about workplace emergency planning, see OSHA's Emergency Response Technical Links webpage (www.osha.gov/SLTC/emergencypreparedness/index.html).

As a nation, our understanding of the risk of terrorist releases and the agents involved continues to evolve. It is likely that OSHA’s recommendations for preparedness, training and equipment also will evolve. OSHA remains committed to helping employers and workers protect themselves from the risk of terrorism in the workplace and is working closely with other federal agencies to provide employers with current information and guidance.

The Evacuation Planning Matrix can be accessed online at:
www.osha.gov/dep/evacmatrix/index.html
Use this diagram to develop a workplace security plan for your company. Have you conducted a risk assessment of your business? If your answer is no, consider these questions: What are your hazards? Focus on the materials, services and transportation areas of your business. What is the probability that the hazards could be used in acts of terrorism/sabotage? How can you reduce or eliminate the hazard/hazards?

If your risks can’t be reduced or eliminated, then you must manage them through security and crisis management. Assess and address the security of your employees and work site. What and where are your vulnerabilities?

Next, develop a crisis management plan for your business so that if your company is the subject of a terrorist act, you and your employees can successfully respond and recover from the event. If you already have a plan in place, go to page 36 in the Appendices [on the website] to review the model Crisis Management Plan located there to determine if your plan is up to date and whether revisions/modifications are needed.

For the safety of you, your employees, your company and our state, you must: Prepare, Prevent and Protect.
# Worksite Risk Assessment List

## Identify your risks

The following set of questions entitled “Worksite Risk Assessment List” is a starting point to identify worksites thought to have the highest level of risk as a target. Answer the questions and identify factors that may place your worksite at a higher risk of an intentional harmful act. If you answer YES to any of the questions, then proceed to the next section to better understand the risk assessment process and to begin applying risk management techniques in eliminating, reducing, or mitigating these risks.

Does your work site USE, HANDLE, STORE or TRANSPORT Hazardous Materials?  □ YES □ NO  If YES, what category of Hazard?

<table>
<thead>
<tr>
<th>Chemicals</th>
<th>Biological/Infectious Materials</th>
<th>Other Potential Hazards</th>
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<tbody>
<tr>
<td>• Flammable liquids, solids or gases</td>
<td>• Select Agents</td>
<td></td>
</tr>
<tr>
<td>• Toxic or Poisonous Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Corrosive Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reactive Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Oxidizers or Organic Peroxides</td>
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</tbody>
</table>

Does your work site Provide Essential Service?  □ YES □ NO  If YES, which of these services fits your worksite?

<table>
<thead>
<tr>
<th>Utility Provider</th>
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<tbody>
<tr>
<td>• Electricity, Sub-stations, etc.</td>
</tr>
<tr>
<td>• Fuels, pipelines, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Telephone, Internet, Radio, TV, Computer Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sewer Treatment Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Law Enforcement, Fire Services, Health Care, Public Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Law Enforcement</td>
</tr>
<tr>
<td>• Fire Services</td>
</tr>
<tr>
<td>• Health Care</td>
</tr>
<tr>
<td>• Public Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Potential Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Does your work site have a High Volume of Pedestrian Traffic?  □ YES □ NO  If YES, what type of facility creates the traffic?

<table>
<thead>
<tr>
<th>Airport</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Open Stadium</td>
</tr>
<tr>
<td>• Inside Arena</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High Rise Office Complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Entertainment event</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditorium</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Entertainment event</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Large Shopping Mall</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Entertainment Park</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
</table>

Does your work site have a Limited Means of Egress?  □ YES □ NO  If YES, which describes the reason for limitation?

<table>
<thead>
<tr>
<th>High Rise Complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bridges/Tunnels</td>
</tr>
<tr>
<td>• Major Traffic Activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Underground Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
</table>

Does your work site have a High Volume of Incoming Materials?  □ YES □ NO  If YES, what type of materials?

<table>
<thead>
<tr>
<th>Mail and Small Packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mail and Small Packages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Import and Export of Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Import and Export of Materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bulk Packages, Materials, Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bulk Packages, Materials, Equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
</table>

Is your work site considered a High Profile Site?  □ YES □ NO  If yes, what is near your worksite?

<table>
<thead>
<tr>
<th>Located Close Proximity (1/4 mile) to Other Characterized Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Located Close Proximity (1/4 mile) to Other Characterized Sites</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Higher Media/ Public Relations Impact (Landmark etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Higher Media/ Public Relations Impact (Landmark etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Military Installation</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Classified Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Classified Site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
</table>

Is your work site considered Transportation Related?  □ YES □ NO  If YES, what type of transportation?

<table>
<thead>
<tr>
<th>Airlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Airlines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bus Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bus Lines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trucking</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Train/Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Train/Rail</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicle Rental/Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cars, Trucks, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
</table>

**Prioritize the Risks**

Use the worksheet below with the rating method shown, to prioritize risks (See example outlined on chart below):

**Risk Rating Technique**

**What could happen?**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Catastrophic (possibility of human fatality, multiple injuries or massive destruction/disruption)</td>
</tr>
<tr>
<td>2</td>
<td>Medium (no fatalities expected, moderate destruction/disruption)</td>
</tr>
<tr>
<td>1</td>
<td>Low (nuisance, little to no injuries or destruction/disruption)</td>
</tr>
</tbody>
</table>

**Chance Rating Technique**

**What is chance/likelihood?**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
</tr>
<tr>
<td>1</td>
<td>Low</td>
</tr>
</tbody>
</table>

Based on these simple rating techniques, choose your priorities based on those receiving the highest score to be addressed first and work down the list.

**WORKPLACE RISK PRIORITIZATION WORKSHEET**

<table>
<thead>
<tr>
<th>Activity Or Event Which Could Be A Risk</th>
<th>What Could Happen?</th>
<th>Risk Rating</th>
<th>Chance Rating</th>
<th>Risk Management/Prevention To Take</th>
<th>Prioritization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Ammonia</td>
<td>Release to general populations resulting in eye irritation, difficulty breathing or death, depending on amount released.</td>
<td>3</td>
<td>1</td>
<td>Increase plant security; review procedures for storing/handling/transfering; keep inventory low; have alarm system; have emergency action plan with drills and assessment of drills; educate community on hazards and actions to take during release.</td>
<td>3 X 1 = 3</td>
</tr>
</tbody>
</table>

|  | X = |  |
|  | X = |  |
|  | X = |  |
|  | X = |  |
|  | X = |  |

Example
Does Your Facility Need an Emergency Action Plan?

This checklist is provided only to identify an employer’s need to develop an emergency action plan in compliance with the Emergency Action Plan standard (29 CFR 1910.38). It does not alert you to other OSHA standards that may be associated with your emergency plan or to the additional OSHA standards that apply to your facility.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are fire extinguishers provided in the workplace?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the fire extinguishers intended for employee use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will any of your employees be required to evacuate the workplace?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you answered “no” to either of the first two or “yes” to all three questions then you are required to develop an EAP. Otherwise, you should continue with the questions in the table below.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your facility use a total flooding extinguishing system that provides any one of the following design concentrations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 4% or greater of Halon 1211?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 4% or greater of carbon dioxide?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 10% or greater of Halon 1301, or concentrations exceeding 7% when egress from an area cannot be accomplished in one minute?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your facility use a fire detection system with alarms or devices that are delayed by more than 30 seconds for reasons other than a total flooding extinguishing system listed above?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you required to comply with 29 CFR 1910.119 Process Safety Management?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you required to comply with 29 CFR 1910.272 Grain Handling Facilities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you required to comply with 29 CFR 1910.1047 Ethylene Oxide?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you required to comply with 29 CFR 1910.1050 Methylenedianiline?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you required to comply with 29 CFR 1910.1051 1,3-Butadiene?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you plan to evacuate all of your employees and to rely on an outside party to provide emergency response to a hazardous substance release?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** if a hazardous substance emergency could occur at your facility and you plan to have any of your employees participate in the emergency response, you are required to have an emergency response plan consistent with 29 CFR 1910.120(q) (Hazardous Waste Operations and Emergency Response).

If you answered “YES” to any one of the questions above, you are required to develop an emergency action plan in compliance with the Emergency Action Plan standard (29 CFR 1910.38).

Source: www.osha.gov/dep/evacmatrix/evacplan_appa.html
Business continuity and disaster recovery are processes that help organizations prepare for disruptive events. They are designed for risk avoidance. The event may be as overwhelming as Hurricane Katrina and the terrorist attacks on 9/11 or as annoying as the breakdown of a critical piece of equipment right before peak production begins.

The two phrases “business continuity planning” and “disaster recovery” are often used synonymously. However, business continuity planning is a comprehensive approach to making sure your business continues after a disaster or emergency. Disaster recovery, on the other hand, refers to the process by which business is resumed after a disruptive event. Disaster recovery plans are usually included in business continuity planning. How both are implemented has impact on a business’s ability to function after a disruptive event until its normal facilities and systems are restored.

A Disaster Action Plan Checklist

This checklist provides a guide for the key steps to go through in developing a Disaster Action Plan, beginning with the establishing of a Crisis Management Team to the specification of procedures for dealing with supplies, logistics, communications, training and exercises/drills, and more. These key steps make up the essentials of a Disaster Action Plan — they should be employed by any type of facility and are the minimum requirements for dealing with any kind of disaster. The material found in the chapters in Section Two of this toolkit provide additional guidelines for dealing with specific categories of emergency situations, such as natural disasters, acts of terrorism and outbreaks of disease.

The crisis management team

- Identify members of a core team with defined roles for preparedness and response planning. The planning process should include representatives from the business (bank, etc.), the company liaison to foodservice, the contract company, if applicable, employees at various levels and unions, if applicable.
- Identify the roles and responsibilities of each employee or position.
- Who are the people required to keep the essential parts of the business running?
- Get the support of all senior-level managers for the entire disaster action plan.
- What are the core skills required to keep the business running?
• What training is required?
• Are there sufficient back-ups for people and skills in view of absence (if employees can’t come to work)?
• Identify a pool of retirees, volunteers, etc., who may be able to provide back-up.
• Can you train and prepare an ancillary workforce?
• If there is a pandemic or other reason people shouldn’t or can’t get to work, who are core people required to manage the disease contingency plan? These people should consider social distancing — even working from home, very early in the pandemic phase. Who will supervise their work? Who will perform functions they are performing while onsite?
• Are there any systems that rely on periodic physical intervention by a key individual to keep them going? How long would the system last without attention if there was no one looking after it?

Prepare a business impact analysis
• Conduct a risk assessment for your business and department to determine how likely each of the disasters is and what the possible impact each will have on your business in the short, medium and long term. For example, the risk assessment level for an earthquake in Vermont is low, whereas the risk assessment level for a hurricane in Florida is very high.
• Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services before, during and after a crisis. How will this affect your purchasing? Need for supplies? Allocation of resources?
• Under certain disaster situations, foodservice may be asked to cater off-site locations. Plan for the need to obtain additional food and employee-hours in a crisis situation.
• Determine the effect of disruption on the business. This will determine how much money should be allocated for establishing back-up systems, remaining open or shutting the doors of a dining facility, arranging transportation for employees, etc.
• Build in recovery time. Business can’t necessarily get up and running immediately. How will you phase into normal operating procedures?

Chain of command during a crisis
• Identify people who can back up those with key roles if key people can’t perform their functions.
• Do you need to train anyone so he/she will be prepared? If so, what training will you offer?

Plan for each type of disaster
• Develop specific checklists for each type of disaster. Though many steps/procedures are similar before, during and after any crisis, there are variations based on the types of storms, contamination, contagious diseases, etc.
• Develop short-, medium- and long-range plans. It is not always possible to predict how long a disaster such as a terrorist attack or a pandemic will last.

Suppliers
• Who are the essential suppliers, vendors and service providers required to maintain business operations by location and function? Meet with these individuals to determine what they might be able to provide during a crisis.
• Determine what to do if suppliers cannot make deliveries.
• Identify and contact your competitors in the local area. In times of crisis, you may need to contact a competitor for assistance, support, supplies, etc.

Supplies
• Purchase emergency supplies and find a safe, secure place to store them.
• Develop a system of evaluation and replacement so items are up-to-date, functioning and ingestible.

Logistics
• Identify exit and evacuation routes.
• Identify limited and/or restricted areas of access. What will be the impact during a crisis?
• Familiarize yourself with the location where deliveries are made. Could those areas be restricted during a crisis? If so, what alternative plans must be made?
• Specify the means of identification needed for internal employees, visitors, suppliers, emergency personnel. Do they need badges? ID’s? What information is required?
• Determine who is allowed in various departments. Is media allowed?
• Determine where employees’ personal items should be stored.
• Decide how inspections of the contents of employee lockers, computers, bags and automobiles will be handled, if needed.
• Select a place for the storage of emergency supplies, including items such as flashlights, and also food and water.
• Set up systems for sanitary procedures. Remember, water supplies may be cut off.
• Develop plans for use of alternate work sites.

Security and safety
• Determine who can enter foodservice areas and who will give them access.
• Determine which companies and individuals can deliver food and supplies, the types of vehicle they use, license plate numbers and proper identification.
• Review contracts with suppliers to make sure their food handling practices support your need for a Hazard Analysis of Critical Control Point (HACCP) system. Review all “normal” procedures for receiving and storage and use this to determine if you can remain HACCP compliant during a disaster.
• Set up a system for monitoring areas where supplies are delivered and stored. Theft and contamination must be deterred as much as possible. What system is in place to detect missing products and damages? What is the system for reporting such abnormalities? Look for shipments containing abnormal odors, liquids and powders.
• Call in an engineer to determine if your entrances and exits are secure. Check also trash removal areas, loading docks and any areas with access to and from the building.
• If a disaster causes food and water damage or contamination, determine how to secure and/or remove these products so they will not be consumed.
• Select a site for storage of hazardous chemicals.
• Select a site for storage of personal protective equipment.
• Set up procedures for dishwashing and cleaning of equipment.
• Set up procedures for determining if the water is safe to drink and/or use for other purposes.
• Determine what you will do to detect power outages and gas and chemical leaks.
• Set up a system for validating computer security systems.

Sustenance
• Develop menus that can be implemented with and without use of power.
• Determine which pieces of equipment should be used if you have power.
• If you don’t have power, what is your back-up plan?
• Determine levels of service in order of priority. Are you equipped to serve visitors, emergency service providers and others who may need food and water? Are you able to handle employees’ families if they should arrive at the facility?
• Consider purchasing MREs (meals ready-to-eat) rather than stocking all the essential foods. These have a long shelf-life, and though they aren’t as tasty as your cuisine, nutrition rather than taste and enjoyment should take precedence during a crisis.

Communications
• Select a key command person in charge of communications who can set up systems, including the monitoring of incoming and outgoing calls, giving instructions to staff and facilitating communication for any reason.
• Collaboration is a must. Work with business leaders in different departments to develop a plan. Once the plan has been developed, it must be tested. Then, it must be disseminated to everyone who may be affected by a crisis.
• Set up a system for notifying employees about the crisis and communicating with them during and after a crisis.
• Develop contact lists for crisis hot lines, employees, emergency services, vendors and suppliers.
• Develop lists of outside individuals/agencies that provide emergency assistance, such as the Red Cross, fire and police departments and hospitals.
• Set up procedures by which you recommend sources of professional help to employees. Some companies have strict regulations governing this practice.
• Identify employees and key customers with special needs and incorporate the requirements of such persons into your preparedness plan. Inform everyone on your staff what procedures will be taken.
• Devise communication materials that provide employees with information they will need so as to understand what might happen during an emergency or disaster and what is expected of them during this time.

Media communications
• Establish a crisis communication team.
• Determine who is the “spokesperson” for the company.
• Identify precise procedures for handling media calls and requests for interviews. Also, plan for surprise visits.
• If you are authorized to speak with the media, anticipate questions you will be asked and answers you will give, along with their political and social implications.

Business planning for absence
• Determine the critical numbers and skills required to keep essential sectors of the business running. At what absence level does business stop?
• Determine who will make the decision to shut sections of the business down when absence rates threaten safe business continuity.
• Determine if people can logistically work from home (social distancing).

Knowledge management
• Knowledge will need to be stored in easily accessible shared locations, because key people may become sick or die.
• Consider setting up shared locations for contingency planning information.
• Determine where essential business information should be stored.
• Arrange for back-up of all data, including laptop computers.
• Determine if you will be able to access data upon disaster recovery.

Training and exercises/drills
• Set schedules for disaster and emergency training.
• Set up practice sessions. The most advanced sessions should simulate as much projected “reality” as possible.
• Debrief, revising your plan as needed.
• Don’t scrimp on the costs of planning and training. During the testing phases, address all possible weaknesses and gaps and fix them in the next draft of the disaster action plan.

Establish policies to be implemented during and after a crisis
• Establish policies for employee compensation and sick-leave absences unique to the situation (storm, pandemic, etc.) Will transportation be subsidized?
• Establish policies for flexible worksite (e.g., telecommuting) and flexible work hours (e.g., staggered shifts).
• Establish policies for handling pandemics. (See “Business Pandemic Influenza Planning Checklist,” Section Two, Chapter Two.)
• Set up authorities, triggers and procedures for activating and terminating the company’s response plan, altering business operation and transferring business knowledge to key employees.

10 no-compromise basics your detailed, written plan should cover
1) Develop a core team with defined roles and responsibilities. Do not exclude any function or activity. Select locations where you, your core team and employees will go if your facility is shut down or inaccessible.
2) Designate employees who will serve a back-up function in emergency situations, in case those employees with primary responsibilities in an emergency are unavailable.
3) Analyze risk. What is the likelihood of disasters in your area? Develop specific plans and procedures for each possible disaster.

4) Have a well-defined communication plan, including a communication “tree” which clearly indicates how to communicate with internal employees during and after a disaster and what to do if telephone lines and/or cells aren’t working. Test methods of communication under disaster scenarios among employees, with customers and with the world outside your facility.

*Remember:* Develop lists of all individuals with whom you may need to communicate. These lists include business and home telephone, cell phone and pager numbers, email addresses, and other pertinent information, such as personal contacts.

5) Require all employees, including management staff, to participate regularly in training programs, which should include everything that will prepare employees for expected and unexpected events during an emergency or disaster: the emergency and disaster plan, the disaster feeding plan, the location of all food, water and supplies, procedures for the safe and sanitary handling of food, water, supplies and any other materials and interaction with other departments. Emergency procedure practice drills are crucial. During practice drills, be sure the hypothetical scenarios are presented with sufficient realism to engage the emotions of employees. It is necessary to see how employees react under stress. In addition, emergency procedure practice drills should be conducted so as to reveal where there are weaknesses in planning or in employee performance. Evaluate every drill and work to improve errors or shortcomings.

6) Contact suppliers and establish plans for business continuity in many different situations. Remember that access to your facility may be limited, if not impossible, during a disaster.

7) Take steps to ensure that local emergency response agencies — firefighters, police and EMTs — become familiar with your facility and that you develop good working relationships with them.

8) Keep enough food, water and supplies on hand to survive for a minimum of 3 days and preferably 7 days. Disasters can be unpredictable and you must be prepared.

9) Take care of yourself as much as possible, because if you become ill or weak, you can’t lead and help others.

10) Be sure to update your disaster action plan whenever there are changes in personnel, equipment or the facility as a whole, such as redesigns.

**SOURCES**

Centers for Disease Control and Prevention (CDC), [www.cdc.gov](http://www.cdc.gov)


CSO magazine, [www.csoonline.com](http://www.csoonline.com)
Excerpted from a presentation made by
Carol Sherman, R.D., senior director, Food
and Nutrition Services, NYU Medical
Center, to members of the Society for
Healthcare Foodservice Management
(HFM) following the terrorist attack on the
World Trade Centers in New York City on

After an incident such as the disaster of 9/11, we were
reminded that we must always be ready for the unexpected.
[NYU Medical Center is on the East Side of Manhattan about
two miles from the World Trade Centers in downtown.] We
never know what will happen. In New York City, we’ve faced
September 11, blackouts, blizzards, a transit strike, and we
have proven ourselves capable of providing service in these
unexpected emergency situations. While we hope that
events in the future will be less dramatic, one never knows
and we need to be ready to deal with the unexpected.

We responded to the disaster, putting into action our disaster
plan, which included everything from preparing to receive
injured victims to turning off HVAC units and closing windows
to eliminate dust and debris from entering the building,
then moved into a process of recovery. Among the many
considerations we had to make involved support staff. For
example, ask yourselves, during and after a disaster, how
will your staff get through security lines to get back and forth
to work? How will you be prepared for the huge undertaking
of cleaning? How will you be prepared to cook thousands
of additional meals? How will you secure and relock your
supplies?

You will need disaster plans for your facility, the department
and those used by the state and local authorities. Consider
your location: What are the natural geographic borders?
Rivers, mountains, lakes, dams, bridges, tunnels and/or major
highways. How would your governor or mayor react? And
how quickly will you get support from FEMA, the Salvation
Army and/or Red Cross?

Among the personal attributes required in an emergency: be
flexible, think on your feet, a can-do, we-will-get-through-this
attitude, and have the ability to communicate very succinctly
about what your situation is.

Initial inventory. First, assess the immediate situation: How
much food is on hand? Is the water supply safe? Will you get
deliveries? Do you need to ration food and supplies?

Your requirements will increase. You must consider
providing food and services for: 24-hour staff in E.R., O.R.,

SECTION ONE
CHAPTER TWO
DISASTER PLANNING
ambulatory, administration, blood bank, morgue attendants, state and local government officials, rescue workers, FBI, military personnel, Office of Emergency Management, volunteers, family members and the press.

Maintain critical supply lines. Keep vendor, home and cellular phone numbers and photocopy driver’s licenses and truck registrations. Remember, in the aftermath of a terrorist attack, the police and National Guard will inspect every truck.

Utility emergency management. You must know what equipment is on a generator. What gas equipment do you have? What steam equipment do you have? Is your steam provided by the electric company?

However you develop your plans, they need to be: written and understood by all, rehearsed, periodically revised, distributed and flexible. Your staff must be able to react without you!

Emergency management

There are four phases of activities:

1) Mitigation: Alternate food preparation responses.
2) Preparedness: How many people will you need to feed for how long for different types of emergencies, e.g., natural disasters versus terrorism? What is the potential for needing and getting re-stocks?
3) Response.
4) Recovery.

Also part of emergency management is initiating the plan and then continuing operations after a disaster.

Hazard Vulnerability Analysis

As part of emergency management, you must conduct a hazard vulnerability analysis (HVA): an identification of hazards and the direct and indirect effect these hazards may have on the hospital. Hazards may be those found in the community, with consideration of things such as bioterrorism or chemical attacks.

A hazard vulnerability analysis includes:

- Identifying the emergencies/disasters most likely to strike your organization and community.
- Determining probable impact if they occur…
  - On your hospital or healthcare organization.
  - On your dietary and foodservices department.
  - On your staff’s ability to work and do their jobs.
  - On your ability to operate nutrition services under these emergencies.

Conducting a HVA. Analyze risk, including: 1) probability, 2) risk, 3) preparedness, and 4) possibilities, such as bioterrorism.

What are the possible threats to a healthcare organization? These include: security (bombs, civil disturbance, terrorist incident, workplace violence and normal security of services); utility failures (medical gases, central vacuum, sewer, natural gas, emergency generator and HVAC); weather (earthquake, snow, winds, hurricane, cold and heat); and structural implications (earthquake, chemical spill, explosion and flooding).

Other aspects of conducting a HVA. You will need to: give a proactive response, focus efforts and resources and drive future drills. For every drill, run the “what if…” scenarios regarding dietary and nutrition care services. For example: Would a 2-week food supply be sufficient in this situation? Water supply? Heat source? How would we function if the cooks would not come to work for a week? How to sanitize? How safe is our food supply? And so forth.

Preparing for managing utilities

- Plan: Can you still prepare patient meals if there’s a major utility outage? Consider disruption, electricity, gas line, water supply and sewers. What’s your backup plan for each utility lost?
- Processes: These include risk criteria and addressing the impact on utility systems.
- Maintenance and operation strategies.
- Education/orientation: users and maintainers.
- Annual evaluation.

How can you provide service: Your “What if…” Plans

What if…Your garbage is not picked up?

- Be prepared with 3 mil. garbage bags that will hold garbage without leaking, with twist ties that can be tightened to control garbage.
- Have a place in mind where you can stack them.

What if…You don’t have power?

- Be prepared: get as much as possible on generators as soon as possible.
- For long disasters, generators can go out, or you may not be able to have your power on generators. Have flashlights, extra batteries and miners’ hats with lights. Make sure your staff knows where they are.

What If…You don’t have dishwashing service (or enough employees to wash dishes)?

- Be prepared with 10 days of single-serviceware. This include paper plates, cups, bowls, wire chafing dishes, plastic utensils and napkins.

What If…You don’t have hand washing facilities?

- Have hand sanitizer that does not need water.
- Maintain an increased inventory of sanitizing chemicals.

What If…You don’t have water to sanitize your counters?

- Be ready with cleaning cloths and chemicals that do not require rinsing after use.

What If…You have contaminated patients requiring service?

- Be prepared with extra gloves, disposable clothing cover-ups, masks and eye shields.
- Have extra disposable trays and single-serviceware.

What If…Deliveries are delayed?

- Have bottled water available: 2 liters per person per day.
- Have a minimum of three days readily available food and supplies for patients/customers and staff.
- Go from marked menus to therapeutically compliant “pot luck.”
What If…You can’t get deliveries?
• Get a police escort for vendors’ delivery trucks to help get you your supplies.

What If…You don’t have elevators?
• Have a plan of action on getting food up or down stairs. Maybe you need to form a stair brigade of bagged meals.

What If…You don’t have cafeteria steam tables?
• Have wire chafing dishes, sterno and matches. JCAHO requires that if you have more than one box of sterno, it must be stored in a fire-proof box.

What If…You have emergency support staff in need of meals?
• Have extra bread and sandwich meats in the freezer, as well as extra canned goods such as tuna fish, peanut butter and jelly.
• Have extra frozen convenience items ready to be reheated.

What If…Others look to you for support?
• What will you do if you are faced with supporting upset or grieving families or shell-shocked emergency staff?

What If…Other service providers look to you for support?
• Be ready with food and coffee, pitchers of ice water.
• Be ready with tissues, headache preparation, antacid, Band-Aids, pads and pencils.
• Know how to hook up with support counselors such as psychologists.

What If…You are unable to go home?
• Keep a change of clothes, sleepware, comfortable shoes, tooth brush, toothpaste, cleanser, make-up, glasses, contact lens supplies, etc., in your office.
• Keep several days’ worth of your prescription drugs in your desk.

What If…You need to mobilize volunteers?
• Be ready to accept and train volunteers and put them into appropriate garb. Have available extra plastic gloves and aprons, and hats or hair nets.

What If…You lose services?
• Back up your computer information on a regular basis, and keep a current back-up off-site.
• Always have your ID badge with you.

What If…You are supporting upset service providers?
• Provide an area of respite.
• Have social services provide support.
• Maintain confidentiality.

What If…Your operation closes?
• You can take your expertise elsewhere to offer help.

Who can you count on???
• The police to support your deliveries in and out. Make these arrangements with your internal security. Initiate this now!
• Staff
  — Provide a phone matrix to the leaders.
  — Staff should have their ID card or badge in their possession at all times.
• Volunteers
  — Make arrangements with your hospital volunteer department in advance. Think about what type of additional staffing you may need.
  — Describe the specific needs of your department such as cooks, bakers or general staffing.
• Your local grocery stores and vendors
  — Make arrangements in advance with your local beverage company.
  — Find out if your local supermarket will give you first preference in the event of a disaster.
  — Check if a local bakery can support your bread needs.
• Suppliers
  — Know your vendors’ emergency plans.
  — Provide a list of emergency foods and paper goods they should deliver automatically in the event of an external disaster.
  — Provide vendors in advance with a letter on hospital stationary that will allow them to display in the truck windshield: “Hospital Emergency Delivery.”
  — Arrange in advance for a refrigerated truck in the case of a disaster.

How do you communicate?
• Set up a Communications Tree for foodservice.
• Communicate with your employees during the disaster.
• Make arrangements for employees to communicate with their families.
• Refer press contacts to Public Affairs.

Establish a Departmental Command Center. But remember, the following may or may not work! Telephones, cell phones (with extra chargers), pagers, E-mail and Walkie-Talkies. Face-to-face contact may be the only reliable method of communicating.

Dealing with bomb scares. You must 1) deal with rumors, 2) investigate, 3) reassure staff, and 4) evacuate patients first.

Government Assistance
• Get directions from local, city, state and federal agencies, including the Department of Health, the Centers for Disease Control and FEMA.
• Keep detailed records of items distributed and to whom for possible reimbursement from grants.

Preparing for the Loss of the Use of Your Physical Plant. Will your cafeteria be used as a triage area, an area to provide care for mass casualties? How will you feed people if there is a loss of preparation areas? Be prepared to work in debris.

Foodservice evacuates last—we stay and feed customers!

Preparing for Bioterrorism
• Listen, read, know, be alert.
• Bioterrorism is the deliberate release of pathogenic microorganisms (bacteria, viruses, fungi or toxins) into a community.
• Know the possible agents, how they are transmitted and the symptoms: anthrax, Botulism Toxin (Botulism, plague, smallpox and Tularemia).
• Be aware that salad bars can be contaminated.
• A hospital may have showers outside for decontamination.
• Have tight policies for isolation trays with supplies on hand and make sure staff is well trained.
• Make sure staff is prepared to serve contaminated people.

**History Involving Food and Water**

- **1916-1918**
  - Germany used anthrax and glanders to infect livestock and animal feed exported to Allies. German agents in the U.S. inoculated horses, mules and cattle with glanders before being shipped to France.

- **1984**
  - Ghagwan Shree Rajneesh.
  - Cult members cultivated Salmonella in their basement.
  - Contaminated salad bars in restaurants and grocery stores in the Dulles, Oregon, area.
  - 750 cases of Salmonellosis (many hospitalized, no deaths).

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**Vulnerable food supply**

- Few states raise more than 30% of what their residents consume.
- Most cities have only a 5-day food supply.
- On average, a person's food travels 1,300 miles from field to table.

**Why is the food supply vulnerable?**

- Many foods consumed raw (salads, fruit, dairy).
- Refrigeration preserves agent.
- May require lower dose than aerosol (depends on agent used).
- Cruder agent preparation.
- Biotoxin may resist heat.
These guidelines should be used to develop a specific action plan for each potential emergency. Tasks range from identifying external resources to provide temporary shelter and food for staff and employees, as well as assigning staff specific responsibilities in responding to emergencies. The steps in the plan are to be documented on the attached Emergency Task Assignment Sheet and Emergency Task Tracking Form.

Source: New York University Student Housing, 2005, used with permission.

**Task Assignment**

1) Review each event [potential emergency] and determine what response is appropriate.
2) Determine the tasks to be performed, prioritize the tasks and assign response activities [to specific individuals].
3) A task is identified and initiated by any functional unit and documented on page 1 of the Emergency Task Assignment Sheet. The first section of the form is completed as follows:
   a. Subject: A title or brief description of the task.
   b. Description: A description of the task objective. This section is also used to identify individual sub-tasks in an outline fashion for tasks involving multiple activities.
   c. Additional sub-tasks may also be identified and added to the task description (the task assignment sheet is a working document).
   d. Whenever sub-tasks are added, the head of the Dining Services department and/or a vice president overseeing Dining Services must be informed.
   e. Name of individual originating task.
   f. Estimated duration of the task.
   g. Assigned To: Denotes the facility(ies) and area(s) impacted by the task.
4) Prior to performance of a task, Dining Services shall consult with other key emergency response personnel and discuss the following, as applicable.
   a. Sequencing and logistics for accomplishing the task. Ensure that enough support is provided to Dining Services staff.
   b. Existing or potential hazards to personnel (for example, oxygen levels, explosive atmosphere, electrical, steam, obstructions, toxic substances).
   c. Time constraints for performance of the task activities.
5) Tasks will be given a unique task identification number to allow tracking and prioritization of support activities.
6) Once assigned, activities are prioritized and traced on the Emergency Task Tracking Form to provide a dynamic overview of support activities conducted during the emergency.
7) Dining Services personnel assigned responsibility for a task will:
   a. Provide the requested support.
   b. Document the results as appropriate. Additional pages may be added to the assignment sheet to describe newly identified sub-tasks or further discuss results. The objective of the task documentation is to provide enough information to allow reconstruction of events and historical information to relief personnel, not to chronicle the activity in the detail of an incident report to the detriment of necessary support functions.
   c. Close out the task when completed by filling out the completion and time blocks at the bottom of page 1.
   d. Provide status updates to the head of Dining Services or the vice president overseeing Dining Services, as appropriate.
# EMERGENCY TASK ASSIGNMENT SHEET

*Source: New York University, 2005, used with permission*

<table>
<thead>
<tr>
<th>TASK</th>
<th>Page 1 of ___</th>
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<tbody>
<tr>
<td>Subject:</td>
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<tr>
<td>Description:</td>
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## ASSIGNED TO

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<td>Specify:</td>
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## ASSIGNMENT

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<thead>
<tr>
<th>Facilities Staff:</th>
<th>Task No:</th>
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## Emergency Task Tracking Form

*Source:* New York University, 2005, used with permission

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<th>No.</th>
<th>Task</th>
<th>Condition</th>
<th>Priority</th>
<th>Status/Resolution</th>
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<td>Incident Initiating Conditions</td>
<td>Routine Incident</td>
<td>Developing Incident/Community Alert</td>
<td>Immediate Threat</td>
<td>Campus Wide Emergency</td>
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<tr>
<td>I. Fire/Explosion</td>
<td>(a) Smoke without fire; (b) Spurious fire alarm due to alarm malfunction or inadvertent activation; or (c) A small fire that is contained and extinguished with minimal damages.</td>
<td>(a) A small explosion with minimal or minor damages. (b) A fire involving, or potentially involving, more than one building; or (c) Fire or explosion in a facility containing radiological or hazardous material that results in a loss of power, detectors, alarms, or instrumentation for more than 60 minutes and no other detection method is available.</td>
<td>(a) A fire or explosion causing significant property damage and/or any injury to students, faculty, or staff, or affecting public health/safety, or affecting 2 or more buildings, and/or causing evacuation(s); (b) A fire or explosion in a facility that actually or potentially results in an uncontrolled release of radioactive or hazardous material exceeding the criteria in Immediate Threat II or IV below; or, (c) Explosion in hazardous/radiological material storage area.</td>
<td>(a) Fire or explosion in a facility that results in an uncontrolled release of radiological/hazardous material exceeding the criteria in Campus Wide Emergency II or IV below.</td>
</tr>
<tr>
<td>II. Release of Hazardous Substances (including Regulated Pollutants, Oil, and Potentially Infectious Materials)</td>
<td>(a) Minor hazardous substance spill cleaned up immediately by those in the spill area. No response team required.</td>
<td>(a) Any unplanned release of hazardous substances (airborne or other) on campus. (b) Localized hazardous substance contamination causing personnel exposures exceeding protective action criteria. (c) Hazardous material is unaccounted for, lost, or stolen.</td>
<td>(a) Actual or potential release of hazardous substances to the environment which would exceed protective action criteria at or near the point of release; or, (b) Any unplanned release of hazardous substances from off campus requiring protective actions by NYU personnel. (c) Significant hazardous substance contamination that requires the evacuation of a facility due to personnel exposures exceeding protective action criteria.</td>
<td>(a) Actual or potential release of hazardous substances to the environment which would exceed protective action criteria at or beyond 30 meters from the point of release. (b) Significant hazardous substance contamination that results in significant consequences, such as exceeding protective action criteria for people on campus; or, (c) Terrorist attack, including Biological, Chemical, or any Weapon of Mass Destruction.</td>
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<td>III. Asbestos Incident</td>
<td>(a) Small Asbestos discovery/release, which is contained and requires minimal clean up.</td>
<td>a) Asbestos release requiring considerable cleanup and closing of the immediate area; or, (b) Asbestos release in a public space that impedes ingress/egress.</td>
<td>a) Asbestos release resulting in closing down a building and/or evacuation.</td>
<td>(a) Building collapse where asbestos is released to the surrounding area.</td>
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<tr>
<td>Incident Initiating Conditions</td>
<td>Routine Incident</td>
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<tr>
<td>IV. Release of Radioactive Material</td>
<td>(a) Any unplanned radioactive release (airborne or other) on campus. (a) Localized Radiological contamination causing personnel exposures exceeding radiological protective action criteria. (c) Radioactive material is unaccounted for, lost, stolen, or present in an unauthorized location.</td>
<td>(a) Actual or potential release of radioactive material to the environment which would result in a dose exceeding radiological protective action criteria at or near the point of release; or, (b) Radioactive release from off-campus requiring protective actions by NYU personnel. (a) Significant radiological material contamination that requires the evacuation of a facility due to personnel exposures exceeding radiological protective action criteria.</td>
<td>(a) Actual or potential release of radioactive material to the environment which would result in a dose exceeding radiological protective action criteria at or beyond 30 meters from the point of release; (b) Significant radiological material contamination that results in significant consequences, such as exceeding protective action criteria to individuals on campus; or, (c) Terrorist attack, including Radiological, or any Weapon of Mass Destruction.</td>
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<tr>
<td>V. Medical and Casualty Incidents</td>
<td>(a) Student, faculty, or staff overdose on drugs, patient conscious; or, (b) Student, faculty, or staff needs medical assistance or has minor injury.</td>
<td>(a) Student, faculty, or staff overdose on drugs, unconscious, moved to health facility; or, (b) Student, faculty, or staff serious illness, injury.</td>
<td>(a) Campus Wide Health Alert - Meningitis - Flu - Other contagious disease; or, (b) Student, faculty, or staff fatality.</td>
<td>(a) Any accident/incident including poisoning (food/otherwise), illness, epidemic, hazardous material exposure, Chemical/Biological attack, etc. causing injuries, sickness, or casualties to a large group of people.</td>
</tr>
<tr>
<td>VI. Criminal Acts</td>
<td>(a) Missing Student; (b) Sexual Assault; (c) Bias Incident; (d) Significant quantity of drugs discovered; or, (e) Student arrested.</td>
<td>(a) Criminal act resulting in possible loss or theft of radiological or hazardous material; (b) Missing Student, violence suspected; (c) Robbery with/without injury; (d) Bias incident with injury; (e) Armed Individual on Campus; (f) Firearms discovered (excluding imitations); or, (g) Large quantity of drugs discovered.</td>
<td>(a) Murder or serious assault/injury; (b) Kidnapping or hostage taking on campus; (c) Extortion or sabotage event on campus; (d) Criminal act resulting in release of radiological/hazardous material exceeding the criteria in Immediate Threat III or IV above; or, (e) Actual or potential arson.</td>
<td>(a) Criminal act resulting in release of radiological/hazardous material exceeding the criteria in Campus Emergency III or IV above; (b) Actual or potential detonation of explosive device (bomb threat); or, (c) Terrorist attack, including Biological, Chemical, Radiological, or any Weapon of Mass Destruction.</td>
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<tr>
<td>Incident Initiating Conditions</td>
<td>Routine Incident</td>
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<tr>
<td>VII. General Items of Security Concern</td>
<td>(e) An occurrence, which requires the immediate assistance from off-campus security resources due to overtaxing on-campus response resources.</td>
<td>(a) An occurrence, which requires the immediate assistance from off-campus security resources due to overtaxing on-campus response resources.</td>
<td>(a) Protests, labor activities, or riots.</td>
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<tr>
<td>VIII. Loss of Public Utility Incident</td>
<td>(a) Loss of campus electrical power for more than 10 minutes.</td>
<td>(a) Loss of campus electrical power, steam, heat, or water service for more than 60 minutes; (b) Loss of electrical power, detectors, alarms or instrumentation for more than 60 minutes at a facility containing radiological or hazardous materials and no other detection method is available; (c) Gas leak; or, (d) Water Main Break.</td>
<td>(a) Loss of campus electrical power, steam, heat, or water service for more than 8 hours; (b) Loss of electrical power, detectors, alarms or instrumentation for more than 8 hours at a facility containing radiological or hazardous materials and no other detection method is available; (c) Gas leak, serious levels of gas, turn off from contractor or utility forthcoming; or, (d) Water Main Break, see Floods above.</td>
<td>(a) Loss of campus electrical power, steam, heat, or water service, no imminent return; (b) Loss of electrical power, detectors, alarms or instrumentation, no imminent return, at a facility containing radiological or hazardous materials and no other detection method is available; (d) Gas leak, dangerous levels of gas, turn off from utility or contractor not imminent; or, (e) Water Main Break, see Floods above.</td>
</tr>
<tr>
<td>IX. Floods from Internal Sources</td>
<td>(a) Minor flooding coming from pipe breaks/leaks, roof leaks that can be fixed with minor repair.</td>
<td>(a) Serious flooding coming from pipe breaks/leaks, roof leaks covering an entire floor or more, emergency repairs needed, contractor cleanup needed; (b) Leak or flood where the water has entered, or is moving towards, an area where water reactive materials are stored.</td>
<td>(a) Major flooding from water main break or similar. Involves 2 or more buildings. Public health and safety affected.</td>
<td>(a) Major flooding from water main break or similar. Involves many buildings and affects the majority of the campus. Public health and safety seriously affected.</td>
</tr>
<tr>
<td>X. Natural Phenomena</td>
<td>(a) Any severe weather advisory.</td>
<td>(a) A severe thunderstorm, snowstorm or ice storm is imminent for the NYU campus with a potential for severe property damage and/or any health and safety risks to students, faculty or staff.</td>
<td>(a) Any confirmed earthquake; (b) A hurricane forecast to directly hit NYU within the next 2 hours; (c) Any sustained winds on campus in excess of 75 mph; or, (d) A tornado directly hitting NYU.</td>
<td></td>
</tr>
<tr>
<td>Emergency Classifications</td>
<td>Routine Incident</td>
<td>Developing Incident/ Community Alert</td>
<td>Immediate Threat</td>
<td>Campus Wide Emergency</td>
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<td>------------------------------------------------</td>
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</tr>
<tr>
<td>XI. Aircraft/Vehicular Accidents (On or near Campus)</td>
<td>(a) Vehicle Accident, minor damage to vehicle(s), no injuries.</td>
<td>(a) Vehicle Accident, significant damage to vehicles and/or some student, faculty or staff injuries.</td>
<td>(a) Aircraft/Vehicle accident causing fire or explosion, significant damage to a campus building, and/or serious personnel injury, or affecting public health and safety; or, (b) Vehicle accident involving radiological or hazardous material. See II or IV above.</td>
<td>(a) Aircraft/Vehicle accident causing fire or explosion, significant damage to 2 or more buildings, and/or mass personnel injury, or significantly affecting public health and safety.</td>
</tr>
<tr>
<td>XII. Government State of Emergency</td>
<td>(a) Declared State of Emergency by the City of New York, State of New York, or Federal Agency affecting the NYU Campus.</td>
<td>(a) Disaster or Catastrophe in any of the communities surrounding the NYU Campus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XIII. Discretionary</td>
<td>(a) In the opinion of the Incident Commander, conditions are such, or could deteriorate to require additional support and/or notifications.</td>
<td>(a) In the opinion of the Incident Commander conditions are such, or could deteriorate to require additional support and/or notifications for a Developing Incident.</td>
<td>(a) In the opinion of the Incident Commander conditions are such, or could deteriorate to require additional support and/or notifications for an immediate Threat.</td>
<td>(a) In the opinion of the Incident Commander conditions are such, or could deteriorate to require additional support and/or notifications for a Campus Wide Emergency.</td>
</tr>
</tbody>
</table>

1 Hazardous Substance Protective Action Criteria

Emergency Response Plan Guidelines (ERPQ) are values are intended to provide estimates of hazardous concentration ranges where one reasonably might anticipate observing adverse effects as a consequence of exposure to the specific substance.

Threshold Limit Value-Ceiling (TLV-C) is a ceiling exposure limit, which should not be exceeded under any circumstances.

Short term exposure limit (STEL), represented as STEL or TLV-STEL, is the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures.

Short Term Public Exposure Guidance Level (SPEGL) is a suitable concentration of a substance in air (as a gas, vapor, or aerosol) for unpredicted, single, short-term, emergency exposure of the general public. Only five SPEGLs have been developed: hydrazine, dimethylhydrazine, monomethyl hydrazine, nitrogen dioxide, and hydrogen chloride. While applicable to spill response situations, the short list of SPEGLs covers only a small fraction of the large number of chemicals that may spill and pose a risk to the public.

Emergency Exposure Guidance Level (EEGL) is a concentration of substance in air (as a gas, vapor, or aerosol) that will permit continued performance of specific tasks during rare emergency conditions, lasting for periods of 1 to 24 hours.

2 Radiological Protective Action Criteria

1 Rem TEDE (Total Effective Dose Equivalent)
5 Rem Thyroid:
### EMERGENCY KIT CHECKLIST

**RECOMMENDED ITEMS**

<table>
<thead>
<tr>
<th>Have in House</th>
<th>Items</th>
</tr>
</thead>
</table>
| **Always On Hand** | - NOAA Weather Alert Radio with Specific Area Message Encoding (S.A.M.E.)  
- Working smoke detectors and fire extinguisher |
| **Portable Emergency Supplies** | - A lightweight backpack or tote bag to hold items listed below  
- Portable radio (AM-FM, battery operated) with 12 spare batteries. Check batteries every four months to make sure they are working. Wind-up radios are also useful with solar cells for back-up.  
- Flashlights (5) with 12 spare batteries each. Check batteries every four months to make sure they are working.  
- Non-toxic chemical lightsticks to be taped next to light switches for emergency use  
- Portable, battery-operated television (with 12 spare batteries)  
- Walkie-Talkie radios with spare batteries  
- Candles or battery-operated lamps  
- Sturdy matches with long sticks  
- Cell phone with extra batteries. Check batteries every four months to make sure they are charged.  
- Whistle on a cord  
- Garbage bags that will hold garbage without leaking with twist ties that can be tightened to control garbage  
- 10 days’ supply of single-serviceware: disposable trays, paper plates, cups, bowls, wire chafing dishes with sterno and matches, plastic utensils, napkins  
- Hand sanitizer that does not need water  
- Increased inventory of sanitizing chemicals  
- Cleaning cloths and chemicals that do not require rinsing after use  
- Gloves, disposable clothing cover-ups, masks and eye shields  
- Aprons, hats and hairnets  
- Plastic bags for individual food portions  
- First aid/trauma kit (see “Chapter 9, “Medical Emergencies”)  
- Paper supplies, including pencils, note pads, markers, tissues, paper plates, towels, napkins and toilet paper  
- A camera, with extra batteries and film, or a disposable camera, to record damage. |
| **Food and Water** | - *Food:* Have on hand a minimum of a 3-day supply. Some recommend a 7-day supply. |
### Have in House

<table>
<thead>
<tr>
<th>Items</th>
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<tbody>
<tr>
<td>- <strong>Water:</strong> Most states and emergency response teams require and/or suggest a 3-day supply of water be kept on hand. Some states require a 7-day supply. It is recommended that a minimum of 1 gallon of water is needed per person per day (some recommend as much as 5 gallons per person per day) for drinking, cooking and personal hygiene. In hot and humid climates and during heat waves and for children, nursing mothers and ill people, as much as 1 gallon may be needed per person for drinking.</td>
</tr>
<tr>
<td><strong>Individual provisions</strong></td>
</tr>
<tr>
<td>- Backpack or carrying case for items</td>
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<tr>
<td>- Change of clothes</td>
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<tr>
<td>- Comfortable shoes</td>
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<tr>
<td>- Personal hygiene supplies, such as toothpaste, tooth brush</td>
</tr>
<tr>
<td>- Cleanser</td>
</tr>
<tr>
<td>- Make-up</td>
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<tr>
<td>- Prescription eyeglasses and/or contact lenses and supplies</td>
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<tr>
<td>- Medical prescriptions — 7 day supply</td>
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<tr>
<td>- Pain relievers (aspirin, ibuprofen, Tylenol, etc.) — 7 day supply</td>
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<tr>
<td>- Multiple vitamins — 7 day supply</td>
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<tr>
<td>- Spare change for public phone and vending machines</td>
</tr>
<tr>
<td>- Pair of strong work gloves</td>
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<tr>
<td>- Pair of walking shoes and socks</td>
</tr>
<tr>
<td>- Warm long-legged and long-sleeved clothing</td>
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<tr>
<td><strong>Also have available</strong></td>
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<tr>
<td>- Cash and/or ATM and credit card</td>
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<tr>
<td>- A full tank of gas in your car and trucks used for transporting goods</td>
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<tr>
<td>- Extra gasoline (if storage is available)</td>
</tr>
<tr>
<td>- Shovel</td>
</tr>
<tr>
<td>- Crow bar</td>
</tr>
<tr>
<td>- Jack, hoisting</td>
</tr>
<tr>
<td>- Tarps, 2</td>
</tr>
<tr>
<td>- Duct tape, 2 rolls (2)</td>
</tr>
<tr>
<td>- Cord, nylon, 50’</td>
</tr>
<tr>
<td>- Light sticks, 25</td>
</tr>
<tr>
<td>- Tape, hazardous, yellow, roll</td>
</tr>
<tr>
<td>- Garbage bags, large, 100</td>
</tr>
<tr>
<td>- Garbage bags, medium, 100</td>
</tr>
<tr>
<td>- Bio bags, roll</td>
</tr>
<tr>
<td>- Hardhats (one for each person)</td>
</tr>
<tr>
<td>- Goggles, eye, 1 pair per person</td>
</tr>
<tr>
<td>- Gloves, work, pair</td>
</tr>
<tr>
<td>- Gloves, nitrile, 50 pair</td>
</tr>
<tr>
<td>- Dust masks, 2 per person</td>
</tr>
<tr>
<td>- Blankets, 2 per person (more for padding for sleeping on floors)</td>
</tr>
<tr>
<td><strong>Technology, office supplies and emergency numbers</strong></td>
</tr>
<tr>
<td>- Unplug major non-vital appliances. Advanced surge-protection systems will protect your equipment from most power surges but will not prevent damage from a direct lighting strike.</td>
</tr>
<tr>
<td>- Raise all computers off the floor, remove any valuables, move equipment away from windows.</td>
</tr>
<tr>
<td>- Cover your computers and other equipment with plastic garbage bags.</td>
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<tr>
<td>- Put important papers in watertight containers (take them if you evacuate) and move valuables to upper stories of your home.</td>
</tr>
<tr>
<td>- Move all account records (paper) and all important materials to the inside rooms and/or to a vault if possible.</td>
</tr>
<tr>
<td>- Investigate the ability to take work with you.</td>
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<tr>
<td>- Update voicemail greeting with your current work location (if power is available).</td>
</tr>
<tr>
<td>- Keep critical phone numbers with you. Key numbers include those for family members, emergency and out-of-state contacts.</td>
</tr>
<tr>
<td>- Keep a current copy of emergency procedures with you and at home.</td>
</tr>
</tbody>
</table>
Have in House | Items
--- | ---
**General**
- Pay attention to local television and radio broadcasts for information about disasters and emergencies, such as storm position, intensity and expected landfall (if power is available).
- If you know someone who relies on electric-powered life-support equipment, be prepared to move that person to a facility outside of a storm’s projected path to avoid the risk of an extended power outage.
- Fill your sinks/pot washing sinks with water for sanitary purposes. Because water conducts electricity, it is not safe to run water during a storm.
- Secure outdoor furniture, bring indoors if possible.

Who Assembled Supplies

Name: ______________________________________________________________________________________________

Date: _______________________________________________________________________________________________
GUIDELINES & PROCEDURES for
DISASTERS & EMERGENCIES
What to do in crisis situations

NAME OF FACILITY or
CONTRACT MANAGEMENT COMPANY
CONTACT NUMBERS

Always call first: Crisis Management Hotline. These people will assess the level of crisis and notify the appropriate departments.

Crisis Management Hotline
1-8xx-xxx-xxxx

Group Risk Management
1-8xx-xxx-xxxx
For issues regarding insurance claims

Management Company Communications Department
1-8xx-xxx-xxxx
Crisis Planning

Why Plan Ahead

This brochure/information will help you plan for a crisis by identifying a course of action. The key to effective crisis management is planning. You need to be prepared before the crisis occurs because no one can foresee if and when a crisis will happen.

Crisis planning helps minimize surprise and indecision during the critical first few hours of a crisis. When the crisis strikes, it is too late to start planning.

Crisis planning helps you to:

1. Deal effectively with a variety of crisis-related issues that may arise;
2. Ensure accurate and timely release of information to all key audiences;
3. Manage and control the message being sent;
4. Minimize damage to the unit or company’s reputation.

Crisis planning and clear thinking during a crisis will help minimize the legal or other consequences related to a crisis.

Unit Managers and Associates

Please carefully review the Step-by-Step Procedures in this guide.

It is critical that everyone in the unit knows the crisis procedures. Make sure you fill in the appropriate numbers on the enclosed “emergency numbers” sticker and post it where everyone can see it.

Make sure all associates know how to:

1. Call for emergency aid (fire, client’s security, police, paramedics, etc)
2. Call the Crisis Management Hotline
3. Call their supervisor

Be sure all associates know how to respond to customer issues. If the customer thinks something is serious enough to bring to your attention, give it the proper attention. Quite often customer issues become crisis or media issues because the customer felt the situation had not been handled to their satisfaction or that the associate or management did not care.

Sample Crisis Situations

- Potential outbreak of foodborne illness
- Workplace accidents involving serious employee or customer injury
- Vehicular accident involving serious injury or death
- Product recall notice received other than from NAME OF COMPANY’s Purchasing Department
- Product tampering or contamination
- Explosion or fire in the unit
- Natural disaster (fire, flood, hurricane)
- Employee strike
- Boycott or picketing
- Boycott or picketing
- Notification from health agency of risk of foodborne illness due to employee health issue
- Crime incidents either to the unit, associate or customer (robbery, rape, kidnapping, etc)
Procedures

Step by Step Procedures

Should a crisis situation occur at your unit

1. Stay Calm. Call for emergency aid if needed.
   It is important that you think clearly and gather as many facts about the situation as quickly as possible.

2. Product Contamination
   If product contamination is involved, identify, clearly label and isolate the suspect product. Contact Purchasing immediately. (1.800.XXX.XXXX) If you heard about a product problem from a customer, be sure to get the customer’s name, address, phone, symptoms (if any), and any other information specific to the case. Product issues are very serious because they could have company-wide implications.

   If a customer was injured in any way, Contact Insurance Company at xxx xxx xxxx immediately.

3. Immediately contact the District Manager or District General Manager to alert him or her of the situation.
   If you are unable to reach your manager, call the Crisis Management Hotline at 1.8xx-.xxx-xxxx.

4. Inform ALL unit employees of the situation.
   Let them know what they should do regarding inquiries from the media and/or customers. See section below “Be prepared for possible media inquiries.” Be sure to leave telephone numbers and contact information for all unit personnel so they can always reach you. Stress confidentiality of crisis situations to all employees.

5. Be prepared for possible media inquiries.
   Should you receive any media calls regarding a crisis situation, refer all media calls to the NAME OF COMPANY’s Communications Department at 1.800.xxx.xxx or after hours page the Communications Department at 1.8x.xxx.xxx8. It is important to centralize and control the flow of information on addressing a crisis or potential crisis by funneling all media inquiries through the Communications Department for handling.

   Should you find yourself in a situation where you must speak to the media please review the section in this brochure, “Tips for Speaking to the Media.”
Tips for Speaking to the Media

There may be situations when the media shows up at your unit unexpectedly to get a comment about a crisis situation that might have occurred. You must be prepared. In a crisis situation anything you say can impact the image of our company and can have legal and other implications as well.

Speaking to the Media – A Few Tips:

- Always behave courteously with reporters.

- NEVER use the phrase “No Comment.” If you cannot comment on a situation, say so, but also say why. See “sample phrases” section of this brochure.

- Never ask the reporter if you can speak “off the record.” There is no such thing. If you don’t want to see it in print, don’t say it.

- Never get argumentative or hostile toward reporters – it will only make the situation worse.

- Keep your message simple. Make your statements brief and concise.

Here are some sample phrases you may use with the news media

Remember, always refer the media to the NAME OF COMPANY Communications Department 1.800.xxx.xxxx.

“We are looking into this matter at this time and, therefore, I am unable to comment on the situation. If you would like more information may I suggest you contact the NAME OF COMPANY Communications Department at 1.8xx.xxx.xxxx.”

If you are unaware of a situation or don’t have enough information . . .

“Please provide me all the information you have and I will have to check out this information. May I have your name and phone number so someone from our communications department can get in touch with you? What is your deadline?”

Make sure you call the Communications Department. It is important to let the Communications Department know who the reporter is and what the reporter is calling about so we can anticipate the call.
Emergency Numbers

1. Call for emergency aid if needed
2. Call your supervisor
3. Call the NAME OF COMPANY Crisis Management Hotline

Fire______________________________________________
Local Security _________________________________
Police ________________________________________
Paramedics ___________________________________
Unit Manager _____________________________
District Manager _________________________
Health Department _______________________

Crisis Management Hotline 1.8xx.XXX.XXXX
Company Communications Dept. 1.800.xxx.xxxx
Company Risk Management 1.800.xxx.xxxx
Company Purchasing Dept. 1.800.XXX.XXXX
Insurance Company 1.800.XXX.XXXX
High on the list of priorities when developing a crisis management plan is selecting the right people for the job and giving them the tools they need to perform effectively and efficiently.

“Decentralized organizations, which are so good at helping promote innovation in normal times, prove to be woefully inadequate in times of crisis. Crisis demands a rapid, centralized response and this, in turn, requires a very clear line of command and the ability to shift into what the military terms ‘war fighting mode’ rapidly.” So states Harvard Business School Professor Michael Watkins, writing for Harvard Business School’s Working Knowledge website.

The ability of a business and its onsite foodservice department to shift into an appropriate “mode” in order to respond appropriately and effectively during a crisis, whether small or catastrophic, begins with the planning process. Appropriate crisis management procedures should be determined well in advance of the actual occurrence of a crisis. In order for the plan developed to be implemented in an organized, deliberate and coordinated manner, the appropriate team must be selected and trained in the roles and responsibilities they are to assume when a crisis occurs.

The foodservice department should be represented on the core team because the services provided by the department are essential during many crises. Foodservice departments should have their own crisis management team that coordinates with the company’s or organization’s team.

Training must be included in the plan. Writing in CSO magazine, in an article titled “Scare Tactics,” March 2004, Daintry Duffy notes, “A study released by the American Management Association in December 2003 found that although many companies are doing a better job of crafting [crisis management] plans, they’re not training their employees to follow them. Of 146 companies and executives surveyed, 64 percent said they have a crisis management plan in place. And 62 percent have designated a crisis management team. However, only 42 percent of those respondents said they routinely conduct drills or crisis simulations to test those plans in action, and a mere 39 percent have trained their key personnel and managers in crisis management techniques.”
1. **Form the central core or permanent crisis management team.** This core team is involved in planning and overseeing the ongoing revisions of the crisis management plan, as well as its implementation. It will be charged with formulating the initial set of recommendations, which can be based on a vulnerability analysis — an assessment of the likelihood and probable impact of each type of emergency scenario. (See Section 1, Chapter 1, “Crisis & Risk Management.”)
   - The most effective core team is one that is comprised of people drawn from all levels of the organization. Some professionals recommend including select employees who represent mid-level management as well as hourly employees.
   - The “Emergency Management Guide for Business and Industry,” from FEMA, and various sources listed at the end of this chapter and in Section Three, “Sources and Resources,” suggest the following procedures for establishing the planning team.
     - The size of the planning team will depend on the facility’s operations, requirements and resources. Usually involving a group of people is best because:
       - It encourages participation and gets more people invested in the process.
       - It increases the amount of time and energy participants are able to give.
       - It enhances the visibility and stature of the planning process.
       - It provides for a broad perspective on the issues.
     - Determine who can be an active member and who can serve in an advisory capacity. In most cases, one or two people will be doing the bulk of the work. At the very least, you should obtain input from all functional areas. Remember:
       - Upper management
       - Line management
       - Labor
       - Human resources
       - Engineering and maintenance
       - Safety, health and environmental affairs
       - Public information office
       - Security
       - Community relations
       - Sales and marketing
       - Legal
       - Finance and purchasing.
     - Upper management should appoint participants in writing. Participants’ job descriptions could also reflect this assignment.

2. **Establish authority.** Demonstrate management’s commitment and promote an atmosphere of cooperation by “authorizing” the planning group to take the steps necessary to develop a plan. The group should be led by the chief executive or the plant or site manager. Establish a clear line of authority between group members and the group leader, though not so rigid as to prevent the free flow of ideas.

In addition, Bruce Blythe, author of **Blindsided: A Manager’s Guide to Catastrophic Incidents in the Workplace,** recommends including a blend of disciplines and a blend of personalities that are task-oriented and people-oriented on this and all crisis management teams. He also recommends that every crisis management committee identify two “champions.” “Champions are leaders, a committee’s driving force,” he writes. “There are typically two champions in company crisis planning: a senior-level champion and a logistical champion. The senior-level champion is the visionary. He ensures that the right financial and human tools are in place… and provides top management support. He will delegate to the logistical champion.”

“The logistical champion will actually lead the committee through its process. Ideally, this person will have deep and wide company contacts, and will be respected by people at all levels of the organization. He must have sufficient authority to make things happen.”

Another important matter is selecting the public spokesperson. Advises Steven Fink in **Crisis Management: Planning for the Inevitable,** “A common mistake often made by unprepared companies under siege is to assume the CEO automatically should be the spokesperson. The responsibility of the crisis management team is to put forth the spokesperson who will best present, explain and/or defend the company’s position. If this should happen to be the CEO, fine… But it might not be.”

3. **Issue a mission statement.** The chief executive or plant manager should issue a mission statement to demonstrate the company’s commitment to crisis management. The statement should:
   - Define the purpose of the plan and indicate that it will involve the entire organization.
   - Define the authority and structure of the planning group.

4. **Establish a schedule and budget.** Establish a work schedule and planning deadlines. Timelines can be modified as priorities become more clearly defined. Develop an initial budget for such things as research, printing, seminars, consulting services and other expenses that may be necessary during the development process.
   - Included in the budget might be resources for a crisis command post site within the company and at an off-site location. These posts must have back-up power generators, emergency food, water and other supplies.

5. **Form the plan implementation teams.** Department heads, managers and hourly employees in every department must be involved in the plan implementation. A chain of command must be established in which each person is assigned specific roles and responsibilities on each team. On the team should be crisis response leaders who are at the top of the chain of command. You may need several teams at strategic points and locations.

Blythe presents a few points to consider:
   - Are team leaders able to stay calm under pressure?
   - Do they have good communication skills so they can give clear directions?
   - Are they take-charge-type individuals who can make decisions and exercise good judgment?
   - Is the team multidisciplinary?
Training can take many forms:

2. Training Activities

   a)  Conduct reviews after each training activity. Involve both community responders in — How the session will be evaluated and documented.
   — When and where each session will take place
   — What training activities will be used
   — Who will do the training
   — Who will be trained

   b)  Consider how to involve community responders in — How the session will be evaluated and documented.
     — When and where each session will take place
     — What training activities will be used
     — Who will do the training
     — Who will be trained

   c)  Orientation and education sessions. These are regularly scheduled discussion sessions to provide information, answer questions and identify needs and concerns.

   d)  Tabletop exercise. Members of the emergency management group meet in a conference room setting to discuss their responsibilities and how they would react to emergency scenarios. This is a cost-effective and efficient way to identify areas of overlap and confusion before conducting more demanding training activities.

   e)  Walk-through drill. The emergency management group and response teams actually perform their emergency response functions. This activity generally involves more people and is more thorough than a tabletop exercise.

   f)  Functional drills. These drills test specific functions such as medical response, emergency notifications, warning and communications procedures and equipment, though not necessarily at the same time. Personnel are asked to evaluate the systems and identify problem areas.

   g)  Evacuation drill. Personnel walk the evacuation route to a designated area where procedures for accounting for all personnel are tested. Participants are asked to make notes as they go along of what might become a hazard during an emergency, e.g., stairways cluttered with debris, smoke in the hallways. Plans are modified accordingly.

   h)  Full-scale exercise. A real-life emergency situation is simulated as closely as possible. This exercise involves company emergency response personnel, employees, management and community response organizations.

3. Employee Training

   General training for all employees should address:

   a)  Individual roles and responsibilities

   b)  Information about threats, hazards and protective actions

   c)  Notification, warning and communications procedures

   d)  Means for locating family members in an emergency

   e)  Emergency response procedures

   f)  Evacuation, shelter and accountability procedures

   g)  Location and use of common emergency equipment

   h)  Emergency shutdown procedures.

   The scenarios developed during the vulnerability analysis can serve as the basis for training events.

   OSHA training requirements are a minimum standard for many facilities that have a fire brigade, hazardous materials team, rescue team or emergency medical response team.

4. Evaluate and Modify the Plan

   Conduct a formal audit of the entire plan at least once a year. Among the issues to consider are:

   a)  How can you involve all levels of management in evaluating and updating the plan?

   b)  Are the problem areas and resource shortfalls identified in the vulnerability analysis being sufficiently addressed?

   c)  Does the plan reflect lessons learned from drills and actual events?

   d)  Do members of the emergency management group and emergency response team understand their respective responsibilities? Have new members been trained?

   e)  Does the plan reflect changes in the physical layout of the facility? Does it reflect new facility processes?

   f)  Are photographs and other records of facility assets up to date?

   g)  Is the facility attaining its training objectives?

   h)  Have the hazards in the facility changed?

   i)  Are the names, titles and telephone numbers in the plan current?

   j)  Are steps being taken to incorporate emergency management into other facility processes?

   k)  Have community agencies and organizations been briefed on the plan? Are they involved in evaluating the plan?
In addition to a yearly audit, evaluate and modify the plan at these times:
   a) After each training drill or exercise
   b) After each emergency
   c) When personnel or their responsibilities change
   d) When the layout or design of the facility changes
   e) When policies or procedures change.
Remember to brief personnel on changes to the plan.

**SOURCES**


# Training Drills and Exercises

<table>
<thead>
<tr>
<th>MANAGEMENT ORIENTATION/REVIEW</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<tbody>
<tr>
<td>EMPLOYEE ORIENTATION/REVIEW</td>
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<td>CONTRACTOR ORIENTATION/REVIEW</td>
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<td>COMMUNITY/MEDIA ORIENTATION/REVIEW</td>
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<td>MANAGEMENT TABLETOP EXERCISE</td>
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<tr>
<td>RESPONSE TEAM TABLETOP EXERCISE</td>
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<td>WALK-THROUGH DRILL</td>
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<td>EVACUATION DRILL</td>
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<td>FULL-SCALE EXERCISE</td>
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</tbody>
</table>
A business continuity plan must contain many different types of contact, continuity and incident report forms, and supply lists. They must be easy to fill out and easy to read. Most important, they must be kept in duplicate and up to date.

Tips for Maintaining Forms & Lists
Contact forms, incident reports and supply lists are invaluable before, during and after a crisis. In order for them to be useful to you, remember these simple tips.

• Revise at least every six months.
• Maintain electronic versions in at least two workplace sites and one off-premise site in case of a power outage or technological emergency such as a computer crash or tampering incident.
• Keep hard-copy and extractable media versions on hand in a waterproof container in at least two places in your office: one with you or the crisis team “leader” and another with an alternate “leader.”
• Make sure key people who are part of your department’s crisis leadership team know where all versions of the forms and lists can be found.

In this chapter
• Business Continuation Plan: Foodservice Crisis Management Team/Contacts During a Disaster & Emergency
• Incident Report Form
• Business Continuation Plan: Key Contact List & Type of Service
• Sample Continuity Forms: Problem/Solution
  – Electricity
  – Fire Suppression
  – Natural Gas
  – Telephone System
  – Transportation
  – Vendors
  – Water
• Open for Business™ forms
  – Employee Contact List
  – Key Contacts
  – Key Supplier/Vendor Information
  – Critical Business Functions
  – Recovery Location
  – Critical Telephone Numbers
  – Vital Records
  – Voice/Data Communications
  – Supplies
  – Equipment/Machinery/Vehicles
  – Computer Equipment and Software
  – Miscellaneous Resources
• Emergency Supplies Checklist
### BUSINESS CONTINUATION PLAN

**FOODSERVICE CRISIS MANAGEMENT TEAM/CONTACTS DURING A DISASTER & EMERGENCY**

**MASTERLIST UPDATED: ____________**

<table>
<thead>
<tr>
<th>PERSON &amp; TITLE</th>
<th>CONTACT NUMBERS</th>
<th>DISASTER &amp; EMERGENCY RESPONSIBILITIES</th>
<th>BACK-UP PERSON &amp; TITLE</th>
<th>CONTACT NUMBERS</th>
<th>OTHER NOTES, i.e., SPECIALTY TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Office:</td>
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<td>Email:</td>
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<td>Email:</td>
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</tbody>
</table>

Routing List

<table>
<thead>
<tr>
<th>Name</th>
<th>When Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
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<tr>
<td>Name</td>
<td></td>
</tr>
</tbody>
</table>

**MISSION DATE **

**Signatures**

**By:**

**Date:**

**By:**

**Date:**

**By:**

**Date:**
**INCIDENT REPORT FORM**

**OPERATION INFORMATION**

<table>
<thead>
<tr>
<th>OPERATION NUMBER:</th>
<th>OPERATION NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATION ADDRESS:</td>
<td></td>
</tr>
<tr>
<td>CITY, STATE, ZIP:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNIT MANAGER:</th>
<th>BUSINESS PHONE:</th>
<th>CELL PHONE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIENT CONTACT:</td>
<td>BUSINESS PHONE:</td>
<td>CELL PHONE:</td>
</tr>
<tr>
<td>DISTRICT MANAGER:</td>
<td>BUSINESS PHONE:</td>
<td>CELL PHONE:</td>
</tr>
<tr>
<td>REGIONAL MANAGER:</td>
<td>BUSINESS PHONE:</td>
<td>CELL PHONE:</td>
</tr>
</tbody>
</table>

**OCCURRENCE INFORMATION:**

| CUSTOMER NAME: | 
| BUSINESS ADDRESS: |
| CITY: | STATE: | ZIP: |
| BUSINESS PHONE: | CELL PHONE: |

**DATE OF INCIDENT:**

| TIME OF INCIDENT: |
| INJURY/INCIDENT: |

**WITNESS INFORMATION (IF APPLICABLE)**

| NAME: |
| WORK ADDRESS: |
| CITY: | STATE: | ZIP: |
| BUSINESS PHONE: | CELL PHONE: |

**INCIDENT DETAILS**

| LOCATION OF INCIDENT: (Serving area, dining room, etc.) |
| ITEM OR OBJECT DAMAGED: | INJURY DETAIL |
| EMERGENCY MEDICAL TREATMENT | YES | NO | NA |
| IF YES, WHO ATTENDED? |
| DESCRIPTION OF INCIDENT: (Include person’s name, title, what took place, why, when, where, how, witnesses or other individuals involved.) |
Key Contact List & Type of Service (continued)

**Type of Service and Service Time**
Breakfast/Continental Breakfast: __:__ a.m. – __:__ a.m.
Lunch/Boxed Lunch: __:__ a.m. – __:__ p.m.
Dinner/Set Menu: __:__ p.m. – __:__ p.m.

**Staffing Requirements**
**Breakfast:**
Manager
Delivery Person
Line Server
Prep Helper (2)

**Lunch:**
Manager
Delivery Person
Line Server
Prep Helper (2)

**Dinner:**
Manager
Chef
St. Cook (2)
Line Servers (2)
Utility (1)

**Menu**
**Continental Breakfast**
Coffee, tea, juice, milk, pastry, yogurt, cereal and fresh fruit

**Boxed Lunch**
Assorted sandwiches, soda, bottled water, iced tea, chips, fruit and dessert

**Set Dinner Menu**
Salad, entrée, bread, dessert, soda, bottled water, iced tea and coffee

Weekend and holiday labor will be the same as the labor designated above and will be made into two shifts. This labor will be more costly than weekday service.

**Billing**
Breakfast: Set price charged per person
Lunch: Set price charged per person
Dinner: Set price charged per person

**Directions to Disaster Recovery Site Facility:**
The center is located approximately ____ miles from ______ airport.
SAMPLE CONTINUITY FORM
PROBLEM/SOLUTION

Source: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Electricity</th>
<th>DRAFT AUTHOR: NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal, External or Third Party:</td>
<td>DRAFT DATE: 8/25/200x</td>
</tr>
<tr>
<td>External</td>
<td></td>
</tr>
</tbody>
</table>

Client Position: Maintain service as efficiently as possible in a safe manner

Communication Protocol:
Person 1, Title
Person 2, Title
Person 3, Title

DESCRIPTION OF PROBLEM SCENARIO:
1. Failure of electrical equipment. Unable to prepare/store product
2. Failure of electrical lighting.

SITE SPECIFIC PLAN:

Planning Tasks:
1. Determined whether electricity failure affects Facility heating and whether a manual override exists
2. Inventory on hand of:
   a. 5 Flash lights
   b. Batteries
   c. 5 Bags of charcoal
   d. 6 cans of lighter fluid
   e. 4 Cases sterno fuel
   f. 10 Wire racks
   g. Water pans
3. Alternative refrigeration sources are
   a. Refrigerated trucks from or through NAME OF SUPPLIER/DISTRIBUTOR, xxx-xxx-xxxx
      Cell phone xxx-xxx-xxxx
   b. Ice and dry ice from NAME OF VENDOR, xxx-xxx-xxxx
4. Provide battery powered lighting in exit stairwell
5. Developed emergency menu protocol

(Continued on next page)
(Electricity, continued)

**Short Term Contingency:**
- Confirm number of Dining Facilities affected.

If isolated to specific areas:
- Implement Partial Closing Plan
- Implement communication protocol.
- Implement employee communication protocol.
- Maintain communication with population on status

If all Dining Operations are affected:

- Evaluate scope of emergency.
- Implement communication protocol
- Implement employee communication protocol.
- Implement emergency menu protocol.
- Obtain communication devices to be in contact with Facility personnel.
- Adjust hours of operation to take advantage of natural light.
- Centralize production at NAME OF UNIT
- Implement SUPPLIER/VENDOR emergency deliveries.
- Assess need for an on-site refrigerated truck through SUPPLIER/DISTRIBUTOR
- Purchase ice/dry ice to keep daily deliveries cold
- Provide battery-powered lighting in exit stairwell, production area, service area and utility area.
- Determine if serving area should be in dining room or servery based on natural light presence.
- Notify employees to dress accordingly, if heat has failed.
- Establish exterior cooking site with easy access to Dining Hall.

**Long Term Contingency:**
1. Modify operations based upon Facility resources.
2. Maintain Short Term Contingency plan.
SAMPLE CONTINUITY FORM
PROBLEM/SOLUTION

Source: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Fire Suppression</th>
<th>DRAFT AUTHOR: NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal, External or Third Party: Third Party</td>
<td>DRAFT DATE: 3/12/200x</td>
</tr>
<tr>
<td>Facility Position: Maintain service in a safe manner</td>
<td></td>
</tr>
</tbody>
</table>

Communication Protocol:
PERSON 1, TITLE
PERSON 2, TITLE

DESCRIPTION OF PROBLEM SCENARIO:
1. Failure affects kitchen. (hoods/exhaust systems)
2. Failure in dining or customer area. (Fire suppression)
3. Faulty system discharge. (Hoods or sprinklers)
4. Fire code prohibits the use of key equipment without working system.

SITE SPECIFIC PLAN:

Planning Tasks:
1. Determined type of suppression system is not impacted by loss of electricity, water, etc. Hood/exhaust routinely tested.
2. All hand held fire extinguishers are up to code. Work with Facility to obtain additional if deemed necessary.
3. Reviewed fire safety and evacuation plans with employees.

Short Term Contingency:
1. Implement communication protocol.
2. If isolated to specific location, direct population to alternate facility.
3. Modify existing menus accordingly.

Long Term Contingency:
1. Expect to be able to operate and serve indefinitely without using equipment requiring fire suppression systems
2. Implement alternative cooking plan.
SAMPLE CONTINUITY FORM
PROBLEM/SOLUTION

*Source: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)*

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Natural Gas</th>
<th>DRAFT AUTHOR: NAME</th>
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</thead>
<tbody>
<tr>
<td>Internal, External or Third Party:</td>
<td>DRAFT DATE: 3/12/200x</td>
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<tr>
<td>External</td>
<td></td>
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</tbody>
</table>

Facility Position: Maintain services for students and staff as efficiently as possible and in a safe manner

Communication Protocol:
Person 1, Title
Person 2, Title

DESCRIPTION OF PROBLEM SCENARIO:
1. Inability to cook with gas fired equipment
2. Inability to operate heating systems (refer to HVAC plan)
3. Potential lack of hot water

SITE SPECIFIC PLAN:

Planning Tasks:
1. Identified impact of systems affected – steamers, grills, deck ovens, hot water
2. Develop 5-day menu cycle based on cooking without gas.
3. Utilize sources for renting or acquiring portable non-gas fired equipment i.e. propane or charcoal grills, electric equipment.
   a. NAME OF RENTAL COMPANY, xxx-xxx-xxxx
   b. NAME OF RENTAL COMPANY, xxx-xxx-xxxx * primary
4. Existing propane tanks are filled. (2)
5. Disposable service ware inventories are three (3) days if dish machine is affected.
6. Consult with chemical provider (NAME) to determine sanitation procedures that can be implemented without hot water.
7. Develop menu cycle amenable to alternate equipment.

Short Term Contingency:
1. Implement communication protocol.
2. Implement modified menu plan.
3. Purchase additional paper/disposable supplies.
4. Rent portable cooking equipment from above stated sources.
5. Arrange for delivery of additional propane tanks.
6. Implement cold water sanitation procedures if necessary.

(Continued on next page)
(Natural Gas, continued)

7. Implement alternate menu cycle.
8. Modify hours of operation and service locations.
9. Establish meal shift times with Facility to maintain order and manageable flow.
10. Obtain assistance from Red Cross to meet demands above our capability
    - decision made by director

<table>
<thead>
<tr>
<th>Person B</th>
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</thead>
</table>

**Long Term Contingency:**
1. Work with Facility and DM to plan for additional menu adjustments.
2. Implement cold water sanitation procedures.
3. Rent additional equipment to facilitate sanitation.
4. Rent additional equipment to facilitate cooking.
6. Modify hours of operation and service locations.
## SAMPLE CONTINUITY FORM

### PROBLEM/SOLUTION

Source: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Telephone System</th>
<th>DRAFT AUTHOR: NAME</th>
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<tbody>
<tr>
<td><strong>Internal, External or Third Party:</strong> Third Party/External</td>
<td><strong>DRAFT DATE:</strong> 3/12/200x</td>
</tr>
<tr>
<td>Facility Position: Maintain Operation</td>
<td></td>
</tr>
</tbody>
</table>

### Communication Protocol:
Person 1, Title

### DESCRIPTION OF PROBLEM SCENARIO:
1. Failure of on-campus telephone system (third party)
2. Failure of local telephone service (external)
3. Failure of cellular phones

### SITE SPECIFIC PLAN:

#### Planning Tasks:
1. Obtain radios on same frequency as Facility emergency for emergency communication
2. Identify key employees, managers and client representatives who have access to cellular phones, beepers, and CB radios and develop a communication network to be implemented in event of a problem.
3. Plan for cell phone communication if possible, i.e. other component, home, to make calls.
4. Seek alternative e-mail communication to order deliveries and communicate to other accounts/corporate.
5. Determine location on campus for posting communication if telephone system fails. Boards by time-clocks to be used as a message board for employees.
6. Distribute to employees schedules, an action plan for what to do if school is open or closed, and an alternate cellular phone number.
7. Maintain two (2) walkie-talkies in chargers.
8. Plan to remotely post communication to university web site.
9. Investigate using public radio to make NAME OF FOODSERVICE PROVIDER announcements...if total communication failure.
10. Consider impact of telephone failure on, vendors and the transmission of financial information.

(Continued on next page)
**Short Term Contingency:**
1. Implement communication protocol.
2. Test modem lines using a single line telephone set to see if the line is an active outside line.
3. Activate the communication network of employees and managers to notify others.
4. Use walkie-talkies and cell phones on campus.
5. Work with University to access hard lines if possible.
6. Post information to university web site and work with school to issue announcements via public radio.
7. Establish scheduled meetings to update employees.
8. Drive to SUPPLIER/DISTRIBUTOR warehouse if necessary with delivery needs.

**Long Term Contingency:**
1. Rent cellular phones, walk talkies and/or pagers for additional critical personnel.
2. Establish scheduled meetings to update employees.
3. Produce flyer for distribution to Facility employees’ mailboxes indicating an alternative way i.e. cell number to reach dining services.
SAMPLE CONTINUITY FORM

PROBLEM/SOLUTION

Source: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Transportation</th>
<th>DRAFT AUTHOR: NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal, External or Third Party:</strong> Third Party</td>
<td><strong>DRAFT DATE:</strong> 3/12/200x</td>
</tr>
</tbody>
</table>

Facility Position: Maintain service for employees/and or students

Communication Protocol:
Person 1, Title

DESCRIPTION OF PROBLEM SCENARIO:
1. Interruption of public transportation services necessary for delivering staff to the workplace i.e. failure in train, subway or bus control systems or a wide-scale transit strike.
2. Restricted access to roads necessary for delivering staff to the workplace developing from failures in traffic control systems, bridges and toll systems.

SITE SPECIFIC PLAN:

Planning Tasks:
1. Distribute to employees an action plan with alternate transportation options for example:
   a. Arrange for Facility van and central pick-up locations.
   b. Have checklist of issues for employees to consider for their own contingencies i.e. childcare.
   c. Created employee master of phone numbers, addresses and usual method of transportation.
2. List critical employees relying on public transportation, and local employees closest to component.
3. Developed emergency team of personnel who will be able to make it to Facility if needed, regardless of problems.
4. Identify list of personnel [if students or employees living nearby] familiar with operation who can assume roles of responsibility in the event that hourly staff cannot get to Facility
   a. NAME OF PERSON, TITLE, in charge of student employees
   b. [Student] employees at the Space
   c. [Student] catering staff
5. Meet with [student] staff about contingency plan.
6. Develop methods of alternative transportation, i.e. car pool, rent vehicles, taxis, etc.
7. Identify temporary lodging options
   a. Facility or on-campus housing alternatives

(Continued on next page)
(Transportation, continued)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>b. Hotels - NAME</td>
<td>Person C</td>
</tr>
<tr>
<td>c. Other employees homes close to campus</td>
<td></td>
</tr>
</tbody>
</table>

**Short Term Contingency:**
1. Implement communication protocol  
2. Implement alternative transportation methods.  
3. Hold employee meeting to ensure everyone understands the plans in place.  
4. Consider housing critical employees on campus/at Facility.  
5. Adjust menus and service hours based on number of employees available.  
6. Obtain assistance from Red Cross to meet demands above our capability - decision made by director

**Long Term Contingency:**
## SAMPLE CONTINUITY FORM

### PROBLEM/SOLUTION

*Source*: ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY:</th>
<th>Vendors</th>
<th>DRAFT AUTHOR: NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal, External or Third Party: Third Party</td>
<td></td>
<td>DRAFT DATE: 3/12/200x</td>
</tr>
</tbody>
</table>

Facility Position: Maintain service

### Communication Protocol:

Person 1, Title

### DESCRIPTION OF PROBLEM SCENARIO:

1. Inability to place orders.
2. Inability/limited ability to receive orders.

### SITE SPECIFIC PLAN:

#### Planning Tasks:

1. Develop alternatives for communicating orders to vendors i.e. cell number for local salesperson, drive to warehouse, fax, etc.
2. Identified alternative local vendors.
3. Maintain one and one third week’s inventory.
4. Establish centralized storage and production at NAME OF UNIT.
5. Obtain information from key local vendors on their emergency procedures.
6. Identify off-site where deliveries can be made that can be picked up in Facility vehicle.

#### Short Term Contingency:

1. Implement communication protocol.
2. Modify menus based on availability of products.
3. Order from alternative local vendors.
4. Centralize storage, production and service to minimize operating locations and maximize resources.
5. Work with SUPPLIER/DISTRIBUTOR on delivery alternatives i.e. drop sites,

#### Long Term Contingency:

**SAMPLE CONTINUITY FORM**

**PROBLEM/SOLUTION**

*Source:* ARAMARK Campus Services (Form has been altered to remove names and specific references to buildings, etc.)

<table>
<thead>
<tr>
<th>PROBLEM CATEGORY: Water</th>
<th>DRAFT AUTHOR: NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal, External or Third Party: External</td>
<td>DRAFT DATE: 3/12/200x</td>
</tr>
</tbody>
</table>

**Client Position:** Maintain service in a safe manner

**Communication Protocol:**

Person 1, Title
Person 2, Title

**DESCRIPTION OF PROBLEM SCENARIO:**

1. Unsafe water supply.
2. Can’t wash service ware and cook ware.
3. Inoperable beverage dispenser systems.
4. Other sanitation issues i.e. no hand washing.

**SITE SPECIFIC PLAN:**

<table>
<thead>
<tr>
<th>Planning Tasks:</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Change over potable water inventory in NAME OF UNIT</td>
<td></td>
</tr>
<tr>
<td>2. Increase disposable serviceware inventory.</td>
<td></td>
</tr>
<tr>
<td>3. Determine amount of water held in building hot water tanks</td>
<td></td>
</tr>
</tbody>
</table>

**Short Term Contingency:**

1. If isolated to specific location, implement Partial Closure Plan.
2. Maintain communication with FACILITY Health Department as FACILITY will be part of the same emergency plan as the rest of the community.
3. Establish water needs for first cooking and then sanitation. Determine volume needed based on circumstances.
4. Secure potable water
   - Utilize water stored in NAME OF UNIT
   - Secure additional water from SUPPLIER/DISTRIBUTOR, xxx-xxxx-xxxx.
5. Adjust menus to minimize production equipment.
6. Use disposable service ware.
   - Secure additional disposable supplies from SUPPLIER/DISTRIBUTOR(s)
7. Contact VENDOR on alternate sanitation solutions.

(Continued on next page)
(Water, continued)

**Long Term Contingency:**

1. Maintain continual communication with Health Department
2. Continue short-term contingency plan.
**Open for Business™**

Employee Contact List

Use this form to gather information on employees (and the business owner) so that each person can be contacted at any time or place. After you have entered all your employees, assign a number to “Call Order” for each employee. You may choose to sort your employee list alphabetically or by call-down order.

Maintain an up-to-date copy of contact information for each employee in an accessible and secure location.

*You can download copies of this form from: [http://www.ibhs.org/business_protection/](http://www.ibhs.org/business_protection/)
Save a blank version so you can make additional copies as needed.*

<table>
<thead>
<tr>
<th>Name:</th>
<th>Position:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Responsibilities:</td>
<td></td>
</tr>
<tr>
<td>Home Address:</td>
<td>City, State, ZIP:</td>
</tr>
<tr>
<td>Home Phone:</td>
<td>Cell Phone:</td>
</tr>
<tr>
<td>Office Phone:</td>
<td>Pager/Beeper:</td>
</tr>
<tr>
<td>FAX:</td>
<td></td>
</tr>
<tr>
<td>Home Email:</td>
<td></td>
</tr>
<tr>
<td>Work Email:</td>
<td></td>
</tr>
<tr>
<td>Emergency Contact:</td>
<td>Relationship:</td>
</tr>
<tr>
<td>Emergency Contact Phone:</td>
<td>Alt Phone:</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
</tr>
<tr>
<td>Call Order:</td>
<td></td>
</tr>
<tr>
<td>Certifications:</td>
<td>First Aid</td>
</tr>
<tr>
<td></td>
<td>CPR</td>
</tr>
<tr>
<td></td>
<td>Emergency Medical Technician (EMT)</td>
</tr>
<tr>
<td></td>
<td>Ham Radio</td>
</tr>
<tr>
<td></td>
<td>Special Licenses:</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
</tr>
</tbody>
</table>
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Key Contacts

Use this form to list the key contacts for administration of your business. Key contacts consist of those you rely on for administration of your business, such as your bank, your creditors, your insurance agent, accountant, etc. They also include services in the community you need to help you resume operations, such as utilities, emergency responders, media outlets, business partners and business organizations.

Your key customers are an essential part of this list. If you have more than 20 key customers, you should use the Vital Records form instead of listing each one here to avoid making your business continuity plan too bulky. Nevertheless, you still may want to include some of your major customers or clients in Key Contacts, as they could be involved with one or more of the critical business functions you identify for your recovery plan.

You can download copies of this form from: http://www.ibhs.org/business_protection/

Save a blank version so you can make additional copies as needed.

<table>
<thead>
<tr>
<th>Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Accountant</td>
</tr>
<tr>
<td>☐ Bank</td>
</tr>
<tr>
<td>☐ Billing/Invoicing Service</td>
</tr>
<tr>
<td>☐ Benefits Administration</td>
</tr>
<tr>
<td>☐ Building Manager</td>
</tr>
<tr>
<td>☐ Building Owner</td>
</tr>
<tr>
<td>☐ Building Security</td>
</tr>
<tr>
<td>☐ Creditor</td>
</tr>
<tr>
<td>☐ Electric Company</td>
</tr>
<tr>
<td>☐ Emergency Management Agency</td>
</tr>
<tr>
<td>☐ Fire Department</td>
</tr>
<tr>
<td>☐ Gas/Heat Company</td>
</tr>
<tr>
<td>☐ Hazardous Materials</td>
</tr>
<tr>
<td>☐ Hospital</td>
</tr>
<tr>
<td>☐ Insurance Agent/Broker</td>
</tr>
<tr>
<td>Name of Business or Service:</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Account Number <em>(If relevant)</em>:</td>
</tr>
<tr>
<td>Materials/Service Provided:</td>
</tr>
<tr>
<td>Street Address:</td>
</tr>
<tr>
<td>City, State, ZIP:</td>
</tr>
<tr>
<td>Company/Service Phone <em>(main)</em>:</td>
</tr>
<tr>
<td>Primary Contact:</td>
</tr>
<tr>
<td>Primary Contact Phone:</td>
</tr>
<tr>
<td>Primary Contact Pager:</td>
</tr>
<tr>
<td>Primary Contact Email:</td>
</tr>
<tr>
<td>Alt. Contact Person:</td>
</tr>
<tr>
<td>Alt. Contact Phone:</td>
</tr>
<tr>
<td>Alt. Contact Pager:</td>
</tr>
<tr>
<td>Alternate Contact Email:</td>
</tr>
<tr>
<td>Website Address:</td>
</tr>
<tr>
<td>Recovery Notes:</td>
</tr>
</tbody>
</table>
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Key Supplier/Vendor Information

Use this form to record information about your current suppliers and ones you could use as an alternate choice.

Disaster-induced operational problems are not always connected to property damage. They include disruptions in the flow of supplies and in the ability to ship those goods or deliver services. Your ability to resume operations also relies on the ability of your suppliers to deliver what you need on time.

You can download copies of this form from: http://www.ibhs.org/business_protection/
Save a blank version so you can make additional copies as needed.

<table>
<thead>
<tr>
<th>Status:</th>
<th>☐ Current Supplier/Vendor</th>
<th>☐ Back Up Supplier/Vendor</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Company Name:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Account Number (If relevant):</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Materials/Service Provided:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Street Address:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>City, State, ZIP:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Company Phone (main):</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Primary Contact:</th>
<th>Title:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Primary Contact Phone:</th>
<th>Primary Contact Cell:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Primary Contact Pager:</th>
<th>Primary Contact Fax:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Primary Contact Email:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alt. Contact Person:</th>
<th>Title:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alt. Contact Phone:</th>
<th>Alt. Contact Cell:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alt. Contact Pager:</th>
<th>Alt. Contact Fax:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alternate Contact Email:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Website Address:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Recovery Notes:</th>
<th></th>
</tr>
</thead>
</table>
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Critical Business Functions

Use this form to identify what business functions are critical to your survival. The following are some key questions to help you decide what they are:

- What are my most critical and time sensitive business functions?
- How much down time can I tolerate for each business function?
- Which business functions are necessary to fulfill my legal and financial obligations and maintain cash flow?
- Which business functions are essential to maintain my market share and reputation, or to strategically adjust to changed circumstances?

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Save a blank version so you can make additional copies as needed.

Note: This form has been adjusted for the SFM Toolkit to include phone numbers and emails.

<table>
<thead>
<tr>
<th>Business Function:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority: □ High □ Medium □ Low</td>
</tr>
<tr>
<td>Employee in charge:</td>
</tr>
<tr>
<td>Timeframe or Deadline:</td>
</tr>
<tr>
<td>Money lost (or fines imposed) if not done: (If relevant)</td>
</tr>
</tbody>
</table>

Who performs this function? (List all that apply)

<table>
<thead>
<tr>
<th>Employee(s):</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
<tr>
<td>Key Contact(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
</tbody>
</table>

Who provides the input to those who perform the function? (List all that apply)

<table>
<thead>
<tr>
<th>Employee(s):</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
<tr>
<td>Key Contact(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
</tbody>
</table>

Who uses the output from this function? (List all that apply)

<table>
<thead>
<tr>
<th>Employee(s):</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
<tr>
<td>Key Contact(s):</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
</tbody>
</table>

Brief description of procedures to complete function: (Consider writing procedures for two scenarios, one for a short disruption, the other for loss of everything.)

Recovery Notes:
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Recovery Location

Use this form to provide information on your recovery location, that is, where you will conduct business operations following an event. It could be at an alternate site, at a similar business through a mutual aid agreement, your own home, or if you are location dependent, at your primary place of business.

Note: If you have not secured a recovery location at the time you are starting to develop this business continuity plan, create an imaginary name, address, etc., so you can continue with the planning process. You can still select which staff will be assigned to the recovery location and which business functions will be performed there, and then move on to the following forms. When you have finalized all arrangements for the recovery site, return to this record and enter the actual name and address of the location.

You can download copies of this form from: http://www.ibhs.org/business_protection/
Save a blank version so you can make additional copies as needed.

<table>
<thead>
<tr>
<th>Recovery Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Include street address, city, state, zip code)</td>
</tr>
</tbody>
</table>

| Building Owner/Manager |

| Phone: | Alt Phone: |

| Pager: | Email: |

| Directions to recovery location: (i.e. map and directions from Internet site or similar information) |

| Business functions to be performed at recovery location:  |
| 1. |

| Employees who should go to recovery location:  |
| 1. |

| Recovery Notes: |


### Critical Telephone Numbers

Use this form to list telephone and/or fax lines that are critical to the survival of your business. Enter what each is used for and think about whether it is essential that this number be continuously available. Then, select a solution for how to keep the number operational or an alternative to meet the need.

*You can download copies of this form from:* [http://www.ibhs.org/business_protection/](http://www.ibhs.org/business_protection/)

*Save a blank version so you can make additional copies as needed.*

<table>
<thead>
<tr>
<th>Phone Number</th>
<th>Type (Enter Code)</th>
<th>Status (Enter Code)</th>
<th>Solution (Enter letter)</th>
<th>Related Business Function(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>L</strong></td>
<td>Local</td>
<td><strong>C</strong></td>
<td>Currently in use</td>
</tr>
<tr>
<td></td>
<td><strong>LD</strong></td>
<td>Long Dist.</td>
<td><strong>E</strong></td>
<td>Will establish during recovery</td>
</tr>
<tr>
<td></td>
<td><strong>Toll Free</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>F</strong></td>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>C</strong></td>
<td>Cell</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>O</strong></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**

(e.g. hotline, main line, toll free customer service line, dial-in to network)

**Recovery Notes:**
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**Vital Records**

Use this form to identify records that are vital to perform your critical business functions. Use “Media” to indicate if the record is print version, on a CD, diskette, etc.

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*Save a blank version so you can make additional copies as needed.*

<table>
<thead>
<tr>
<th>Name of Vital Record:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Network</td>
<td>□ Print Version</td>
</tr>
<tr>
<td>□ Hard drive</td>
<td>□ Microfilm</td>
</tr>
<tr>
<td>□ Laptop</td>
<td>□ Internet</td>
</tr>
<tr>
<td>□ CD</td>
<td>□ Other</td>
</tr>
<tr>
<td>□ Diskette</td>
<td>Explain:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is it backed up?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes</td>
</tr>
<tr>
<td>□ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media for backup:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Network</td>
<td>□ Print Version</td>
</tr>
<tr>
<td>□ Hard drive</td>
<td>□ Microfilm</td>
</tr>
<tr>
<td>□ Laptop</td>
<td>□ Internet</td>
</tr>
<tr>
<td>□ CD</td>
<td>□ Other</td>
</tr>
<tr>
<td>□ Diskette</td>
<td>Explain:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How often is it backed up?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Hourly</td>
</tr>
<tr>
<td>□ Daily</td>
</tr>
<tr>
<td>□ Weekly</td>
</tr>
<tr>
<td>□ Monthly</td>
</tr>
<tr>
<td>□ Quarterly</td>
</tr>
<tr>
<td>□ Semi-Annually</td>
</tr>
<tr>
<td>□ Yearly</td>
</tr>
<tr>
<td>□ Never</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where it is stored?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Can the record be re-created?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes</td>
</tr>
<tr>
<td>□ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business function it support(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recovery Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
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Voice/Data Communications

Use this form to list your voice and data communications needs. Communication with employees, vendors, customers, emergency officials and other key contacts is vital to your ability to resume business operations following a disaster event. This form should be used to determine what telecommunications equipment you need to help you with that communication.

If you go to a recovery location, it is likely you will need to lease or purchase telecommunications equipment. You may use the Voice/Data Communications form to list what you would order, and in the “Description & Model No.” field, write “Unknown,” or similar words, if you do not yet have that information. Be sure to explain in Recovery Notes.

If you plan to purchase or lease multiple items of the same type - e.g. telephones - you can condense the information into one record. List relevant details in Recovery Notes.

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Save a blank version so you can make additional copies as needed.

Note: This form has been adjusted for the SFM Toolkit to include phone numbers and emails.

<table>
<thead>
<tr>
<th>Type of Service:</th>
<th>Telephone</th>
<th>Fax Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PBX w/ ACD (Private Branch Exchange w/ Automatic Call Distribution)</td>
<td>Two-way Radio and Pager</td>
</tr>
<tr>
<td></td>
<td>PC Data Communications</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Cell Phone</td>
<td>Explain:</td>
</tr>
</tbody>
</table>

| Description & Model Number: | (Enter Unknown if telecommunications items is to be leased/bought for recovery location) |

<table>
<thead>
<tr>
<th>Status:</th>
<th>Currently in use</th>
<th>Will lease/buy for recovery location</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Voice Communications Features:</th>
<th>Voice Mail</th>
<th>Conversation recorder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>Conference</td>
<td>Explain:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Communications Features:</th>
<th>Cable</th>
<th>Dial-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DSL</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>T-1</td>
<td>Explain:</td>
</tr>
</tbody>
</table>

| Quantity: | |
|-----------||

<table>
<thead>
<tr>
<th>Primary Supplier/Vendor:</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alternate Supplier/Vendor:</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Recovery/Install Location:</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
</table>

| Recovery Notes: | |
|-----------------||
Use this form to list supplies needed to fulfill your critical business functions. A supply is anything you have not listed in previous forms. It should have an order number and should include items essential to keep equipment or work processes functioning, e.g. special fluid for a machine, special forms and/or checks.

If you do not have the supplier recorded on the supplier/vendor form, go back to the form to add the information.

*Note:* Do not include basic office supplies, e.g. pens, paper, stapler. Do not include office furniture either, e.g. filing cabinets, mail bins, desks or chairs, as they all should be listed in Miscellaneous Resources.

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*Note:* This form has been adjusted for the SFM Toolkit to include phone numbers and emails.

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Order Number</th>
<th>Quantity</th>
<th>Supplier/Vendor(s)</th>
<th>Related Business Function(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
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<td>Name: Phone: Cell Phone: Email:</td>
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<td>Name: Phone: Cell Phone: Email:</td>
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<td></td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
</tbody>
</table>
**Open for Business**

Supplies *(cont.)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Order Number</th>
<th>Quantity</th>
<th>Supplier/Vendor(s)</th>
<th>Related Business Function(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
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<td>Name: Phone: Cell Phone: Email:</td>
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<td></td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
</tbody>
</table>

Recovery Notes:
Open for Business℠

Equipment/Machinery/Vehicles

Identify the key equipment/machinery necessary to perform your essential business functions, i.e. the equipment or machinery that would shut you down or severely curtail production of goods or services if it failed. This could include tools and spare parts vital to operation of equipment. You may also want to list company-owned vehicles.

When there is adequate warning about an event, such as a hurricane, you might decide to take some of your equipment or machinery that can be easily moved to a safe place, so that it could be used at your recovery location. In that case, you would want to list equipment or machinery you currently own or lease. Some disasters occur without warning, though, so you want to be sure you have alternatives available.

*Note:* Computer equipment should be listed in the Computer Equipment and Software form; telecommunications equipment in the Voice/Data Communications form; and office furniture for your recovery location in the Miscellaneous Resources form.

*You can download copies of this form from:* http://www.ibhs.org/business_protection/

*Save a blank version so you can make additional copies as needed.*

*Note:* This form has been adjusted for the SFM Toolkit to include phone numbers and emails.

<table>
<thead>
<tr>
<th>Item:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status:</th>
<th>Currently in use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will lease/buy for recovery location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

<p>| Primary Vendor/Supplier:                |</p>
<table>
<thead>
<tr>
<th>Name:</th>
<th>Phone:</th>
<th>Cell Phone:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Vendor/Supplier:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td>Phone:</td>
<td>Cell Phone:</td>
<td>Email:</td>
</tr>
</tbody>
</table>

| Recovery location for installation:    |

| Related business function(s):         |

| Backup Available:                     |
| Yes | No |

| Order time for replacement:            |

| Recovery Notes:                       |
Use this form to list the computer equipment, hardware and software you will need to fulfill your critical business functions.

If you go to a recovery location, it is likely you will need to lease or purchase computer equipment and replace your software. You may use the form to list what you would order, and in the “Title & Version or Model No.,” write “Unknown,” or similar words, if you do not yet have that information. Be sure to explain in your Recovery Notes. The important thing is that your final plan include what you need to perform your critical business functions.

If you plan to order multiple items of the same type - e.g. keyboards or mouses - you can condense the information into one record. You can list relevant details in Recovery Notes.

When there is sufficient warning about an event, such as a hurricane, you might decide to move some of your computer equipment and software to a safe place, so that it could be utilized at your recovery location. In that case, you would want to list equipment you currently own or lease and/or software that you would take, and in the Status field check “Currently in use.” Some disasters occur without warning, though, so be sure you have alternatives available.

If you currently own/lease the item, choose the supplier/vendor(s) based on which one(s) you would use to replace the item if it were damaged in a disaster. It is always advisable to have an alternate vendor, though, in case your primary vendor is not available.

---

**You can download copies of this form from:** [http://www.ibhs.org/business_protection/](http://www.ibhs.org/business_protection/)

*Save a blank version so you can make additional copies as needed.*

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---

<table>
<thead>
<tr>
<th>Item:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td></td>
</tr>
<tr>
<td>☐ Computer Hardware</td>
<td>☐ Computer Software</td>
</tr>
<tr>
<td>Status:</td>
<td></td>
</tr>
<tr>
<td>Currently in use</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Will lease/buy for recovery location</td>
<td>☐ Yes</td>
</tr>
<tr>
<td>Primary Supplier/Vendor:</td>
<td>Phone:</td>
</tr>
<tr>
<td>Alternate Supplier/Vendor:</td>
<td>Phone:</td>
</tr>
<tr>
<td>Title &amp; Version or Model No.:</td>
<td></td>
</tr>
<tr>
<td><em>(Enter Unknown if hardware/software is to be leased/bought for recovery location)</em></td>
<td></td>
</tr>
<tr>
<td>Serial Number:</td>
<td>Purchase/Lease Date:</td>
</tr>
<tr>
<td>Purchase/Lease Price:</td>
<td></td>
</tr>
<tr>
<td>Recovery Install Location:</td>
<td></td>
</tr>
<tr>
<td>Quantity (equipment) or No. of Licenses (software):</td>
<td></td>
</tr>
<tr>
<td>License Numbers <em>(enter one per line)</em>:</td>
<td></td>
</tr>
<tr>
<td>Recovery Notes:</td>
<td></td>
</tr>
</tbody>
</table>
Use this form to list the basics to make your recovery site operational, such as office furniture, safes, mail bins, and other items needed for the recovery location. Consider any unique recommendations for people with special needs.

You can download copies of this form from: [http://www.ibhs.org/business_protection/](http://www.ibhs.org/business_protection/)

Save a blank version so you can make additional copies as needed.

*Note:* This form has been adjusted for the SFM Toolkit to include phone numbers and emails.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Primary Supplier/Vendor</th>
<th>Alternate Supplier Vendor</th>
<th>Recovery Install Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairs</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Extension/drop cords, surge protectors and power strips</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>File cabinets</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Mail bins</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Portable air conditioners/fans</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Safes</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Tables</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Waste baskets</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
<tr>
<td>Other Explain:</td>
<td></td>
<td>Name: Phone: Cell Phone: Email:</td>
<td>Name: Phone: Cell Phone: Email:</td>
<td></td>
</tr>
</tbody>
</table>
### EMERGENCY KIT CHECKLIST

#### RECOMMENDED ITEMS

<table>
<thead>
<tr>
<th>Have in House</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Always On Hand</strong></td>
<td>• NOAA Weather Alert Radio with Specific Area Message Encoding (S.A.M.E.)&lt;br&gt;• Working smoke detectors and fire extinguisher</td>
</tr>
<tr>
<td><strong>Portable Emergency Supplies</strong></td>
<td>• A lightweight backpack or tote bag to hold items listed below&lt;br&gt;• Portable radio (AM-FM, battery operated) with 12 spare batteries. Check batteries every four months to make sure they are working. Wind-up radios are also useful with solar cells for back-up.&lt;br&gt;• Flashlights (5) with 12 spare batteries each. Check batteries every four months to make sure they are working.&lt;br&gt;• Non-toxic chemical lightsticks to be taped next to light switches for emergency use&lt;br&gt;• Portable, battery-operated television (with 12 spare batteries)&lt;br&gt;• Walkie-Talkie radios with spare batteries&lt;br&gt;• Candles or battery-operated lamps&lt;br&gt;• Sturdy matches with long sticks&lt;br&gt;• Cell phone with extra batteries. Check batteries every four months to make sure they are charged.&lt;br&gt;• Whistle on a cord&lt;br&gt;• Garbage bags that will hold garbage without leaking with twist ties that can be tightened to control garbage&lt;br&gt;• 10 days’ supply of single-serviceware: disposable trays, paper plates, cups, bowls, wire chafing dishes with sterno and matches, plastic utensils, napkins&lt;br&gt;• Hand sanitizer that does not need water&lt;br&gt;• Increased inventory of sanitizing chemicals&lt;br&gt;• Cleaning cloths and chemicals that do not require rinsing after use&lt;br&gt;• Gloves, disposable clothing cover-ups, masks and eye shields&lt;br&gt;• Aprons, hats and hairnets&lt;br&gt;• Plastic bags for individual food portions&lt;br&gt;• First aid/trauma kit (see “Chapter 9, “Medical Emergencies”)&lt;br&gt;• Paper supplies, including pencils, note pads, markers, tissues, paper plates, towels, napkins and toilet paper&lt;br&gt;• A camera, with extra batteries and film, or a disposable camera, to record damage.</td>
</tr>
<tr>
<td><strong>Food and Water</strong> (see Chapters 7 and 8)</td>
<td>• <strong>Food:</strong> Have on hand a minimum of a 3-day supply. Some recommend a 7-day supply.</td>
</tr>
</tbody>
</table>
Have in House Items

- **Water:** Most states and emergency response teams require and/or suggest a 3-day supply of water be kept on hand. Some states require a 7-day supply. It is recommended that a minimum of 1 gallon of water is needed per person per day (some recommend as much as 5 gallons per person per day) for drinking, cooking and personal hygiene. In hot and humid climates and during heat waves and for children, nursing mothers and ill people, as much as 1 gallon may be needed per person for drinking.

**Individual provisions**
- Backpack or carrying case for items
- Change of clothes
- Comfortable shoes
- Personal hygiene supplies, such as toothpaste, toothbrush
- Cleanser
- Make-up
- Prescription eyeglasses and/or contact lenses and supplies
- Medical prescriptions — 7 day supply
- Pain relievers (aspirin, ibuprofen, Tylenol, etc.) — 7 day supply
- Multiple vitamins — 7 day supply
- Spare change for public phone and vending machines
- Pair of strong work gloves
- Pair of walking shoes and socks
- Warm long-legged and long-sleeved clothing

**Also have available**
- Cash and/or ATM and credit card
- A full tank of gas in your car and trucks used for transporting goods
- Extra gasoline (if storage is available)
- Shovel
- Crow bar
- Jack, hoisting
- Tarps, 2
- Duct tape, 2 rolls (2)
- Cord, nylon, 50'
- Light sticks, 25
- Tape, hazardous, yellow, roll
- Garbage bags, large, 100
- Garbage bags, medium, 100
- Bio bags, roll
- Hardhats (one for each person)
- Goggles, eye, 1 pair per person
- Gloves, work, pair
- Gloves, nitrile, 50 pair
- Dust masks, 2 per person
- Blankets, 2 per person (more for padding for sleeping on floors)

**Technology, office supplies and emergency numbers**
- Unplug major non-vital appliances. Advanced surge-protection systems will protect your equipment from most power surges but will not prevent damage from a direct lighting strike.
- Raise all computers off the floor, remove any valuables, move equipment away from windows.
- Cover your computers and other equipment with plastic garbage bags.
- Put important papers in watertight containers (take them if you evacuate) and move valuables to upper stories of your home.
- Move all account records (paper) and all important materials to the inside rooms and/or to a vault if possible.
- Investigate the ability to take work with you.
- Update voicemail greeting with your current work location (if power is available).
- Keep critical phone numbers with you. Key numbers include those for family members, emergency and out-of-state contacts.
- Keep a current copy of emergency procedures with you and at home.
### Have in House Items

<table>
<thead>
<tr>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pay attention to local television and radio broadcasts for information about disasters and emergencies, such as storm position, intensity and expected landfall (if power is available).</td>
</tr>
<tr>
<td>• If you know someone who relies on electric-powered life-support equipment, be prepared to move that person to a facility outside of a storm’s projected path to avoid the risk of an extended power outage.</td>
</tr>
<tr>
<td>• Fill your sinks/pot washing sinks with water for sanitary purposes. Because water conducts electricity, it is not safe to run water during a storm.</td>
</tr>
<tr>
<td>• Secure outdoor furniture, bring indoors if possible.</td>
</tr>
</tbody>
</table>

### Who Assembled Supplies

Name: ____________________________________________

Date: ____________________________________________
The need for good communication as part of crisis management may seem too obvious to need emphasis. But that is the very reason why it is absolutely essential to make sure communications have been properly planned and that all the i’s are dotted and the t’s are crossed.

“Remember to give communications to and from your crisis management team the highest priority. They are the lifeblood of your effective crisis response.” It’s little wonder that Bruce T. Blythe, author of *Blindsided: A Manager’s Guide to Catastrophic Incidents in the Workplace*, is emphatic when he gives this advice. After all, if communication breaks down at any step before, during or after a crisis, mistakes — sometimes life-threatening mistakes — can be made.

Hundreds of articles and books have been written on crisis communications. One of the articles, which includes practice information, is “Recipe for Readiness, A Step-by-Step Guide to Crisis Communication,” from *Getting Back to Business*, reprinted with permission from the National Restaurant Association.

What follows is found in “Emergency Management Guide for Business and Industry,” a publication sponsored by a public-private partnership with FEMA.

**Contingency Planning**

Plan for all possible contingencies from a temporary or short-term disruption to a total communications failure.

- Consider the everyday functions performed by your facility and the communications, both voice and data, used to support them.
- Consider the business impact if your communications were inoperable. How would this impact your emergency operations?
- Prioritize all facility communications. Determine which should be restored first in an emergency.
- Establish procedures for restoring communications systems.
- Talk to your communications vendors about their emergency response capabilities. Establish procedures for restoring services.
- Determine needs for back-up communications for each business function. Options include messengers, telephones, portable microwave, amateur radios, point-to-point private lines, satellite and high frequency radio.
Emergency Communications

Consider the functions your facility might need to perform in an emergency and the communications systems needed to support them. Consider communications between:

- Emergency responders
- Responders and the Incident Commander (IC)
- The IC and the Emergency Operations Center (EOC)
- The IC and employees
- The EOC and outside response organizations
- The EOC and neighboring businesses
- The EOC and employees’ families
- The EOC and customers
- The EOC and media.

Methods of communication include:

- Messenger
- Telephone
- Two-way radio
- FAX machine
- Microwave
- Satellite
- Dial-up modems
- Local area networks
- Hand signals.

Family Communications

In an emergency, personnel will need to know whether their families are okay. Taking care of one’s loved ones is always a first priority. Make plans for communicating with employees’ families in an emergency. Also, encourage employees to:

- Consider how they would communicate with their families in case they are separated from one another or injured in an emergency.
- Arrange for an out-of-town contact for all family members to call in an emergency.
- Designate a place to meet family members in case they cannot get home in an emergency.

Notification

Establish procedures for employees to report an emergency. Inform employees of procedures. Train personnel assigned specific notification tasks. Post emergency telephone numbers near each telephone, on employee bulletin boards and in other prominent locations. Maintain an updated list of addresses and telephone and pager numbers of key emergency response personnel from within and outside the facility. Listen for tornado, hurricane and other severe weather warnings issued by the National Weather Service. Determine government agencies’ notification requirements in advance. Notification must be made immediately to local government agencies when an emergency has the potential to affect public health and safety. Prepare scripts for announcements that could be made over public address systems.

Warning

Establish a system for warning personnel of an emergency. The system should:

- Be audible or within view by all people in the facility.
- Have an auxiliary power supply.
- Have a distinct and recognizable signal.

Make plans for warning persons with disabilities. For instance, a flashing strobe light can be used to warn hearing-impaired people. Familiarize personnel with procedures for responding when the warning system is activated. Establish procedures for warning customers, contractors, visitors and others who may not be familiar with the facility’s warning system. Test your facility’s warning system at least monthly.

Test communications often. A research firm discovered in a drill that its two-way radio system did not work, limiting communication between the Emergency Operating Center (EOC) and the Incident Commander (IC) to a single telephone line. The Emergency Management Group had failed to provide a back-up radio for the EOC. Fortunately, this was discovered during training.

Test alarm systems monthly. One company conducted its first test of a sophisticated alarm system 21 years after the system was installed. Rather than alarm bells, the system played Christmas music.

Sources


“Communication in Risk Situations” published by Association of State and Territorial Health Officials (ASTHO). Written by Dr. Vincent T. Covello, director of the Center for Risk Communication, NY, NY.


Response to Media Inquiry. You’re in the middle of a crisis and the phone rings. It’s a reporter, on deadline. The decision to talk with that reporter, and the process of handling his or her request, is a critical part of media relations that can shape your restaurant’s image.

Media Statement or Press Release. Restaurants can distribute their messages through the creation and distribution of media statements or press releases. Depending on the situation, you may want to supplement those statements with direct calls to reporters, editors or producers to draw attention to your side of the story.

Targeted Media Pitch. Rather than issue a news item broadly, you may choose to “pitch” or “release” a story to one reporter, or a select group of reporters, by contacting them directly. Preferably, this is done in the context of an existing relationship with a reporter, or with the knowledge that a reporter covers issues similar to the one the restaurant has to offer.

Letter to the Editor. Sometimes it is appropriate to respond to a newspaper story by writing a letter to the editor. Doing so can provide an opportunity to express a side of the story you believe was absent from the article.

Op-Ed. Restaurants can submit an “Op-Ed” when an original opinion or response to an article requires more space than a letter to the editor will allow. A typical letter to the editor is approximately 50-150 words, while a typical Op-Ed is approximately 500-700 words. It is important to check with the newspaper about its unique requirements.

Editorial Board. Outreach to editorial boards is often overlooked but is many times one of the most effective tools for media engagement. The editorial board of a newspaper usually is composed of the senior editors who decide the media outlet’s editorial position on issues of the day. Editorial boards are no different than reporters—editorial-board members seek and require information about companies just as frequently. Editorial boards generally will meet with company staff for background or will seek out a company to learn more about an issue.

News Conference. A restaurant can hold a news conference if there is a need to communicate something newsworthy to the media broadly. Depending on the situation, audio news conferences can be used to communicate news items via telephone.
Advanced Tools. Technology has made available a host of tools that can benefit restaurants in their media relations efforts. Sometimes you will need to call in experts with the equipment and experience to successfully implement advanced techniques, which include:

✔ **Video news release (VNR):** a pre-produced media story to be distributed to television stations.

✔ **Audio news release (ANR):** a “sound only” report that can be distributed to radio stations.

✔ **B-roll:** your own videotape of operations and senior executive interviews that do not have a specific story line, but offer background information and visuals to electronic media.

✔ **Radio tour:** booking interviews with a host of radio stations to cover the airwaves with their story.

✔ **Web cast:** news conferences held via the Internet to reach an array of audiences.

✔ **Dark Web site:** Web sites that exist offline and are only activated if they are needed to address specific crisis situations.
UNDERSTANDING THE MEDIA

Today’s news media include newspapers, magazines, radio, network and cable television, and the Internet. While all conventional media may share a “thirst for getting the news,” there are marked differences in the way print and electronic media develop and deliver news—so you need to approach each medium differently.

At the same time, newspapers and television stations are managed by people with the same desires—and failings—as those who work within any industry.

Here are a few things to keep in mind about news reporters:

Reporters (generally) …

… aren’t out to make restaurants look bad
  but they don’t get paid to make them look good either.

… don’t have a hidden agenda
  but they think they know what news is, and what their readers, viewers, and listeners want.

… don’t seek to misquote spokespeople
  but they won’t rewrite a bad quote into a good one.

… don’t intentionally quote spokespeople out of context
  but their context often comes from the spokespeople.

… are human beings
  and want a pat on the back like others do—only it may be at a restaurant’s expense.

Remember …

… reporters are your conduit of information to key audiences.
  Reporters see themselves as a “stand-in” for their readers, viewers or listeners, asking questions the audience or readers would ask if they could. They are also trained to have a healthy skepticism about the story they are covering and the people they are interviewing.

… reporters’ skepticism becomes keener when they face evasive or confused storytellers.
  Honesty really is the best policy. If you lie to a reporter and your deception is discovered, you could be the subject of an ugly, avoidable news story.

… reporters want a good story.
  Generally, reporters want to get a good story—not “get” the company. Your media relations personnel should take time to think about the stories they have read or news they have listened to closely. What catches attention? Conflict, humor, danger, something new, a tug of the heartstrings—human emotions that send a message.

… one key to success is to confidently direct the company’s message to the audience the reporter represents, not to the reporter.
### Consider These “Dos” and “Don’ts” of Media Relations:

<table>
<thead>
<tr>
<th><strong>DO...</strong></th>
<th><strong>DON’T...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Treat members of the media with common courtesy and professionalism.</td>
<td>✔ Err on the extremes: trying to “win them over” on one hand or “beat them” into submission on the other.</td>
</tr>
<tr>
<td>✔ Take media stories seriously.</td>
<td>✔ Take media stories personally.</td>
</tr>
<tr>
<td>✔ Think about the story from the reporter’s perspective.</td>
<td>✔ Lose sight of why you are interested in media outreach in the first place.</td>
</tr>
<tr>
<td>✔ Prepare thoroughly and practice thoughtfully for interaction with the media.</td>
<td>✔ Become robotic in your approach to the media; losing one’s personality means losing one’s appeal.</td>
</tr>
<tr>
<td>✔ Think about all of the factors that impact media coverage and seek to influence these factors positively.</td>
<td>✔ Deceive or lie to the media—under any circumstance.</td>
</tr>
</tbody>
</table>
ESTABLISH A MEDIA RESPONSE PROCESS

Handling the high volume of media inquiries that can come your way during a crisis is critically important. You’ll want to respond to all media inquiries quickly and efficiently by evaluating each deadline and the relative importance of the media outlet making the inquiry.

With an efficient system for handling media inquiries, incoming calls are handled centrally and promptly routed to designated members of the Crisis Management Team (CMT) for response (review the responsibilities for various members of the CMT under “Step 1” of the of this guide titled “The Crisis Communications Plan.”).

Here is an outline for establishing a media inquiry response system:

Procedure Outline:

1. Individuals who receive phone calls or in-person inquiries from the media should route them to a designated member of the CMT. The designated member of the CMT may be the spokesperson or the logistics coordinator in a larger operation. The phone coordinator does not attempt to answer questions from the media. His or her job is to take the relevant information about the media inquiry and provide it to the appropriate person for evaluation. Don’t forget about your receptionist or hostess who may answer your phones! This person must be kept “in the know” about how to properly route phone calls, especially media inquiries.

2. The first point of contact for media calls should field calls using a script prepared by the CMT.

3. Calls must be answered immediately; no caller should encounter voice mail.

4. Staff logs incoming calls on a media request form (see example following this outline), recording all information, including contact information and deadline.

5. Media request forms are promptly relayed to the spokesperson, or the media coordinator in a larger operation.

6. Spokesperson, in consultation with entire CMT if appropriate, determines response to media requests. Here is where prioritization is critical. Calls should not necessarily be returned according to the time they were received; rather, you should evaluate requests based on the importance of the media outlet and deadline of the reporter.

7. Media calls are returned as deemed appropriate, and the media-request form is updated to reflect the result of the call and whether additional follow-up is required.

8. The media-request forms should be maintained in the order in which calls are returned, in case they are needed for further reference.
MEDIA RESPONSE FORM

Media Contact: ____________________________________________________________

Date: ______________________ Time: ___________ Deadline: ______________________

Organization: ___________________________________________________________

Telephone: ________________ Fax: ________________________________

E-mail: ______________________ Alternative: ________________________________

Comments:: ______________________________________________________________

_________________________________________________________________________

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_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

Taken By _________________________________________________________________

Follow-Up Interview Schedule

Contact: ______________________

Date: ______________________

Location: ____________________
PREPARE FOR A NEWS CONFERENCE

You may need to hold a news conference at a centralized location if a high-profile crisis situation attracts significant media attention; doing so can be an efficient way to provide multiple media outlets with a visual simultaneously.

At least two members of your Crisis Management Team (CMT) should “staff” the news conference—one to direct the news conference and the other to serve as support and pass out copies of news releases, business cards for spokespersons, and other relevant materials. You’ll also need a spokesperson(s) that may or may not be a member(s) of your CMT.

The member of the CMT who directs the news conference (“director”) is responsible for introducing the spokesperson(s) and other participants, including relevant expert sources; fielding questions; and drawing the event to a close.

Here’s a format to follow for a news conference:

1. Director welcomes members of the media and introduces company spokesperson(s) and other participants, making sure to spell all names and give full job titles. Director clearly states the time allotted for the news conference and the protocol for questions and answers.

2. Spokesperson(s) and other participants make brief statement regarding the facts of the incident (maximum five minutes per person). Statement should be factual and not speculate on the cause of the crisis, if this information is not confirmed.

3. Director thanks spokesperson(s) and other participants and opens the floor to questions. The director should request that members of the media state their name and affiliation when asking questions. Support staff should note the names and affiliations of journalists who ask questions.

4. Director manages questions from the media and draws the conference to a close once the messages and incident facts have been communicated. The conference should not be allowed to continue indefinitely; it should conclude within the time allotted during the introduction.

5. Before the news conference ends, the director should provide the media with a communications schedule: when the next conference will be held, when the next release will be issued, etc.

6. When the conference ends, the spokesperson(s) and other participants should leave the room promptly, accompanied by the support staff. Staff directing the conference should remain to deal with any additional requests for information and to ensure that all journalists clear the area, if necessary.
Just as there are appropriate techniques for handling the news conference, there are appropriate techniques for setting up the room. Here are some things to consider:

✔ Identify and set up a room that is of sufficient size to accommodate media interest. The room should be large enough to accommodate a minimum of five cameras, potentially more. Doors to this room should not allow members of the media to access areas where confidential work or conversations may be taking place.

✔ Arrange for security to monitor access by journalists to other parts of the building, if needed.

✔ Inform any receptionist(s) of the time and location of the news conference and brief them on the likely number of visitors.

✔ Establish a registration desk outside the conference room. Media materials should be available for distribution and all attendees should be required to register with their name, media affiliation and phone number. Only accredited members of the media should be given access to the news conference.

✔ Ensure the room set-up is appropriate for a news conference:
  • Chairs should be laid out in theater style with a central aisle to enable television and radio crews access for microphones. Allow seating for at least 20.
  • Space (at least the equivalent of three rows of seating) should be left for cameras, toward the rear of the room.
  • A lectern should be provided for the spokesperson(s).
  • Ideally, the lectern should be positioned in front of a wall or curtain with a plain and unpatterned background. It should not be in front of a window or other area of activity. It should be well lit but away from direct sunlight.
  • If available, a sign showing the company’s logo should be positioned on the front of the lectern or otherwise behind the spokesperson.
  • Water should be available for the spokesperson(s) on the lectern.
  • The spokesperson(s) should have a route to exit the room that is clear from camera equipment and seating.
PRACTICE AND PREPARE FOR INTERVIEWS

Reporters are professional interviewers who spend years learning their craft. When it comes to being interviewed, most of the rest of us are amateurs, no matter what positions we hold. But you can improve your odds by taking time to learn how to be interviewed. Remember, the more you prepare, the better your chances of success.

This section includes tips for performing well in interviews.

General Interview Tips

- When a reporter first calls asking for information, ask questions. Find out what he or she is covering, why he or she called, who else will be called, and what background information he or she has.
- When a reporter calls for information, comment or an actual interview, one of the most important questions to ask is, “What is your deadline?” It is critical to work within the context of the reporter’s deadline.
- Know what you want to say before the reporter walks through the door. Have two or three key messages ready and get each of your key messages into the interview at least once—don’t be afraid to repeat them. Repetition of message is key to success.
- Keep answers brief and to the point. This increases the chances that the quote that best states the case is the one that will be used.
- Avoid technical jargon.
- Make the most important points at the beginning of the interview.
- Remember that an interview is an opportunity to communicate your messages, not just to answer questions.
- Answer questions on a positive note.
- Remain calm, courteous and cooperative.
- Be honest, responsive and factual.
- If you are being interviewed by a newspaper reporter with a photographer present, look at the reporter and not at the photographer.
- Do not talk off the record. Assume anything you say can be used by the reporter.
- If you don’t know the answer to a question, promise to find out the information and report back to the reporter or producer.

Television Interview Tips

- If possible, choose a location that is comfortable and that reflects the topic of the story.
- Think about additional picture opportunities that can be offered.
- Find out if the interview is live or taped and if others will be interviewed simultaneously.
- Accept makeup if it is offered.
• Don’t give away any unfavorable information during set-up that could be used by the reporter during the interview.

• Look at the interviewer, not the camera (unless the interview is with a straight-on shot for a satellite feed; then, look slightly above the camera).

• Do not nod agreement during a lengthy question. If the tone changes, you will have to alter your body language quickly.

• Don’t lose control and don’t demand that the interview be halted. If this happens on camera, it makes great TV and terrible PR. Answer tough questions with vigor and clarity. Keep your message in the answer, no matter how rambling, aggressive or antagonistic the question sounds. Remain calm and centered.

• Pause before answering.

• Do not slouch, but do not sit ramrod straight. Try not to fidget.

• Ensure body language reflects the message. It is OK to smile at appropriate times.

• State the main message at the beginning of the interview, as well as at the end of the interview. At the end, thank the presenter.

• Assume cameras, tape recorders and microphones are always on.

**Radio Interview Tips**

• Find out if the interview is live or taped and if others will be interviewed simultaneously.

• Particularly for early-morning interviews, warming up your voice is helpful.

• Minimize background noise and eliminate disruptions at the interview location.

• Use “visual imagery” and “colorful examples.”

• The tone of your voice must reflect your message.

• If callers will ask questions, write down the names of each caller and refer back to them by name.

• Do not attack any “nuisance callers”—handle the situation with grace.

• Do not patronize callers; speak to them with the same tone as you would with an acquaintance.

• Pause between points.

**Practice Makes Painless**

Media training is tremendously valuable. Public-relations specialists can teach interview techniques from the basic to the highly advanced. In addition, practice in realistic settings makes actual interviews much less daunting.
Depending on your restaurant’s level of experience in public relations, drafting the documents that serve as the “tools of the trade” of media relations—press releases, media advisories, statements, etc.—can be second nature or completely unfamiliar. The most important thing to remember when crafting these documents for use in crisis communications is to establish the facts and convey your key messages (see “Step 5” under “The Crisis Communications Plan.”)

In this section of the guide, we’ve included descriptions and templates for various documents that may need to be written as part of your crisis communications planning, including: communications to the media, communications to key audiences such as customers, and internal talking points. Remember, in addition to routing for approval by the appropriate management in your restaurant, these documents must be reviewed by your legal counsel.
MEDIA ADVISORIES

A restaurant should issue a media advisory when planning an event like a news conference. A media advisory is one of the simplest forms of media outreach—it includes little more than the facts, and is much like an invitation that you would send for a personal engagement.

Creating the media advisory is only half the battle. The outreach is not complete until the advisory has been distributed to the media and you have conducted the appropriate follow-up.

Companies should develop media lists that include the names and contacts at various media outlets, including trade press and local newspapers, radio stations, and television networks (see “Step 4” under “The Crisis Communications Plan”). In compiling the list, you’ll want to identify the appropriate media contacts, the frequency and deadlines of the various media outlets, and their preferred method of contact. The media face the same challenges that other companies face, and personnel changes are common. These lists must be updated regularly!
MEDIA STATEMENTS

A media statement communicates your restaurant’s position on an issue or the status of a situation. A statement should be attributed to a person in your restaurant and provide that person’s name and title. The statement should also include a media contact, as well as the date of the statement.

Here are some considerations for media statements:

✔ **Statements should be only as long as they need to be.** Remember, the media will likely take only a few lines from your statement. By issuing a more compact statement, you’ll increase the likelihood that your key points will appear in media coverage. At the same time, you don’t want to be accused of issuing a “terse” statement during a crisis situation—one that is not substantive enough to indicate genuine caring.

✔ **Statements are nothing more than an extension of the restaurant’s larger strategy.** Remember to keep focused on your goals in a given situation. The statement should support the achievement of the restaurant’s goals and reflect your key messages.

✔ **The tone of your statement is as important as the facts conveyed in the statement, if not more so.** When reviewing a statement, ensure that it cannot be perceived as “defensive, angry, evasive, or insincere.”

✔ **Proofreading is important.** Typos and errors in grammar and punctuation undermine your credibility.

As is the case with media advisories, maintaining and utilizing accurate media lists is important. You’ll also want to consider how the statement will be used. Sometimes, a restaurant will decide not to release a statement broadly, but to keep it available in case the media call. In other instances, a full-scale release is appropriate. A middle-of-the-road approach is to post the statement on the Web site so reporters who are looking for information can find it.

Statements can be useful with all forms of media, including newspapers, radio and television. For example, you may receive a television interview request for which you decide it is not wise to provide an on-camera spokesperson. Issuing a well-worded statement can be a suitable response in some situations.
This sample statement is provided for formatting and style purposes only. Actual statements should be reviewed by appropriate personnel within a company and its consultants, including technical experts, public-relations staff, company leadership, and legal counsel.

For Immediate Release
October 1, 2004

Contact: Jane Smith
202-555-6789

Statement of
John Jones, President and CEO
Great Place To Eat, Inc.

The people of Great Place To Eat, Inc. are saddened by an accident today involving three long-time employees. Our immediate concern is their recovery and the well-being of their families.

Also of vital importance to Great Place To Eat, Inc. is a complete understanding of the nature and cause of the accident, and the prevention of such an event in the future. We are cooperating fully with an investigation of the federal Occupational Safety and Health Administration. Consistent with the company’s policies, we also have initiated an extensive independent investigation. Great Place To Eat, Inc. takes the safety of the workplace very seriously. No prior accident has required hospital care for a company employee.

Immediately following the accident, Great Place To Eat, Inc. personnel acted in accordance with its procedures to immediately cease operations in the affected area. The affected area remains closed at this time. Operations in this area will resume as soon as possible, in consultation with the authorities.

# # #

Great Place To Eat, Inc. is a Washington, D.C.-based family of casual-dining restaurants. Great Place To Eat, Inc. began as a family owned and operated single restaurant in 1955. Today, the privately held company operates 32 restaurants in Washington, D.C., Virginia, Maryland and Delaware.
PRESS RELEASES

A press release resembles an actual newspaper story in a lot of ways—it includes a headline and is written much like an article in a newspaper. In addition, a press release includes a media contact, a release date and a description of the restaurant.

A press release is used when communication of a news development requires a quote from a restaurant representative, but also substantial background information.

Here are some thoughts to consider when developing a press release:

✔ Like many forms of communication to the media, compactness is key. It is important to communicate the key points—the “who, what, when, where, why and how?”—in preferably one, and certainly not more than two, pages.

✔ The most important part of the press release is the headline and the lead paragraph. They provide the focus of the news story.

✔ When writing a press release, put the most important information first, and the least critical information last. Some smaller publications will print press releases almost word for word, but they may need to edit for space. Sometimes, companies will recognize their press releases in print, with the last two or three paragraphs deleted.

✔ Keep quotes from restaurant representatives short and “on message.” This increases the chance that the quote used by the media is the one that your company wants to see in print.
James’ Joint Open During Renovations Following Fire
Restaurant thanks community for support

Washington, D.C.—James’ Joint restaurant reopened today following a fire that caused the restaurant to close for two weeks. The restaurant has resumed normal business hours and has introduced a new sandwich called the “Neighborhood Special” in honor of the outpouring of support from customers following the fire.

“We are open for business as usual,” said Paul James, owner of James’ Joint. “The safety of our employees and customers comes first, and we are proceeding with the approval of the authorities. We are primarily thankful that nobody was hurt in this incident, particularly the brave firefighters at Station 32. We thank our firefighters for their heroic and swift work to protect lives and save our livelihood, and we thank the community for standing by us. We look forward to returning to our primary goal of welcoming our customers for great food and great service.”

James delivered enough of its new “Neighborhood Special” sandwiches to Station 32 today to feed the entire firehouse and made a donation of children’s toys to the burn unit of Washington Hospital.

Renovations will be necessary to restore service to a portion of the restaurant’s kitchen as a result of fire damage. The fire on September 17, 2004, occurred when the restaurant was closed. An investigation into the cause is ongoing.

James’ Joint is open Sunday through Thursday from 11 a.m. to 11 p.m., and Friday and Saturday from 11 a.m. to midnight.

# # #

James’ Joint is a family-owned and -operated Washington, D.C., restaurant and bar that has served the metropolitan Washington community since 1975. Five members of the James family currently work at the establishment.
During a crisis, you’ll need to provide guidance to your employees about how to handle questions from various audiences. Employees should be reminded of the company’s policy regarding talking to the media. This policy should include referring the reporter to a designated media contact. You’ll also want to provide guidance about how employees should handle questions from restaurant guests.

If your restaurant is a multi-unit operation, you should make a decision as to the breadth of the distribution of these talking points. Particularly if restaurant locations share a brand name, it is possible—in fact likely, in the case of a high-profile incident—that employees at locations beyond the site of the crisis will receive questions.

One important caution about issuing internal talking points is that these documents should not contain anything that the restaurant would be uncomfortable seeing on the front page of the paper. Assume that anything can make its way into the hands of the media. Another guideline to keep in mind is that the talking points should be simple enough to remember by heart.

An appropriate script to distribute to staff for telephone inquiries and in-person conversations with customers may look like this:

Thank you for calling (or coming in).
Yes, I am aware of these news stories, and we are investigating. I am not familiar with all the details, but I can refer you to someone who will be better able to assist you.

We have a toll-free number designated to address customers’ questions on issues like this. If you call that number you will reach someone who will be able to answer your questions.

[Or, I would be happy to have someone contact you].

Thank customer and close conversation.

It is appropriate for the staff member to share concern, if appropriate. But the staff member should not comment further or speculate, or attempt to respond to specific questions.

Like other documents associated with crisis communications, scripts and talking points should be reviewed by legal counsel, public-relations staff, and other appropriate personnel.
SAMPLES OF SUCCESS:
CASE STUDIES & PRACTICE DRILLS IN CRISIS COMMUNICATIONS

When it comes to crisis communications, there is no substitute for regular practice. That’s why we strongly recommend you conduct crisis drills and media training to enhance your team’s decision-making skills and efficiency in crisis management.

It’s also valuable to study case studies of crisis situations that can increase your understanding of crisis communications principles in action. While no two crises are exactly alike, elements of crises are predictable and share similarities that make preparation both wise and possible. Case-study review is an important step toward understanding how your restaurant would handle the next crisis looming around the corner.

In this section, we’ve combined both practice drills and case studies to help you boost your knowledge and your confidence in crisis communications.

The case studies in this section are fictional, but each situation blends circumstances and actions from actual events. While reading the case studies, keep in mind how the elements of crisis communications planning and management presented earlier in this guide are implemented.

In the practice exercises, we’ve presented you with the basic facts surrounding a specific crisis followed by a series of questions for you to consider when determining how you’d handle the crisis. We recommend you use these drills as “food for thought” for your crisis management team’s next meeting. Practice them now, before the next crisis hits!
SAMPLES OF SUCCESS:
CASE STUDIES IN CRISIS COMMUNICATIONS—NATURAL DISASTER/FIRE

FACTS
A single-unit restaurant suffered a fire overnight that inflicted considerable, though not devastating, damage to the kitchen area. The fire occurred after the restaurant closed for the evening. No employees or customers were in the restaurant at the time of the fire. The security system vendor used by the restaurant notified the owner of the incident at 3:30 a.m. Upon consulting with the fire department, it became apparent that the damage would require the restaurant to close for an uncertain period of time. The fire department indicated that the cause of the fire was unknown and that an investigation would be necessary.

After seeing that the fire was extinguished, the owner returned home for the rest of the night. Following a sleepless night and disappointment and sadness over the state of the family business, the owner returned to the location early the next morning to inspect the damage in the daylight. He was “greeted” by the arrival of a television camera crew and a newspaper reporter.

STRATEGY
The owner reacted calmly and told the news media that he was not prepared to talk with them at this time because so little was known about the incident. He asked if he could call them back and took down their contact information. The reporters indicated the time by which they would like to talk with the owner—this was fortunate, since the owner forgot to ask about their deadlines.

The owner asked his family members who work at the restaurant to meet him at a neighboring car dealership, whose owner offered some meeting space to tend to the business at hand. He also contacted his attorney and his accountant, who also serves as a business manager. The owner contacted his employees and broke the news, telling them that they need not report to work until further notice. He asked them not to discuss the incident with reporters and to refer any calls to him.

Once his family members and business advisors were gathered together with the owner, they began to talk about the situation and its implications, including the need to develop a communications strategy in light of the reporters’ visits.

This team decided its main objective was to lay the groundwork for restoring the business as soon as possible by emphasizing the business’s efforts to return to normal operations quickly. They also wanted to emphasize the restaurant’s image as a valued neighbor in the community characterized by caring people and friendly service.

The team realized it would be important to keep communications focused on the facts, as the cause of the fire was unknown. Avoiding speculation would be important.
They agreed that any communications should focus on the following themes:

• The restaurant is thankful nobody was hurt, including the firefighters involved in battling the fire.
• The restaurant is eager to identify the cause of the fire and is cooperating completely with the authorities.
• The restaurant strives to return to business as soon as it is safe and possible to do so.

They agreed the following groups of people were among their target audiences: customers, community opinion leaders, and suppliers.

**ACTION**

*After meeting, the team took the following actions:*

• Contacted the fire department to determine if there was any additional information and to obtain a media contact at the department who could discuss specific aspects of the investigation.
• Agreed that the owner would serve as the restaurant’s media spokesperson and that any media inquiries would be forwarded to him.
• Drafted a media statement describing the facts of the fire as they were known at the time and reflecting the key messages.
• Hand-delivered the statement to the media contact at the fire station, local news media, neighboring businesses, and local officials.
• Contacted the restaurant’s Web-site developer and had the statement posted on its Web site.
• Developed a list of potential questions that the media would likely ask and rehearsed appropriate answers.
• Called the reporters who had met the owner at the restaurant and conducted a telephone interview with the newspaper reporter and an on-camera interview with the television reporter.
• Created a sign to hang on the front door of the restaurant that read, “We look forward to serving you again very soon. We are thankful for the health and safety of our brave firefighters and of our community. We appreciate your support.”
• Sent a letter to suppliers indicating what happened and making necessary contingencies.

After accomplishing these tasks, the group met to determine events that would create a need for additional communications. The group noted the following: a finding on the cause of the fire; the scheduling of a date for re-opening of the restaurant; and the actual re-opening.
CONSIDERATIONS

Here are a few ways in which the situation would have differed under alternative circumstances.

If the restaurant were a multi-unit operation:

... it would have been important to distribute a sample script for employees of the other restaurants and to inform them of the appropriate way to handle media inquiries.

If the suspected cause of the case were arson:

... it would have been necessary to accommodate increased media attention.

... it would have been necessary to request information from anybody who might have had information about the incident.

If individuals were harmed:

... it would have been necessary to emphasize the appropriate level of concern for those harmed and for their families and to consider some action that would demonstrate that concern.

... promoting the restaurant’s eagerness to “return to business as usual” would not be appropriate.

If individuals were harmed and the restaurant was at fault in any way:

... it would have been necessary for the restaurant to accept responsibility, to communicate regret, and to indicate steps taken to prevent similar incidents in the future.

... the restaurant would have made tasteful and sincere outreach to the victim(s) and family members to offer assistance.

... coordination with legal counsel would have been even more critical to every facet of the communications.
SAMPLES OF SUCCESS:

CASE STUDIES IN CRISIS COMMUNICATIONS—PROTESTS

FACTS

A group of more than 100 activists arrived to picket at a franchised location of a national restaurant brand at 11 a.m. The individuals were part of an activist group that had announced a boycott of the national brand, alleging that the company sources some products internationally from entities with substandard labor practices. The protest was the third in a series of protests against various restaurant locations owned by different franchisees. The picketers assembled on a public sidewalk outside of the restaurant, displaying signs, chanting, and using noisemaking devices including air horns and cowbells. The manager on duty immediately called the franchisee by telephone to inform him of the development.

STRATEGY

Immediately following the activist group’s initial announcement of its boycott, the corporate headquarters of the restaurant company distributed a kit to franchisees to prepare for the possibility of protests. The kit included guidelines for handling the protest; a script for media inquiries; instructions for communicating with employees about the situation and how they should answer questions from guests; a copy of the official company statement on the boycott; and a backgrounder on the company’s consistent efforts over time to advocate labor practices consistent with international and industry standards.

The franchisee had received this information but was still surprised to see the activist group had selected his location for its next protest. He called the corporate headquarters immediately to inform them, called two additional managers into work, and proceeded to the restaurant. Upon arriving at the restaurant, he followed the instructions provided to him by the corporate headquarters.

The instructions indicated that the main objective for a franchisee whose restaurant becomes the site of a protest is to “survive the day without fueling more extensive media coverage.” The company’s “big picture” objective was to demonstrate its corporate responsibility on international labor standards without entering into debates with activist groups.

The company emphasized that the actions of the corporate headquarters and franchisees should reflect the following themes:

- The restaurant respects the right of individuals to protest and hold their own opinions.
- The restaurant is committed to corporate responsibility in the area of international labor practices, has consistently advocated such practices consistent with international and industry standards, and continues to identify opportunities to act appropriately as a corporate citizen.
- The restaurant maintains a posture of hospitality in the face of any protest situation.

Information about media relations, found in “Recipe for Readiness, A Step-by-Step Guide to Crisis Communication,” reprinted with permission from the National Restaurant Association. Operators interested in ordering Getting Back to Business: Resources for Restaurateurs, should call (800) 482-9122 or visit the Association’s online store.
Lives can be saved and casualties reduced by following basic steps to prepare for these natural disasters and emergencies. For natural disasters and emergencies, the following preparation and supplies are essential. See subject-specific chapters for details:

- A master plan with procedures to follow before, during and after, emergency contacts, etc.
- Guidelines for water safety and water management
- Guidelines for food safety and food management, including menus
- Emergency supplies
- Guidelines for medical emergencies
- First aid supplies.

Note: For all the following disasters and emergencies, remember to have on hand a critical piece of natural disaster equipment: a NOAA Weather Alert Radio, a 24-hour warning monitor.

FLOODS AND FLASH FLOODS

What they are: Floods are the most common and widespread of all natural disasters. Most communities in the U.S. can experience some degree of flooding after spring rains, heavy thunderstorms or winter snow thaws. Flash floods can be caused by intense storms or dam failure.

The concerns: Most floods develop slowly over a period of days. Flash floods, however, are like walls of water that develop in a matter of minutes. Floods can cause significant water damage to structures, equipment and supplies. They sometimes strike without warning.

Flood alerts

- A flood watch: High flow or overflow of water from a river is possible in the given time period. It can also apply to heavy runoff or drainage of water into low-lying areas. These watches are generally issued for flooding that is expected to occur at least 6 hours after heavy rains have ended. Stay tuned to NOAA radio. Be prepared to evacuate. Turn to local television and radio stations for further information.
- A flood warning: Flooding conditions are actually occurring or are imminent in the warning area. Take precautions.
at once. Be prepared to go to higher ground. If advised, evacuate immediately.

- **A flash flood watch:** Flash flooding is possible in or close to the watch area. Flash Flood Watches are generally issued for flooding that is expected to occur within 6 hours after heavy rains have ended.
- **A flash flood warning:** Flash flooding is actually occurring or imminent in the warning area. It can be issued as a result of torrential rains, a dam failure or ice jam.

**What to do before danger threatens**

Whether your building’s maintenance department or your department takes responsibility for this, the steps are of crucial importance.

1) Determine whether your facility is located in a flood plain, review the history of flooding in your area and familiarize yourself with the elevation of your facility in relation to nearby streams, rivers and dams. Consult Flood Insurance Rate Maps (FIRMs) to determine your flood risk.

2) Review the community’s emergency plan and evacuation routes and the exact locations of higher ground in your community along with the routes to get to them from your facility.

3) Establish warning and evacuation procedures for the facility and build in plans for assisting employees who may need assistance and/or transportation in evacuating the building and area.

4) Prepare a facility checklist of areas subject to flooding, records and equipment that can be moved to a higher location and where that higher location is.

5) Consider three groups of flood-proofing measures to protect your facility. Choose appropriate measures based on your location, facility design, the likelihood of occurrence and the potential for damage.

**Permanent flood-proofing** measures are taken before a flood occurs and require no human intervention when flood waters rise. They include:

- Filling windows, doors or other openings with water-resistant materials such as concrete blocks or bricks. This approach assumes the structure is strong enough to withstand flood waters.
- Installing check valves to prevent water from entering where utility and sewer lines enter the facility.
- Reinforcing walls to resist water pressure and sealing walls to prevent or reduce seepage.
- Building watertight walls around equipment or work areas within the facility that are particularly susceptible to flood damage.
- Constructing floodwalls or levees outside the facility to keep flood waters away.
- Elevating the facility on walls, columns or compacted fill. This approach is most applicable to new construction, though many types of buildings can be elevated.

**Contingent flood-proofing** measures are also taken before a flood, yet require some additional action when flooding occurs. These measures include:

- Installing watertight barriers called flood shields to prevent the passage of water through doors, windows, ventilation shafts or other openings.
- Installing permanent watertight doors.
- Constructing movable floodwalls.
- Installing permanent pumps to remove flood waters.

**Emergency flood-proofing** measures are generally less expensive than those listed above, though they require substantial advance warning and do not satisfy the minimum requirements for watertight flood-proofing as set forth by the National Flood Insurance Program (NFIP). They include:

- Building walls with sandbags.
- Constructing a double row of walls with boards and posts to create a “crib,” then filling the crib with soil.
- Constructing a single wall by stacking small beams or planks on top of each other.
- Consider the need for backup systems, including portable pumps to remove flood water, alternate power sources such as generators or gasoline-powered pumps, and battery-powered emergency lighting.
- Participate in community flood control projects.

**What to do before, during and after a flood**

**Before:**

1) Turn off all utilities at the main power switch and close the main gas valve if evacuation appears necessary.

2) Fill sinks and plastic soda and water bottles (and bathtubs if these are available) with clean water. Sanitize the sinks and tubs first by using bleach. Rinse, then fill with clean water.

3) Use large corks or stoppers to plug drains.

4) Stockpile plywood, plastic sheeting, lumber, shovels, sandbags, and such tools as hammer, nails, saw and a prybar.

**During:**

1) If you’re at work in a building, follow procedures for evacuation or moving to a higher floor or roof. If you are at home, evacuate or, if waters begin to rise before you have evacuated, move to a higher floor or roof. Take emergency provisions, such as dry clothing, a flashlight and portable radio with you. Then, wait for help.

2) Don’t drive through a flooded area. If you come upon a flooded road, turn around and go another way. More people drown in their cars than anywhere else.

3) If your car stalls, abandon it immediately and climb to higher ground. Many deaths have resulted from attempts to move stalled vehicles.

4) Don’t walk through flooded areas. As little as six inches of moving water can knock you off your feet.

5) Stay away from downed power lines and electrical wires. Electrocution is another major source of deaths in floods. Electric current passes easily through water.

**After:**

Flood dangers do not end when the water begins to recede. Listen to a radio or television and don’t return to any building until authorities indicate it is safe to do so.

1) Before entering a building, inspect foundations for cracks or other damage. Don’t go in if there is any chance of the building collapsing.
2) Upon entering the building, don’t use matches, cigarette lighters or any other open flames, since gas may be trapped inside. Instead, use a flashlight to light your way.

3) Keep power off until an electrician has inspected your system for safety.

4) If your facility has been flooded, clean it up as soon as possible. Floodwaters pick up sewage and chemicals from roads, farms and factories. Be sure to throw out foods that may have met floodwater.

5) Until local authorities proclaim your water supply to be safe, boil water for drinking and food preparation vigorously for five minutes before using.

6) Be careful walking around. After a flood, steps and floors are often slippery with mud and covered with debris, including nails and broken glass.

**HURRICANES**

**What they are:** Severe tropical storms with sustained winds of 74 miles per hour or greater. Hurricane winds can reach 160 miles per hour and extend inland for hundreds of miles.

**The concerns:** Hurricanes bring torrential rains and a storm surge of ocean water that crashes into land as the storm approaches. Hurricanes also spawn tornadoes.

**Hurricane alerts**
Advisories are issued by the National Weather Service as soon as a hurricane appears to be a threat. The hurricane season lasts from June through November.

- **A hurricane watch:** Hurricane conditions are possible in the watch area within 24 to 36 hours. Stay tuned for additional advisories. Tune to local radio and television stations for additional information. An evacuation may be necessary.

- **A hurricane warning:** Hurricane conditions are expected in the warning area within 24 hours. Take precautions at once. If advised, evacuate immediately.

**What to do before danger threatens**
Whether your building’s maintenance department or your department takes responsibility for this, the steps are of crucial importance.

1) Familiarize yourself with community evacuation plans, routes and shelters.

2) Establish facility warning, shutdown and evacuation procedures.

3) Protect your facility from hurricanes.

• Prepare a master plan for moving records, computers and other items within your facility to another location.

• Prepare a master communication checklist with contact information and alternate phone numbers to communicate with employees’ families before and after a hurricane.

• Stockpile supplies to protect windows, either permanent storm shutters or 5/8-inch marine plywood sheets. Be sure employees know where shutters and/or plywood sheets are stored and how to install them — quickly. Mark which board fits which window. Pre-drill screw holes every 18 inches — well in advance of storm.

• Consider the need for backup systems, including battery-powered emergency lighting, portable pumps to remove flood water and alternate power sources such as generators or gasoline-powered pumps.

**What to do before, during and after a hurricane**

**Before:**

1) Secure buildings by closing and boarding up windows.

2) Remove outside antennas.

3) Turn refrigerator and freezer to coldest settings; open only when absolutely necessary and close quickly.

4) Store drinking water in clean bathtubs, jugs, bottles and cooking utensils.

5) Review community and facility evacuation plans.

**During:**

1) Avoid elevators.

2) Stay inside, away from windows, skylights and glass doors.

3) Keep a supply of flashlights and extra batteries handy.

4) Avoid open flames, such as candles and kerosene lamps used as a source of light.

5) If power is lost, turn off major appliances to reduce power “surge” when electricity is restored.

6) If evacuation is recommended: Secure your facility by unplugging appliances and turning off electricity and the main water valve. Bring pre-assembled emergency supplies and warm protective clothing, blankets and sleeping bags to shelter. Lock up and leave as soon as possible. Avoid flooded roads and watch for washed-out bridges.

**After:**

1) Stay tuned to local radio for information.

2) Avoid loose or dangling power lines and report them immediately to the power company, police or fire department.

3) Enter buildings with caution.

4) Beware of snakes, insects and animals driven to higher ground by floodwater.

5) Open windows and doors to ventilate and dry building.

6) Inspect utilities in a damaged building

• Check for gas leaks: If you smell gas or hear blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighboring building.

• Look for electrical system damage: If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.

• Check for sewage and water lines damage: If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid the water from the tap. You can obtain safe water by melting ice cubes.
TORNADOES

What they are: Tornadoes are incredibly violent local storms, spawned from powerful thunderstorms, that extend to the ground with whirling winds that can reach 300 miles per hour. Tornadoes can occur in any state but occur more frequently in the Midwest, Southeast and Southwest.

The concerns: Tornadoes can uproot trees and buildings and turn harmless objects into deadly missiles in a matter of seconds. Damage paths can be in excess of one mile wide and 50 miles long. They occur with little or no warning.

Tornado alerts
• A tornado watch: Conditions are conducive to the development of tornadoes in and close to the watch area. Be ready to take shelter. Stay tuned to radio and television stations for additional information.
• A tornado warning: A tornado has been sighted in your area or is indicated by radar and is occurring or imminent in the warning area. Take shelter immediately.

Fujita - Pearson Tornado Scale
F-0: 40-72 mph, chimney damage, tree branches broken
F-1: 73-112 mph, mobile homes pushed off foundation or overturned
F-2: 113-157 mph, considerable damage, mobile homes demolished, trees uprooted
F-3: 158-205 mph, roofs and walls torn down, trains overturned, cars thrown
F-4: 207-260 mph, well-constructed walls leveled
F-5: 261-318 mph, homes lifted off foundations and carried over 200 miles per hour, cars tossed into the air
F-6: 319-379 mph, homes carried more than 200 miles per hour
F-7: 380-439 mph, homes carried more than 200 miles per hour
F-8: 440-509 mph, homes carried more than 200 miles per hour
F-9: 510-579 mph, homes carried more than 200 miles per hour
F-10: 580-649 mph, homes carried more than 200 miles per hour
F-11: 650-719 mph, homes carried more than 200 miles per hour
F-12: 720-789 mph, homes carried more than 200 miles per hour

What to do before danger threatens
Whether your building’s maintenance department or your department takes responsibility for this, the steps are of crucial importance.

1) Know the tornado danger signs:
   • An approaching cloud of debris can mark the location of a tornado even if a funnel is not visible.
   • Before a tornado hits, the wind may die down and the air may become very still.
   • Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

2) Establish procedures to inform personnel when tornado warnings are posted. Consider the need for spotters to be responsible for looking out for approaching storms.

3) Work with a structural engineer or architect to designate shelter areas in your facility. Ask your local emergency management office or National Weather Service office for guidance. Consider the amount of space you will need. Adults require about six square feet of space per person. The best protection in a tornado is usually an underground area. If an underground area is not available, consider:
   • Small interior rooms on the lowest floor and without windows.
   • Hallways on the lowest floor away from doors and windows.
   • Rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead.
   • Protected areas away from doors and windows.

4) Be sure all employees know the designated shelter areas, the closest one to their workplace and how to get to them.

What to do before, during and after a tornado

Before:
Because there is little warning time, follow instructions above long before danger threatens. Follow the instructions for “during” as soon as you know a tornado is coming.

During:
1) Go at once to a windowless, interior room. Some people have reported that going to the top of a staircase or closet that is situated at the top of a staircase offers protection. Or go to a storm cellar or the basement or lowest level of the building. If there is no basement, go to an inner hallway or a smaller inner room without windows, such as a bathroom or closet. Get away from the windows. Go to the center of the room. Stay away from corners because they tend to attract debris. Get under a piece of sturdy furniture such as a workbench or heavy table or desk and hold on to it. Use arms to protect head and neck.

2) If at work or school: Go to the basement or to an inside hallway at the lowest level. Avoid places with wide-span roofs such as auditoriums, cafeterias, large hallways or shopping malls. Get under a piece of sturdy furniture such as a workbench or heavy table or desk and hold on to it. Use arms to protect head and neck.

3) If outdoors: If possible, get inside a building. If shelter is not available or there is no time to get indoors, lie in a ditch or low-lying area or crouch near a strong building. Be aware of the potential for flooding. Use arms to protect head and neck.

4) If in a car: Never try to out-drive a tornado in a car or truck. Tornadoes can change direction quickly and can lift up a car or truck and toss it through the air. Get out of the car immediately and take shelter in a nearby building. If there is no time to get indoors, get out of the car and lie in a ditch or low-lying area away from the vehicle. Be aware of the potential for flooding.

After:
1) Stay out of damaged buildings. Use the telephone only for emergency calls.

2) Clean up spilled medicines, bleaches, or gasoline or other flammable liquids immediately. Leave the building if you smell gas or chemical fumes.

www.fema.gov/kids/fscale.htm
EARTHQUAKES

What they are: Earthquakes are a vibrating movement of a portion of the earth’s crust, produced by underground volcanic forces or by the breaking and shifting of rock beneath the earth’s surface. In the U.S., earthquakes occur most frequently west of the Rocky Mountains, although historically the most violent earthquakes have occurred in the central U.S.

The concerns: Earthquakes can seriously damage buildings and their contents; disrupt gas, electric and telephone services; and trigger landslides, avalanches, flash floods, fires and huge ocean waves called tsunamis. Aftershocks can occur for weeks following an earthquake. In many buildings, the greatest danger to people in an earthquake is when equipment and non-structural elements such as ceilings, partitions, windows and lighting fixtures shake loose. Earthquakes occur suddenly and without warning.

Measuring an earthquake’s strength
The Richter scale measures the magnitude of an earthquake’s strength in terms of the energy dissipated in it, with 1.5 being the smallest that can be felt and 8.5 being a devastating earthquake.

Earthquake alerts
Earthquakes cannot be predicted, and so there are no earthquake alerts.

What to do before danger threatens
Whether your building’s maintenance department or your department takes responsibility for this, the steps are of crucial importance.

1) Understand the risks of earthquake in your location. Obtain seismic information for your area from local government agencies. Use this information to undertake appropriate earthquake protection and structural reinforcement work based on your building’s design and location, the probability of earthquake occurrence and the potential for damage.
2) Have your facility inspected by a structural engineer. Develop and prioritize strengthening measures. These may include:

- Adding steel bracing to frames
- Adding shear walls to frames
- Strengthening columns and building foundations
- Replacing unreinforced brick filler walls.

3) Inspect non-structural systems such as air conditioning, communications and pollution control systems. Assess the potential for damage. Prioritize measures to prevent damage.
4) Inspect your facility for any item that could fall, spill, break or move during an earthquake.
5) Move large and heavy objects to lower shelves or the floor. Hang heavy items away from where people work.
6) Secure shelves, filing cabinets, tall furniture, desktop equipment, computers, printers, copiers and light fixtures.
7) Secure fixed equipment and heavy machinery to the floor. Larger equipment can be placed on casters and attached to tethers which attach to the wall.
8) Add bracing to suspended ceilings, if necessary. Install safety glass where appropriate. Secure large utility and process piping.
9) Keep copies of design drawings of the facility to be used in assessing the facility’s safety after an earthquake.
10) Review processes for handling and storing hazardous materials. Have incompatible chemicals stored separately.

What to do before, during and after an earthquake

Before:
Since there is no warning before an earthquake, follow the procedures above for “What to do before danger threatens.” Floods may occur, at which time you must follow procedures for floods and flash floods.

During:
1) If indoors, stay there.
2) Take cover under a sturdy piece of furniture or counter, or brace yourself against an inside wall.
3) Protect your head and neck. If outdoors, move into the open, away from buildings, street lights, and utility wires, trees, overpasses and elevated expressways.

After:
1) Establish procedures to determine whether an evacuation is necessary.
2) Designate areas in the facility away from exterior walls and windows where occupants should gather after an earthquake if an evacuation is not necessary.
3) Turn off utilities if possible before leaving a facility.
4) Stay away from windows, skylights and items that could fall. Do not use the elevators.
5) Use stairways to leave the building if it is determined that a building evacuation is necessary.
6) Be prepared for aftershocks, which cause additional damage and may bring down weakened structures. Aftershocks can occur hours, days, weeks or even months after an earthquake.
7) Stay out of damaged buildings, clean up flammable (bleach, gasoline) spills, and immediately open doors to buildings and closets, but cautiously.
8) Enter a facility only when authorized personnel say it is okay.
9) Take great precaution outside the facility. Fires, flooding...
and power outages are all possible following an earthquake.

**VOLCANOES**

**What they are:** Eruptions of molten rock, gases and ashes through a vent in the earth’s crust caused by underground pressure that builds up so much it explodes.

**The concerns:** Volcanic eruptions can hurl hot rocks for at least 20 miles. Floods, airborne ash or noxious gases can spread 100 miles or more. The heat and fires caused by molten lava can bury vegetation and landscape for miles. Volcanic eruptions can also cause mudslides, flooding and even earthquakes in the surrounding area. Volcanic ash is actually fine, glassy rock fragments and can contaminate water supplies, cause electrical storms, disrupt the operation of all machinery and collapse roofs.

**Volcanic eruption alerts**

There are no established volcanic eruption alerts. Warnings of impending volcanic eruptions, when predictable, are presented on normal news services.

**What to do before danger threatens**

- Have a plan for evacuation of the facility.
- As with all disasters, know what you will do if you must stay in the facility for long periods of time until it is safe to go outside or go home.

**What to do before, during and after a volcano**

**Before:**

Pay attention to warnings of impending volcanic eruptions and plan to go into “emergency” action at any time.

**During:**

1) If caught indoors, close all windows, doors and dampers. If trapped outdoors, avoid low-lying areas where poisonous gases can collect.
2) Avoid areas downwind of the volcano.
3) Although it may seem safe to stay in a building or at home and wait out an eruption, doing so could be very dangerous. The rock debris from a volcano can break windows and set buildings on fire. Take advice from local authorities.
4) Dress in long-sleeved shirts and pants, wear goggles to protect eyes and use a dust-mask or hold a damp cloth over face to help breathing.
5) Beware of mudflows, powerful “rivers” of mud that move faster than people and can destroy everything in their path. Mudflows occur when rain falls through ash-carrying clouds or when rivers are dammed during an eruption. They are most dangerous close to stream channels. When you approach a bridge, first look upstream. If a mudflow is approaching or moving beneath the bridge, do not cross the bridge. The power of the mudflow can destroy a bridge very quickly.

**After:**

1) Stay away from volcanic ashfall, cover nose and mouth when outside to avoid inhaling ash, wear goggles to protect your eyes and keep skin covered to avoid irritation or burns.
2) Avoid driving in heavy ashfall because driving will stir up more ash, which can clog engines and stall vehicles.
3) Clear roofs of ashfall, because it is very heavy and can cause buildings to collapse.
4) Use great precaution when cleaning up. Ashfall may last for long periods of time.
5) Be watchful of warnings about water and food safety.

**SEVERE WINTER STORMS**

**What they are:** Severe winter storms bring heavy snow, ice, strong winds and freezing rain.

**The concerns:** Winter storms can prevent employees and customers from reaching the facility, leading to a temporary shutdown until roads are cleared. Heavy snow and ice can also cause structural damage and power outages.

**Winter storm alerts**

*Note:* “Wind chill” is a calculation of how cold it feels outside when the effects of temperature and wind speed are combined.

- A winter storm watch: Severe winter weather is possible in your area.
- A winter storm warning: Severe winter weather is expected in your area.
- A blizzard warning: Severe winter weather with sustained winds of at least 35 miles per hour and several hours duration are expected in your area.
- A traveler’s advisory: Severe winter conditions may make driving difficult or dangerous.

**What to do before danger threatens**

1) Establish procedures for facility shutdown and early release of employees.
2) Provide a backup power source for critical operations.
3) Arrange for snow and ice removal from parking lots, walkways, loading docks, etc.

**What to do before, during and after a winter storm**

**Before:**

1) Have safe emergency heating equipment available: portable space heaters or kerosene heaters.
2) Protect pipes from freezing: wrap pipes in insulation or layers of old newspapers, cover the newspapers with plastic to keep out moisture, let faucets drip a little to avoid freezing, prepare to have to shut off water valves.

**During:**

1) If indoors:
   - Dress warmly and lower the thermostat to 65 degrees during the day and 55 degrees at night.
   - Close off unused rooms.
   - If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags.
   - Completely open all faucets and pour hot water over the pipes, starting where they were most exposed to the cold (or where the cold is most likely to penetrate).
2) If outdoors:
   - Dress warmly and wear loose-fitting, layered, light-weight clothing. Layers can be removed to prevent
perspiration and chill. Outer garments should be tightly woven and water repellant. Mittens are warmer than gloves because fingers generate warmth when they touch each other.

- Stretch before you go out to warm up your body.
- Cover your mouth to protect your lungs from extremely cold air. Try not to speak unless absolutely necessary.
- Avoid overexertion because cold weather puts an added strain on the heart. Unaccustomed exercise such as shoveling snow or pushing a car can bring on a heart attack or make other medical conditions worse.
- Be aware of symptoms of dehydration.
- Watch for signs of frostbite and hypothermia. Keep dry. Change wet clothing frequently to prevent a loss of body heat. Wet clothing loses all of its insulating value and transmits heat rapidly.

3) Medical cautions during a winter storm
Frostbite is a severe reaction to cold exposure that can permanently damage its victims. A loss of feeling and a white or pale appearance in fingers, toes, or nose and ear lobes are symptoms of frostbite. Hypothermia is a condition brought on when the body temperature drops to less than 95 degrees Fahrenheit. Symptoms of hypothermia include uncontrollable shivering, slow speech, memory lapses, frequent stumbling, drowsiness and exhaustion. (For emergency procedures to deal with frostbite and hypothermia, see “Chapter 9: Medical Emergencies.”)

After:
1) Be cautious about flooding and follow flood procedures if a warming trend follows a storm.
2) Give special attention to traffic reports. Remember, normal life does not necessarily resume immediately. Roads may be icy, so employees may not be able to return home safely for several hours.
3) Watch for downed power lines, electrical outages and frozen pipes.
4) If you are responsible for shoveling snow either at your facility or while you are home, be cautious of overexertion.

HEAT WAVES

What they are: Periods of abnormally and uncomfortably hot and unusually humid weather. Typically a heat wave lasts two or more days.

The concerns: Heat waves do not cause physical, structural or environmental damage, but they can kill people. Under normal conditions, the body’s internal thermostat produces perspiration that evaporates and cools the body. However, in extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.

Special heat-related medical concerns
Heat waves can cause:
1) Heat cramps, in which muscles spasm
2) Heat exhaustion, in which excessive bodily fluids and salts are lost
3) Heat stroke, the most serious of the three, which is a life-threatening emergency requiring immediate treatment. Symptoms of heat stroke can include extremely high body temperature, delirium, convulsions and loss of consciousness. Most at risk are people who work outside, people who do not have access to air conditioning and people with already weakened physical conditions because of age or illness. Also at additional risk are people who live in areas with poor air quality and stagnant atmospheric conditions.

(For emergency procedures to deal with heat-related medical conditions, see “Chapter 9: Medical Emergencies.”)

Heat wave alerts
There are no established heat wave alerts. Warnings of extreme heat conditions are presented on normal news services.

What to do during a heat wave
1) Protect against heat-related medical conditions:
   - Stay indoors as much as possible and limit exposure to the sun.
   - Drink plenty of water. Persons who have epilepsy or heart, kidney, or liver disease, are on fluid-restricted diets or have a problem with fluid retention should consult a doctor before increasing liquid intake.
   - Limit intake of alcoholic and caffeinated beverages.
   - If you don’t have air conditioning, consider spending the warmest part of the day in public buildings such as libraries, schools, movie theaters, casinos, shopping malls and other community facilities. Circulating air can cool the body by increasing the perspiration rate of evaporation.
   - Eat well-balanced, light and regular meals. Avoid using salt tablets unless directed to do so by a physician.
   - Dress in loose-fitting, lightweight and light-colored clothes that cover as much skin as possible.
   - Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat and take frequent breaks.
   - Check on family, friends, and neighbors who do not have air conditioning and who spend much of their time alone.

2) Protect employees in your facility:
   - Schedule more frequent breaks.
   - Encourage water consumption.
   - Rotate people out of excessively hot work areas.
   - Rework menu to focus on fewer foods that require cooking or heat preparation and more cold sandwiches and salads.
   - Install fans where needed.

(Sources on next page)
(Section 2, Chapter 1, continued)

SOURCES

www.fema.gov/library/dizandemer.shtm
www.fema.gov/rr/foodwtr.shtm
www.fema.gov/library.emfdwtr.shtm

www.fsis.usda.gov/Fact_Sheets/keeping_food_safe_during_an_emergency

“Open for Business,” developed by the Institute for Business & Home Safety and the Small Business Administration,
www.ibhs.org/docs/openforbusiness.pdf

An outbreak of influenza or other communicable disease can have a serious impact on every aspect of your facility, particularly when the disease is highly infectious and spreads over a large geographical area. A communicable disease that spreads over the entire globe constitutes a pandemic. It is imperative to know what measures should be taken in advance and what to do when an outbreak of influenza or other communicable disease strikes.

What they are: Communicable diseases are illnesses that can be transmitted to a person from an infected person or animal, either directly or indirectly. Indirect transmission often occurs by means of infected food or water. Among the many communicable diseases are influenza, tuberculosis, severe acute respiratory syndrome (SARS), anthrax, meningitis and hepatitis A, B, and C.

The concerns: The symptoms, methods of infection and risk factors associated with infection are specific to each communicable disease. What is of common concern is the spread of infection, which is great in any highly populated workplace, and the urgency of taking measures to limit exposure to the disease.

What to do before a disease outbreak or pandemic
(See “Business Pandemic Influenza Planning Checklist” for greater detail concerning all the areas of advance planning listed below.)

1) Plan for the impact of a pandemic on your business.
2) Plan for the impact of a pandemic on your employees and customers.
3) Establish policies to be implemented during a pandemic.
4) Allocate resources to protect your employees and customers during a pandemic.
5) Communicate to and educate your employees.
6) Coordinate with external organizations and help your community.

INFLUENZA AND INFLUENZA PANDEMICS

What they are: Seasonal or common influenza (or flu) is a respiratory illness that can be transmitted person to person. The illness is characterized by rapid onset of respiratory and generalized symptoms, including high fever, headache, extreme tiredness, dry cough, muscle aches and pains, fatigue, cough, sore throat, runny nose and stomach symptoms such as nausea, vomiting and diarrhea. Influenza viruses spread in respiratory droplets caused by coughing and sneezing. They usually spread from person to person,
though sometimes people become infected by touching something with influenza viruses on it and then touching the mouth or nose. Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 days after becoming sick. Influenza viruses can live on — and spread from — dry surfaces such as doorknobs, telephones, handrails, utensils and drinking cups for up to two days.

**Influenza pandemic** is the rapid spread of a highly contagious new respiratory virus. Precisely because it is a new form of virus, people have little or no natural immunity to the virus. In addition, there is no time to develop a vaccine to treat victims in the first wave of the disease because the virus has to be identified before a vaccine can be developed. That’s why an influenza pandemic usually results in exceedingly high rates of illness and high mortality rates. On average, influenza pandemics occur three times every century but with no recognizable pattern in timing. There were three influenza pandemics in the twentieth century: the 1918-19 Spanish flu, the 1957-58 Asian flu and the 1968-69 Hong Kong flu.

**Avian Influenza (or Bird Flu)** is a strain of influenza, isolated in 1997 in Southeast Asia, that is found in birds and transmitted bird-to-human. Avian Influenza outbreaks among chickens and other birds occur from time to time around the world due to a variety of strains of Avian Influenza virus. The current outbreak of “Highly Pathogenic Avian Influenza” (HPAI) due to the H5N1 strain of the virus is of concern because of the size of the outbreak, the number of countries affected and that fact that humans have been affected by bird-to-human transmission. (According to Bruce Cords of Ecolab, Low Pathogenic Avian Influenza, or LPAI, is a milder form of disease that occurs occasionally around the world and is not a public health concern. See “Sources.”)

No vaccine has been developed to combat the H5N1 virus, and many health professionals are concerned by the potential for H5N1 to mutate and adapt to humans, creating the possibility of human-to-human transmission and posing a serious threat of worldwide pandemic. To date, the current Avian Influenza has been contracted primarily by people in close proximity to live or unplucked fowl and their feces. There is one report of human illness linked to consumption of raw duck blood. The Avian Influenza virus can be found in the muscle and eggs of infected poultry, but laboratory studies and epidemiological investigations show that contaminated poultry and eggs that have been properly cooked do not spread the disease. (For further information on procedures suppliers are taking to limit the transmission of the Avian Influenza virus, see “Procedures by Food Suppliers to Limit the Spread of the Avian Influenza Virus” in this chapter.

### The Differences Between Influenza and the Common Cold

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Influenza</th>
<th>Common Cold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Usual, sudden onset 100°-104° and lasts 3-4 days</td>
<td>Rare</td>
</tr>
<tr>
<td>Headache</td>
<td>Usual and can be severe</td>
<td>Rare</td>
</tr>
<tr>
<td>Aches and Pains</td>
<td>Usual and can be severe</td>
<td>Rare</td>
</tr>
<tr>
<td>Fatigue and weakness</td>
<td>Usual and can last 2-3 weeks or more after the acute illness</td>
<td>Sometimes, but mild</td>
</tr>
<tr>
<td>Debilitating fatigue</td>
<td>Usual, early onset can be severe</td>
<td>Rare</td>
</tr>
<tr>
<td>Nausea, vomiting, diarrhea</td>
<td>In children less than 5 years old</td>
<td>Rare</td>
</tr>
<tr>
<td>Watering of the eyes</td>
<td>Rare</td>
<td>Usual</td>
</tr>
<tr>
<td>Runny, stuffy nose</td>
<td>Rare</td>
<td>Usual</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Rare in early stages</td>
<td>Usual</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Usual</td>
<td>Usual</td>
</tr>
<tr>
<td>Chest discomfort</td>
<td>Usual and can be severe</td>
<td>Sometimes, but mild to moderate</td>
</tr>
<tr>
<td>Complications</td>
<td>Respiratory failure, can worsen a current chronic condition, can be life threatening</td>
<td>Congestion or earache</td>
</tr>
<tr>
<td>Fatalities</td>
<td>Well recognized</td>
<td>Not reported</td>
</tr>
<tr>
<td>Prevention</td>
<td>Influenza vaccine, frequent hand-washing, cover your cough</td>
<td>Frequent hand-washing, cover your cough</td>
</tr>
</tbody>
</table>

**Source:** Michael Stapleton Associates, an explosives detection securities company, New York, NY, www.mikestapleton.com
The concerns:
1) Victims are generally considered infectious before they show any symptoms of the disease, so once the outbreak is confirmed, the disease has already been spreading. In addition, some individuals may be infected and contagious and never show symptoms.
2) Influenza pandemics are particularly dangerous because vaccines are virus specific, so pandemic vaccines cannot be produced until the specific pandemic virus has been identified. The time lapse between virus recognition and production is likely to be at least several months.
3) There is no predicting the timing, the movement or the impact of a pandemic. The Spanish flu attacked in three waves; the Asian flu appeared on one long wave and had a very high attack rate between 70 and 80 percent.
4) The World Health Organization (WHO) considers the risk of Avian Influenza mutating into the next pandemic to be very high. WHO has advised governments and businesses to develop plans for dealing with influenza outbreaks.
5) Avian Influenza is a particularly virulent form of influenza. It causes sudden and severe respiratory disease with a high mortality rate: 51 percent in the 120 confirmed cases in Southeast Asia since 2003.

The concerns for foodservice facilities:
1) In case of an influenza pandemic, a substantial proportion of your workforce may be absent. It is not possible to predict how long a pandemic may last. There could be more than one wave of infection during a pandemic period. Each wave could typically last about 8 weeks, building to a peak in week 4 before abating again. Managers should plan for up to 60 percent staff absences for periods of about two weeks at the height of a pandemic wave and lower levels of staff absence for a few weeks either side of a peak. Of course, your customer base, especially if it works in the same building or complex as your foodservice facilities, is likely to be hit at about the same time by the virus, so, while you have a smaller staff, you will also have a reduced customer count.
2) Extraordinary precautions must be taken with sanitation and decontamination to minimize the spread of disease within the foodservice facility among customers and staff.

What to do before an influenza outbreak or pandemic

The procedures to follow in advance of influenza outbreaks and influenza pandemics are those that should be followed in preparation for the outbreak of many infectious diseases. (See “Business Pandemic Influenza Planning Checklist.”)

In particular:
1) Identify essential business activities and the core people and skills needed to keep them running. Ensure that these are backed up with alternative arrangements.
2) Mitigate business/economic disruptions, including possible shortages of supplies. Following are reminders from “Workplace Influenza Pandemic Health Plan,” from Michael Stapleton Associates.

What to do during an influenza outbreak or pandemic

“The concern is not simply with people getting sick and staying out of work,” says Stephen Kobrin, professor at the University of Pennsylvania’s Wharton Business School, quoted in “Leadership and Change, Avian Flu: What To Expect and How Companies Can Prepare for It,” Knowledge@Wharton, a website for Wharton Business School. “It has to do with a fairly substantial breakdown in infrastructure. If there is a pandemic, people will be reluctant to leave their homes. That means disruptions in food supplies, supply chains, mass transit systems and information technology systems if the systems fail and IT people aren’t there to fix them. The issue is, how do you operate in the context of turmoil? You have to plan for a substantial breakdown in the physical and social infrastructure. The question companies should be thinking about is how to keep their businesses going.”

Michael Stapleton Associates recommends the following.
1) Minimize illness in workers and customers.
   • Restrict workplace entry of people with influenza symptoms.
   • Emphasize personal hygiene and workplace cleaning habits.
   • Increase social distancing by cutting back on meetings, crowded areas, handshakes, etc. Where operationally possible, split workers into physically separate work locations and schedule intervals between work shifts so worksite can be thoroughly ventilated. Generally avoid crowds, travel off-peak, stagger lunchtimes, introduce flex work hours and conduct business over the phone and by email.
   • Step up cleaning. Filters of air conditioning systems should be cleaned and antibacterial solution applied. Clean commonly handled tools, appliances and work areas, including telephones, hand-railings and counters.
2) Establish procedures for workers who become ill at work
   • Track the spread of the virus by using “suspect case” forms for any workers who call in sick.
• Employees should be screened for symptoms on their arrival at work.
• Employees who become ill at work should put on a mask and leave the building immediately.
• Employees should not use public transportation to travel home, if at all possible.
• Identify all those who have been in close contact with a stricken employee, advise them of the situation and ask them to go home.
• Clean and disinfect any “suspect case” worker’s station.

3) Hand hygiene: The most important thing you can do to keep from getting sick is to wash your hands.

Hand Washing

Advisory: use personal protective equipment when cleaning after a suspected or confirmed case of Avian Influenza. N95 respirator or surgical mask and gloves must be used for cleaning in the facility with a suspected or known incident.

Proper hand washing procedures are a primary intervention to minimize the transfer of influenza by personal or surface contact.

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<th>Surface/Area</th>
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<tbody>
<tr>
<td>Hand Care</td>
<td>Follow CDC and FDA Food Code Guidelines for hand hygiene.</td>
<td>Proper hand washing procedures are a primary intervention to minimize the transfer of influenza by personal or surface contact.¹</td>
</tr>
<tr>
<td>Traditional Hand Wash</td>
<td>• Decontaminate (clean and sanitize) hands before having direct contact with guests, after using toilet or washroom.</td>
<td>The CDC recommends frequent, aggressive hand washing and the use of alcohol-based hand sanitizers (rubs) particularly after contact and in public setting.</td>
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<tr>
<td>Traditional Hand Wash &amp;</td>
<td>• Decontaminate hands before preparing food, when changing from station to station or after touching non-food prep surfaces.</td>
<td>There are no anti-viral claims available for hand care products as they are not recognized by the FDA (FDA Tentative Final Monograph for Healthcare Antiseptic Drug Products.)²</td>
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<tr>
<td>Waterless Hand Sanitization</td>
<td>• Use gloves for cleaning; avoid touching face, nose, eyes or mouth. Wash and sanitize hands before gloving.</td>
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<td>• Change gloves when moving from task to task.</td>
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<td>• Hand wash. Wet hands with water, apply hand-wash product and rub hands together vigorously for at least 20 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and dry thoroughly with a disposable towel. Use a towel to turn off faucet.</td>
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<td>• Waterless hand sanitization. Use an alcohol-based hand sanitizer (rub). Apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers until hands are dry (15 to 20 seconds).</td>
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<tr>
<td>Surface/Area</td>
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<tr>
<td><strong>Food Contact Hard Surface Disinfection &amp; Sanitization</strong></td>
<td>[For hard-surface disinfection, wear disposable gloves while cleaning. Discard gloves after use. Wash hands frequently with soap and water and/or alcohol-based hand sanitizer.] If surface is visibly soiled, surface must be cleaned and rinsed before disinfection. Work top to bottom. Until incident occurs follow standard procedures. • Flood surface with EPA-registered, hospital-use disinfectant; surface must remain wetted for 10 minutes or stated label claim. [With disinfectant, wipe down frequently touched surfaces such as light and air control switches, faucets, toilets, flush levers, door knobs, and television and radio control knobs. All surfaces in bathrooms should be disinfected.] • Thoroughly rinse with potable water to ensure removal of disinfectant residue. • Sanitize with EPA registered food contact hard surface sanitizer.</td>
<td>Until time of incident, standard procedures for food contact hard surface sanitizing as indicated by label directions should be followed. Hard surface food contact sanitizers are not effective against the influenza virus at sanitizing concentrations. When decontamination is needed, an EPA-registered, hospital-use disinfectant must be used, followed by a potable water rinse and sanitation (see procedure). In Canada, A DIN registered disinfectant is required.</td>
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<tr>
<td><strong>Laundry</strong></td>
<td>• Laundry should be handled while masked and gloved. • Place in laundry bag. • Wash temperature should be at least 160°F./71°C. for a minimum of 5 minutes.</td>
<td>There are currently no anti-viral claims available for laundry sanitizing products. The EPA does not recognize a method to measure viral decontamination in laundry.</td>
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<tr>
<td><strong>Carpeting</strong></td>
<td>Carpeting should be cleaned or replaced when contaminated with vomitus or body fluids. Area should be extracted to remove soil. (See “Carpet Cleaning Equipment.”) • Spot test to assure product compatibility. • Apply product to affected area. • Wet vacuum or extract after application.</td>
<td>Operator should wear NIOSH-approved N95 mask, disposable gloves and shoe covers if walking in wetted area.</td>
</tr>
<tr>
<td><strong>Carpet Cleaning Equipment</strong></td>
<td>• Spot test to assure compatibility. • Add product to detergent and recovery tanks. • Spot extract as needed. • Empty slowly to avoid splashing. • Disinfect recovery tank and suction side with fresh disinfectant after machine is emptied.</td>
<td>Hard surface disinfectants may be used to control contamination in rug extraction equipment. No products are EPA registered to disinfect carpets or fabrics.</td>
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*Note: No Ecolab EPA, Health Canada or FDA-registered products carry label registration approvals specific for Avian Influenza, H5N1 strain. Products suggested (contact Ecolab for products recommended) contain the active ingredients to provide the antimicrobial activity required to decontaminate Avian Influenza or other influenza indicated by Centers for Disease Control (CDC)¹ and World Health Organization (WHO).³*

*Source: Excerpt from “Influenza Control Procedures,” by Ecolab Inc.*
The concerns: include: Chickenpox, measles, scabies and head lice.

Other communicable diseases to watch for in foodservice

- Hepatitis A, B and C: A viral liver disease. Hepatitis is
- Meningitis: An inflammation of the membranes that cover
- Anthrax: A bacterial disease that can affect the skin, the
- Severe Acute Respiratory Syndrome (SARS): A viral
- Tuberculosis: A bacterial infection that most often

What they are: Communicable diseases other than influenza that are highly contagious include Norovirus, tuberculosis, severe acute respiratory syndrome (SARS), anthrax, meningitis and hepatitis A, B and C.

- Norovirus: Also known as the Norwalk Virus. Although commonly known as “stomach flu,” Norovirus is in fact a highly contagious virus, usually foodborne, that causes gastroenteritis. It is also known as “the cruise ship virus” because of several highly publicized incidents of the disease spreading rapidly and extensively among passengers on cruise ships. Incidents of Norovirus are not unique to cruise ships. The CDC estimates that the predominant vehicles for the spread of Norovirus are food (39%, fecally contaminated food, the most frequent vehicle), person to person (12%) and water (3%).
- Tuberculosis: A bacterial infection that most often affects the lungs. It is one of the most lethal and common communicable diseases today.
- Severe Acute Respiratory Syndrome (SARS): A viral respiratory illness that often leads to pneumonia.
- Anthrax: A bacterial disease that can affect the skin, the digestive system or the lungs. An infection of the lungs is particularly serious and can lead to death if not treated soon after infection. (For information concerning the dangers and procedures for handling anthrax used as a biological weapon, see “Chapter 4: Terrorism: Nuclear, Biological and Chemical (NBC) Warfare.”)
- Meningitis: An inflammation of the membranes that cover the brain and spinal cord. Meningitis can be bacterial or viral.
- Hepatitis A, B and C: A viral liver disease. Hepatitis is particularly dangerous and can be foodborne.

Other communicable diseases to watch for in foodservice include: Chickenpox, measles, scabies and head lice.

The concerns: Each communicable disease has its own specific conditions and dangers of infection. None are mild diseases. For instance, Norovirus is highly contagious and has a high resistance to disinfectants with a long survival rate on environmental surfaces.

What to do during a communicable disease outbreak or pandemic

Two general procedures:
1) Follow all standard procedures recommended in “Business Pandemic Influenza Planning Checklist.”
2) Monitor regular news sources for reports of impending outbreaks of communicable diseases.

Several specific procedures:
1) Reporting to local health officials is required in cases of pulmonary tuberculosis, hepatitis A, B and C, and bacterial meningitis. Generally, the treating physician will report most cases. However, employers must report to the local health authority if knowledge is confirmed of a reportable case.
2) In cases of the communicable diseases listed above, disposable gloves must be used for any contact with body fluids from an infected person. The gloves should be disposed of properly after the area is cleaned up, and hands should then be washed aggressively.
3) If an infected person with a confirmed case of any of the communicable diseases listed above needs to be escorted, only local health officials or properly trained personnel should escort the person. If not on the ground floor, only freight elevators should be used, and the affected person should be picked up by emergency responders at a loading dock area or a building area other than commonly used entrances.

SOURCES


Centers for Disease Control and Prevention, www.cdc.gov

Website by the National Chicken Council, the National Turkey Federation and the Egg Safety Center on the industry’s defenses against the spread of Avian Influenza, www.avianinfluenza.com

“Avian Influenza and Pandemic Comparisons and Regulatory Issues,” by Bruce R. Cords, Ph.D., vice president, Environment, Food Safety and Public Health, Ecolab Inc.
PROCEDURES BY FOOD SUPPLIERS TO LIMIT THE SPREAD OF THE AVIAN INFLUENZA VIRUS

Source: Excerpts from “Avian Influenza and Pandemic Comparisons and R Issues,” by Bruce R. Cords, Ph.D., vice president, Environment, Food Safety and Public Health, Ecolab Inc.

Many factors and current practices in the poultry “Farm to Fork” continuum substantially reduce the risk of Avian Influenza spread to humans.

Production Procedures
• **Biosecurity.** Most commercial flocks, such as those in the U.S. and Canada, are raised in enclosed housing to prevent contact with wild birds that may carry disease.
• **Surveillance.** Infected layer flocks significantly reduce egg production and soon stop laying. Such indications are often enough to alert farmers, who remove laid eggs from the food chain.
• **Intervention.** In many countries, like the U.S., highly pathogenic bird flu is a reportable disease. If HPAI is found, government veterinarians move quickly to quarantine the farm and, where appropriate, humanely euthanize the birds. Afterwards, the U.S. has authority to pay farm subsidies for these emergency measures.
• **Inspection.** Poultry destined for slaughter in the U.S. are inspected, another key tool for detecting potential disease and keeping sick animals from entering the food supply.

Interventions in Poultry Processing
• **Disinfectants.** Like other viruses with lipid envelopes, the Avian Influenza H5N1 virus is also sensitive to most disinfectants and sanitizers used at the recommended concentration.
• **Carcass washes.** Many antimicrobial carcass washes used to reduce *Salmonella* and *Campylobacter* will also inactivate the Avian Influenza virus.

• **Egg surface disinfection.** Commercial egg suppliers in North America wash and then disinfect the outside of eggs with chlorine or other sanitizers prior to breaking or packaging to eliminate shell contamination with both LPAI and HPAI from contaminated poultry droppings.
• **Cooking.** Normal cooking for poultry meat (e.g., temperature at or above 160 deg. F. in all parts of the product) will inactivate the virus.

The Regulatory Conundrum About Claims on Labels
• In the U.S., the EPA and FDA regulate antimicrobial and antiviral products. EPA regulates disinfectants and sanitizers; FDA regulates handwashes and hand sanitizers.
• A real or an implied claim for an organism not listed on the label is a violation of federal law.
• What they say; EPA/FDA about hand hygiene: No virucidal claims allowed. CDC: Use alcohol-based hand sanitizer. EPA/FDA about hard surfaces: No real or implied claims for pandemic influenza allowed. CDC: Use any EPA-registered hospital detergent disinfectant.
• EPA and FDA are not “in sync” with CDC or WHO, which creates confusion about which claims for an infectious agent not listed on the label can be made.

Note: Changing Conditions
If the current Avian Influenza strain of concern acquired, through re-assortment or direct mutation, human-to-human transmission capability, the game changes immediately. The following websites show how the situation might unfold in a major metro area: www.npr.org/templates/story/story.php?storyid=5128474 and www.npr.org/templates/story/story.php?storyid=5071792.
BUSINESS PANDEMIC INFuenZA PLANNING CHECKLIST

In the event of pandemic influenza, businesses will play a key role in protecting employees’ health and safety as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical. To assist you in your efforts, the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist for large businesses. It identifies important, specific activities large businesses can do now to prepare, many of which will also help you in other emergencies. Further information can be found at www.pandemicflu.gov and www.cdc.gov/business.

1.1 Plan for the impact of a pandemic on your business:

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- Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from labor representatives.
- Identify essential employees and other critical inputs (e.g., raw materials, suppliers, sub-contractor services/products, and logistics) required to maintain business operations by location and function during a pandemic.
- Train and prepare ancillary workforce (e.g., contractors, employees in other job titles/descriptions, retirees).
- Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services during a pandemic (e.g., effect of restriction on mass gatherings, need for hygiene supplies).
- Determine potential impact of a pandemic on company business financials using multiple possible scenarios that affect different product lines and/or production sites.
- Determine potential impact of a pandemic on business-related domestic and international travel (e.g., quarantines, border closures).
- Find up-to-date, reliable pandemic information from community public health, emergency management, and other sources and make sustainable links.
- Establish an emergency communications plan and revise periodically. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
- Implement an exercise/drill to test your plan, and revise periodically.

1.2 Plan for the impact of a pandemic on your employees and customers:

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- Forecast and allow for employee absences during a pandemic due to factors such as personal illness, family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.
- Implement guidelines to modify the frequency and type of face-to-face contact (e.g., hand-shaking, seating in meetings, office layout, shared workstations) among employees and between employees and customers (refer to CDC recommendations).
- Encourage and track annual influenza vaccination for employees.
- Evaluate employee access to and availability of healthcare services during a pandemic, and improve services as needed.
- Evaluate employee access to and availability of mental health and social services during a pandemic, including corporate, community, and faith-based resources, and improve services as needed.
- Identify employees and key customers with special needs, and incorporate the requirements of such persons into your preparedness plan.

December 6, 2005
Version 3.6
1.3 Establish policies to be implemented during a pandemic:

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- Establish policies for employee compensation and sick-leave absences unique to a pandemic (e.g. non-punitive, liberal leave), including policies on when a previously ill person is no longer infectious and can return to work after illness.
- Establish policies for flexible worksite (e.g. telecommuting) and flexible work hours (e.g. staggered shifts).
- Establish policies for preventing influenza spread at the worksite (e.g. promoting respiratory hygiene/ cough etiquette, and prompt exclusion of people with influenza symptoms).
- Establish policies for employees who have been exposed to pandemic influenza, are suspected to be ill, or become ill at the worksite (e.g. infection control response, immediate mandatory sick leave).
- Establish policies for restricting travel to affected geographic areas (consider both domestic and international sites), evacuating employees working in or near an affected area when an outbreak begins, and guidance for employees returning from affected areas (refer to CDC travel recommendations).
- Set up authorities, triggers, and procedures for activating and terminating the company’s response plan, altering business operations (e.g. shutting down operations in affected areas), and transferring business knowledge to key employees.

1.4 Allocate resources to protect your employees and customers during a pandemic:

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- Provide sufficient and accessible infection control supplies (e.g. hand-hygiene products, tissues and receptacles for their disposal) in all business locations.
- Enhance communications and information technology infrastructures as needed to support employee telecommuting and remote customer access.
- Ensure availability of medical consultation and advice for emergency response.

1.5 Communicate to and educate your employees:

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- Develop and disseminate programs and materials covering pandemic fundamentals (e.g. signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (e.g. hand hygiene, coughing/sneezing etiquette, contingency plans).
- Anticipate employee fear and anxiety, rumors and misinformation and plan communications accordingly.
- Ensure that communications are culturally and linguistically appropriate.
- Disseminate information to employees about your pandemic preparedness and response plan.
- Provide information for the at-home care of ill employees and family members.
- Develop platforms (e.g. hotlines, dedicated websites) for communicating pandemic status and actions to employees, vendors, suppliers, and customers inside and outside the worksite in a consistent and timely way, including redundancies in the emergency contact system.
- Identify community sources for timely and accurate pandemic information (domestic and international) and resources for obtaining counter-measures (e.g. vaccines and antivirals).

1.6 Coordinate with external organizations and help your community:

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- Collaborate with insurers, health plans, and major local healthcare facilities to share your pandemic plans and understand their capabilities and plans.
- Collaborate with federal, state, and local public health agencies and/or emergency responders to participate in their planning processes, share your pandemic plans, and understand their capabilities and plans.
- Communicate with local and/or state public health agencies and/or emergency responders about the assets and/or services your business could contribute to the community.
- Share best practices with other businesses in your communities, chambers of commerce, and associations to improve community response efforts.
These manmade disasters and emergencies may create havoc in your city, resulting in staff shortages, unpredictable customer counts and the need to provide food in crisis conditions for long periods of time.

(What follows are general guidelines. Before implementation, you should check with your internal security department.)

**TERRORISM**

**What it is:** According to the FBI, “There is no single, universally accepted definition of terrorism.” Terrorism is defined by the Code of Federal Regulations as “the unlawful use of force and violence against persons and property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.” Since the attacks on September 11, 2001, it has become clear that terrorist incidents in the U. S. are a primary concern and can occur on a major scale and at any time. Every business, organization and individual anywhere in the country must be prepared to deal with a terrorist act.

**The concerns:** The Federal Emergency Management Agency (FEMA) characterizes terrorist attacks according to the method used and indicates that bombings have been the most frequently used terrorist method in the United States. (The FBI calculates that between 1980 and 2001, bombings accounted for nearly 70% of all terrorist attacks in the U. S. and its territories.) Other possibilities include attacks at transportation facilities, attacks against utilities or other public services, and incidents involving chemical or biological agents. (Note: For procedures concerning attacks using chemical or biological agents, see “Chapter 4: Terrorism: Nuclear, Biological & Chemical (NBC) Warfare.”)

**Terrorist Bomb Threats and Bombing Attacks**

**What to do before danger threatens**

1) Prepare to deal with a terrorist incident by adapting many of the same techniques used to prepare for other crises. Be certain all employees know your emergency disaster plans. Have available:
   - A master plan with procedures to follow before, during and after, emergency contacts, etc.
   - Emergency supplies of water
   - Emergency supplies of food
   - Other emergency supplies
   - Guidelines for medical emergencies
   - First aid supplies.
2) Everyone should be alert and aware of the surrounding area. The very nature of terrorism suggests that there may be little or no warning.

3) Warn employees to take precautions when traveling and to be aware of conspicuous or unusual behavior. They should not accept packages from strangers or leave luggage unattended.

4) Be sure all employees know where emergency exits are located. Plan ahead about how to evacuate the building in a hurry.

5) Identify an alternative hospital. Hospitals closest to the event are always the busiest.

6) Prepare for a building explosion; the use of explosives by terrorists can result in collapsed buildings and fires. People who work in a multi-level building should review emergency evacuation procedures and know where fire exits are located.
   - Keep fire extinguishers in working order. Know where they are located, and how to use them. Learn first aid. Contact the local chapter of the American Red Cross for additional information.
   - In the event that rescue workers are not immediately present after an incident, prepare a back-up plan for transporting injured persons to hospitals. Obtain advice from local public safety offices (local health department, local emergency management offices, fire and police departments and reliable news sources).

What to do before, during and after a terrorist bombing
What follows are general guidelines. Before implementation, you should check with your internal security department.

Before:
1) If you receive a bomb threat by phone, try to get as much information from the caller as possible and write down everything that is said. While keeping the caller on the line, try to signal to another associate to notify internal security and/or police and building management as specified in your corporate policy.
2) After you’ve been notified of a bomb threat, do not touch any suspicious packages. Clear the area around the suspicious package and notify your internal security department and the police immediately. In evacuating a building, avoid standing in front of windows or other potentially hazardous areas. Do not restrict sidewalk or streets to be used by emergency officials.

During:
1) In a building explosion, get out of the building as quickly and calmly as possible.
2) If items are falling off of bookshelves or from the ceiling, get under a sturdy table or desk.
3) If there is a fire:
   - Stay low to the floor and exit the building as quickly as possible.
   - Cover nose and mouth with a wet cloth.
   - When approaching a closed door, use the palm of your hand and forearm to feel the lower, middle and upper parts of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot to the touch, do not open the door — seek an alternate escape route.
   - Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.
4) Leave the area immediately unless otherwise instructed.
5) Avoid crowds. Crowds of people may be a target for a second attack.
6) Avoid unattended care and trucks. Unattended cars and trucks may contain explosives.
7) Stay away from damaged buildings to avoid falling glass and bricks. Move at least 10 blocks or 200 yards away from damaged buildings.
8) Call 911 once you are in a safe area, but only if police, fire or Emergency Medical Services has not arrived.

After:
1) If you are trapped in debris:
   - Use a flashlight and look around your environment to assess where you can and can’t walk.
   - Stay in your area so that you don’t kick up dust. Cover your mouth with a handkerchief or clothing.
   - Tap on a pipe or wall so that rescuers can hear where you are. Use a whistle if one is available. Shout only as a last resort. Shouting can cause a person to inhale dangerous amounts of dust.
2) Assisting victims: Untrained persons should not attempt to rescue people who are inside a collapsed building. Wait for emergency personnel to arrive.
3) Listen to radio or television for news and instructions (if you have access to this equipment).
4) Go to a hospital or clinic for medical attention if you have:
   - Excessive bleeding
   - Trouble breathing
   - Persistent cough
   - Trouble walking or using arm or leg
   - Stomach, back or chest pains
   - Headache
   - Blurred vision or burning eyes
   - Dry mouth
   - Vomiting or diarrhea
   - Rash or burning skin
   - Hearing problems
   - Injuries that increase in pain, redness or swelling
   - Injuries that do not improve after 24 to 48 hours.
5) When the incident is over, direct staff to seek counseling as needed.

FOOD TAMPERING

What it is: The deliberate, surreptitious tainting of food products available to the public is a specific form of criminality and/or terrorism to which foodservice facilities are clearly vulnerable. Your operation is a constant target, so it is imperative that your employees know how to recognize the signs of deliberate food contamination and how to secure your operation against its occurrence.

The concerns: Food tampering involves the introduction of poisonous and toxic chemicals, and often pesticides, into food presented to the public through tampering.
with legitimate food products or through the inclusion of counterfeit products among legitimate products. The risks are as serious as those of the chemicals used and frequently can be life-threatening.

**What to do before food is contaminated to limit the risk of an occurrence of food tampering**

See “Retail Food Stores and Food Service Establishments: Food Security Preventive Measures Guidance” on the following pages.

**CIVIL DISOBEDIENCE**

**What it is:** Forms of civil disobedience include gang incidents, hostage takings and shootings in the immediate vicinity. Civil disobedience may also involve rioting that may or may not be affiliated with a political or social protest or racial incident.

**The concerns:** Employees may not be able to travel to and from your facility, so you may need to reschedule and readjust your normal foodservice operations. You and your staff may have to stay in your facility overnight. In some situations, you may become a disaster recovery site and will need to provide shelter and meals for those who need assistance.

**What to do before, during and after a civil disobedience incident**

**Before:**
1) Prepare to deal with this emergency by adapting many of the same techniques used to prepare for other crises. Be certain all employees know your emergency disaster plans. Have available:
   - A master plan with procedures to follow before, during and after, emergency contacts, etc.
   - Emergency supplies of water
   - Emergency supplies of food
   - Other emergency supplies
   - Guidelines for medical emergencies
   - First aid supplies.
2) Contact your suppliers to ascertain how they will be coping with the emergency and how they expect it will affect you.
3) Consider rescheduling staff and menus.

**During:**
1) Execute your emergency plan as needed.
2) Reassure staff of their safety and security in your facility.
3) Attempt to adjust your foodservice operations so your employees are not put in avoidable danger when trying to travel to or from work.

**After:**
1) Review your plans and alter if necessary.
2) Reassure staff that all is back to “normal.”
3) When the incident is over, direct staff to seek counseling as needed.

**ENERGY CRISSES/OIL EMBARGOES**

**What they are:** Critical energy crises, such as the one that resulted from the energy embargo of the 1970s, can create insuperable transportation problems.

**The concerns:** Employees may not be able to travel by car to and from your facility, so you may need to reschedule and readjust your normal foodservice operations. Also, increased fuel costs may result in enormous costs to you for food deliveries. In addition, you may have to adjust your budget to try to compensate employees for increased transportation costs to and from work.

**What to do before, during and after a crisis/embargo occurs**

**Before:**
1) Prepare to deal with this emergency by adapting many of the same techniques used to prepare for other crises. Be certain all employees know your emergency disaster plans.
   - A master plan with procedures to follow before, during and after, emergency contacts, etc.
   - Emergency supplies of water
   - Emergency supplies of food
   - Other emergency supplies
   - Guidelines for medical emergencies
   - First aid supplies
2) Contact your suppliers to ascertain how they will be coping with the emergency and how they expect it will affect you.
3) Consider rescheduling staff and menus.

**During:**
1) Execute your emergency plan as needed.
2) Reassure staff of their safety and security in your facility.
3) Attempt to adjust your foodservice operations so your employees are not put in avoidable danger when trying to travel to or from work.

**After:**
1) Review your plans and alter if necessary.
2) Reassure staff that all is back to “normal.”
3) When the incident is over, direct staff to seek counseling as needed.

**NUCLEAR POWER PLANT MALFUNCTIONS & SHUTDOWNS**

**What they are:** Although construction and operation of nuclear power plants are closely monitored and regulated by the Nuclear Regulatory Commission (NRC), an accident, though unlikely, is possible.

**The concerns:** The potential danger from an accident at a nuclear power plant is exposure to radiation. This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume (cloud-like) formation. The area the radioactive release may affect is determined by the amount released from the plant, wind direction and speed and weather conditions (i.e., rain, snow, etc.), which would quickly drive the radioactive material to the ground, hence causing increased deposition of radionuclides. If a release of radiation occurs, the levels of radioactivity will be monitored by authorities from Federal and State governments and by the utility to determine the potential danger in order to protect the public.

Employees may not be able to travel to and from your facility, so you may need to reschedule and readjust your normal foodservice operations. Also, you may not be able to receive deliveries for some time.
What to do before and during nuclear power plant malfunctions and shutdowns

Before:
For procedures concerning the threat or event of nuclear contamination, see “Chapter 4: Terrorism: Nuclear, Biological & Chemical (NBC) Warfare.”

Prepare to deal with this emergency by adapting many of the same techniques used to prepare for other crises. Be certain all employees know your emergency disaster plans. Have available:

- A master plan with procedures to follow before, during and after, emergency contacts, etc.
- Emergency supplies of water
- Emergency supplies of food
- Other emergency supplies
- Guidelines for medical emergencies
- First aid supplies.

During:
1) Execute your emergency plan as needed.
2) Reassure staff of their safety and security in your facility.
3) Attempt to adjust your foodservice operations so your employees are not put in avoidable danger when trying to travel to or from work.

After:
1) Review your plans and alter if necessary.
2) Reassure staff that all is back to “normal.”
3) When the incident is over, direct staff to seek counseling as needed.

SOURCES
FEMA, www.fema.gov


American Red Cross Disaster Plans, www.redcross.org/preparedness/cdc_english/CDC.asp

American Red Cross, “Terrorism — Preparing for the Unexpected,” www.redcross.org/services/disaster/0,1082,0_589,00.html


Guidance for Industry

Retail Food Stores and Food Service Establishments:
Food Security Preventive Measures Guidance

FINAL GUIDANCE

Additional copies are available from:
Office of Compliance
Center for Food Safety and Applied Nutrition
Food and Drug Administration
5100 Paint Branch Parkway
College Park, MD 20740
(Tel) 301-436-2359
http://www.cfsan.fda.gov/guidance.html

This guidance represents the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the FDA staff responsible for implementing this guidance. If you cannot identify the appropriate FDA staff, call the appropriate number listed on the title page of this guidance.

Purpose and Scope:

This guidance is designed as an aid to operators of retail food stores and food service establishments (for example, bakeries, bars, bed-and-breakfast operations, cafeterias, camps, child and adult day care providers, church kitchens, commissaries, community fund raisers, convenience stores, fairs, food banks, grocery stores, interstate conveyances, meal services for home-bound persons, mobile food carts, restaurants, and vending machine operators). This is a very diverse set of establishments, which includes both very large and very small entities.

This guidance identifies the kinds of preventive measures they may take to minimize the risk that food under their control will be subject to tampering or other malicious, criminal, or terrorist actions. Operators of food retail food stores and food service establishments are encouraged to review their
current procedures and controls in light of the potential for tampering or other malicious, criminal, or terrorist actions and make appropriate improvements.

This guidance is designed to focus operators' attention sequentially on each segment of the food delivery system that is within their control, to minimize the risk of tampering or other malicious, criminal, or terrorist action at each segment. To be successful, implementing enhanced preventive measures requires the commitment of management and staff. Accordingly, FDA recommends that both management and staff participate in the development and review of such measures.

FDA's guidance documents, including this guidance, do not establish legally enforceable responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word should in Agency guidances means that something is suggested or recommended, but not required.

Limitations:

Not all of the guidance contained in this document may be appropriate or practical for every retail food store or food service establishment, particularly smaller facilities. FDA recommends that operators review the guidance in each section that relates to a component of their operation, and assess which preventive measures are suitable. Example approaches are provided for many of the preventive measures listed in this document. These examples should not be regarded as minimum standards. Nor should the examples provided be considered an inclusive list of all potential approaches to achieving the goal of the preventive measure. FDA recommends that operators consider the goal of the preventive measure, assess whether the goal is relevant to their operation, and, if it is, design an approach that is both efficient and effective to accomplish the goal under their conditions of operation.

Structure:

This guidance is divided into five sections that relate to individual components of a retail food store or food service establishment operation: management, human element-staff, human element-public, facility, and operations.

Related Guidance:


Additional Resources: (*)

A process called Operational Risk Management (ORM) may help prioritize the preventive measures that are most likely to have the greatest impact on reducing the risk of tampering or other malicious, criminal, or terrorist actions against food. Information on ORM is available in the Federal Aviation Administration (FAA) System Safety Handbook, U.S. Department of Transportation, FAA, December 30, 2000, Chapter 15, Operational Risk Management. The handbook is available at: http://www.asy.faa.gov/Risk/SSHandbook/Chap15_1200.PDF

The U.S. Department of Transportation, Research and Special Programs Administration has published an advisory notice of voluntary measures to enhance the security of hazardous materials shipments. It is available at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2002_register&docid=02-3636-filed.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2002_register&docid=02-3636-filed.pdf). The notice provides guidance to shippers and carriers on personnel, facility and en route security issues.


The Federal Anti-Tampering Act (18 USC 1365) makes it a federal crime to tamper with or taint a consumer product; to attempt, threaten, or conspire to tamper with or taint a consumer product; or make a false statement about having tampered with or tainted a consumer product. Conviction can lead to penalties of up to $100,000 in fines and up to life imprisonment. The Act is available at: [http://www.fda.gov/opacom/laws/fedact.htm](http://www.fda.gov/opacom/laws/fedact.htm).

The National Infrastructure Protection Center (NIPC) serves as the federal government’s focal point for threat assessment, warning, investigation, and response for threats or attacks against U.S. critical infrastructure. The NIPC has identified the food system as one of the eight critical infrastructures, and has established a public-private partnership with the food industry, called the Food Industry Information Sharing and Analysis Center (Food Industry ISAC). The NIPC provides the Food Industry ISAC with access, information, and analysis, enabling the food industry to report, identify, and reduce its vulnerabilities to malicious attacks, and to recover from such attacks as quickly as possible. In particular, the NIPC identifies credible threats and crafts specific warning messages to the food industry. Further information is available at [http://www.nipc.gov/](http://www.nipc.gov/) and [http://www.foodisac.org/](http://www.foodisac.org/).

Finally, FDA encourages trade associations to evaluate the preventive measures contained in this guidance document and adapt them to their specific products and operations and to supplement this guidance with additional preventive measures when appropriate. FDA welcomes dialogue on the content of sector specific guidance with appropriate trade associations.

## Retail Food Store and Food Service Establishment Operations:

### Management

FDA recommends that retail food store and food service establishment operators consider:

- **Preparing for the possibility of tampering or other malicious, criminal, or terrorist events**
  - assigning responsibility for security to knowledgeable individual(s)
  - conducting an initial assessment of food security procedures and operations, which we recommend be kept confidential
  - having a crisis management strategy to prepare for and respond to tampering and other malicious, criminal, or terrorist actions, both threats and actual events, including identifying, segregating, and securing affected products
  - planning for emergency evacuation, including preventing security breaches during evacuation
  - becoming familiar with the emergency response system in the community
  - making management aware of 24-hour contact information for local, state, and federal police/fire/rescue/health/homeland security agencies
  - making staff aware of who in management they should alert about potential security
problems (24-hour contacts)
• promoting food security awareness to encourage all staff to be alert to any signs of tampering or malicious, criminal, or terrorist actions or areas that may be vulnerable to such actions, and to report any findings to identified management (for example, providing training, instituting a system of rewards, building security into job performance standards)
• having an internal communication system to inform and update staff about relevant security issues
• having a strategy for communicating with the public (for example, identifying a media spokesperson, preparing generic press statements and background information, and coordinating press statements with appropriate authorities)

• Supervision

• providing an appropriate level of supervision to all staff, including cleaning and maintenance staff, contract workers, data entry and computer support staff, and especially, new staff (for example, supervisor on duty, periodic unannounced visits by supervisor, daily visits by supervisor, two staff on duty at same time, monitored video cameras, off-line review of video tapes, one-way and two-way windows, customer feedback to supervisor of unusual or suspicious behavior by staff)
• conducting routine security checks of the premises, including utilities and critical computer data systems (at a frequency appropriate to the operation) for signs of tampering or malicious, criminal, or terrorist actions, or areas that may be vulnerable to such actions

• Investigation of suspicious activity

• investigating threats or information about signs of tampering or other malicious, criminal, or terrorist actions
• alerting appropriate law enforcement and public health authorities about any threats of or suspected tampering or other malicious, criminal, or terrorist actions

• Evaluation program

• evaluating the lessons learned from past tampering or other malicious, criminal, or terrorist actions and threats
• reviewing and verifying, at least annually, the effectiveness of the security management program (for example, using knowledgeable in-house or third-party staff to conduct tampering or other malicious, criminal, or terrorist action exercises and to challenge computer security systems), revising accordingly (using third-party or in-house security expert, where possible), revising the program accordingly, and keeping this information confidential
• performing random food security inspections of all appropriate areas of the facility (including receiving and storage areas, where applicable) using knowledgeable in-house or third-party staff, and keeping this information confidential
• verifying that security contractors are doing an appropriate job, when applicable

Human element -- staff

Under Federal law, retail food store and food service establishment operators are required to verify
the employment eligibility of all new hires, in accordance with the requirements of the Immigration and Nationality Act, by completing the INS Employment Eligibility Verification Form (INS Form I-9). Completion of Form I-9 for new hires is required by 8 USC 1324a and nondiscrimination provisions governing the verification process are set forth at 1324b.

FDA recommends that retail food store and food service establishment operators consider:

- **Screening (pre-hiring, at hiring, post-hiring)**
  - examining the background of all staff (including seasonal, temporary, contract, and volunteer staff, whether hired directly or through a recruitment firm) as appropriate to their position, considering candidates' access to sensitive areas of the facility and the degree to which they will be supervised and other relevant factors (for example, obtaining and verifying work references, addresses, and phone numbers, participating in one of the pilot programs managed by the Immigration and Naturalization Service and the Social Security Administration [These programs provide electronic confirmation of employment eligibility for newly hired employees. For more information call the INS SAVE Program toll free at 1-888-464-4218, fax a request for information to (202) 514-9981, or write to US/INS, SAVE Program, 425 I Street, NW, ULLICO-4th Floor, Washington, DC 20536. These pilot programs may not be available in all states], having a criminal background check performed by local law enforcement or by a contract service provider [Remember to first consult any state or local laws that may apply to the performance of such checks])

  - Note: screening procedures should be applied equally to all staff, regardless of race, national origin, religion, and citizenship or immigration status.

- **Daily work assignments**
  - knowing who is and who should be on premises, and where they should be located, for each shift
  - keeping information updated

- **Identification**
  - establishing a system of positive identification and recognition (for example, issuing uniforms, name tags, or photo identification badges with individual control numbers, color coded by area of authorized access), when appropriate
  - collecting the uniforms, name tag, or identification badge when a staff member is no longer associated with the establishment

- **Restricted access**
  - identifying staff that require unlimited access to all areas of the facility
  - reassessing levels of access for all staff periodically
  - limiting staff access to non-public areas so staff enter only those areas necessary for their job functions and only during appropriate work hours (for example, using key cards or keyed or cipher locks for entry to sensitive areas, color coded uniforms [remember to consult any relevant federal, state, or local fire or occupational safety codes before making any changes])
  - changing combinations, rekeying locks, and/or collecting the retired key card when a staff
member who is in possession of these is no longer associated with the establishment, and additionally as needed to maintain security

- **Personal items**

  - restricting the type of personal items allowed in non-public areas of the establishment
  - allowing in the non-public areas of the establishment only those personal use medicines that are necessary for the health of staff (other than those being stored or displayed for retail sale) and ensuring that these personal use medicines are properly labeled and stored away from stored food and food preparation areas
  - preventing staff from bringing personal items (for example, lunch containers, purses) into nonpublic food preparation or storage areas
  - providing for regular inspection of contents of staff lockers (for example, providing metal mesh lockers, company issued locks), bags, packages, and vehicles when on company property (Remember to first consult any federal, state, or local laws that may relate to such inspections)

- **Training in food security procedures**

  - incorporating food security awareness, including information on how to prevent, detect, and respond to tampering or other malicious, criminal, or terrorist actions or threats, into training programs for staff, including seasonal, temporary, contract, and volunteer staff
  - providing periodic reminders of the importance of security procedures (for example, scheduling meetings, providing brochures, payroll stuffers)
  - encouraging staff support (for example, involving staff in food security planning and the food security awareness program, demonstrating the importance of security procedures to the staff)
  - encouraging staff support (for example, involving staff in food security planning and the food security awareness program, demonstrating the importance of security procedures to the staff)

- **Unusual behavior**

  - watching for unusual or suspicious behavior by staff (for example, staff who, without an identifiable purpose, stay unusually late after the end of their shift, arrive unusually early, access files/information/areas of the facility outside of the areas of their responsibility; remove documents from the facility; ask questions on sensitive subjects; bring cameras to work)

- **Staff health**

  - being alert for atypical staff health conditions that staff may voluntarily report and absences that could be an early indicator of tampering or other malicious, criminal, or terrorist actions (for example, an unusual number of staff who work in the same part of the facility reporting similar symptoms within a short time frame), and reporting such conditions to local health authorities

**Human element -- public**
FDA recommends that retail food store and food service establishment operators consider:

- **Customers**
  - preventing access to food preparation and storage and dishwashing areas in the non-public areas of the establishment, including loading docks
  - monitoring public areas, including entrances to public restrooms (for example, using security guards, monitored video cameras, one-way and two-way windows, placement of employee workstations for optimum visibility) for unusual or suspicious activity (for example, a customer returning a product to the shelf that he/she brought into the store, spending an unusual amount of time in one area of the store)
  - monitoring the serving or display of foods in self-service areas (for example, salad bars, condiments, open bulk containers, produce display areas, doughnut/bagel cases)

- **Other visitors (for example, contractors, sales representatives, delivery drivers, couriers, pest control representatives, third-party auditors, regulators, reporters, tours)**
  - restricting entry to the non-public areas of the establishment (for example, checking visitors in and out before entering the non-public areas, requiring proof of identity, issuing visitors badges that are collected upon departure, accompanying visitors)
  - ensuring that there is a valid reason for all visits to the non-public areas of the establishment before providing access to the facility - beware of unsolicited visitors
  - verifying the identity of unknown visitors to the non-public areas of the establishment
  - inspecting incoming and outgoing packages and briefcases in the non-public areas of the establishment for suspicious, inappropriate or unusual items, to the extent practical

**Facility**

FDA recommends that retail food store and food service establishment operators consider:

- **Physical security**
  - protecting non-public perimeter access with fencing or other deterrent, when appropriate
  - securing doors (including freight loading doors, when not in use and not being monitored, and emergency exits), windows, roof openings/hatches, vent openings, ventilation systems, utility rooms, ice manufacturing and storage rooms, loft areas and trailer bodies, and bulk storage tanks for liquids, solids and compressed gases to the extent possible (for example, using locks, "jimmy plates," seals, alarms, intrusion detection sensors, guards, monitored video surveillance [remember to consult any relevant federal, state, or local fire or occupational safety codes before making any changes])
  - using metal or metal-clad exterior doors to the extent possible when the facility is not in operation, except where visibility from public thoroughfares is an intended deterrent (remember to consult any relevant federal, state, or local fire or occupational safety codes before making any changes)
  - minimizing the number of entrances to non-public areas (remember to consult any relevant federal, state, or local fire or occupational safety codes before making any changes)
  - accounting for all keys to establishment (for example, assigning responsibility for issuing, tracking, and retrieving keys)
  - monitoring the security of the premises using appropriate methods (for example, using
security patrols [uniformed and/or plain-clothed, monitored video surveillance]
• minimizing, to the extent practical, places in public areas that an intruder could remain unseen after work hours
• minimizing, to the extent practical, places in non-public areas that can be used to temporarily hide intentional contaminants (for example, minimizing nooks and crannies, false ceilings)
• providing adequate interior and exterior lighting, including emergency lighting, where appropriate, to facilitate detection of suspicious or unusual activity
• implementing a system of controlling vehicles authorized to park in the non-public parking areas (for example, using placards, decals, key cards, keyed or cipher locks, issuing passes for specific areas and times to visitors' vehicles)
• keeping customer, employee, and visitor parking areas separated from entrances to non-public areas, where practical

• Storage and use of poisonous and toxic chemicals (for example, cleaning and sanitizing agents, pesticides) in non-public areas

  • limiting poisonous and toxic chemicals in the establishment to those that are required for the operation and maintenance of the facility and those that are being stored or displayed for retail sale
  • storing poisonous and toxic chemicals as far away from food handling and food storage areas as practical
  • limiting access to and securing storage areas for poisonous or toxic chemicals that are not being held for retail sale (for example, using keyed or cipher locks, key cards, seals, alarms, intrusion detection sensors, guards, monitored video surveillance [remember to consult any relevant federal, state, or local fire codes before making any changes])
  • ensuring that poisonous and toxic chemicals are properly labeled
  • using pesticides in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (for example, maintaining rodent bait that is in use in covered, tamper-resistant bait stations)
  • knowing what poisonous and toxic chemicals should be on the premises and keeping track of them
  • investigating missing stock or other irregularities outside a normal range of variation and alerting local enforcement and public health agencies about unresolved problems, when appropriate

Operations

FDA recommends that retail food store and food service establishment operators consider:

• Incoming products

  • using only known and appropriately licensed or permitted (where applicable) sources for all incoming products
  • taking steps to ensure that delivery vehicles are appropriately secured
  • requesting that transporters have the capability to verify the location of the load at any
time, when practical
  • establishing delivery schedules, not accepting unexplained, unscheduled deliveries or
drivers, and investigating delayed or missed shipments
  • supervising off-loading of incoming materials, including off hour deliveries
  • reconciling the product and amount received with the product and amount ordered and the
product and amount listed on the invoice and shipping documents, taking into account
any sampling performed prior to receipt
  • investigating shipping documents with suspicious alterations
  • inspecting incoming products and product returns for signs of tampering, contamination,
or damage (for example, abnormal powders, liquids, stains, or odors, evidence of
resealing, compromised tamper-evident packaging) or "counterfeiting" (for example,
inappropriate or mismatched product identity, labeling, product lot coding or
specifications, absence of tamper-evident packaging when the label contains a tamper-
evident notice), when appropriate
  • rejecting suspect food
  • alerting appropriate law enforcement and public health authorities about evidence of
tampering, "counterfeiting," or other malicious, criminal, or terrorist action

• Storage

  • having a system for receiving, storing, and handling distressed, damaged, and returned
products, and products left at checkout counters, that minimizes their potential for being
compromised (for example, obtaining the reason for return and requiring proof of identity
of the individual returning the product, examining returned or abandoned items for signs
of tampering, not reselling returned or abandoned products)
  • keeping track of incoming products, materials in use, salvage products, and returned
products
  • investigating missing or extra stock or other irregularities outside a normal range of
variability and reporting unresolved problems to appropriate law enforcement and public
health authorities, when appropriate
  • minimizing reuse of containers, shipping packages, cartons, etc., where practical

• Food service and retail display

  • displaying poisonous and toxic chemicals for retail sale in a location where they can be
easily monitored (for example, visible by staff at their work stations, windows, video
monitoring)
  • periodically checking products displayed for retail sale for evidence of tampering or other
malicious, criminal, or terrorist action (for example, checking for off-condition
appearance [for example, stained, leaking, damaged packages, missing or mismatched
labels], proper stock rotation, evidence of resealing, condition of tamper-evident
packaging, where applicable, presence of empty food packaging or other debris on the
shelving), to the extent practical
  • monitoring self-service areas (for example, salad bars, condiments, open bulk containers,
produce display areas, doughnut/bagel cases) for evidence of tampering or other
malicious, criminal, or terrorist action

• Security of water and utilities
• Limiting, to the extent practical, access to controls for airflow, water, electricity, and refrigeration
• securing non-municipal water wells, hydrants, storage, and handling facilities
• ensuring that water systems and trucks are equipped with backflow prevention
• chlorinating non-municipal water systems and monitoring chlorination equipment and chlorine levels
• testing non-municipal sources for potability regularly, as well as randomly, and being alert to changes in the profile of the results
• staying attentive to the potential for media alerts about public water provider problems, when applicable
• identifying alternate sources of potable water for use during emergency situations where normal water systems have been compromised (for example, bottled water, trucking from an approved source, treating onsite or maintaining onsite storage)

• Mail/packages
  • implementing procedures to ensure the security of incoming mail and packages

• Access to computer systems
  • restricting access to critical computer data systems to those with appropriate clearance (for example, using passwords, firewalls)
  • eliminating computer access when a staff member is no longer associated with the establishment
  • establishing a system of traceability of computer transactions
  • reviewing the adequacy of virus protection systems and procedures for backing up critical computer-based data systems
  • validating the computer security system

**Emergency Point of Contact:**

U.S. Food and Drug Administration
5600 Fishers Lane
Rockville, MD 20857
301-443-1240

If a retail food store or food service establishment operator suspects that any of his/her products that are regulated by the FDA have been subject to tampering, "counterfeiting," or other malicious, criminal, or terrorist action, FDA recommends that he/she notify the FDA 24-hour emergency number at 301-443-1240 or call their local FDA District Office. FDA recommends that the operator also notify local law enforcement and public health authorities.

FDA District Office telephone numbers are listed at:

*Reference to these documents is provided for informational purposes only. These documents are not incorporated by reference into this guidance and should not be considered to be FDA guidance.*
Ever since 9/11, Americans have realized that the possibility of the most devastating terrorist attacks must be taken seriously.

**What it is:** Terrorism through nuclear, biological and chemical (NBC) warfare is the intentional contamination and sabotage with infectious agents of the air, food and water supply of a targeted population. Various NBC agents are introduced throughout the food chain and, regardless of the agent used, the result is the same: people become ill or die by consuming contaminated food and water.

**How it spreads:** Stored, transported and prepared food is susceptible to NBC contamination.

**Your plan:** There are three primary countermeasures to overcome or reduce the NBC hazard to food:

1) **Protect food from contamination.** Contamination avoidance includes using natural and fabricated barriers (i.e., packaging) to prevent or significantly reduce the spread of contamination.
2) **Detect the presence, measure the extent and identify the nature of NBC agent contamination.** Identifying contaminated food is complicated by the fact that nuclear, biological and chemical agents may not change the smell, taste or appearance of food.
3) **Decontaminate food by removing contaminant so food is safe for consumption.** Decontamination efforts require an extensive amount of labor, time and supplies. Discard those contaminated foods that cannot be safely decontaminated. In many cases, decontamination efforts will be limited to the packaging/packing materials. Note: the following decontamination methods are considered to be the minimum.
## NBC Decontamination of Food Supplies

<table>
<thead>
<tr>
<th>SURFACE OR MATERIAL</th>
<th>CHEMICAL (Select one option below)</th>
<th>BIOLOGICAL (Select one option below)</th>
<th>NUCLEAR (Select one option below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canned, bottled or protected by impermeable container.</td>
<td>Immerse in boiling, soapy water for 30 minutes and rinse.</td>
<td>Wash with soap and water, then immerse in disinfectant solution. (Disinfectant, chlorine or 1/3 cup of household bleach in 10 gal. of water.)</td>
<td>Wash with soap and water, rinse.</td>
</tr>
<tr>
<td></td>
<td>Immerse in boiling water for 30 minutes.</td>
<td>Boil in water 15 minutes; not effective on toxins and some spores.</td>
<td>Brush, wipe contamination from surface of container.</td>
</tr>
<tr>
<td></td>
<td>Spray with DS2 and rinse.</td>
<td>Immerse in 5% sodium carbonate (4 lb. washing soda in 10 gal. water), rinse with potable water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wash in hot soapy water, rinse and aerate.</td>
<td>Immerse in household bleach solution (1/2 gal. bleach in 25 gal. water) for 30 minutes then rinse and aerate for 10 minutes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immerse in high-test hypochlorite (HTH) solution (1 lb. in 25 gal. water) 20 minutes, then rinse.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immerse in supertropical bleach (STB) solution (1 lb. in 25 gal. water) 30 minutes, then rinse.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immerse in 2% peracetic acid for 10 minutes, rinse and aerate for 10 minutes.</td>
<td></td>
</tr>
<tr>
<td>Not canned or impermeable container</td>
<td>Food known or suspected to be contaminated should not be consumed until approved by appropriate personnel.</td>
<td>Boil in water 15 minutes. Cook.</td>
<td>Wash or trim contamination from unpackaged food.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Immerse in or spray with 2% household bleach solution. (Packaged, peeled, or pared food may be immersed or sprayed.)</td>
<td></td>
</tr>
</tbody>
</table>

*Source: All charts in this chapter are from Health Service Support in a Nuclear, Biological, and Chemical Environment, Tactics, Techniques and Procedures, October 2002, Headquarters, Department of the Army, Field Manual 4-02.7 (8-10-7, appendix j: Food Contamination and Decontamination.*
NUCLEAR WARFARE

What it is: Nuclear warfare was originally called atomic warfare after the atom bomb, the first nuclear weapon. Nuclear warfare uses nuclear weapons against an enemy or target population. Nuclear weapons derive their destructive force, which is much greater than conventional explosives, from nuclear reactions of either nuclear fission or the more powerful fusion. A limited nuclear attack uses a smaller number of weapons against military forces. A full-scale nuclear war, unlike a conventional war, would release massive weapons against both military and civilian targets in a large geographic area or country.

The concerns: A nuclear war causes widespread destruction with long-term global effects. There would be human death and physical destruction in the immediate area of exploding nuclear weapons and massive and residual devastation beyond the point of impact caused by radioactive fallout from the explosion. Note: Food may be contaminated by fallout miles away from the blast site. It is detected by a radiac meter (Geiger counter). Food that has been contaminated by nuclear attack does not appear changed.

Contamination: Following a nuclear detonation, food can become contaminated in three ways.

1) Direct contamination. Direct contamination results by fallout collecting on plants, animals and stored food (surface contamination). Fallout has two effects. First, it produces a gamma radiation field over the fallout area. Second, it contaminates the surface of anything on which it is deposited. The whole-body gamma irradiation hazard to an individual far outweighs any potential hazard from food contamination. The basic rule is, if you can safely be in the area to salvage the food, then the food salvaged is safe to use (although slightly contaminated).

2) Indirect contamination. This form of contamination can be spread throughout the food chain. Humans can ingest contamination by eating plants that have absorbed radioactive isotopes; products (milk or meat) from animals allowed to graze on contaminated pastures; or fish from contaminated water.

3) Induced radiation. It is possible that food will be exposed to sufficient neutron flux (an increase in the number of free neutrons) as the result of a nuclear explosion to produce considerable induced radioactivity in food without it being destroyed by the blast and heat of a nuclear explosion. In other words, the food isn’t destroyed but it does become radioactive.

In an area of induced radiation, foods requiring the most caution are dairy products, high salt content foods, dry beans, raisins and ready-mixed cake and biscuit flours. The radioactivity has a short half-life; therefore, the radiation will decay very rapidly. It should be possible to consume foods containing induced radiation within a week or two. Cans, particularly those with “C” enamel, may incur a high level of induced radiation (from zinc in the enamel, not from iron in the can). Glass, because of its high salt content, will show very high levels of activity; clear glass will turn brown. Container radioactivity has no bearing on the food, which is safe to use. The radioactivity is not transferred to the contents. No significant toxic by-products are formed in the exposed canned food.

The risk: Consumption of food contaminated with radioactive fallout may cause a risk of radiation injuries from internal radiation; that is, radiation from radioactive sources within the body. Most isotopes will pass through the digestive tract or be excreted very quickly. However, the intestinal tract may receive a considerable dose. Some isotopes are more hazardous because they are absorbed from the digestive tract and enter the metabolism of man and animals.

How to protect food supplies: Meats and milk are the most vulnerable products because of the possibility for contamination of radioactive isotopes (Strontium, Cesium and Iodine). All bulk and fresh food stored in the open without protection will be contaminated. Decontamination is very difficult and time-consuming. Efforts should be made to ensure proper packing to prevent food contamination from radioactive fallout. Packing made from hard and nonporous materials, such as plastic or multilayer cardboard with a smooth surface, should be used. In addition, storage facilities should be enclosed to avoid the entry of fallout. Any material used as a protective cover will give some protection against nuclear fallout. Protection against induced radiation, blast, and thermal effects requires a hardened shelter or underground storage.

BIOLOGICAL WARFARE

What it is: Biological warfare is defined as the intentional use of disease-causing organisms (pathogens), toxins, or other agents of biological origin to incapacitate, injure or kill humans and animals or to destroy crops. Historically, biological warfare has primarily involved the use of pathogens as sabotage agents in food and water supplies to spread contagious disease among target populations.

Biological agents can be delivered by many means, including infected animals or contaminated animal products, aerosols, contaminated water and food, ticks, rodents and their fleas, deer flies, mosquitoes, algae, crabs, octopus, yellow rain and secondary person-to-person contact.

Examples of Known or Suspect Biological Warfare Agents

<table>
<thead>
<tr>
<th>PATHOGENS</th>
<th>TOXINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacillus anthracis (Anthrax)</td>
<td>Botulinum toxin</td>
</tr>
<tr>
<td>Francisella tularensis (Tularemia)</td>
<td>Mycotoxins</td>
</tr>
<tr>
<td>Yersinia pestis (Plague)</td>
<td>Enterotoxin</td>
</tr>
<tr>
<td>Brucella species (Brucellosis)</td>
<td>Ricin</td>
</tr>
<tr>
<td>Vibrio cholerae (Cholera)</td>
<td></td>
</tr>
</tbody>
</table>

The concerns: Food contaminated with biological warfare agents may look, taste and smell normal. The agents do not produce noticeable changes to the food. Also, naturally occurring infectious organisms can be made more virulent and antibiotic resistant and manipulated to render protective vaccines ineffective. These developments complicate the ability to detect and identify biological warfare agents and to operate in areas contaminated by those agents.
**Contamination:** Biological warfare agents exist in the form of toxins and microorganisms. The normal packaging and packing of food (to protect against moisture, dust and bacteria or other contamination) provides protection against most biological agents. The exception may be toxins and biologically derived substances. However, the protective methods used for chemical agents will also protect against toxins and derived substances. Food in freezers, refrigerators and refrigerated trucks or rail cars will be safe if these containers remain sealed until the outer surfaces are decontaminated.

- It is unlikely that a biological agent will affect the appearance, taste or smell of the food enough for the change to be apparent.
- Packaging and packing materials are not life supportive to pathogenic agents and are therefore self-decontaminating with the exception of spore-forming organisms.
- Food packaged in metal containers or encased in heavy aluminum laminated plastics that can withstand boiling water are impervious to arthropod penetration and are highly resistant to biological agents.
- Unprotected fresh food stored in the open and close to the source of dissemination will become contaminated.

**Detection:** Rapid identification of agents used is absolutely essential to implement effective countermeasures. It is the first step in answering critical management questions.

- What adjustments must be made in food preparation and distribution?
- What are the essential countermeasures?
- What is the expected outcome of the incident?

Samples of food that are suspected of being contaminated are transported to a designated laboratory, accompanied by a description of the samples, the sample collection procedures and the circumstances that prompted the collection.

**Decontamination:** Food contaminated with toxins is handled in the same manner as food contaminated with chemical agents. Food contaminated with microorganisms is handled in the same manner as when contaminated with the more common foodborne disease-producing microorganisms.

**How to protect food supplies:** Food that is sealed in containers that are resistant to the passage of biological agents require only that the exterior of the container be decontaminated.

**For containers made of metal, glass, plastic, or porcelain:**

1) Thoroughly wash the container in potable water and soap, or in a disinfectant solution. If the water used for washing is contaminated, the soap and water wash may increase, not reduce, the contamination hazard. After that, the food containers are immersed in a disinfectant solution for 30 minutes, then rinsed with potable water. Chlorine solutions are not as reactive or corrosive as Decontamination Solution Number 2 (DS2).

2) Place the containers in boiling soapy water for 15 minutes; then rinse with potable water.

**ANTHRAX as a biological weapon**

The threat of anthrax deserves special mention because it was successfully and intentionally released as a biological agent through the U.S. Postal System in 2001 and because it is potentially so deadly.

**What it is:** Anthrax is a naturally occurring infectious disease that infects wild and domestic animals. In the past, humans could get anthrax only from exposure to infected animals. But in the second half of the last century, a deadly form of anthrax that can be inhaled by humans was developed as a biological weapon.

**How it spreads:** Anthrax is not spread from person to person. To contract anthrax, the organism must be rubbed into abraded skin, swallowed, or inhaled as a fine, aerosolized mist.

**The concerns:** Anthrax organisms can cause infection in the skin, gastrointestinal system or the lungs. Death can be prevented after exposure to the anthrax spores by prompt recognition and early treatment with the appropriate antibiotics. But treatment should start immediately after exposure to be successful. The difficulty lies in the fact the symptoms are generally described as “flu-like” so an accurate diagnosis can be delayed if there is no suspicion of exposure to anthrax.

**Your plan:** The following disaster plan for dealing with anthrax is provided courtesy of Whitsons Culinary Group, an Islandia, New York-based contractor with extensive experience operating at disaster sites.

**How to handle a suspicious unopened letter or package marked with a threatening message such as “Anthrax”**

1) Do not shake or empty the contents of any suspicious envelope or package.

2) Place the envelope or package in a plastic bag or some other type of container to prevent leakage of contents.

3) If you do not have any container, then cover the envelope or package with anything (e.g., clothing, paper, trash can, etc.) and do not remove this cover.

4) Then leave the room and close the door, or section off the area to prevent others from entering (i.e., keep others away).

5) Wash your hands with soap and water to prevent spreading any powder to your face.

6) What to do next...
   - If you are at home, immediately report the incident to local police.
   - If you are at work, immediately report the incident to local police, and notify your building security official or an available supervisor.

7) List all people who were in the room or area when this suspicious letter or package was recognized. Give this list to both the local public health authorities and law enforcement officials for follow-up investigations and advice.
How to handle envelope containing powder, which spills out onto surfaces
1) Do not try to clean up the powder. Cover the spilled contents immediately with anything (e.g., clothing, paper, trash can, etc.) and do not remove this cover!
2) Then leave the room and close the door, or section off the area to prevent others from entering (i.e., keep others away).
3) Wash your hands with soap and water to prevent spreading any powder to your face.
4) What to do next…
   — If you are at home, immediately report the incident to local police.
   — If you are at work, immediately report the incident to local police, and notify your building security official or an available supervisor.
5) Remove heavily contaminated clothing as soon as possible and place in a plastic bag, or some other container that can be sealed. This clothing bag should be given to the emergency responders for proper handling.
6) Shower with soap and water as soon as possible. Do not use bleach or other disinfectant on your skin.
7) If possible, list all people who were in the room or area, especially those who had actual contact with the powder. Give this list to both the local public health authorities so that proper instructions can be given for medical follow-up, and to law enforcement officials for further investigation.

How to handle room contamination by aerosolization
Example: a detection device is triggered, warning that the air handling system is contaminated, or warning that a biological agent has been released in a public space.
1) Turn off local fans or ventilation units in the area.
2) Leave area immediately.
3) Close the door, or section off the area to prevent others from entering (i.e., keep others away).
4) What to do next…
   — If you are at home, immediately dial 911 to report the incident to local police and the local FBI field office.
   — If you are at work, immediately dial 911 to report the incident to local police and the local FBI field office, and notify your building security official or an available supervisor.
5) Shut down air handling system in the building, if possible.
6) If possible, list all people who were in the room or area. Give this list to both the local public health authorities so that proper instructions can be given for medical follow-up, and to law enforcement officials for further investigation.

How to identify suspicious packages and letters
Some characteristics of suspicious packages and letters include the following.
• Excessive postage
• Handwritten or poorly typed addresses
• Incorrect titles
• Title, but no name
• Misspellings of common words
• Oily stains, discolorations or odor
• No return address
• Excessive weight
• Lopsided or uneven envelope
• Protruding wires or aluminum foil
• Excessive security material such as masking tape, string, etc.
• Visual distractions
• Ticking sound
• Marked with restrictive endorsements, such as “Personal” or “Confidential.”

CHEMICAL WARFARE
What it is: Since World War I, chemical warfare has been publicly held in disrepute by most Western political and military leaders. However, evidence accumulated over the last 50 years does not support the position that public condemnation equates to limiting development or the use of offensive chemical warfare agents. The confirmed use of chemical warfare agents by Egypt against Yemen and by Iraq against Iranian forces, and their probable use by the Soviets in Afghanistan indicate chemical warfare is still a threat.

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>EFFECT</th>
<th>TIME TO EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabun (GA)</td>
<td>Lethal nerve agents</td>
<td>Inhalation: seconds to minutes</td>
</tr>
<tr>
<td>Sarin (GB)</td>
<td>Topical: minutes</td>
<td></td>
</tr>
<tr>
<td>Soman (GD)</td>
<td>Lethal blood agent</td>
<td>Minutes</td>
</tr>
<tr>
<td>V-Agents</td>
<td>Blister agents</td>
<td>1 to 12 minutes</td>
</tr>
<tr>
<td>Hydrogen cyanide</td>
<td>Lung-damaging</td>
<td>Minutes</td>
</tr>
<tr>
<td>Mustard</td>
<td>Incapacitating agents</td>
<td>15 to 60 minutes</td>
</tr>
<tr>
<td>Lewisite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSD and BZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosgene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine</td>
<td>(choking)</td>
<td></td>
</tr>
</tbody>
</table>
The concerns: Chemical agents can cause the food to become very toxic without causing any other changes in the food. Since food can be contaminated without any outward change in appearance, the possibility of contamination must be assumed in a chemical agent environment.

Contamination: The effects of chemical agents on food depend on the nature of the agent and the type of the food. The extent to which chemical agents penetrate food also depends on the amount, form of dispersal (liquid [droplet size], or vapor) and duration of exposure. Nerve agents and mustard will penetrate deeply into unprotected fatty foods and will readily penetrate granular products such as grain and sugar. Liquid food products can be completely contaminated. Arsenicals readily hydrolyze to poisonous arsenical oxides in some foods. Foods can be divided into three categories based on their water content, fat content and crystalline structure.

1) Foods having a high water content, a low fat content, and/or a crystalline structure (fresh vegetables, fruits, sugar, salt and eggs), will absorb mustard and nerve agents, either as a liquid or as a vapor. Nerve agents will be hydrolyzed slowly.

2) Foods having a low fat content and an irregular (amorphous) structure (flour, bread, grain, rice, cereals, dried fruits, dried vegetables, tea, coffee, peas and beans), readily absorb mustard and nerve agent in liquid form. As a vapor, these agents are absorbed to some extent, but are easily removed by airing.

3) Foods having a low water content and a high fat content such as butter, fat, fatty oils, ham, cheese, milk, bacon, fatty meat, and fish, absorb mustard and nerve agents such that removal of the agents is virtually impossible.

Contamination by absorption: Chemical agents can be physically and chemically absorbed into food. In addition to the toxic effect, they often adversely affect taste, smell and the appearance of the food. However, chemical agents can cause the food to become very toxic without causing any other changes in the food. Since food can be contaminated without any outward change in appearance, the possibility of contamination must be assumed in a chemical agent environment. Treat the food with the same precautions as established for known contaminated items.

In many cases, decontamination is difficult, so emphasis must be placed on protection. Keep food supplies covered at all times. Take special precautions to protect food that is not packed in protective packages. Unprotected food, forage and grain supplies may be so contaminated that their consumption will produce gastrointestinal irritation or systemic poisoning. Nerve agents, vesicants and arsenicals are the most dangerous.

### Effects of Chemical Agents on Food

<table>
<thead>
<tr>
<th>Agent</th>
<th>Taste</th>
<th>Smell</th>
<th>Color</th>
<th>Residual toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mustard</td>
<td>Bad</td>
<td>Bad</td>
<td>Discolors meat</td>
<td>+</td>
</tr>
<tr>
<td>N-Mustards</td>
<td>Bad</td>
<td>Bad</td>
<td>Doesn’t discolor meat</td>
<td>+</td>
</tr>
<tr>
<td>Arsenals</td>
<td>Acid</td>
<td>Bad</td>
<td>Discolors meat and vegetables</td>
<td>+, Arsenic</td>
</tr>
<tr>
<td>Nerve agents</td>
<td>Bad</td>
<td>None</td>
<td>None</td>
<td>+</td>
</tr>
<tr>
<td>Phosgene</td>
<td>Acid</td>
<td>None</td>
<td>?</td>
<td>- After weathering</td>
</tr>
<tr>
<td>Cyanogen agents</td>
<td>Bitter</td>
<td>Bad</td>
<td>None</td>
<td>- After weathering</td>
</tr>
<tr>
<td>Irritants</td>
<td>Acid</td>
<td>Bad</td>
<td>None</td>
<td>+</td>
</tr>
<tr>
<td>Smoke</td>
<td>Acid</td>
<td>Bad</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>White Phosphorous</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>+</td>
</tr>
</tbody>
</table>

+ Indicates the presence of residual toxicity  
- Denotes that residual toxicity is not present  
? The influence has not been determined
**How to protect food supplies:** The protective properties of packaging materials are dependent upon a number of factors. The factors include the form of the agent (liquid versus vapor); concentration and exposure time; weather (temperature, wind speed and humidity); and packaging material (the type of material, thickness and the presence of folds, tears and small holes). Even the thinnest material will offer some protection and is better than nothing at all. Therefore, always cover food supplies with whatever material is available.

**Protection from Chemical Contamination by Packaging Methods and Materials**

<table>
<thead>
<tr>
<th>PACKAGING METHOD OR MATERIAL</th>
<th>CHEMICAL VAPORS</th>
<th>LIQUIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOTTLES &amp; CANS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airtight bottles</td>
<td>Complete</td>
<td>Complete</td>
</tr>
<tr>
<td>Sealed metal cans</td>
<td>Complete</td>
<td>Complete</td>
</tr>
<tr>
<td>Glass bottles</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Metal containers</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td><strong>BOXES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardboard</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Wooden crates</td>
<td>Moderate</td>
<td>Poor or none</td>
</tr>
<tr>
<td><strong>WRAPPINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal foil laminates</td>
<td>Complete</td>
<td>Complete</td>
</tr>
<tr>
<td>Paper</td>
<td>Poor</td>
<td>None</td>
</tr>
<tr>
<td>Textiles</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Waxed paper</td>
<td>Good</td>
<td>Moderate</td>
</tr>
<tr>
<td>Multilayer bags</td>
<td>Good</td>
<td>Moderate</td>
</tr>
<tr>
<td>Cellophane</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Cellophane, wet</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Canvas</td>
<td>Poor</td>
<td>Poor</td>
</tr>
</tbody>
</table>

**Chemical Decontamination of Packaged Materials**

<table>
<thead>
<tr>
<th>PACKAGING MATERIAL</th>
<th>CONTAMINATION</th>
<th>DECONTAMINATION PROCEDURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtight metal containers, glass bottles,</td>
<td>Vapor and</td>
<td>Air for 24 hours. Wash with</td>
</tr>
<tr>
<td>foil aluminated, laminated materials.</td>
<td>Liquid</td>
<td>hot soapy water, soda or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bleach solution. Rinse with</td>
</tr>
<tr>
<td>Polyester, PVF, wooden boxes, crates,</td>
<td>Vapor</td>
<td>Remove contaminated package.</td>
</tr>
<tr>
<td>boards, multilayer bags.</td>
<td></td>
<td>Air contents for 24 hours.</td>
</tr>
<tr>
<td>Cardboard, polyethylene.</td>
<td>Liquid</td>
<td>Contaminated contents —</td>
</tr>
<tr>
<td></td>
<td></td>
<td>treat as unpackaged food.</td>
</tr>
</tbody>
</table>
Notes on packaging

- Attempts to decontaminate porous packaging materials, such as cardboard or wood, are likely to be unsuccessful and may result in spreading the contamination. The best procedure in handling such items is to strip off the outer contaminated coverings and examine the inner layer to see if penetration of the agent has occurred. If it has, continue stripping off layers until an uncontaminated layer is reached.

- Food in cans or in other sealed, impermeable containers is not in danger of chemical contamination. Because contamination is confined to the outer surface of the sealed container, decontamination is accomplished by: immersion in boiling, soapy water for 30 minutes and rinse; immersion in boiling water for 30 minutes; spray with DS2; or wash in hot soapy water, rinse and aerate. Under no conditions should contaminated containers be opened before they have been decontaminated and monitored.

### Chemical Decontamination of Unpackaged Foods

<table>
<thead>
<tr>
<th>CHEMICAL AGENT</th>
<th>FATTY FOODS (butter, bacon, milk, cheese, ham)</th>
<th>NONFATTY FOODS, HIGH WATER CONTENT, CRYSTALLINE (fruits, vegetables, salt, sugar)</th>
<th>NONFATTY FOODS, LOW WATER CONTENT, AMORPHOUS (flour, cereals, bread, peas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nerve Agents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor, heavy</td>
<td>Destroy</td>
<td>Destroy unless possible to boil after airing 48 hours</td>
<td>Air for 48 hours, then boil</td>
</tr>
<tr>
<td>Vapor, Light</td>
<td>Destroy</td>
<td>Air for 48 hours, then boil</td>
<td>Air for 48 hours, then boil</td>
</tr>
<tr>
<td>Liquid</td>
<td>Destroy</td>
<td>Destroy</td>
<td>Destroy</td>
</tr>
<tr>
<td>Mustards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor</td>
<td>Remove 1-3 cm of outer layer and wash with 2% Sodium Bicarbonate Solution. Boil for at least 30 minutes. Destroy milk.</td>
<td>Wash with water, air for 48 hours</td>
<td>Wash with water, air for 48 hours</td>
</tr>
<tr>
<td>Arsenicals</td>
<td>Destroy</td>
<td>Destroy</td>
<td>Destroy</td>
</tr>
<tr>
<td>Choking Agents (may decompose rapidly on contact with water)</td>
<td>Wash food with water when possible and expose to the air for 24 hours. Food may be unpalatable due to the acid product of hydrolysis.</td>
<td>Wash food with water when possible and expose to the air for 24 hours. Food may be unpalatable due to the acid product of hydrolysis.</td>
<td>Wash food with water when possible and expose to the air for 24 hours. Food may be unpalatable due to the acid product of hydrolysis.</td>
</tr>
<tr>
<td>Cyanide-type Agents</td>
<td>Unlikely to produce dangerous contamination of foodstuffs.</td>
<td>Unlikely to produce dangerous contamination of foodstuffs.</td>
<td>Unlikely to produce dangerous contamination of foodstuffs.</td>
</tr>
<tr>
<td>Riot Control Agents</td>
<td>Food may be unpalatable to the extent of being inedible.</td>
<td>Food may be unpalatable to the extent of being inedible.</td>
<td>Food may be unpalatable to the extent of being inedible.</td>
</tr>
</tbody>
</table>
**DURING A TERRORISM INCIDENT**

*Health Alert Network (HAN)* works through continuous, high-speed internet connectivity and broadcast capacity to support emergency communication, ensuring that each community has rapid and timely access to emergent health information, a cadre of highly-trained professional personnel, and evidence-based procedures for effective public health preparedness, response and service on a 24/7 basis. [www.phppo.cdc.gov/han](http://www.phppo.cdc.gov/han).


*The Epidemic Information Exchange (Epi-X)* [www.cdc.gov/mmwr/epix/epix.html], CDC's secure, web-based communications network, serves as a communications exchange between CDC, state and local health departments, poison control centers and other public health professionals.

**SOURCES**

All charts in this chapter are from *Health Service Support in a Nuclear, Biological, and Chemical Environment*, Tactics, Techniques and Procedures, October 2002, Headquarters, Department of the Army, Field Manual 4-02.7 (8-10-7, appendix j: Food Contamination and Decontamination.


Disaster Resource Guide, [www.disasterresource.com](http://www.disasterresource.com)

Diagram 1. Flow diagram of response to criminal or terrorist activity

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(17)
Accidents in the workplace can happen at any time in any facility and can create serious threats to the welfare of employees as well as customers. It is important to have in place proper procedures for limiting the risk of accidents and for handling them safely when they occur.

**FIRES**

*What it is:* The accidental combustion of flammable materials is a constant risk in any workplace.

*The concerns:* By their very natures, accidental fires break out without warning. They can spread rapidly, creating sudden and potentially widespread emergencies. Fires can easily cut off escape routes, trapping employees in the facility, creating the threat of smoke inhalation as well as the danger of the fire itself.

*What to do before a fire breaks out*

1. Be sure to follow all local fire safety codes.
2. Your facility must have sufficient and suitably located exits to permit everyone to escape quickly in case of fire or other emergency situations.
3. Fire exits must never be obstructed or locked while employees are in the facility.
4. Post evacuation instructions with floor plans throughout your facility.
5. Make sure all combustible scrap, debris and waste materials (oily rags, etc.) are stored in covered metal receptacles and removed from the facility promptly.
6. Be certain that proper storage of combustible materials is practiced in order to minimize the risk of fire, including spontaneous combustion.
7. Approved containers and tanks should be used for the storage and handling of flammable and combustible liquids.
8. All connections on drums and combustible liquid piping, vapor and liquid should be checked to be certain they are tight.
9. All flammable liquids should be kept in closed containers when not in use.
10. Bulk drums of flammable liquids should be grounded and bonded to containers during dispensing.
11. Storage rooms for flammable and combustible liquids should have explosion-proof lights and mechanical or gravity ventilation. Do not keep flammable liquids near open flames or food, or in improperly ventilated areas.
12) All solvent wastes and flammable liquids should be kept in fire-resistant, covered containers until they are removed from the worksite.

13) Fire extinguishers are classified in three varieties and should be provided throughout your facility, selected for the types of materials present in areas where they are to be used. The three classifications are:
   - Class A: Ordinary combustible material fires
   - Class B: Flammable liquid, gas or grease fires
   - Class C: Energized-electrical equipment fires.

14) Appropriate fire extinguishers should be mounted within 10 feet of any storage area for combustible materials.

15) Fire extinguishers must be positioned free from obstructions or blockage and must be kept fully charged.

16) All fire extinguishers should be serviced, maintained and tagged at intervals not to exceed 1 year.

17) Safety cans should be used for dispensing flammable or combustible liquids at the point of use.

18) Storage tanks for hazardous materials must be adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying or atmosphere temperature changes. Storage tanks also should be equipped with emergency venting to relieve excessive internal pressure in case of fire exposure.

19) Made sure that “no smoking” rules are enforced, particularly in areas involving storage and use of hazardous materials.

20) Conduct regular maintenance on all electrical equipment and connections. Check for:
   - Frayed wiring
   - Overloaded extension cords
   - Plugs that are not properly grounded
   - Equipment that smokes
   - Electrical plates that are cracked or missing
   - The proper use of shielding on high-intensity lighting
   - The presence of grease on electrical equipment and flammable materials near power sources.

21) Be certain all employees are trained in fire drills and in the use of fire extinguishing equipment. An employee should be assigned to turn off gas and electrical power when there is a fire emergency. During fire drills, members of the management staff should check all non-visible areas (bathrooms, refrigeration units, corridors and stairwells) to be sure the evacuation is complete.

22) Be certain employees know they must never mix chemicals without management approval.

23) Regularly check for grease build-up on range hoods. Hoods should be cleaned daily.

24) Post emergency phone numbers next to all telephones.

25) Specify a meeting location outside the facility where employees are to gather when a full evacuation is necessary.

26) Make sure you have proper insurance. Make sure you have business-interruption insurance to reimburse you for loss of revenue.

**What to do once a fire breaks out**

1) All employees and customers should evacuate the affected areas swiftly and calmly. Designate one employee who is responsible for determining if and to what degree evacuation is necessary and who will take charge of leading everyone to safety.

2) Call the fire department immediately.

3) Return to the facility only when instructed by fire officials.

4) After the emergency is over and you have returned to the facility, break apart all debris and soak with the contents of appropriate fire extinguishers.

5) Discard all foods not stored in impermeable packaging, even if refrigerated. In particular, food exposed to chemicals must be destroyed.

**HAZARDOUS CHEMICAL SPILLS**

**What it is:** The Occupational Safety and Health Administration (OSHA) defines hazardous substances as chemicals and other substances that can affect workers’ health, causing illness or disease. Often they will be industrial chemicals, such as solvents or cleaners. They may also be pesticides, paints, drugs, cosmetics, food and any other substance that is hazardous to health and is used or produced in a work activity.

**The concerns:** Hazardous chemicals present a range of potential dangers to employees and customers. OSHA lists the categories of danger as:

- **Very toxic:** capable of causing death or very serious health problems after relatively small exposures.
- **Toxic:** capable of causing death or serious health problems after exposure.
- **Harmful:** capable of causing health problems after larger or long-term exposures.
- **Corrosive:** capable of destroying materials or living tissue (skin) on contact.
- **Irritant:** capable of irritating or inflaming the skin, eyes or respiratory system, e.g., causing dermatitis.
- **Sensitizing:** capable of causing allergic reaction such as asthma to even minute quantities of the substance.
- **Carcinogenic:** capable of causing cancer.
- **Mutagenic:** capable of causing damage to genes.
- **Teratogenic:** capable of causing birth defects.

Health effects can be acute, resulting from a short-term exposure, or chronic, resulting from long-term exposure over a period of time. Chronic effects may not occur for many years. They are hard to predict in advance, and when they do occur, it may be hard to identify what caused them. Whether any of these health problems actually occur depends on:

- The amount of exposure.
- The route of exposure (the way that a hazardous substance gets into a person’s body). The most common ways are by breathing in the substance (inhalation) or skin contact. Some hazardous substances can be absorbed through the skin, and substances can be accidentally swallowed (e.g., by eating or smoking with contaminated hands).
- Whether the affected person is or has been exposed to other hazardous substances. This can increase or change the adverse health effects which result.
What to do before a hazardous chemical spill occurs

1) Learn how to detect the presence of a hazardous material. Many hazardous materials do not have a taste or an odor. Some materials can be detected because they cause physical reactions such as watering eyes or nausea. Some hazardous materials exist beneath the surface of the ground and can be recognized by an oil- or foam-like appearance.

2) Contact your Local Emergency Planning Committee (LEPC) or local emergency management office for information about hazardous materials and community response plans. (A list of LEPCs nationwide can be obtained from the EPA website. See “Sources,” below.)

3) Be sure to have emergency response and evacuation plans in place.

4) Create and maintain a list of all hazardous chemicals used at your facility.

5) Provide all necessary protective equipment and be sure all appropriate employees understand how to use it.

6) Obtain a Material Safety Data Sheet (MSDS) for each hazardous chemical in your inventory. The MSDS for a hazardous chemical is developed or obtained by and available from the manufacturer or importer. The MSDS lists:
   - The identity of the chemical
   - The physical and chemical characteristics
   - Physical and health hazards
   - Primary routes of entry in the body
   - Exposure limits
   - Precautions
   - Controls
   - Emergency and first aid procedures
   - The name of the manufacturer or importer.

7) Chemical manufacturers, importers and distributors provide labels, tags or other markings for containers of hazardous chemicals that specify the identity of the chemical, the appropriate hazard warning and the name and address of the manufacturer, importer or other responsible party. Be sure that all containers of hazardous chemicals are properly labeled, tagged or marked and remain so.

8) Monitor levels of hazardous substances in the air.

9) Provide training to all employees on the physical and health hazards of the chemicals in your facility and the measures they should take to protect themselves from chemical hazards including proper work practices, emergency procedures and the use of protective equipment, where appropriate. Be sure that all employees understand the information contained in the MSDSs and that they know how to read the labeling on chemical containers. Arrange additional training:
   - When new chemicals are introduced into the facility
   - When process or equipment changes are made that could cause new or increased chemical exposure
   - When procedures or work practices are changed that could cause changes in employee exposure

10) Employee training is required by OSHA. Check with OSHA to be sure all necessary training is being provided and properly documented. OSHA’s specific regulations are contained in the “General Industry Occupational Safety and Health Standards.” (See “Sources,” below.)

What to do once a hazardous chemical spill occurs

1) Follow the procedures specified on the MSDS for the spilled chemical.

2) As soon as possible, call 911 or the local fire department to report the nature and location of the accident.

3) Everyone should move away from the accident scene and help keep others away.

4) Do not walk into or touch any of the spilled substance. Try not to inhale gases, fumes and smoke. If possible, cover mouth with a cloth while leaving the area.

5) Stay away from accident victims until the hazardous material has been identified.

6) If the spill occurs outdoors, try to stay upstream, uphill and upwind of the accident.

7) Don’t try to care for victims of a hazardous materials accident until the substance has been identified and authorities indicate it is safe to go near victims. Then you can move victims to fresh air and call for emergency medical care. Remove contaminated clothing and shoes and place them in a plastic bag. Cleanse victims that have come in contact with chemicals by immediately pouring cold water over the skin or eyes for at least 15 minutes, unless authorities instruct you not to use water on the particular chemical involved.

8) If gas or vapors could be present, take shallow breaths through a cloth or a towel.

9) Avoid eating or drinking any food or water that may be contaminated.

10) Authorities will decide if evacuation is necessary based primarily on the type and amount of chemical released and how long it is expected to affect the area. Other considerations are the length of time it should take to evacuate the area, weather conditions and the time of day.

11) After authorities announce it is safe to return to the facility, clean up and dispose of residue carefully. Follow instructions from emergency officials concerning clean-up methods.

SOURCES


OSHA, www.osha.gov


FEMA, www.fema.gov
A fire can devastate your business, leading to lost revenues and even permanent closure. But there are steps you and your staff can take to prevent fires and, in the event one occurs, increase the likelihood of a recovery.


Preventative Maintenance

Be sure to schedule regular maintenance service for electrical equipment.
- Instruct an electrician to check for the following electrical hazards:
  - Equipment that sparks or smokes
  - Frayed cords or wiring
  - Too many electrical cords in a socket
  - Cracked or broken switch or receptacle plates
  - Ungrounded plugs or outlets
  - Insufficient fuses or circuit breakers
  - Temporary wiring
  - No shield on high-intensity lights, especially if the lights are near flammable items
  - Dust or grease buildup on equipment, sockets or wiring
  - Combustible items near power sources.

Train Staff in Fire Prevention

Training your staff in proper fire prevention techniques is one of the most important steps to reduce the probability of a fire.
- Train your staff to look for these potential hazards:
  - Flammable liquids that are not stored in their original containers or puncture-resistant, tightly sealed containers
  - Flammable liquids that are not stored in well-ventilated areas away from supplies, food, food-preparation areas or any source of flames
  - Employees smoking in or near storage areas
  - Directions that are not being followed when using chemicals. Never mix chemicals unless directions call for mixing.
  - Poorly ventilated areas where a chemical is being used
  - Chemical spills that are not immediately cleaned up.
- Instruct staff to regularly clean grease from walls and work surfaces; ranges, fryers, broilers and convection ovens; heating, air-conditioning and ventilation units; and hoods, vents and filters.
- Alert employees to watch for these potential hazards:
  - paper products, linens, boxes and food in dry storage.
areas that are not kept and used away from heat sources; and soiled rags, paper products and trash that are piled in storage and working areas. Properly dispose of the latter materials at least once a day.

- Teach new employees about your restaurant's evacuation routes and fire safety equipment usage. Don’t forget to give veteran staff members refresher courses in fire safety.
- Train at least one worker per shift how to shut off gas and electrical power in case of emergency.
- Instruct cooks to clean hoods daily to prevent grease buildup. Consider hiring a professional to clean the hoods once a year.
- Another important step to protect your operation from the devastation of a fire is to properly insure your restaurant.

### Purchase Fire Insurance

Here are some tips for properly insuring your operation against fire damage.

- Don’t skimp on insurance coverage. Carriers require that you purchase insurance for a value equal to a specified percentage, usually 80 or 90 percent of the value of your property. Many restaurateurs don’t follow this guideline in an effort to save money, but if you don’t insure to your restaurant’s full value, you won’t get paid 100 percent of your loss in the event of a fire.
- Have your restaurant appraised by an independent public appraiser to make sure you know the value of your restaurant. This helps you keep the amount of your premium in pace with your restaurant’s value, which usually rises with inflation.
- Avoid hassles with your insurer over the actual cash value (ACV) of your restaurant in the event of a fire by replacing your policy’s ACV assessment with a repair-and-replacement endorsement. This calls for payment to you of the cash required to replace or repair property at market prices.
- Take out blanket coverage if you have more than one unit or building. Blanket coverage entitles you to the recovery of full loss up to the total value of all buildings covered for any single fire occurrence.
- Determine your deductible by assessing your own risk averseness. Are you willing to gamble with a higher amount for a lower premium?
- Carry business-interruption insurance to reimburse you for the loss of revenues while you wait to reopen your restaurant.
- Consider carrying contingent-business-interruption insurance to reimburse you for lost revenues in the event a supplier is struck by fire. One rule of thumb: Take out enough insurance to keep your restaurant operating for six months after the disaster. The dollar amount is typically gross earnings.
- Keep your policy up to speed with municipal building codes. For example, your town may require you to tear down the half of your restaurant that remains standing after a fire.
- Include the addresses of all your buildings in your policy.
- Take out separate policies on items that are typically excluded from policies, such as plate-glass windows or cash.

Despite properly trained staff and adequate insurance, a fire could still strike your restaurant. The next course will teach you how to evacuate patrons and staff safely and how to accelerate your claim.

### What to Do in the Event of a Fire

If a fire breaks out in your restaurant, you or someone on your staff must take control of the situation and lead customers and employees to safety. Then you must deal with the aftermath of the fire and try to get your restaurant up and running as soon as possible.

- Include a site plan showing where all fire exits are in your restaurant. If your restaurant is located within a larger building, note where that building’s exits are located.
- Designate one staff member per shift to be evacuation manager. That person should be in charge of calling the fire department at 911, determining when an evacuation is necessary and ensuring that everyone exits the restaurant safely.
- Create a “marshalling site” close to your establishment where staff and customers should go in case of evacuation.
- Create a business-restoration plan to use in case of disaster. The plan should include names and contact numbers of suppliers, clients and companies that clean, rebuild and do fire-restoration work. The plan should be stored away from the restaurant.
- File a report with the police, fire department and health department if a fire should strike. Notify your insurance agency, describing the property lost or damaged. Take pictures to document the damage. Protect the property from further damage. Set damaged property aside to be examined. Keep a record of expenses incurred. Request claim forms from your insurance company.
- Purchase a fire-suppression system. Kitchen systems should include a tank or tanks on the wall filled with wet or dry chemicals that are piped to the underside of the stove hood.
- Contact your local fire department to conduct an inspection of your fire-suppression equipment, smoke and fire alarms, and gas and electrical appliances.

By taking these steps, you can better protect your establishment from fire and, in the event a fire does occur, be able to evacuate staff and diners safely and rebuild your restaurant quickly.
Dangers that arise from employee behavior, either through acts of violence or through the use of equipment or the conduct of work in a manner that is unsafe, often can be as hazardous as a chemical spill or an outbreak of disease. In addition, some incidents can place the employer in legal jeopardy. It is imperative to take all appropriate measures to limit workplace violence and work accidents to the maximum degree possible.

VIOLENCE IN THE WORKPLACE

What it is: OSHA defines workplace violence as “violence or the threat of violence against workers. It can occur at or outside the workplace and can range from threats and verbal abuse to physical assaults and homicide, one of the leading causes of job-related deaths.”

The concerns: Roughly two million American workers are victims of workplace violence each year. Several categories of workers are at above average risk of work-related violence. A number of those categories apply to foodservice employees: workers who exchange money with the public; who deliver passengers, goods or services; and who work alone or in small groups during late night or early morning hours, in high-crime areas or in community settings where they have extensive contact with the public.

What to do to limit the likelihood of workplace violence

1) The best protection employers can offer is to establish a zero-tolerance policy toward workplace violence against or by their employees. Management should establish a workplace violence prevention program or incorporate the information into an existing accident prevention program, employee handbook or manual of standard operating procedures.

2) Establish a policy of investigating and promptly remedying all claims of workplace violence. Make sure that all employees know the policy of zero-tolerance and of immediate investigation and remediation.

3) Make clear that anyone initiating or participating in acts of violence and/or threats of violence will immediately be removed from the workplace and will be subject to corrective action, up to and including termination and/or criminal complaint. During the course of an investigation into a reported incident, any individual involved may be suspended until the investigation is complete and a determination is made.

4) Adopt and communicate to all employees a policy that weapons of any type, and particularly firearms, are not permitted to be carried or displayed in the facility at any time except by local, state and federal law enforcement officials.
officers acting in the line of duty. The term “weapons” includes but is not limited to:
• Any weapon that, per applicable law, is illegal to possess.
• Any firearm, loaded or unloaded, assembled or disassembled, including pellet, “BB” and stun guns (electronic incapacitation devices).
• Knives (and other similar instruments) with a blade length of more than three inches, other than those present in the workplace for the specific purpose of food preparation and service.
• Any “switchblade” knife.
• “Brass knuckles,” “metal knuckles” and similar weapons.
• Bows, cross-bows and arrows.
• Explosives and explosive devices, including fireworks and incendiary devices.
• “Throwing stars,” “nun chucks,” clubs, saps and any other item commonly used as, or primarily intended for use as, a weapon.
• Self-defense chemical sprays, e.g., mace and pepper spray, in canisters or containers larger than two ounces.
• Any object that has been modified to serve as, or has been employed as, a dangerous weapon.

5) Make clear to all employees that management reserves the right to conduct workplace inspections for weapons, including the search of:
• Outer clothing, packages, handbags, briefcases, back-packs, lunch bags, boxes and/or other containers being taken in or out of the company’s buildings or to or from the company’s grounds.
• Vehicles parked on company property (owned, leased, or occupied) or company-owned vehicles.
• All workstations, computer files, book shelves, lockers, desks, credenzas, file cabinets, store rooms and other areas at anytime, with or without notice.

6) Provide safety education for employees so they know what conduct is not acceptable, what to do if they witness or are subjected to workplace violence and how to protect themselves.

7) Secure your facility. Where appropriate, install video surveillance, extra lighting and alarm systems. Where appropriate, minimize access by outsiders through the use of identification badges, electronic keys and guards.

8) Provide safe drops to limit the amount of cash on hand. Keep a minimum amount in registers during evenings and late night hours.

9) Equip field staff who are at risk with cellular phones and hand-held alarms or noise devices. Keep employer-provided vehicles properly maintained.

10) Instruct field employees not to enter any location where they feel unsafe. If feasible, introduce a “buddy system.”

11) Provide personal safety training programs to teach employees how to recognize, avoid or diffuse potentially violent situations.

12) Instruct employees to alert supervisors to any concerns about safety or security and to report all incidents immediately in writing.

13) Make clear to all employees that retaliation against individuals for reporting incidents of violence, threats or potential violence will not be tolerated and will warrant disciplinary action up to and including termination of employment.

14) Make clear that all employees are responsible for notifying management of any acts of violence or threats they witness, receive or are made aware of.

15) Be sure that all members of management know they are responsible for:
• Supporting the policies concerning workplace violence and communicating them to employees.
• Immediately addressing any and all acts of violence or threats of violence.
• Promptly and confidentially reporting all incidents as specified by the policy.
• Assisting in any investigations of reported incidents.
• Providing positive role models through their own behavior and fostering a work climate that is sensitive to the reality of workplace violence.
• Ensuring that no retaliation takes place against any individual who reports an incident.

What to do once an incident of workplace violence has occurred

1) Provide prompt medical evaluation and treatment.
2) Report the incident to the police promptly.
3) Inform victims of their legal right to prosecute perpetrators.
4) Discuss the circumstances of the incident with your other employees. Encourage them to share information about ways to avoid similar situations in the future.
5) Offer stress debriefing sessions and post-traumatic counseling services to help employees recover from the violent incident.
6) Investigate all violent incidents and threats. Monitor trends in violent incidents by type or circumstance and institute corrective actions.
7) Discuss changes in your program of corrective actions at regular employee meetings.

WORKPLACE ACCIDENTS

What they are: According to OSHA, a workplace hazard is a “potential for harm” that “is associated with a condition or activity that, if left uncontrolled, can result in injury or illness.”

The concerns: The risk factors for workplace accidents are as varied as the specific practices and equipment that employees use. They are difficult to predict, and they create frequent incidents. The Bureau of Labor Statistics reports that, in 2004 (the last year for which figures are now available), close to 1.3 million American workers in private industry suffered workplace injuries sufficiently severe to cause them to take days away from work. Beyond the primary dangers of physical harm, workplace accidents create a hidden cost of doing business that can be considerable. In foodservice, accidents may occur as employees use equipment and supplies. In addition, accidents may occur due to handling boxes, slipping on wet floors and so forth.
What to do to help prevent workplace accidents

Note: Be sure that your facility’s emergency plans are in place and known to all employees.

OSHA recommends that every workplace conduct job hazard analyses, focusing on job tasks so as to identify hazards of injury before they occur. By examining the relationship among “the worker, the task, the tools and the work environment,” proper job procedures can be developed that will reduce the risk of accidental injury.

Jobs that are appropriate for a job hazard analysis include:
• Jobs with the highest injury or illness rates.
• Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents.
• Jobs in which one simple human error could lead to a severe accident or injury.
• Jobs that are new to your operation or have undergone changes in processes and procedures.
• Jobs complex enough to require written instructions.

Begin job hazard analyses with the following steps:
1) Involve employees. Employees have a unique understanding of their jobs, and that knowledge is invaluable for finding hazards.
2) Review the accident history for the facility. Be sure to include any “near misses”: events in which an accident did not occur but could have.
3) Conduct a preliminary job review. Discuss with employees the hazards they know exist. Brainstorm with them for ideas to eliminate or control those hazards. If any hazards exist that pose immediate danger to life or health, take immediate action to protect employees. Do not wait to complete the job hazard analysis.
4) List, rank and set priorities for hazardous jobs. List jobs with hazards that present unacceptable risks, based on those most likely to occur and with the most severe consequences. These jobs should have the first priority for analysis.
5) Outline the steps or tasks. Break down each potentially hazardous job into steps or tasks. Observe the employee doing the job. Be certain to assure employees that it is the job itself that is being evaluated, not their job performance. Sometimes it may be helpful to photograph or videotape the employee doing the job.

Identify workplace hazards by answering these questions once jobs have been analyzed into their component tasks.
• What can go wrong?
• What are the consequences?
• How could the accident arise?
• What are other contributing factors?
• How likely is it that the hazard will occur?

Here is an example of a hazard scenario:
In the kitchen, an employee’s hand comes into contact with a slicer, which severs a finger. You immediately get medical help for the employee. Later, to perform a job hazard analysis, you would ask:

1) What can go wrong? The employee might hold a meat product near the blade while the slicer is working, rather than follow the manufacturer’s instructions for product placement and equipment use. As a result, the employee’s fingers could come into contact with the blade.
2) What are the consequences? The employee could receive a severe injury and lose fingers.
3) How could it happen? The accident could happen as a result of the employee not following the instructions for safe handling of this piece of equipment.
4) What are other contributing factors? Because the blade is so sharp and is moving rapidly, the employee doesn’t have time to prevent an accident once his hand comes into contact with the blade. This is an important factor, because it helps you determine the severity and likelihood of an accident when selecting appropriate hazard controls.
5) How likely is it that the hazard will occur? This determination requires some judgment. If there have been “near misses” or actual cases, then the likelihood of a recurrence would be considered high. With proper supervision and training, it is unlikely the hazard will occur. But if the equipment is being handled improperly, risk is high.

Develop hazard control measures. Information obtained from a job hazard analysis is useless unless hazard control measures recommended in the analysis are incorporated into the tasks. Not all hazard controls are equal. The order of precedence and effectiveness of hazard control is as follows:
1) Engineering controls. These include:
• Elimination or minimization of the hazard by designing the facility, equipment or process to remove the hazard
• Enclosure or isolation of the hazard through the use of guards, shields or other means
• Removal or redirection of the hazard as with, in the case of hazardous fumes, exhaust ventilation.
2) Administrative controls. These include:
• Written operating instructions and safe work practices
• Exposure time limits (in cases of exposure to temperature extremes or ergonomic hazards)
• Monitoring the use of highly hazardous materials
• Alarms, signs and warnings
• Training.
3) Personal protective equipment. The use of protective clothing and equipment is acceptable when:
• Engineering controls are not feasible or do not completely eliminate the hazard
• Engineering controls are being developed
• Safe work practices do not provide sufficient additional protection
• There are emergencies during which engineering controls are not feasible.
<table>
<thead>
<tr>
<th>Hazards</th>
<th>Hazard Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical (Toxic)</td>
<td>A chemical that exposes a person by absorption through the skin, inhalation, or through the bloodstream that causes illness, disease or death. The amount of chemical exposure is critical in determining hazardous effects. Check Material Safety Data Sheets (MSDS), and/or OSHA 1910.1000 for chemical hazard information.</td>
</tr>
<tr>
<td>Chemical (Flammable)</td>
<td>A chemical that, when exposed to a heat ignition source, results in combustion. Typically, the lower a chemical’s flash point and boiling point, the more flammable the chemical. Check MSDS for flammability information.</td>
</tr>
<tr>
<td>Chemical (Corrosive)</td>
<td>A chemical that, when it comes into contact with skin, metal or other materials, damages the materials. Acids and bases are examples of corrosives.</td>
</tr>
<tr>
<td>Explosion (Chemical Reaction)</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>Explosion (Over Pressurization)</td>
<td>Sudden and violent release of a large amount of gas/energy due to a significant pressure difference such as rupture in a boiler or compressed gas cylinder.</td>
</tr>
<tr>
<td>Electrical (Shock/Short Circuit)</td>
<td>Contact with exposed conductors or a device that is incorrectly or inadvertently grounded, such as when a metal ladder comes into contact with power lines. 60Hz alternating current (common house current) is very dangerous because it can stop the heart.</td>
</tr>
<tr>
<td>Electrical (Fire)</td>
<td>Use of electrical power that results in electrical overheating or arcing to the point of combustion or ignition of flammables, or electrical component damage.</td>
</tr>
<tr>
<td>Electrical (Static/ESD)</td>
<td>The moving or rubbing of wool, nylon, other synthetic fibers, and even flowing liquids can generate static electricity. This creates an excess or deficiency of electrons on the surface of material that discharges (spark) to the ground resulting in the ignition of flammables or damage to electronics or the body’s nervous system.</td>
</tr>
<tr>
<td>Electrical (Loss of Power)</td>
<td>Safety-critical equipment failure as a result of loss of power.</td>
</tr>
<tr>
<td>Ergonomics (Strain)</td>
<td>Damage of tissue due to over exertion (strains and sprains) or repetitive motion.</td>
</tr>
<tr>
<td>Ergonomics (Human Error)</td>
<td>A system design, procedure or equipment that is error-provocative. (A switch goes up to turn something off).</td>
</tr>
<tr>
<td>Excavation (Collapse)</td>
<td>Soil collapse in a trench or excavation as a result of improper or inadequate shoring. Soil type is critical in determining the hazard likelihood.</td>
</tr>
<tr>
<td>Fall (Slip, Trip)</td>
<td>Conditions that result in falls (impacts) from height or traditional walking surfaces (such as slippery floors, poor housekeeping, uneven walking surfaces, exposed ledges, etc.)</td>
</tr>
<tr>
<td>Fire/Heat</td>
<td>Temperatures that can cause burns to the skin or damage to other organs. Fires require a heat source, fuel and oxygen.</td>
</tr>
<tr>
<td>Mechanical/Vibration (Chaffing/Fatigue)</td>
<td>Vibration that can cause damage to nerve endings, or material fatigue that results in a safety-critical failure. (Examples are abraded slings and ropes, weakened hoses and belts.)</td>
</tr>
<tr>
<td>Mechanical Failure</td>
<td>Self explanatory; typically occurs when devices exceed designed capacity or are inadequately maintained.</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Skin, muscle or body part exposed to crushing, caught-between, cutting, tearing, shearing items or equipment.</td>
</tr>
<tr>
<td>Noise</td>
<td>Noise levels (&gt;85 dBA 8 hr TWA) that result in hearing damage or inability to communicate safety-critical information</td>
</tr>
<tr>
<td>Radiation (Ionizing)</td>
<td>Alpha, Beta, Gamma, neutral particles and X-rays that cause injury (tissue damage) by ionization of cellular components.</td>
</tr>
<tr>
<td>Radiation (Non-Ionizing)</td>
<td>Ultraviolet, visible light, infrared and microwaves that cause injury to tissue by thermal or photochemical means.</td>
</tr>
<tr>
<td>Struck By (Mass Acceleration)</td>
<td>Accelerated mass that strikes the body causing injury or death. (Examples are falling objects and projectiles.)</td>
</tr>
<tr>
<td>Struck Against</td>
<td>Injury to a body part as a result of coming into contact of a surface in which action was initiated by the person. (An example is when a screwdriver slips.)</td>
</tr>
<tr>
<td>Temperature Extreme (Heat/Cold)</td>
<td>Temperatures that result in heat stress, exhaustion or metabolic slow down such as hypothermia.</td>
</tr>
<tr>
<td>Visibility</td>
<td>Lack of lighting or obstructed vision that results in an error or other hazard.</td>
</tr>
<tr>
<td>Weather Phenomena (Snow/Rain/Wind/Ice)</td>
<td>Self-explanatory.</td>
</tr>
</tbody>
</table>

### Sample Job Hazard Analysis Form

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Job Location:</th>
<th>Analyst</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task #</td>
<td>Task Description:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazard Type:</td>
<td>Hazard Description:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequence:</td>
<td>Hazard Controls:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rational or Comment:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### What to do when workplace accidents occur

1. Contact emergency services immediately, whenever necessary.
2. Apply what first aid is appropriate to the situation.
3. If appropriate, move the injured employee away from danger.
4. Shut down any machinery involved in the accident.
5. Move all unaffected employees away from the site of the accident.

### SOURCES

Does Your Facility Need an Emergency Action Plan?

This checklist is provided only to identify an employer’s need to develop an emergency action plan in compliance with the Emergency Action Plan standard (29 CFR 1910.38). It does not alert you to other OSHA standards that may be associated with your emergency plan or to the additional OSHA standards that apply to your facility.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are fire extinguishers provided in the workplace?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the fire extinguishers intended for employee use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will any of your employees be required to evacuate the workplace?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you answered “no” to either of the first two or “yes” to all three questions then you are required to develop an EAP. Otherwise, you should continue with the questions in the table below.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your facility use a total flooding extinguishing system that provides any one of the following design concentrations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 4% or greater of Halon 1211?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 4% or greater of carbon dioxide?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 10% or greater of Halon 1301, or concentrations exceeding 7% when egress from an area cannot be accomplished in one minute?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does your facility use a fire detection system with alarms or devices that are delayed by more than 30 seconds for reasons other than a total flooding extinguishing system listed above?

Are you required to comply with 29 CFR 1910.119 Process Safety Management?

Are you required to comply with 29 CFR 1910.272 Grain Handling Facilities?

Are you required to comply with 29 CFR 1910.1047 Ethylene Oxide?

Are you required to comply with 29 CFR 1910.1050 Methyleneedianiline?

Are you required to comply with 29 CFR 1910.1051 1,3-Butadiene?

Do you plan to evacuate all of your employees and to rely on an outside party to provide emergency response to a hazardous substance release?

**Note:** if a hazardous substance emergency could occur at your facility and you plan to have any of your employees participate in the emergency response, you are required to have an emergency response plan consistent with 29 CFR 1910.120(q) (Hazardous Waste Operations and Emergency Response).

If you answered “YES” to any one of the questions above, you are required to develop an emergency action plan in compliance with the Emergency Action Plan standard (29 CFR 1910.38).

During a disaster or emergency, you may not have access to food, water and electricity for days, or even weeks. Before disaster strikes, prepare to store emergency food and water supplies. Safe food handling is always a number one priority in foodservice and so it is during a disaster or emergency. However, due to existing circumstances and conditions, adhering to safe practices may be challenging. Lack of access to or a limited supply of water will increase the probability of cross-contamination because of the increased difficulty in maintaining and monitoring proper methods of sanitizing.

**Storage Before a Disaster or Emergency**

It is recommended to have on hand food for a minimum of 1 week. A 2-week supply is better. Some institutions recommend a 6-month supply of basic foods in preparation for a national emergency, crop failure or major contamination. (This is possible only for institutions with large storage capacity.) Store large amounts of products with unlimited shelf life and smaller quantities of food that can be rotated. See table on next page for more detailed guidance.

**Suggested Temperatures for Food Storage**

- **Dry storage:** 50°F. – 70°F. (10° C. – 21°C.)
- **Refrigerated storage:** 41°F. (0°C. or below)
  (Keep potentially hazardous foods out of the temperature zone of 41°F. – 140°F.)
- **Deep chilling storage:** 26°F. – 32°F. (-3°C. to 0°C.)
- **Freezer storage:** 0°F. (-23°C.) or below

[*Note: Use appliance thermometers in refrigerators and freezers at all times. When the power is out, an appliance thermometer will indicate the temperature in the coolers no matter how long the power has been out. If you aren’t certain if a particular food is cold enough, use a food thermometer to take its temperature.*]

Reprinted with permission. Adapted from Ruby Puckett’s *Safe Handling of Food, HACCP, OSHA, and Other Safety Precautions in Foodservice Departments.* 2nd ed. Gainsville, Fla: Department of Correspondence Study, University of Florida; 2001:69.

**Storage Tips**

Also consult your regularly used, safe storage guidelines.

- Keep food in a dry, cool spot or dark area if possible.
- Keep food covered at all times.
- Open food boxes or cans carefully so they can be closed tightly after each use.
- Wrap cookies and crackers in plastic bags and keep them in tight containers.
- Empty opened packages of sugar, dried fruits and nuts into screw-top jars or air-tight cans to protect them from pests.
- Inspect all food for signs of spoilage before use.
Guidelines for Rotating Common Emergency Foods

*Remember:* Keep a manual can opener and disposable utensils in storage.

<table>
<thead>
<tr>
<th>May be stored indefinitely in proper containers and conditions</th>
<th>Use within one year</th>
<th>Use within six months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat, Vegetable oils, Dried corn, Baking powder, Soybeans, Instant coffee, tea and cocoa, Iodized salt, White rice, Bouillon products, Dry pasta, Powdered milk in nitrogen-packed cans, Non-carbonated soft drinks</td>
<td>Canned condensed meat and vegetable soups, Canned fruits, fruit juices and vegetables, Ready-to-eat cereals and uncooked instant cereals (in metal containers), Peanut butter, Jelly, Hard candy, Honey, Canned nuts, Vitamin C (rotate every 2 years)</td>
<td>Powdered milk (boxed), Dried fruit (in metal containers), Dry, crisp crackers (in metal container), Potatoes</td>
</tr>
</tbody>
</table>

Foods should be used in the following order to assure quality.

- Food in the refrigerators (if doors of refrigerators have been kept shut for at least 4 hours). This includes all dairy supplies, any leftovers, thawed meat, poultry.
- Perishable fresh foods such as lettuce, other salad mixtures, peppers, etc.
- Check "use by date" on all products, especially milk, eggs, fish, meats. Use sliced luncheon meats first, handle very carefully.
- Foods in freezer. If a freezer is full, the food will remain "frozen" for a longer period of time (for about 48 hours; 24 hours if it is half full). For foods in a freezer: bunch frozen foods in a pile, add dry ice, cover with blankets or towels; and use blankets/towels under door seals to keep the cold air in. When doors need to be opened, close the door while in the freezer and take out all needed items at one time. Do not open doors unless absolutely necessary until the power is back on.
- Refrigerated foods that rise above 41° F. and freezer foods that rise above 0° F. must be cooked to 165° F. for 15 or more seconds (the internal temperature must be 165° F. for at least 15 seconds).
- Canned foods that have no split seams or bulges or otherwise damaged.
- If electricity is unavailable for 1 to 3 days, use all frozen bakery goods, bananas and other fresh fruit such as pears and grapes during this time. Use all refrigerated convenience foods especially those that contain creams, dressings and gravies.
- Use all frozen juices, supplemental beverages and puddings.

Foods to Discard

- Perishable foods that have been held above 40° F. for more than two hours. Food that has an unusual odor, color or texture.

**Guidelines for Rotating Common Emergency Foods**

<table>
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<td>Canned condensed meat and vegetable soups, Canned fruits, fruit juices and vegetables, Ready-to-eat cereals and uncooked instant cereals (in metal containers), Peanut butter, Jelly, Hard candy, Honey, Canned nuts, Vitamin C (rotate every 2 years)</td>
<td>Powdered milk (boxed), Dried fruit (in metal containers), Dry, crisp crackers (in metal container), Potatoes</td>
</tr>
</tbody>
</table>

**Source:** [www.fema.gov/library.emfdwtr.shtm](http://www.fema.gov/library.emfdwtr.shtm)

- Use foods before they go bad, and replace them with fresh supplies, dated with [permanent] ink or marker. Place new items at the back of the storage area and older ones in front [rotation system].

**Reminders for Nutrition Intake**

- During and right after a disaster, you must maintain your strength.
- Eat at least one well-balanced meal each day.
- Drink enough liquid to enable your body to function properly (two quarts a day, or one gallon in hot climates).
- Take in enough calories to enable you to do any necessary work. If activity is reduced, healthy people can survive on half their usual food intake for an extended period and without any food for many days. Water is essential.
- Include vitamin, mineral and protein supplements in your stockpile to assure adequate nutrition.

**Handling Food Safely**

The following is excerpted with permission from “Food Safety for a Disaster,” by Ruby Puckett, MA, RD, from “Bioterrorism in Healthcare Food Service/NBC Could Occur/Food Safety for a Disaster,” by Charnette Norton, MS, RD, and Ruby Puckett, MA, RD, in “Healthcare Food Service TRENDS,” a publication of the American Society for Healthcare Food Service Administrators, Vol. 8, Issue 1, 2006. Other sources used herein are listed at the end of the chapter.

Temperature maintenance becomes critical and cold refrigerated foods should be used first. Do not taste foods that have been cooked and left in a refrigerator [if] the power has been out for a number of hours. If in doubt, throw out the food. Food that is to be served should be first-in first-out (FIFO). Date of storage must be indicated on all foods. (For more detail, see Disaster and Emergency Preparedness in Foodservice Operations, by Ruby Puckett, MA, RD, and L. Charnette Norton, MS, RD, published by the American Dietetic Association.)
Thawed foods that have reached room temperature. In severe winter storms when the power is out for 3 to 4 hours, refrigerated food generally stays cold if the refrigerator doors remain closed. If the power is out for an extended period of time, do not store frozen foods outside in the snow due to variations in temperature from hour to hour. Also, food could be exposed to unsanitary conditions or to animals that may harbor bacteria or disease.

- Foods in contact with non-potable water.
- Foods or supplies that have been in contact with floodwater or in a flooded area as they may be contaminated. Discard canned goods that came in contact with flood waters, as well.
- Food that has been near a fire because it can be damaged by the heat of the fire, smoke fumes and chemicals involved. These foods include meat, fish, poultry, eggs and fresh produce. If in doubt, throw them out. When fire is involved, food stored in refrigerators and freezers can also become contaminated by fumes if the seals aren’t airtight. When fire is extreme, the cans or jars themselves can split or rupture, rendering the food unsafe. Chemicals used to fight fires can contain toxic materials and can contaminate food stored at room temperature and in containers, as well as cookware. Food, whether stored at room temperature or if it is exposed to chemicals should be thrown away. Cookware exposed to fire-fighting chemicals can be decontaminated by washing in soap and hot water. Then submerge for 15 minutes in a solution of 1 teaspoon chlorine bleach per quart of water.
- Food supplies in cardboard boxes, open containers and packages, spices and extracts, foods in dented or bulging cans, and flour, sugar, cereal, cornmeal, rice and other supplies.
- Products in containers with screw-caps, snap-lids, crimped-caps (soda pop bottles), twist-caps, flip-top, snap-open and similar type closures that have been submerged in flood waters because they cannot be reconditioned. Foods in hermetically sealed cans (top and bottom double seams) that have been in contact with floodwater or storm water may be reconditioned by removing the labels, washing the cans and dipping them in a solution of 1 cup of bleach in 5 gallons of water, and re-labeling.
- Canned foods with broken seams.
- **Note:** Foods that are partially frozen and contain ice crystals or feel cold may be refrozen.

**Remember:** Proper and safe disposal of condemned food items must be in a manner that ensures that the items will not be easily accessible to consumers in trash containers or reappear as damaged merchandise in any outlet that would permit public consumption. Disposal of such items should be conducted properly and in a manner consistent with food safety requirements in that jurisdiction.

See chart “When to Save and When to Throw It Out.”

### When to Save and When to Throw It Out

<table>
<thead>
<tr>
<th>Foods held above 40°F. for over 2 hours: TO DISCARD</th>
<th>Foods held above 50°F. for over 8 hours: TO DISCARD</th>
<th>Safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat, poultry and seafood (raw and leftover cooked meat, poultry, fish and seafood; thawing meat and poultry; soy meat substitutes)</td>
<td>Sauces, spreads and jams (opened mayonnaise, tartar sauce, horseradish)</td>
<td>Hard cheeses</td>
</tr>
<tr>
<td>Meat, tuna, shrimp, chicken and egg salad Gravy, stuffing, broth Lunchmeats, hot dogs, bacon, sausage, dried beef Pizza with any toppings Canned hams labeled “Keep Refrigerated” Canned meats and fish, opened Cheese (soft cheeses, shredded, low-fat) dairy, other than butter and margarine Baby formula, opened Eggs (fresh and cooked) Custards and puddings Casseroles, soups, stews Fruit (fresh, cut)</td>
<td>Fish sauces (oyster sauce) Opened creamy-based dressings Spaghetti sauce, opened jar Refrigerator biscuits, rolls, cookie dough Cooked pasta, rice, potatoes Pasta salads with mayonnaise or vinaigrette Fresh pasta Cheesecake Pastry, cream filled Pies, custard, cheese-filled or chiffon; quiche Greens, pre-cut, pre-washed, packaged Vegetables, cooked; tofu Vegetable juice, opened Baked potatoes Commercial garlic in oil Potato salad</td>
<td>Grated Parmesan, Romano and combination (in can or jar) Butter and margarine Fruit juices, opened Canned fruits, opened Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates Peanut butter Jelly, relish, taco sauce, mustard, catsup, olives Worcestershire, soy, barbecue, Hoisin sauces Open vinegar-based dressings Bread, rolls, cakes, muffins, quick breads, tortillas Breakfast foods such as waffles, pancakes, bagels Pies, fruit Fresh mushrooms, herbs, spices Vegetables, raw</td>
</tr>
</tbody>
</table>

*Source: [www.fsis.usda.gov/Fact_Sheets/keeping_food_safe_during_an_emergency/index.asp](http://www.fsis.usda.gov/Fact_Sheets/keeping_food_safe_during_an_emergency/index.asp)*
<table>
<thead>
<tr>
<th>Food</th>
<th>Still contains ice crystals and feels as cold as if refrigerated</th>
<th>Thawed. Held above 40° F. for over 2 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat, poultry, seafood</strong></td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Variety meats (liver, kidney, heart, chitterlings)</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Casseroles, stews, soups</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Fish, shellfish, breaded seafood products</td>
<td>Refreeze. However, there will be texture and flavor loss.</td>
<td>Discard</td>
</tr>
<tr>
<td><strong>Dairy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>Refreeze. May lose some texture.</td>
<td>Discard</td>
</tr>
<tr>
<td>Eggs (out of shell) and egg products</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Ice cream, frozen yogurt</td>
<td>Discard</td>
<td>Discard</td>
</tr>
<tr>
<td>Cheese (soft and semi-soft, and shredded)</td>
<td>Refreeze. May lose some texture.</td>
<td>Discard</td>
</tr>
<tr>
<td><strong>Hard cheeses</strong></td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Casseroles containing milk, cream, eggs, soft cheeses</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Cheesecake</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juices</td>
<td>Refreeze</td>
<td>Refreeze. Discard if mold, yeasty smell or sliminess develops.</td>
</tr>
<tr>
<td>Home or commercially packaged</td>
<td>Refreeze. Will change texture and flavor.</td>
<td>Refreeze. Discard if mold, yeasty smell or sliminess develops.</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juices</td>
<td>Refreeze</td>
<td>Discard after held above 40°F. for 6 hours.</td>
</tr>
<tr>
<td>Home or commercially packaged or blanched</td>
<td>Refreeze. May suffer texture and flavor loss.</td>
<td>Discard after held above 40°F. for 6 hours.</td>
</tr>
<tr>
<td><strong>Breads, pastries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breads, rolls, muffins, cakes (without custard fillings)</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Cakes, pies, pastries with custard or cheese filling</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Pie crusts, commercial and homemade bread dough</td>
<td>Refreeze. Some quality loss may occur.</td>
<td>Refreeze. Quality loss is considerable.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casseroles, pasta, rice based</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
<tr>
<td>Flour, cornmeal, nuts</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Breakfast items (waffles, pancakes, bagels)</td>
<td>Refreeze</td>
<td>Refreeze</td>
</tr>
<tr>
<td>Frozen meal, entrée, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)</td>
<td>Refreeze</td>
<td>Discard</td>
</tr>
</tbody>
</table>

Source: [www.usda.gov/fact_sheets/focus_on_freezing/index.asp](http://www.usda.gov/fact_sheets/focus_on_freezing/index.asp)
For Hospitals and Facilities with Patients

• If electricity is unavailable, patients who receive enteral feeding will have a limited amount of time while the pumps switch to battery back-up. Work with nursing on policies and procedures for methods to provide the feeding to the patient.

Sanitation

• During a disaster it is vital that sanitary conditions be maintained because the possibility of contamination/illnesses may result. Separate areas should be designated for dirty and clean materials.
• All garbage cans should be lined, keeping all waste and garbage in covered containers. These should be removed from the foodservice area as soon as possible. Keep doors closed to prevent pests, especially ants, and domesticated and wild animals that may have become lost during the disaster from entering.
• Be aware of snakes, frogs, mice, rats and other small animals as they seek higher ground during a rise in water levels. Do not attempt to “catch” any of these animals or pests as they can attack you. Contact the emergency crew.
• The department should maintain a supply of hand sanitizing compounds to sanitize employee hands. Disposable gloves should also be kept on hand. If the water is contaminated, employees should not use this water to wash hands, clean work surfaces or wash food until it has been boiled or sanitized by another method.
• Disposable dishes and utensils should be used whenever possible. Once used, discard in the garbage and remove at once. If potable water is available and it is necessary to wash pots and dishes by hand, use the three-sink method.

Follow Public Health Rules

• During and after a disaster are trying times for foodservice directors, their staffs, patients, employees and families. It is important to follow the state/local public health rules concerning the amount of supplies of potable water and food that should be kept on hand in case of a disaster. Foodservice directors and staffs must follow a plan for using food on hand in a methodical way to provide safe and sanitary food and water to customers and employees.


Electricity

If no electricity is available for refrigeration and frozen storage:

• Provide continuous refrigeration by the use of generators or ice (wet or dry ice). If dry ice is used in enclosed spaces such as walk-in refrigerators, make sure there is adequate ventilation to avoid the harmful effects of a build-up of carbon dioxide.
• The volume and type of potentially hazardous food requiring refrigeration should be limited to very simple foods whenever possible (e.g., hot dogs, eggs, cheeses, cultured dairy products, hard summer sausage or salami, and other foods with preservatives).
• Consider obtaining alternative refrigerated warehouse space outside of the affected area.
• If no electricity or gas is available for water heaters, water can be heated using alternate methods such as electrical generators for electrical power or propane heaters. As a safety precaution, advise the utility company when using a generator and use it in a properly ventilated area.
• For emergency cooking, use a fireplace, charcoal grill or camp stove. Food can be heated with candle warmers, chafing dishes and fondue pots. Canned food can be eaten right out of the can. If you must heat it, be sure to open the can and remove the label first.

Equipment

• Clean, repair and disinfect all surfaces affected by flood waters, including non-food contact surfaces (e.g., floors, walls, ceilings) and food contact surfaces, using potable water (e.g., equipment, utensils, etc.). Wash metal pans, ceramic dishes and utensils with hot soapy water and sanitize by boiling them in clean water and immersing them for 15 minutes in a solution of 1 teaspoon of chlorine bleach per quart of water.
• A commercial dishwasher or 3-compartment sink should be utilized to wash, rinse and sanitize equipment and utensils using potable water.
• Chlorine bleach or other approved sanitizers should be provided for sanitizing food contact surfaces and equipment.
• An approved test kit should be available to ensure appropriate sanitizer strength.
• Refrigerated display and storage cases and other refrigerator equipment used to store food should be cleared of all contaminated products and their juices prior to cleaning.
• Refrigerated storage equipment should be thoroughly washed inside and outside with a hot detergent solution and rinsed free of detergents and residues (Special attention should be given to lighting, drainage areas, ventilation vents, corners, cracks and crevices, door handles and door gaskets.)
• All exhaust systems and hoods should be thoroughly cleaned and freed of any debris. Consult professional service technicians as needed.
• All filters on equipment should be removed and replaced if not designed to be cleaned in place.
• All sinks should be thoroughly cleaned and sanitized before resuming use.
• Equipment should be inspected to ensure it is operational and that all aspects of its integrity are maintained.
• Ranges and other equipment should be thoroughly cleaned and checked by the fire department, local utility company or authorized service representative prior to use.
## Sample Menu For Emergency Foodservice

### 1-Day Menu

<table>
<thead>
<tr>
<th>Menu 1</th>
<th>Menu 2</th>
<th>Menu 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot soup</td>
<td>Cheese, spread, bread</td>
<td>Bread, spread</td>
</tr>
<tr>
<td>Crackers</td>
<td>Hot soup, crackers</td>
<td>Peanut butter</td>
</tr>
<tr>
<td>Milk/juice</td>
<td>Fruit (fresh, frozen, or canned)</td>
<td>Tuna salad</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>Milk/juice</td>
<td>Milk/juice</td>
</tr>
<tr>
<td></td>
<td>Coffee, tea</td>
<td>Coffee, tea</td>
</tr>
</tbody>
</table>

### OptionalMenus

#### Breakfast for All 3 Days

- Assorted juices
- Dry cereal with milk (if available)
- Canned fruit
- Bread, spread, jelly/jam
- Instant coffee/tea for adults
- Cocoa for children
- Carbonated beverages (as needed)

#### Lunch and Dinner for All 3 Days

- Soup (if possible)
- Peanut butter and jelly sandwiches (lunch, day 1)
- Fruit juices, instant coffee/tea
- Protein salads (tuna, chicken, pimento cheese, peanut butter and jelly with bread/crackers) for both lunch and dinner
- Cold mixed canned vegetable salad, dressing
- Canned fruit, ready-to-eat puddings, gelatins
- Chips (if available)
- Juice, instant drinks

*Sources for menus:* Used by permission of Ruby P. Puckett, MA, RD, FCSI, CFE, President, Food Management Consultants, Program Director, Dietary Manager Training, University of Florida, Gainsville, FL.
SOURCES

“Food Safety for a Disaster,” by Ruby Puckett, MA, RD, in Bioterrorism in Healthcare Food Service/NBC Could Occur by Charnette Norton, MS, RD, LD, FADA, FHCFA, and “Food Safety for a Disaster,” by Ruby Puckett, MA, RD, FCSI, CFE, “Healthcare Food Service TRENDS,” a publication of the American Society for Healthcare Food Service Administrators, Vol. 8, Issue 1, 2006. Materials and excerpts reprinted with permission, the authors and “Healthcare Food Service TRENDS.”

Department of Health and Human Services/Centers for Disease Control and Prevention, www.cdc.gov


Other FEMA sites:
www.fema.gov/library/dizandemer.shtm
www.fema.gov/rr/foodwtr.shtm

Food and Nutrition Information Center, www.nal.usda.gov/fnic

Open for Business, a disaster planning toolkit from the Institute for Business & Home Safety and the Small Business Administration, www.ibhs.org/docs/openforbusiness.pdf


Related Sources


• Consumer Advice: Disaster Assistance with Food, www.foodsafety.gov/%7Efsg/fsgdisas.html

• Food Safety Information for Hurricane Aftermath, FDA, www.cfsan.fda.gov/~dms/fsdisas.html

• Food Safety Office, CDC, www.cdc.gov/foodsafety

• Being Prepared, American Red Cross, www.redcross.org/services/disaster/beprepared/
FOODBORNE ILLNESS

Contagious illnesses that are spread through food and beverages are common and sometimes life-threatening. There are more than 250 recognized foodborne illnesses, caused by bacteria, viruses or parasites. The annual cost of all foodborne illnesses is $5 to $6 billion in direct medical expenses and lost productivity at work.

What it is: According to the United States Department of Agriculture’s (USDA) Food Safety and Inspection Service (FSIS), foodborne illness often presents itself as flu-like symptoms such as nausea, vomiting, diarrhea or fever, so many people may not recognize the illness is caused by bacteria or other pathogens in food.

The concerns: According to the Centers for Disease Control (CDC), approximately 76 million Americans suffer foodborne illnesses each year, resulting in 325,000 hospitalizations and more than 5,000 deaths annually. People infected with foodborne germs may have no symptoms or develop symptoms ranging from mild intestinal discomfort to severe dehydration and bloody diarrhea. Recently, public health, agriculture and environmental officials have expressed growing concern over bioterrorism and are studying means for keeping the nation’s food and water supply safe from terrorist acts.

What to do to prevent foodborne illnesses before an incident occurs

Note: Refer to your sanitation and safety programs, as well. Also refer to HACCP guidelines (see section at end of chapter).

1) Most cases of foodborne illnesses can be prevented. Proper cooking and processing of food destroys bacteria. The FSIS observes that the “danger zone” for foods is between 40°F. and 140°F., a range in which bacteria multiply rapidly. To keep food out of the “danger zone,” FSIS recommends keeping cold food cold and hot food hot.
   • Store food in the refrigerator (40°F. or below) or freezer (0°F. or below).
   • Cook food to 160°F. (145°F. for roasts, steaks and chops of beef, veal and lamb).
   • Maintain hot cooked food at 140°F. or above.
   • When reheating cooked food, reheat to 165°F.

2) Wash hands carefully before preparing food. Wash hands frequently during food preparation.

3) Wash hands, utensils and kitchen surfaces with hot soapy water after they touch raw meat and poultry.
4) Serve and eat cooked food promptly and refrigerate leftovers within two hours after cooking.
5) Wash fruits and vegetables thoroughly, especially those that will be eaten raw.
6) Drink only pasteurized milk and juices and treated surface water.
7) Wash hands carefully after using the bathroom, changing infant diapers or cleaning up animal feces.

What to do during an outbreak of foodborne illness
The FSIS recommends:

1) Preserve the evidence. If a portion of the suspect food is available, wrap it securely, mark “DANGER” and freeze it. Save all the packaging materials, such as cans or cartons. Write down the food type, the date, other identifying marks on the package, the time consumed, and when the onset of symptoms occurred. Save any identical unopened products.

2) Seek treatment as necessary. If the victim is in an “at risk” group, seek medical care immediately. Likewise, if symptoms persist or are severe (such as bloody diarrhea, excessive nausea and vomiting or high temperature), call a doctor. If symptoms occur in the dining services operation, be sure to call for medical help.

3) Call the local health department to report the incident.
4) Call the USDA Meat and Poultry Hotline if the suspect food is a USDA-inspected product and you have all the packaging.
5) If symptoms develop after customers have left your facility and you are notified, do all you can immediately to locate the source and cooperate fully with local health department officials. Follow up with victims if possible to find out how they are doing and express your concern.

The following are facts sheets from the CDC on Escherichia coli O157:H7 and Salmonellosis.

Escherichia coli O157:H7

What is Escherichia coli O157:H7?
- Escherichia coli O157:H7 is an emerging cause of foodborne illness. An estimated 73,000 cases of infection and 61 deaths occur in the United States each year. Infection often leads to bloody diarrhea and occasionally to kidney failure. Most illness has been associated with eating undercooked, contaminated ground beef. Person-to-person contact in families and child care centers is also an important mode of transmission. Infection can also occur after drinking raw milk and after swimming in or drinking sewage-contaminated water.
- Consumers can prevent E. coli O157:H7 infection by thoroughly cooking ground beef, avoiding unpasteurized milk and washing hands carefully.
- Because the organism lives in the intestines of healthy cattle, preventive measures on cattle farms and during meat processing are being investigated.

What is Escherichia coli O157:H7?
- E. coli O157:H7 is one of hundreds of strains of the bacterium Escherichia coli. Although most strains are harmless and live in the intestines of healthy humans and animals, this strain produces a powerful toxin and can cause severe illness.
- E. coli O157:H7 was first recognized as a cause of illness in 1982 during an outbreak of severe bloody diarrhea; the outbreak was traced to contaminated hamburgers. Since then, most infections have come from eating undercooked ground beef.
- The combination of letters and numbers in the name of the bacterium refers to the specific markers found on its surface and distinguishes it from other types of E. coli.

How is E. coli O157:H7 spread?
- The organism can be found on a small number of cattle farms and can live in the intestines of healthy cattle. Meat can become contaminated during slaughter, and organisms can be thoroughly mixed into beef when it is ground. Bacteria present on the cow’s udders or on equipment may get into raw milk.
- Eating meat, especially ground beef that has not been cooked sufficiently to kill E. coli O157:H7, can cause infection. Contaminated meat looks and smells normal. Although the number of organisms required to cause disease is not known, it is suspected to be very small.
- Among other known sources of infection are consumption of sprouts, lettuce, salami, unpasteurized milk and juice, and swimming in or drinking sewage-contaminated water.
- Bacteria in diarrheal stools of infected persons can be passed from one person to another if hygiene or hand washing habits are inadequate.
- This is particularly likely among toddlers who are not toilet trained. Family members and playmates of these children are at high risk of becoming infected.
- Young children typically shed the organism in their feces for a week or two after their illness resolves. Older children rarely carry the organism without symptoms.

What illness does E. coli O157:H7 cause?
- E. coli O157:H7 infection often causes severe bloody diarrhea and abdominal cramps; sometimes the infection causes nonbloody diarrhea or no symptoms. Usually little or no fever is present, and the illness resolves in 5 to 10 days.
- In some persons, particularly children under 5 years of age and the elderly, the infection can also cause a complication called hemolytic uremic syndrome, in which the red blood cells are destroyed and the kidneys fail. About 2% to 7% of infections lead to this complication. In the United States, hemolytic uremic syndrome is the principal cause of acute kidney failure in children, and most cases of hemolytic uremic syndrome are caused by E. coli O157:H7.

How is E. coli O157:H7 infection diagnosed?
- Infection with E. coli O157:H7 is diagnosed by detecting the bacterium in the stool. Most laboratories that culture stool do not test for E. coli O157:H7, so it is important to request that the stool
specimen be tested on sorbitol-MacConkey (SMAC) agar for this organism. All persons who suddenly have diarrhea with blood should get their stool tested for E. coli O157:H7.

How is the illness treated?
- Most persons recover without antibiotics or other specific treatment in 5 to 10 days. There is no evidence that antibiotics improve the course of disease, and it is thought that treatment with some antibiotics may precipitate kidney complications. Antidiarrheal agents, such as loperamide (Imodium), should also be avoided.
- Hemolytic uremic syndrome is a life-threatening condition, usually treated in an intensive care unit. Blood transfusions and kidney dialysis are often required. With intensive care, the death rate for hemolytic uremic syndrome is 3% to 5%.

What are the long-term consequences of infection?
- Persons who only have diarrhea usually recover completely.
- About one-third of persons with hemolytic uremic syndrome have abnormal kidney function many years later, and a few require long-term dialysis. Another 8% of persons with hemolytic uremic syndrome have other lifelong complications, such as high blood pressure, seizures, blindness, paralysis and the effects of having part of their bowel removed.

How can Salmonella infections be diagnosed?
- Salmonella is an infection with a bacteria called Salmonella. Most persons infected with Salmonella develop diarrhea, fever and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons the diarrhea may be so severe that the patient needs to be hospitalized. In these patients, the Salmonella infection may spread from the intestines to the blood stream, and then to other body sites and can cause death unless the person is treated promptly with antibiotics. The elderly, infants and those with impaired immune systems are more likely to have a severe illness.

What can you do to prevent E. coli O157:H7 infection?
- Cook all ground beef and hamburger thoroughly. Because ground beef can turn brown before disease-causing bacteria are killed, use a digital instant-read meat thermometer to ensure thorough cooking. Ground beef should be cooked until a thermometer inserted into several parts of the patty, including the thickest part, reads at least 160° F. Persons who cook ground beef without using a thermometer can decrease their risk of illness by not eating ground beef patties that are still pink in the middle.
- If you are served an undercooked hamburger or other ground beef product in a restaurant, send it back for further cooking. You may want to ask for a new bun and a clean plate, too.
- Avoid spreading harmful bacteria in your kitchen. Keep raw meat separate from ready-to-eat foods. Wash hands, counters and utensils with hot soapy water after they touch raw meat. Never place cooked hamburgers or ground beef on the unwashed plate that held raw patties. Wash meat thermometers in between tests of patties that require further cooking.
- Drink only pasteurized milk, juice or cider. Commercial juice with an extended shelf-life that is sold at room temperature (e.g., juice in cardboard boxes, vacuum sealed juice in glass containers) has been pasteurized, although this is generally not indicated on the label. Juice concentrates are also heated sufficiently to kill pathogens.
- Wash fruits and vegetables thoroughly, especially those that will not be cooked. Children under 5 years of age, immuno-compromised persons, and the elderly should avoid eating alfalfa sprouts until their safety can be assured. Methods to decontaminate alfalfa seeds and sprouts are being investigated.
- Drink municipal water that has been treated with chlorine or other effective disinfectants.
- Avoid swallowing lake or pool water while swimming.
- Make sure that persons with diarrhea, especially children, wash their hands carefully with soap after bowel movements to reduce the risk of spreading infection and that persons wash hands after changing soiled diapers. Anyone with a diarrheal illness should avoid swimming in public pools or lakes, sharing baths with others and preparing food for others.

Salmonellosis

What is Salmonellosis?
- Salmonellosis is an infection with a bacteria called Salmonella. Most persons infected with Salmonella develop diarrhea, fever and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons the diarrhea may be so severe that the patient needs to be hospitalized. In these patients, the Salmonella infection may spread from the intestines to the blood stream, and then to other body sites and can cause death unless the person is treated promptly with antibiotics. The elderly, infants and those with impaired immune systems are more likely to have a severe illness.

What sort of germ is Salmonella?
- The Salmonella germ is actually a group of bacteria that can cause diarrheal illness in humans. They are microscopic living creatures that pass from the feces of people or animals, to other people or other animals. There are many different kinds of Salmonella bacteria. Salmonella serotype Typhimurium and Salmonella serotype Enteritidis are the most common in the United States. Salmonella has been known to cause illness for over 100 years. They were discovered by a American scientist named Salmon, for whom they are named.

How can Salmonella infections be diagnosed?
- Many different kinds of illnesses can cause diarrhea, fever or abdominal cramps. Determining that Salmonella is the cause of the illness depends on laboratory tests that identify Salmonella in the stool of an infected person. These tests are sometimes not performed unless the laboratory is instructed specifically to look for the organism. Once Salmonella has been identified, further testing can determine its specific type and which antibiotics could be used to treat it.
How can Salmonella infections be treated?

- Salmonella infections usually resolve in 5 to 7 days and often do not require treatment unless the patient becomes severely dehydrated or the infection spreads from the intestines. Persons with severe diarrhea may require rehydration, often with intravenous fluids. Antibiotics are not usually necessary unless the infection spreads from the intestines, then it can be treated with ampicillin, gentamicin, trimethoprim/sulfamethoxazole or ciprofloxacin. Unfortunately, some Salmonella bacteria have become resistant to antibiotics, largely as a result of the use of antibiotics to promote the growth of feed animals.

Are there long-term consequences to a Salmonella infection?

- Persons with diarrhea usually recover completely, although it may be several months before their bowel habits are entirely normal. A small number of persons who are infected with Salmonella will go on to develop pains in their joints, irritation of the eyes and painful urination. This is called Reiter’s syndrome. It can last for months or years and can lead to chronic arthritis which is difficult to treat. Antibiotic treatment does not make a difference in whether or not the person later develops arthritis.

How do people catch Salmonella?

- Salmonella live in the intestinal tracts of humans and other animals, including birds. Salmonella are usually transmitted to humans by eating foods contaminated with animal feces. Contaminated foods usually look and smell normal. Contaminated foods are often of animal origin, such as beef, poultry, milk or eggs, but all foods, including vegetables, may become contaminated. Many raw foods of animal origin are frequently contaminated, but fortunately, thorough cooking kills Salmonella. Food may also become contaminated by the unwashed hands of an infected food handler who forgot to wash his or her hands with soap after using the bathroom.

- Salmonella may also be found in the feces of some pets, especially those with diarrhea, and people can become infected if they do not wash their hands after contact with these feces. Reptiles are particularly likely to harbor Salmonella and people should always wash their hands immediately after handling a reptile, even if the reptile is healthy. Adults should also be careful that children wash their hands after handling a reptile.

What can a person do to prevent this illness?

- There is no vaccine to prevent Salmonellosis. Since foods of animal origin may be contaminated with Salmonella, people should not eat raw or undercooked eggs, poultry or meat. Raw eggs may be unrecognized in some foods, such as homemade hollandaise sauce, Caesar and other homemade salad dressings, tiramisu, homemade ice cream, homemade mayonnaise, cookie dough and frostings. Poultry and meat, including hamburgers, should be well-cooked, not pink in the middle. Persons also should not consume raw or unpasteurized milk or other dairy products. Produce should be thoroughly washed before consuming.

- Cross-contamination of foods should be avoided. Uncooked meats should be keep separate from produce, cooked foods and ready-to-eat foods. Hands, cutting boards, counters, knives and other utensils should be washed thoroughly after handling uncooked foods. Hands should be washed before handling any food and between handling different food items.

- People who have Salmonellosis should not prepare food or pour water for others until they have been shown to no longer be carrying the Salmonella bacterium.

How common is Salmonellosis?

- Every year, approximately 40,000 cases of Salmonellosis are reported in the United States. Because many milder cases are not diagnosed or reported, the actual number of infections may be thirty or more times greater. Salmonellosis is more common in the summer than winter.

- Children are the most likely to get Salmonellosis. Young children, the elderly and the immuno-compromised are the most likely to have severe infections. It is estimated that approximately 600 persons die each year with acute Salmonellosis.

What else can be done to prevent Salmonellosis?

- It is important for the public health department to know about cases of Salmonellosis. It is important for clinical laboratories to send isolates of Salmonella to the city, county, or state public health laboratories so the specific type can be determined and compared with other Salmonella in the community. If many cases occur at the same time, it may mean that a restaurant, food or water supply has a problem which needs correction by the public health department.

- Some prevention steps occur everyday without you thinking about it. Pasteurization of milk and treating municipal water supplies are highly effective prevention measures that have been in place for many years. In the 1970s, small pet turtles were a common source of Salmonellosis in the United States, and in 1975, the sale of small turtles was halted in this country. Improvements in farm animal hygiene, in slaughter plant practices and in vegetable and fruit harvesting and packing operations may help prevent Salmonellosis caused by contaminated foods. Better education of food industry workers in basic food safety and restaurant inspection procedures may prevent cross-contamination and other food handling errors that can lead to outbreaks. Wider use of pasteurized eggs in restaurants, hospitals and nursing homes is an important prevention measure. In the future, irradiation or other treatments may greatly reduce contamination of raw meat.
What is the government doing about Salmonellosis?
- The Centers for Disease Control and Prevention (CDC) monitors the frequency of Salmonella infections in the country and assists the local and state health departments to investigate outbreaks and devise control measures. CDC also conducts research to better identify specific types of Salmonella. The Food and Drug Administration inspects imported foods and milk pasteurization plants, promotes better food preparation techniques in restaurants and food processing plants, and regulates the sale of turtles. The U.S. Department of Agriculture monitors the health of food animals, inspects egg pasteurization plants and is responsible for the quality of slaughtered and processed meat. The U.S. Environmental Protection Agency regulates and monitors the safety of our drinking water supplies.

How can I learn more about this and other public health problems?
- You can discuss any medical concerns you may have with your doctor or other health care provider. Your local city or county health department can provide more information about this and other public health problems that are occurring in your area. General information about the public health of the nation is published every week in the “Morbidity and Mortality Weekly Report,” by the CDC in Atlanta, GA. Epidemiologists in your local and State Health Departments are tracking a number of important public health problems, investigating special problems that arise and helping to prevent them from occurring in the first place or from spreading if they do occur.

How to prevent Salmonellosis
- Cook poultry, ground beef, and eggs thoroughly before eating. Do not eat or drink foods containing raw eggs or raw unpasteurized milk.
- If you are served undercooked meat, poultry or eggs in a restaurant, don’t hesitate to send it back to the kitchen for further cooking.
- Wash hands, kitchen work surfaces and utensils with soap and water immediately after they have been in contact with raw meat or poultry.
- Be particularly careful with foods prepared for infants, the elderly and the immuno-compromised.
- Wash hands with soap after handling reptiles or birds, or after contact with pet feces.
- Avoid direct or even indirect contact between reptiles (turtles, iguanas, other lizards, snakes) and infants or immuno-compromised persons.
- Don’t work with raw poultry or meat, and an infant (e.g., feed, change diaper) at the same time.
- Mother’s milk is the safest food for young infants. Breast-feeding prevents Salmonellosis and many other health problems.

The following are fact sheets from the National Restaurant Association, www.restaurant.org
About Foodborne Illness: Common Pathogens: Listeriosis, Hepatitis A, Norwalk Virus, Vibrio vulnificus, Staphylococcal food poisoning, Shigellosis, Clostridium perfringens, Clostridium botulinum, Campylobacter jejuni, Bacillus cereus

Listeriosis
Disease Summary
- Listeriosis is a bacterial illness. Listeria is frequently found in soil, water and plant matter, and it has the ability to survive and grow in moist, cool locations such as refrigerators. Listeria is a common bacteria and is very difficult to eliminate. However, thorough cooking will destroy it. Listeriosis can be a severe illness for the old, very young and for people who are immuno-compromised.

Symptoms
- The infection is usually characterized by nausea, vomiting, headaches, delirium, coma, collapse, shock and lesions on vital organs. In pregnant women, the illness can cause a miscarriage or result in stillbirths. Listeriosis may also cause severe retardation, meningitis and death in newborns.

Source
- Infected wild and domestic mammals and fowl are the most likely sources for Listeriosis. The organism is frequently found in soil, water and plant matter that animals ingest and excrete, allowing further transmission.

Mode of Transmission
- When people become infected with Listeriosis, they may excrete the bacteria in their feces; thus, hand washing is extremely important. Improper sanitation of refrigerators may increase spread of Listeriosis. Cheese made with unpasteurized milk may support the growth of Listeria during ripening and has been implicated in serious outbreaks.

Control
- Food-protection education.
- Good personal hygiene and handwashing.
- Keep facilities dry—Listeria can grow on wet floors, in drains, in ceiling condensates and on sponges.
- Proper cleaning/sanitizing of equipment.
- Washing vegetables/produce.
- Avoiding contact between raw and cooked foods.

Hepatitis A
Disease Summary
- Hepatitis A virus is a communicable disease that may be foodborne, but is also transmitted through person-to-person contact in settings such as daycare centers and hospitals by persons who do not adequately wash their hands after restroom use and by consumption of raw or undercooked shellfish harvested from contaminated waters. In the foodservice industry, the
primary controls for Hepatitis A are proper training and effective supervision of employees to ensure good hygienic practices, proper hand washing and safe handling of food and tableware.

**Symptoms**
- Abrupt fever, fatigue, loss of appetite, nausea, abdominal discomfort, jaundice, dark urine and joint aches. Symptoms of this infection usually occur within 15 to 50 days following exposure. The greatest risk of illness transmission from an infected person is one week before until one week after symptoms first appear.

**Source**
- Humans; occasionally nonhuman primates.

**Mode of Transmission**
- Person-to-person via fecal-oral. Common source outbreaks have been related to contaminated water; food contaminated by infected foodhandlers, especially food that is not cooked after handling; and raw or undercooked shellfish from contaminated waters.

**Control**
- Food-protection education.
- Minimize manual contact with food and food contact surfaces.
- Good personal hygiene and handwashing.
- Approved food sources.
- Proper food cooking temperatures.
- Vaccines for active immunization; limited use (available as of 1995).
- Exclude infected employees.

**Norwalk Virus (Norovirus)**

**Disease Summary**
- Norwalk virus is usually associated with poor personal hygiene and contaminated soils or water. Because Norwalk is a virus, it does not grow or reproduce in food. However, when food is contaminated with the virus via hands, soil or water, it is not easily killed by cooking. Because viruses cannot be isolated readily or detected in contaminated food, preventive controls are extremely important.

**Symptoms**
- Norwalk virus is characterized by nausea, vomiting, diarrhea, abdominal pain, headache and low-grade fever. Symptoms usually appear 24 to 48 hours after infection and may persist for as long as 1 to 2 days.

**Source**
- Man is the only known source of the virus. The virus is found in the feces of an infected person and is shed in human waste.

**Mode of Transmission**
- Poor personal hygiene/lack of hand washing after toilet use and consumption of contaminated water supplies are the most common modes of transmission. Raw shellfish harvested from contaminated waters, contaminated ready-to-eat foods, eggs and even ice have caused Norwalk virus outbreaks.

**Control**
- Food-protection education.
- Good personal hygiene and handwashing.
- Food and water from reputable sources.
- Washing raw vegetables.

**Vibrio Vulnificus**

**Disease Summary**
- *Vibrio Vulnificus* is a common, naturally occurring bacterium that is present in coastal waters throughout the world. It is not the result of pollution and can be higher in concentration during the warmer months. The U.S. Food and Drug Administration estimates that 5 to 10% of all shellfish are contaminated with *Vibrio Vulnificus*. Currently, there are no practical methods available to eliminate *Vibrio Vulnificus* from coastal waters or from shellfish harvested from these waters. Most healthy adults are not at risk for *Vibrio Vulnificus* illness and may not experience any symptoms or illness. However, the illness can be very severe in immuno-compromised individuals such as the young, the elderly and persons with liver disease.

**Symptoms**
- The infection is usually characterized by fever, chills, nausea, vomiting, diarrhea, shock, abdominal pain and severe fatigue. Localized skin or blood infections may occur, which may then progress to sores or ulcers. Onset of symptoms is rapid, usually occurring within 3 days after ingestion of the bacteria. Immuno-compromised persons are at an increased risk for acquiring *Vibrio Vulnificus*, and the infection can cause severe illness with a high mortality rate in those persons.

**Source**
- Warm coastal waters, most commonly around the Gulf of Mexico, but the organisms have also been found in water samples from both the Atlantic and Pacific coasts and from other locations worldwide.

**Mode of Transmission**
- *Vibrio Vulnificus* is transmitted to humans through consumption of improperly cooked or raw shellfish harvested from infected waters or through open wounds in contact with seawater.

**Control**
- Food-protection education.
- Avoid exposure of recent or healing skin abrasions to seawater.
- Immuno-compromised persons should avoid
consumption of raw or undercooked shellfish and ensure the shellfish is thoroughly cooked.

- Proper cleaning/sanitizing equipment to avoid cross-contamination of raw shellfish and cooked foods.
- Good personal hygiene with an emphasis on handwashing.
- Using shellfish from approved sources; however, individual shellfish cannot be tested for *Vibrio Vulnificus*, so “approved sources” are not risk free.

**Staphylococcal Food Poisoning**

**Disease Summary**
- Staphylococcal food poisoning is one of the most commonly reported illnesses in the United States. Staphylococcal poisoning is an intoxication; it is caused by toxins that are produced by the staph. bacteria. When a person consumes food that is contaminated with staph toxins, that person becomes ill from the toxin, not the bacteria. Deaths are rare and the duration of the illness usually lasts only 1 to 2 days. However, sometimes the intensity and severity of the symptoms require hospitalization.

**Symptoms**
- Staphylococcal food poisoning is usually characterized by nausea, vomiting, diarrhea, dehydration, prostration, cramps, subnormal temperatures and lowered blood pressure. Symptoms appear within 30 minutes to 7 hours (2 to 4 hours is most common) after eating the contaminated food and may last for up to 24 to 48 hours.

**Source**
- Humans are the most common source, but cows, dogs and fowl also can be a source. It is estimated that 40 to 50% of healthy adults carry staph. bacteria in nasal passages, throat, hands and skin. These bacteria also are found in infected cuts, boils, burns, abrasions and pimples.

**Mode of Transmission**
- By ingestion of a food product contaminated with the toxin produced by the staph. bacteria. Contaminated ready-to-eat, high-protein foods such as meat, poultry and dairy products subjected to temperature abuse are the most common source of this illness.

**Control**
- Food-protection education.
- Good personal hygiene and handwashing.
- Fly control.
- Remove employees with the illness from food handling duties until cleared by a physician.

**Clostridium perfringens**

**Disease Summary**
- *Clostridium perfringens* is widely distributed in the environment and frequently occurs in the intestines of humans and many domestic and feral animals. Spores of the organism persist in soil, sediments and areas subject to human and animal fecal pollution.

**Symptoms**
- *Clostridium perfringens* can cause diarrhea and gas pain about 8 to 24 hours after eating. The illness usually lasts 1 day, but some symptoms may last 1 to 2 weeks for the elderly or very young.

**Source**
- The bacteria can be found in soil, dust, sewage and intestinal tracts of animals and humans. The organism grows in little or no oxygen.

**Mode of Transmission**
- *Clostridium perfringens* bacteria are capable of producing a food-poisoning toxin that can be produced in foods that have experienced temperature abuse. Cooking can destroy the bacteria, but some toxin-producing spores may survive.

**Control**
Cool foods rapidly in small quantities. Avoid preparing foods hours in advance. Reheat foods rapidly to a minimum of 165°F. Proper cleaning and sanitizing of equipment. Avoid using leftovers.

**Clostridium botulinum**

**Disease Summary**
- *Clostridium botulinum* is an anaerobic, gram-positive, spore-forming rod that produces a toxin. The spores are heat resistant and can survive in foods that are incorrectly or minimally processed. Foodborne botulism is a severe type of food poisoning caused by the ingestion of foods containing the potent toxin formed during the growth of the organism.

**Symptoms**
- Onset of symptoms is usually 2 to 36 hours after ingestion of food that contained the toxin but sometimes appear as few as 2 hours or as long as 8 days after eating. Signs are double vision, droopy eyelids, trouble speaking and swallowing, difficulty breathing and paralysis. It is often fatal.

**Source**
- The organism and its spores are widely distributed in nature. They occur in both cultivated and forest soils, bottom sediments of streams, coastal waters, in the intestinal tracts of fish and mammal, and in the gills and viscera of crabs and other shellfish.

**Mode of Transmission**
- Bacteria produce a toxin that causes the illness. *Clostridium botulinum* has been demonstrated in a variety of foods such as canned corn, peppers, green beans, soups, smoked fish, improperly canned foods, garlic in oil and vacuum-packaged and tightly wrapped foods.

**Control**
- Use only commercially canned or smoked products.
- Refrigerate olive oil and garlic.
- Discard bulging canned goods.
- Refrigerate foods.
- Rapidly chill in small quantities.

**Campylobacter jejuni**

**Disease Summary**
- *Campylobacter jejuni* is a microaerophilic organism, which means it has a requirement for reduced amount of oxygen. Surveys have shown that *Campylobacter* is the leading cause of bacterial diarrheal illness in the United States. It causes more disease than Shigella or Salmonella combined.

**Symptoms**
- Initial symptoms include fever, headache, and muscle pain followed by diarrhea, abdominal pain and nausea. These symptoms may appear 2 to 5 days after eating and may last up to 7 to 10 days.

**Mode of Transmission**
- *Campylobacter* can be transmitted by contaminated water, raw milk and raw and undercooked meat, poultry or shellfish.

**Source**
- Healthy chicken carry this bacteria in their intestinal tracts, sometimes causing the contamination of raw poultry. Raw milk can also be a source; the bacteria are carried by healthy cattle and by flies on farms. Nonchlorinated water may also be a source for the infection. However, properly cooking chicken, pasteurizing milk and chlorinating drinking water will kill the bacteria.

**Control**
- Avoid cross-contamination of foods.
- Cook foods thoroughly.
- Practice good personal hygiene.
- Only consume pasteurized milk products.

**Bacillus cereus**

**Disease Summary**
- *Bacillus cereus* food poisoning is the general description, although two recognized types of illness are caused by two distinct metabolites. A large molecular weight portion causes the diarrheal type of illness, while the vomiting type of illness is believed to be caused by a heat stable peptide.

**Symptoms**
- The symptoms of bacillus diarrheal type mimic those of *clostridium perfringens*. The onset of watery diarrhea, abdominal cramps and pain occurs 6 to 15 hours after consumption of contaminated food. Nausea may accompany diarrhea, but vomiting rarely occurs. Symptoms last for 24 hours. The emetic type is characterized by nausea and vomiting within 0.5 to 6 hours after consumption of contaminated foods. Occasionally, abdominal cramps and/or diarrhea may also occur. These symptoms last less than 24 hours.

**Source**
- A wide variety of foods including meats, milk, vegetables and fish have been associated with the diarrheal type. The emetic type is associated with rice products and other starchy foods such as pastas, potato and cheese products.

**Modes of Transmission**
- Ingestion of foods noted above that have been abused by temperature is the main way to transmit the bacteria. Employees handling foods who demonstrate poor personal hygiene practices can also transmit the bacteria to the customer.

**Control**
- Practice proper handwashing.
- Rapidly cool foods.
- Cool foods in small quantities.
- Wash foods prior to preparation.
What is HACCP?

HACCP involves seven principles:

- **Analyze hazards.** Potential hazards associated with a food and measures to control those hazards are identified. The hazard could be biological, such as a microbe; chemical, such as a toxin; or physical, such as ground glass or metal fragments.

- **Identify critical control points.** These are points in a food's production—from its raw state through processing and shipping to consumption by the consumer—at which the potential hazard can be controlled or eliminated. Examples are cooking, cooling, packaging and metal detection.

- **Establish preventive measures with critical limits for each control point.** For a cooked food, for example, this might include setting the minimum cooking temperature and time required to ensure the elimination of any harmful microbes.

- **Establish procedures to monitor the critical control points.** Such procedures might include determining how and by whom cooking time and temperature should be monitored.

- **Establish corrective actions to be taken when monitoring shows that a critical limit has not been met;** for example, reprocessing or disposing of food if the minimum cooking temperature is not met.

- **Establish procedures to verify that the system is working properly;** for example, testing time-and-temperature recording devices to verify that a cooking unit is working properly.

- **Establish effective recordkeeping to document the HACCP system.** This would include records of hazards and their control methods, the monitoring of safety requirements and action taken to correct potential problems. Each of these principles must be backed by sound scientific knowledge: for example, published microbiological studies on time and temperature factors for controlling foodborne pathogens.

Advantages

HACCP offers a number of advantages over the current system. HACCP:

- Focuses on identifying and preventing hazards from contaminating food.
- Is based on sound science.
- Permits more efficient and effective government oversight, primarily because the recordkeeping allows investigators to see how well a firm is complying with food safety laws over a period rather than how well it is doing on any given day.
- Places responsibility for ensuring food safety appropriately on the food manufacturer or distributor.
- Helps food companies compete more effectively in the world market and reduces barriers to international trade.


Another excellent source on HACCP; *Safe Handling of Food, HACCP, OSHA, and Other Safety Precautions in Foodservice Departments*, 2nd ed., by RP Puckett, Department of Correspondence Study, University of Florida, Gainesville, Fla., 2001.
Stocking water reserves and learning how to purify contaminated water should be among your top priorities in preparing for an emergency. Each person’s needs will differ, depending upon age, physical condition, activity, diet and climate. In any foodservice establishment, water is needed for cooking, drinking, cleaning, rinsing fresh produce and other food preparation tasks.

Water Demand During Water Disruption Emergencies
- Drinking water
- Handwashing
- Food preparation and cooking
- Ice
- Manual flushing of toilets
- Fire prevention (e.g., sprinkler systems)
- Laundry and central sterile departments (if these services cannot be arranged for elsewhere)

Amounts of Water Needed
Most states and emergency response teams require and/or suggest a 3-day supply of water be kept on hand. Some states require a 7-day supply. It is recommended that a minimum of 1 gallon of water is needed per person per day (some recommend as much as 5 gallons per person per day) for drinking, cooking and personal hygiene. In hot and humid climates and during heat waves and for children, nursing mothers and ill people, as much as one gallon may be needed per person for drinking alone.

During an emergency, efforts should be made to reduce the amount of water needed for all-purpose use, according to Ruby Puckett, MA, RD, and L. Charnette Norton, MS, RD, in Disaster and Emergency Preparedness in Foodservice Operations. The authors advise that water from hot-water tanks and ice in machines should be used first. Juices from fruits and vegetables, especially those that are water packed, are liquids that can be used in cooking. Bottled water should be on hand at all times. Health care facilities will need a policy on the use of sterile and distilled water, especially during an emergency.

Note: For drinking and use of water that will be consumed, drink only approved or chlorinated water.

Remember: You can reduce the amount of water your body needs by reducing activity and staying cool.

Consider: If you do not have adequate storage capabilities, contact a neighboring institution/company that can store water for you and to which you can get access quickly and
easily. Arrangements with local vendors may be useful, but consider whether delivery routes will always be open during a disaster and/or emergency.

How to Store Emergency Water Supplies

- In preparation for an emergency, the following instructions are offered by FEMA if you choose to store your own water, rather than purchase bottled water.
- **Remember:** Do not wait until a disaster warning to prepare. Many factors, including water restrictions due to a drought or an explosion caused by the local power company working on its equipment, may contribute to the shutting down and/or obstruction of your water supply. In addition, water may become contaminated for a variety of reasons, such as broken water and sewage lines.
- Water cannot be stored in thoroughly washed plastic, glass, fiberglass or enamel-lined metal containers. Never use a container that has held toxic substances, because tiny amounts may remain in the container’s pores. Sound plastic containers, such as soft drink bottles that have not been contaminated with microbes or chemicals, are acceptable. You can also purchase food-grade plastic buckets or drums.
- Before storing your water, thoroughly clean surfaces with soap and water, then rinse. Then, treat container with a preservative, such as chlorine bleach, to prevent the growth of microorganisms. For gallon- or liter-sized containers, add approximately 1 teaspoon (4.9 milliliter) household bleach (5.25% sodium hypochlorite and no soap) with 1 cup (240 mL) water to make a bleach solution. Cover the container and agitate the bleach solution thoroughly, allowing it to contact all inside surfaces. Cover and let stand for 30 minutes, then rinse with potable water. Seal your water containers tightly, label them and store them in a cool, dark place.

During an Emergency

- Water may not be safe to drink, cook or clean with or bathe in after an emergency such as a hurricane, earthquake, flood, or any disaster involving a power outage. During and after a disaster, water can become contaminated with microorganisms, such as bacteria, sewage, agricultural and industrial waste, chemicals and other substances that can cause illness or even death from diseases such as dysentery, cholera, typhoid and hepatitis. Listen to and follow public announcements. Local authorities will tell you if tap water is safe for drinking, food preparation or hygiene.
- **ALWAYS!** Practice basic hygiene. Wash your hands with soap and bottled water or water that has been boiled or disinfected. Wash your hands before preparing food or eating, after toilet use, after participating in clean-up activities, and after handling articles contaminated with floodwater or sewage. Use an alcohol-based hand sanitizer to wash your hands if you have a limited supply of clean water. (For more on hand hygiene, see “Hand Hygiene in Emergency Situations” in this chapter.)
- If the water is not safe to use — or if you are in doubt! — follow local instructions to use bottled water or to boil or disinfect water. Typically, within 24 hours, the water will have been tested for bacteria and the advisory lifted.

Until then, however, great care must be taken to purify the water. **Note:** If you use bottled water, be sure it came from a reliable, safe source. If you do not know that the water came from a safe source, you should boil or treat it before using it. Do not rely on water disinfection methods or devices that have not been recommended or approved by local health authorities. Contact your local health department for advice about water treatment products that are being advertised.

- Purification methods include boiling water, chlorination and use of purification tablets. **Note:** Purification methods will kill microbes but will not remove other contaminants such as heavy metals, salts, most other chemicals and radioactive fallout. To remove those contaminants you must use distillation and filtering.

**Boiling Water.** This is the safest method to kill harmful bacteria and parasites. Use this method if you have utilities available. In the event of a major unplanned water service interruption, a “Boil Water” advisory may be issued by the local health department.
- Boiling is the safest method of purifying water. Bring water to a rolling boil for 10 minutes, which will kill most organisms. Boiling will not remove chemical contaminants. If you suspect or are informed that water is contaminated with chemicals, seek another source of water, such as bottled water. Keep in mind that some water will evaporate. Let the water cool before drinking. Boiled water will taste better if you put oxygen back into it by pouring it back and forth between two containers. This will also improve the taste of stored water.

**Chlorination and Purification Tablets.** If you can’t boil water, you can treat water with chlorine tablets, iodine tablets or unscented household chlorine bleach (5.25% sodium hypochlorite). If the label states the bleach is not for personal use, you can only use if sodium hypochlorite is the only ingredient. If you use chlorine tablets or iodine tablets, follow the directions that come with the tablets. Usually, 1 tablet is sufficient for 1 quart of water; 2 tablets for cloudy water.
- If you use household chlorine bleach, add 1/8 teaspoon (0.75 mL), or 8 drops of bleach per gallon of water if the water is clear. For cloudy water, add 1/4 teaspoon (1.50 mL), or 16 drops of bleach per gallon. Mix the solution thoroughly and let it stand for about 30 minutes before using it. If the water does not taste and smell of chlorine at that point, add another dose and let stand another 15 minutes. If the solution still doesn’t taste or smell of chlorine, do not drink the water.
- Treating water with chlorine tablets, iodine tablets or liquid bleach will not kill many parasitic organisms. Boiling is the best way to kill these organisms.

**Distillation and Filtering.** Distillation will remove microbes, heavy metals, salts, most other chemicals, and radioactive dust and dirt, called radioactive fallout. Filtering will also remove radioactive fallout. (Water itself cannot become radioactive, but it can be contaminated by radioactive fallout. It is unsafe to drink water that contains radioactive fallout.) Distillation involves boiling water and then collecting the
vapor that condenses back to water. The condensed vapor will not include salt and other impurities. To distill, fill a pot halfway with water. Tie a cup to the handle on the pot's lid so that the cup will hang right-side-up when the lid is upside-down (make sure the cup is not dangling into the water) and boil the water for 20 minutes. The water that drips from the lid into the cup is distilled.

- To make a fallout filter, punch holes in the bottom of a large bucket, and put a layer of gravel in the bucket about 1-1/2 inches high. Cover the gravel with a towel cut in a circle slightly larger than the bucket. Cover soil with a towel, place the filter over a large container and pour contaminated water through. Then, disinfect the filtered water using one of the methods described above. Change the soil in your filter after every 50 quarts of water.

**During “Boil Water Advisory” for Food Establishments**

When water testing has revealed that your drinking water may be contaminated, in order to continue operating your food establishment, all of the following must be implemented. The following was issued by the Rhode Island Department of Health’s Office of Drinking Water Quality. Check with your state for procedures that are state-specific.

**Ice Machines.** Ice machines that are directly connected to the water system must not be used. Shut the machine down, clean and sanitize the unit, and leave the unit off until the water is okay again.

**Soda Machines.** Soda machines that are directly connected to the water system must not be used. The machines must be shut down, cleaned and sanitized, and left shut down until problem is over. *Only bottled/canned soda may be sold.*

**Coffee Machines.** Coffee machines that are directly connected to the water system can be used if the water reaches a boiling temperature for 1 minute. If you are not sure how hot the water gets, then bottled or previously boiled water must be used.

**Sanitizing In A 3-Bay Sink / In-Place Sanitation.** Normal washing, rinsing and sanitizing can be done in a 3-bay sink, provided that the concentration of sanitizer (chlorine, iodine, quaternary ammonia) is at the proper level. The levels are 50 to 100 parts per million (ppm) chlorine, 200-ppm quaternary ammonia, and 12.5-ppm iodine.

**Dishwashing, Automatic:** Automatic dishwashers, sanitizing with chlorine, can continue to be used, as well as dishwashers using hot water to sanitize. The combination of soap and hot water, or sanitizer, will effectively kill any bacteria. The utensils must be left to air dry.

**Cooking:** As long as the product being cooked is going to be boiled for at least 1 minute, then the tap water can be used. If the product is not going to be boiled, e.g., baked goods, then bottled water must be used.

**Vegetable and Fish / Shellfish Sprays:** In-place spray units and units that periodically spray water on products to maintain freshness must be shut down, cleaned and sanitized. These units may not be used until the emergency has been resolved.

**Note:** Water for drinking or cooking must be **boiled for 10 minutes** or the establishment must use bottled water from an approved company. Ice must also be from an approved source. You may not use any chemicals to disinfect water that will be used for cooking or drinking. Filters cannot be used since they will not disinfect water.

**Once Water Service Is Restored**

- When the water source is safe, local authorities will make an announcement on broadcast media, in newspapers and handbills.
- Faucet water may have a chlorine taste, which indicates precautions were/are being taken.

**Cleaning & Sanitizing Procedures In Food Establishments**

The following recommendations from the Rhode Island Department of Health address procedures to be taken once the boil water advisory is rescinded. Check with your state for procedures that are state-specific.

**Ice Machines.** Ice machines must be cleaned and sanitized before use. Follow the manufacturer's suggested sanitizing procedures in the operator's manual. Procedures should include the following minimum requirements.

- Run the ice machine for 24 hours.
- Discard all the ice.
- Wash and sanitize the bin area.

All external filtering devices associated with ice machines should be sanitized. Cartridges should be changed.

**Water Treatment Units.** All water treatment filter cartridges should be changed.

**Soda Dispensers.** Follow manufacturer's suggested sanitizing procedures in operator's manual, or contact the soda company that installed the dispenser(s) to have them cleaned and sanitized.

**Vending Machines.** Contact the company that installed the vending machine(s) to have the machine properly cleaned and sanitized. This only applies to vending machines that are directly connected to the water system and are used to manufacture food such as cold beverages, etc.

**Vegetable And Fish Sprays.** In-place spray units and units which periodically spray water on products to maintain freshness must be cleaned and sanitized prior to use. A 50 to 100 parts per million (ppm) chlorine solution or approved sanitizer should be flushed through the lines for at least 60 seconds.

**Drinking Fountains.** All water cooling tanks must be completely flushed out prior to use.

**Faucets/Taps.** Any faucets or taps that have not been used during the boil water advisory should be flushed until a temperature change is detected to ensure that any contamination that may be present is removed.

**Hand Hygiene in Emergency Situations**

(You may want to post this in your department.)

After an emergency, it can be difficult to find running water. However, it is still important to wash your hands to avoid illness. It is best to wash your hands with soap and water, but when water isn’t available, you can use alcohol-based...
products made for washing hands. Below are some tips for washing your hands with soap and water and with alcohol-based products.

**When Should You Wash Your Hands?**
1) Before preparing or eating food.
2) After going to the bathroom.
3) After changing diapers or cleaning up a child who has gone to the bathroom.
4) Before and after tending to someone who is sick.
5) After handling uncooked foods, particularly raw meat, poultry or fish.
6) After blowing your nose, coughing or sneezing.
7) After handling an animal or animal waste.
8) After handling garbage.
9) Before and after treating a cut or wound.

**Techniques for Hand Hygiene with Alcohol-based Products**
When hands are visibly dirty, they should be washed with soap and water when available. However, if soap and water are not available, use an alcohol-based product to clean your hands. Alcohol-based hand-rubs significantly reduce the number of germs on skin and are fast acting. When using an alcohol-based hand-rub, apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry. Note that the volume needed to reduce the number of bacteria on hands varies by product.

**Techniques for Hand Washing with Soap and Water**
Proper techniques to use when washing your hands with soap and water:
1) Place your hands together under water (warm water if possible).
2) Rub your hands together for at least 15-20 seconds (with soap if possible). [Note: Others recommend rubbing for 1 full minute.] Wash all surfaces well, including wrists, palms, backs of hands, fingers and under the fingernails.
3) Clean the dirt from under your fingernails.
4) Rinse the soap from your hands.
5) Dry your hands completely with a clean towel if possible (this helps remove the germs). However, if towels are not available, it is okay to air dry your hands.
6) Pat your skin rather than rubbing to avoid chapping and cracking.
7) If you use a disposable towel, throw it in the trash.

*Source for hand hygiene:* www.bt.cdc.gov/disasters/handhygienefacts.asp

**SOURCES**

- CDC’s “Hand Hygiene in Emergency Situations,” www.cdc.gov/ncidod/dhqp/gl_environinfection.html
- CDC’s Hand Hygiene After a Disaster, www.bt.cdc.gov/disasters/handhygienefacts.asp
- Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Disaster Safety, “Keep Food and Water Safe After a Natural Disaster or Power Outage,” www.bt.cdc.gov/disasters/pdf/foodwater.pdf
- Rhode Island Department of Health, Office of Drinking Water Quality, www.health.ri.gov/environment
Recognizing that an emergency exists and taking action in the first few minutes can mean the difference between death or life-long disabilities and full recovery.

Each year, hundreds of thousands of Americans die and millions of Americans are hospitalized because of injuries. Millions more die from sudden illnesses, such as heart attacks and strokes. Many of these deaths could have been prevented if victims and those around them knew how to take action.

Note: The following is to be used as a guide. It is not a substitute for materials used in first aid or CPR courses. The information is compiled from various reference sources. It includes some information about infants and children, but is not comprehensive. Other sources should be consulted. We believe the information provided to be correct, but assume no liability for consequential or other damages attendant to the use of this material.

How to Recognize Emergencies in a Workplace Environment

Some of these sounds, sights, odors and behaviors may seem obvious signs of distress. But other signs are more subtle. To be alert to disasters, you must tune in to anything out of the ordinary in your workplace environment. Consider the following suggestions.

Unusual Sounds
- Screams, yells, moans or calls for help
- Breaking glass, crashing metal or screeching tires
- Changes in machinery or equipment noises
- Sudden, loud voices

Unusual Sights
- An overturned pot
- Malfunction of equipment
- A spilled medicine container
- Broken glass
- Downed electrical wires
- Smoke or fire
- A stalled vehicle

Unusual Odors
- Odors stronger than usual
- Unrecognizable odors

Unusual Appearances or Behaviors
- Difficulty breathing
- Clutching the chest or throat
- Slurred, confused or hesitant speech
- Unexplainable confusion or drowsiness
- Sweating for no apparent reason
- Unusual skin color
Encourage employees to wear Medic-Alert ID tags or bracelets or carry cards with information about drugs being taken, allergies, allergic reactions to drugs and insects, and medical conditions such as diabetes, epilepsy, glaucoma, hemophilia and others.

**Remember the 4 Cs**
1) Stay Calm
2) Check. Look at the scene and the victim to determine what has happened. Listen for sounds and information.
3) Call or get others to call 911 or the local emergency number (some businesses have specific procedures for calling) if the victim:
   - Is or becomes unconscious
   - Has trouble breathing or is breathing erratically
   - Has chest pain or pressure
   - Is bleeding severely
   - Has pressure or pain in the abdomen that does not quickly go away
   - Is vomiting or passing blood
   - Has seizures, a severe headache or slurred speech
   - Appears to have been poisoned
   - Has injuries to the head, neck or back
   - Has possible broken bones.
3a) Call or get others to call for help if the situation involves:
   - Fire or explosion
   - Downed electrical wires
   - Swiftly moving or rapidly rising water
   - Presence of poisonous gas
   - Vehicle collisions
   - Victims who cannot be moved easily.

**Remember:** When you are alone, provide 1 minute of care, then call 911 or the local emergency number when victims are unconscious, have been submersed or were near drowning, have cardiac arrest associated with trauma or are experiencing drug overdose. These situations are likely to precipitate breathing emergencies, so provide support for airway, breathing and circulation through rescue breaths or chest compressions as appropriate.

3b) If you call an internal emergency number, allow the staff there to handle the calls outside for emergency assistance. If you are making the call, **stay calm and speak slowly and very clearly** to give the dispatcher:
   - The exact location or address of the emergency. Include nearby intersections, landmarks and the building name, floor or room. A laminated note card containing this information should be placed on all phone extensions and in central building locations. Remember to alert the building’s security about such calls.
   - The telephone number from which the call is being made.
   - The caller’s name
   - The victim’s name
   - How many people are involved
   - The victim’s condition
   - What help/first aid is being given
   - More information requested by the dispatcher
   - Do not hang up until the dispatcher tells you to hang up or he/she hangs up. The dispatcher may be able to tell you how to best care for the victim until the ambulance arrives.

4) Care for the victim.

**How to Give Care**

**IF the Victim Is Suddenly Ill:**
- Watch for changes in the victim’s breathing and consciousness. First, take appropriate action to **life threatening conditions**, including breathing difficulty, severe bleeding, heart failure, allergic reactions and poisoning.
- Keep watching for changes in consciousness and breathing.
- Help the victim rest comfortably.
- Keep the victim from getting chilled or overheated.
- Reassure the victim.
- Do not give anything to eat or drink unless the victim is fully conscious.

**Preventing Disease Transmission**
- Avoid contact with bodily fluids, such as blood, when possible.
- Place barriers, such as disposable gloves or a clean dry cloth, between the victim’s bodily fluids and yourself.
- Cover any cuts, scrapes and openings in your skin by wearing protective clothing, such as disposable gloves.
- Use breathing barriers, if available, when breathing into a victim’s mouth.
- Wash your hands with soap and water immediately before and after giving care, even if you wear gloves.
- Do not eat, drink or touch your mouth, nose or eyes when giving first aid.
- Do not touch objects that may be soiled with blood, mucus or other bodily substances.

**IF the Victim:**
- Vomits — Place the victim on his or her side.
- Faints — Position victim on back and elevate legs if no head or back injury suspected.
- Has a Diabetic Emergency — Give the victim some form of sugar.
- Has a Seizure — Place victim flat on the floor if possible so he/she won’t fall. Do not hold or restrain the person or place anything between the teeth. Remove any objects like sharp-edged objects that might cause injury. Cushion the victim’s head using folded clothing or small pillow.

**Note:** **Move the injured victim only when absolutely necessary.**

- Never move an injured person unless there is a fire or when explosives are involved.
- The major concern with moving an injured person is making the injury worse, which is especially true with spinal cord injuries. If you must move an injured person, try to drag him/her by the clothing around the neck or shoulder area. If possible, drag the person onto a blanket or large cloth and then drag the blanket.
IF the Victim Is Bleeding (See illustrations at left)

- Control bleeding. Each of us has between five and six quarts of blood in our body. Most people can lose a small amount of blood with no problem, but if a quart or more is quickly lost, it could lead to shock and/or death.
- Place a clean, sterile cloth on the wound, then apply pressure with your palm against the wound until the bleeding stops.
- Raise the injured area above the victim’s heart, if possible, to slow down the bleeding at the wound site. Don’t move any related part of the body if you think the wound involves a broken bone.
- Do not remove the cloth that is against the open wound because it could disturb the blood clotting and restart the bleeding.
- Apply a bandage snugly over the dressing.

If bleeding is severe:

- Apply pressure to the nearest major pressure point, located either on the inside of the upper arm between the shoulder and elbow, or in the groin area where the leg joins the body. Direct pressure is better than a pressure point or a tourniquet (a device, such as a bandage or tie twisted tight, sometimes with a stick, to control the flow of blood) because direct pressure stops blood circulation only at the wound. Use the pressure points only if elevation and direct pressure haven’t controlled the bleeding. Never use a tourniquet except in response to an extreme emergency, such as a severed arm or leg. Tourniquets can damage nerves and blood vessels, which could result in the victim losing an arm or leg.

IF the Victim Is in Shock

Shock can threaten the life of the victim of an injury if it is not treated quickly, even if the injury doesn’t directly cause death. Shock occurs when the body’s important functions are threatened by not getting enough blood or when the major organs and tissues don’t receive enough oxygen. Shock can occur due to a variety of conditions, including heart attack, burns, bleeding, poisoning, illness, exposure to extreme heat or cold and much more. Some of the symptoms of shock are a pale or bluish skin color that is cold to the touch, vomiting, dull and sunken eyes, loss of alertness and interest, confusion, rapid or weak pulse, and unusual thirst. Shock requires medical treatment to be reversed, so all you can do is prevent it from getting worse.

Note: Treat for shock after the serious injury.

- Generally, keep the victim lying flat on his/her back.
- You can maintain an open airway for breathing, control any obvious bleeding.
- Continue to watch for breathing difficulty or irregularities.
- Elevate the legs about 12 inches unless an injury makes it impossible.
- Prevent the loss of body heat by covering the victim (over and under) with blankets.
- Don’t give the victim anything to eat or drink because this may cause vomiting.
- Do not place cushions or pillows under the head or neck.
- Give reassurance that everything will be okay.

Note: A victim who is unconscious or bleeding from the mouth should lie on one side so breathing is easier. Stay with the victim until medical help arrives.

IF the Victim Is Unable to Speak or Cough

- If the person is conscious, in a standing position, place fists just above navel and give quick, upward thrusts until object is removed.

IF the Victim Is Breathing but Unconscious

- Place the victim on his/her side in case of vomiting and monitor breathing and movement.

IF the Victim Is Not Breathing

(Chest is not rising and falling, you can’t hear or feel breaths and skin appears pale or bluish)

- Tilt head back and lift chin. Check the mouth for fluid or objects (particularly if the victim has been submerged in water).
- Pinch nose shut. Open your mouth and make a tight seal around the victim’s mouth. (For infants, your mouth will cover the infant’s mouth and nose). Give 2 slow breaths until the chest clearly rises. Check for movement (coughing or response to breaths) for about 10 seconds. (Bottom illustration)

If the victim is not breathing but shows some movement:

- Perform rescue breathing, giving 1 slow rescue breath about every 5 seconds. (For infants, every 3 seconds.)
- If your breaths do not go in, reposition the airway and give breaths again.
- Recheck for breathing and movement about every minute.

IF the Victim Is Not Breathing and Has a Head, Neck or Back Injury

- Use the jaw-thrust maneuver by placing one hand on each side of the victim’s head with your thumbs on the victim’s cheeks and your fingers under the back of the lower jaw, next to the ears.
- Grab the back of the lower jaw, next to the ears, and lift with both hands.
- If you can maintain a clear, open airway, do not move the victim unnecessarily.
- If you give rescue breaths, place your cheek tightly against the victim’s nose.

IF Air Won’t Go In

- Position your hand on the center of the breastbone, then give 15 chest compressions.
- Look for and remove any object in the mouth.
- Tilt head back. Give 2 rescue breaths.
- If the breaths do not go in, reposition the airway and re-attempt breaths. Repeat chest compressions, continuing to look for an object, and rescue breaths until breaths go in.
IF the Victim Is Not Breathing, Is Unconscious and Has No Pulse: Give Cardiopulmonary Resuscitation (CPR).

CPR involves a combination of mouth-to-mouth rescue breathing and chest compression that keeps oxygenated blood flowing to the brain and other vital organs until more definitive medical treatment can restore a normal heart rhythm. Death can occur within 8 to 10 minutes when the heart stops and there is an absence of oxygenated blood to the brain. Take accredited first-aid training courses to learn CPR and how to use an automated external defibrillator (AED). The three steps are 1) Clear the airway, 2) breathe for the victim, and 3) restore blood circulation.

Clear the Airway
- If the victim appears not to be breathing, call (or preferably ask someone else to call) 911 or the local emergency number.
- Place the victim on his/her back. If there is no indication of head injury, place your palm on the victim’s forehead and push down gently, tilting the head back. With the other hand, gently lift the chin forward to open the airway.
- Check for normal breathing, for no more than 10 seconds. If the victim is not breathing normally (gasp is not normal), begin mouth-to-mouth breathing.

Breathing
Rescue breathing can be mouth-to-mouth breathing or mouth-to-nose breathing if the mouth is injured or can’t be opened. Using the head tilt-chin lift, keeping the airway open, pinch the nostrils shut and give 1 slow rescue breath by covering the victim’s mouth and nose with yours and blow until the chest rises. If it rises, give the second breath. If the chest doesn’t rise, repeat the head tilt-chin lift and give the second breath. Each breath should make the chest clearly rise. If there is no movement, begin CPR.

Circulation
- Place the heel of one hand over the center of the victim’s breastbone, between the nipples. Place the other hand on top of the first. (Top illustration)
  - Position your shoulders over your hands. Keeping your elbows straight and using your upper body weight, compress (push down) the chest about one-and-one-half to two inches, approximately 15 times in 10 seconds. (Bottom illustration)
  - After 30 compressions, tilt the head back and lift the chin up to open the airway. Give 2 rescue breaths. (Pinch the nose shut and breathe into the mouth for one second. If the chest rises, give a second rescue breath. If the chest doesn’t rise, repeat the head tilt-chin lift and then give the second rescue breath.)
- If the victim doesn’t move after five cycles (about 2 minutes), use an AED if it is available. If you’re not trained to use an AED, a 911 operator may be able to guide you in its use. If it isn’t available or you don’t know how to use it, proceed to the next step.
- Repeat sets of 15 compressions and 2 breaths until help arrives.

Note: If two people are helping, the person pumping the chest stops while the other gives mouth-to-mouth breathing.

Note: For children ages 1-8, the procedure is essentially the same. Perform five cycles of compressions and breaths on the child (about 2 minutes), before calling 911. If someone else calls, continue to perform CPR on the child. Use only one hand to perform heart compressions. Breathe more gently than with adults, but use the same compression/breath rate as for adults (30 compressions followed by 2 breaths). Continue until the victim moves or help arrives.

For infants, consult your first-aid manuals for both choking and CPR.

IF the Victim Is Choking: Perform the Heimlich Maneuver
(Watch for clutching the throat with one or both hands, inability to speak, cough forcefully or breathe, or high-pitched wheezing.) Choking can occur when a person tries to swallow large pieces of poorly chewed food; drinks alcohol before and during meals, thereby dulling the nerves that aid in swallowing; eats while talking excitedly or laughing; eats too fast; and walks, plays or runs with food or objects in the mouth.
- If the victim is sitting or standing, stand behind him/her.
- Make a fist with one hand, placing your fist, thumb side in, against the middle of the abdomen, just below the victim’s rib cage in the front of the body and just above the navel. Place your other hand over your fist.
- Keeping your arms off the victim’s rib cage, make quick, inward and upward thrusts until the food or object is dislodged.
- Repeat until the obstructing object is coughed up and the victim breathes on his/her own. If the person is lying down or becomes unconscious, straddle him/her and place the heel of your hand directly above the waistline. Place your other hand on top of this hand. Keeping your elbows straight, give 4 quick upward thrusts. Repeat until the obstructing object is coughed out.
- If breathing does not resume, follow steps for CPR, continuing in sets of 15 compressions, and look for objects and remove if possible.

IF the Victim Is Burned
Burns are caused by heat such as hot steam, fire, explosions, hot water, friction, radiation, sunrays, other heated objects and liquids; chemicals such as sulfuric acid; electricity such as alternating currents; and inhalation of fumes, smoke or steam. The severity of a burn depends on the temperature or whatever caused the burn, the length of time the person is exposed, the location on the body, the burn’s size and the person’s age and medical condition.

First-degree, or superficial burns: The skin is red and dry; the area may swell and is usually painful. These burns affect the top layer of the skin.
Second-degree burns: These burns affect the outer and underlying layer of skin. The skin is red, often with blisters; the area may swell and be painful.

Third-degree or deep burns: These burns affect all layers of skin, including the deep layer of skin. The skin may appear brown, black, grey or charred. There may be blisters that weep clear fluid. The burn can range from very painful to almost painless because nerve endings may be damaged. The victim may be in shock (falling blood pressure, severe fluid and blood loss) and may suffer symptoms of hysteria/dementia.

Inhalation burns: These may involve lips, mouth and throat. The face may be reddened or burned. The victim may have difficulty breathing or coughing.

Electrical burns with high voltage (more than 1000V): These may damage multiple organ systems and may be associated with cardiac arrest.

All burns: These are at risk of being infected. If the victim appears sick and presents changes in alertness, confusion, fever, severe pain or loss of consciousness, seek immediate emergency medical treatment, regardless of the type of burn. If the victim is not breathing, follow steps in “IF the Victim Is Not Breathing.” If the victim is in shock, which will most likely be the case with severe burns, follow steps in “IF the Victim Is In Shock.”

Note: A critical burn needs immediate medical attention. First, flush the burn if possible. Then, call for an ambulance if a burn:

- Involves breathing difficulty
- Covers more than one body part
- Involves the head, neck, hands, feet or genitals
- Is to a child or elderly person (other than a very minor burn)
- Is caused by chemicals, explosions, radiation or electricity.

If the burn is thermal, not caused by chemicals or electricity:

- Stop the burning. Remove the victim from the source of the burn. Put out flames if possible.
- If the victim’s clothing is stuck to the burn, do not try to remove it. Remove clothing that is not stuck to the burn by cutting or tearing it.
- Do not puncture blisters or rub the skin.
- Do not scrub the burn and do not apply any soap, ointment or anesthetic, oil, cream or home remedies.
- Cool the burn with large amounts of cool water. Running cold water over the burn for a minimum of 10 minutes for first-degree burns and 30 minutes for more severe burns is recommended. It has been found to relieve pain and reduce the severity of injury. Do not use ice or ice water except on small superficial burns. If needed for a large burned area, use a hose.
- Apply sterile, soaked sheets or other wet cloths to the face or other areas that cannot be immersed. Keep cloth cool by adding more water.
- Cover the burn with dry, sterile dressings or a clean cloth. Loosely bandage dressing in place to prevent infection and reduce pain, or cover burned area with a dry sheet. If you do not have clean, cotton material, do not cover the burn with anything. Do not use cotton or an adhesive pad.
- Don’t give the burn victim anything to drink or eat.
- After treating with wet cloths, keep the victim from getting chilled or overheated until medical help arrives by covering with a blanket.
- Seek medical attention for second- and third-degree burns.

If a burn is caused by chemicals:

- Flush skin or eyes with large amounts of cool running water for a minimum of 10-15 minutes. The water stream should not be “strong” or “harsh.”
- Always flush away from the body.
- Brush dry chemicals off the skin with a gloved hand.
- Remove clothing and jewelry that may trap chemicals against the skin or on which chemicals may have spilled.
- Cover the burn with sterile, soaked sheets or other wet cloths. Do not cover with cotton or an adhesive pad. Do not use soap, ointment or anesthetic, oil, cream or home remedies.

Note: Find out what chemical is involved so you can inform medical care professionals.

If a burn is caused by electricity:

- Do not go near a victim until the power is turned off or until the victim is no longer in contact with the power source. If the victim is still in contact with the power source, electricity will travel through the victim’s body and electrify you when you reach to touch. Turn off electric power by pulling the electric plug, remove the fuse or shut the main current.
- If electricity can’t be turned off, you can very carefully pull the victim away using a dry rope looped around his/her arm or leg (but remember, you can’t touch the victim if he/she is in contact with the power source). You can also use a wooden stick or plastic pipe to remove a live downed power line that is lying on top of the victim. You can use a stick to carefully roll the victim off the wire if it is under the victim. If a power line is down, wait for the fire department or power company.
- Do not use or touch anything metal.
- Do not stand on or touch anything that is wet.
- Call for emergency help.
- Once the victim is clear of the power source, check for airway obstruction, breathing and circulation. If the victim is unconscious, give rescue breathing or CPR.
- Do not move victim unnecessarily because there may be internal injuries.
- Check for possibility of two wounds, entrance and exit burns.
- Do not cool burn.
- Cover the burn with a sterile, dry dressing.
- Treat the victim for shock.
- Keep the victim from getting chilled or overheated.

If the burn is caused by smoke inhalation:

- Move the victim to fresh air.
- If the victim is unconscious, give rescue breathing.
- Support the victim in the position in which it is easiest to breathe.
- If the victim is breathing but unconscious, place on his/her side and monitor breathing closely.
**IF the Victim Has Cold-Related Illness**

**Hypothermia** is the cooling of the body caused by the failure of the body's warming system. Look for shivering, numbness, a glassy stare, apathy, weakness, impaired judgment and/or loss of consciousness.

- Gently move victim to a warm place.
- Give rescue breathing if needed.
- Remove any wet clothing and dry the victim.
- Warm the victim slowly and seek immediate medical assistance. Warm the victim's trunk first. Use your own body heat to help. Arms and legs should be warmed last because stimulation of the limbs can drive cold blood toward the heart and lead to heart failure.
- Warm the victim by wrapping in blankets or by putting dry clothing on the victim. Hot water bottles and chemical hot packs may be used if first wrapped in a towel or blanket before applying.
- Do not warm the victim too quickly, such as immersing him/her in warm water. Rapid warming can cause dangerous heart rhythms.

**Frostbite** is the freezing of body parts. Look for lack of feeling in the affected area, the skin appears waxy and is cold to the touch or is discolored to flushed, white, gray, yellow or blue. Attempt to remove jewelry or restrictive clothing.

- Handle the area gently; never rub the affected area.
- Warm gently by soaking affected area in warm water (100 deg. F. to 105 deg. F.) until it appears red and feels warm.
- Loosely bandage area with dry, sterile dressing.
- If the victim's fingers or toes are frostbitten, place dry, sterile gauze between them to keep them separated.
- Avoid breaking any blisters.
- If hypothermia is involved as well, follow instructions above.

**For Both Hypothermia and Frostbite:**

- If the victim is conscious and breathing properly, you may give him/her a warm drink. But never give anything with caffeine in it (like coffee or tea) or alcohol. Caffeine, a stimulant, can cause the heart to beat faster and hasten the effects the cold has on the body. Alcohol, a depressant, can slow the heart and also hasten the ill effects of cold body temperatures.

**IF the Victim Has Heat-Related Illness**

**Heat cramps and heat-related illness** are progressive conditions caused by overexposure to heat. Heat exhaustion can occur anywhere there is poor air circulation, such as around an open furnace or heavy machinery, or if a person is poorly adjusted to very warm temperatures. The body reacts by increasing the heart rate and strengthening blood circulation. If recognized in the early stages, heat-related illness can usually be reversed. Simple heat exhaustion can occur due to loss of body fluids and salts. The symptoms are usually excessive fatigue, dizziness and disorientation, and normal skin temperature but a damp and clammy feeling.

**Heat cramps**

- Look for painful muscle spasms, usually in the legs and abdomen.
- Place the victim in a cool place to rest.
- Give the victim cool water to drink.

**Heat exhaustion**

- Move the victim to a cool spot.
- Encourage drinking of cool water and rest.
- Do not give salt tablets.
- Watch for signals of heat stroke.

**Heat stroke** is much more serious and occurs when the body's sweat glands have shut down. Look for mental confusion, collapse, unconsciousness, headache, nausea, dizziness, weakness, exhaustion and heavy sweating. In late stages, look for red, hot, dry skin, changes in level of consciousness and vomiting. A heat stroke victim will die quickly, so don’t wait for medical help to arrive. Assist immediately.

- Move the victim to a cool place and out of the sun.
- Loosen tight or remove perspiration-soaked clothing.
- Begin pouring cool water over the victim or apply cool, wet cloths to the skin.
- Fan the victim to provide good air circulation until medical help arrives.

*If victim refuses water, vomits or loses consciousness:*

- Call 911.
- Continue to cool victim by placing ice or cold packs on victim's wrists, ankles, groin and neck and armpits.
- If the victim becomes unconscious, give rescue breathing.

**IF the Victim Is Unable to Move or Use Body Part**

Look for pain, bruising and swelling.

- Keep the injured part from moving.
- Apply ice or a cold pack to control swelling and reduce pain. Place a towel or cloth between the source of cold and the skin.
- Avoid any movement or activity that causes pain.
- Get medical care. Call 911 or the local emergency number if:
  - Feels or sounds like bones are rubbing together
  - “Snap” or “pop” heard or felt at time of injury
  - An open wound on or around the injury site; bone ends may or may not be visible
  - Inability to move or use the affected part normally
  - Injured area is cold and numb
  - Injury involves the head, neck or back
  - Victim has trouble breathing
  - Cause of the injury suggests that the injury may be severe.

*Note: See first aid manuals for splinting.*

**IF the Victim Is Poisoned**

Look for trouble breathing, nausea, vomiting, diarrhea, chest or abdominal pain, sweating, changes in consciousness, seizures, burns around the lips, tongue or on the skin, open or spilled containers, open medicine cabinet, overturned or damaged plant, unusual odors, flames and smoke. Treatment must be appropriate to the form of the poisoning.

- Check the scene to make sure it is safe to approach and gather clues about what happened.
• If necessary, move the person to safety, away from the source of the poison.
• Check the victim’s level of consciousness, breathing and movement (coughing or response to rescue breaths). Care for any life-threatening conditions.
• Call 911 or local emergency number or Poison Control Center.
• Look for any containers that are in the area that will tell you what type of poison is involved.
• If you suspect someone has swallowed a poison, try to find out what type of poison it was, how much was taken and when it was taken.
• Never give anything to eat or drink unless directed to do so by the Poison Control Center or healthcare provider.
• If the person vomits, position him/her on his/her side. Save a sample of the vomit if poison is not known so that it can be identified at the hospital.
• If the poison is in solid form, such as pills, remove it from the victim’s mouth using a clean cloth wrapped around your finger. Don’t do this with infants because it could force the poison further down their throat.
• If the poison is a gas, you may need a respirator to protect yourself. After checking the area first for your safety, remove the victim from the area and take to fresh air.
• If the poison is corrosive to the skin, remove the clothing from the affected area and flush with water for 30 minutes.
• Take the poison container or label with you when you call for medical help because you will need to be able to answer questions about the poison. Try to stay calm and follow the instructions you are given.
• If the poison is in contact with the eyes, flush the victim’s eyes for a minimum of 15 minutes with clean water.

IF the Victim Has An Allergic Reaction
Look for trouble breathing, feeling of tightness in the chest and throat, swelling of the face, neck and tongue, and rash, hives, dizziness or confusion.
• Check the scene to make it safe.
• Check the person carefully for swelling and breathing problems.
• If the victim has trouble breathing, send someone to call 911 or local emergency number or Poison Control Center.
• People who know they are allergic may carry a special kit. Many health professionals applaud the efforts to assist with epi-pen (and albuterol inhaler for asthma).

See “Provisions to Include in a First Aid Kit” on the next page.

SOURCES

American Red Cross, www.redcross.org
(The American Red Cross translates scientific, medical and educational research into training that provides everyday people with skills that may help them save a life. New training programs and materials will soon be available. Contact your local American Red Cross chapter [www.redcross.org or 800-667-2968] for more information.


Nicole@911infobook.com. 1-888-680-9061

Mayo Clinic, www.mayoclinic.com/health

American Heart Association, www.americanheart.org

“Handbook of Emergency Cardiovascular Care.” This edition of the ECC Handbook provides readers with the latest consensus recommendations from the 2005 International Consensus Conference on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science. The material in this handbook was selected for its relevance to patient care and its application to a quick reference format.


National Institute for Occupational Safety and Health, www.cdc.gov/niosh/

Centers for Disease Control and Prevention, www.cdc.gov


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UPDATED Emergency Numbers to Post On or Near All Department Telephones and In Central Work Locations

Dial 911
Dial “O” for internal operator (or another emergency number issued)
Ambulance_____________________________
Fire Department _______________________
Poison Control Center___________________
Police_______________________________
Hospital______________________________
Electrical Emergency___________________
Gas Emergency________________________
Other City Officials_____________________


Provisions to Include in a First Aid Kit

- Waterproof case or backpack
- List of emergency phone numbers
- Flashlight and working batteries
- Adhesive bandages in a large range of sizes for minor cuts, abrasions and puncture wounds
- Butterfly closures to hold wound edges firmly together
- Nonstick sterile pads (4” x 4”) that are soft, super-absorbent and provide a good environment for wound dressing and healing. These are used for bleeding and draining wounds, burns and infections.
- Rolled gauze (3” roll) to allow freedom of movement. These are best for securing the dressing and/or pads. These are especially good for hard-to-bandage wounds.
- Adhesive tape (1” roll)
- Elastic bandage
- Triangular bandages
- Antiseptic towelettes
- Topical sting relief
- Sterile eye pads
- Eye wash
- Antibacterial ointment
- Alcohol pads
- Cold pack
- Scissors
- Tweezers
- Safety pins
- Breathing barrier
- Red biohazard bag
- Biohazard identification sticker
- Germicidal floor wipes
- Antimicrobial hand wipes
- Disposable gloves
- Disposable mouth/hose cover
- Disposable apron
- Plastic shovel/scrapper
- Sealable scoop bag
- Activated charcoal (absorbs poison)
- Plastic bags
- Thermometer (oral)
- Thermometer (rectal)
- Petroleum jelly
- Hydrogen peroxide
- Hydrocortisone cream
- Providence–iodine solution
- Antihistamine
- Pain reliever pills
- Salt tablets
- Syrup of Ipecac (induces vomiting)
- Diarrhea medicine
- Emergency blanket
- First aid instruction booklet
CATERING AT DISASTER SITES

Here’s what one company recommends having on hand or bringing to a site during a disaster or emergency.

The following outline for catering at a disaster site was provided courtesy of Whitsons Culinary Group, an Islandia, New York-based contractor with extensive experience operating at disaster sites, including a long-term disaster relief contract it completed in the aftermath of September 11, 2001. This copy is excerpted from a comprehensive “Disaster Services Manual” the company compiled over a 12-month period. Used with permission.

For Use During a Disaster or Emergency

Shelf-stable foods
Foods that are processed — those treated by heat or a combination of other treatments which will destroy dangerous microorganisms — are shelf stable. These products, which include canned foods, bottled juices and other products that do not require refrigeration until opened, have a shelf life that is evaluated in terms of the quality of the product. These items are often referred to as non-perishable for these reasons. Canned foods can last for two years or longer, because shelf-stable foods experience a very slow rate of organic change. After two years, however, the product may lose taste and color.

Product dating
The dating of shelf-stable foods is done on a voluntary basis for all food products except baby food. Consumers will, however, see products marked with dating terms such as “best before/best-if-used-by,” “sell by,” and “use by.” The “best-if-used-by” date is the date recommended for best flavor and quality of a product. It is not a safety date. A “sell by” or “expiration” or “use by” date tells a customer how long a store should display the product for sale. Purchase products before the “sell by” or “use by” date. A product can be safely used after the “sell by” date; however, do not use a product beyond the “use by” date. Additionally, consumers should note that products in slightly dented cans can be consumed as long as there are no leaks and the product appears wholesome. Do not consume products from severely dented, leaking or swollen cans or jars.
Remember, processed foods that are shelf stable can be safely consumed for two years or longer. Consumers are encouraged to contact the retailer or manufacturer with further questions.

How long can shelf-stable foods be safely stored on the shelf?
According to the Food and Drug Administration (FDA), food can be safe forever from a foodborne-illness standpoint, but if shelf-stable food has been on the shelf for an extended period of time, you might not want to eat it because the quality may not be good. In this case, the “best if used by” date on the label of the product is an indication of whether or not the quality of the food is good. Food quality deals with the taste, texture, and nutritional value of food. For example, freezer burn, rancidity and food spoilage are all quality-related issues. The FDA does not require an expiration date for shelf-stable foods, since the storage time for these foods is a quality issue, not a food safety concern.

Three-day emergency supply of shelf-stable food for one person
An unexpected blizzard, tornado, flood or power outage can create food-safety and supply problems. In order to be prepared for such emergencies, experts advise keeping a 3-day supply of food and water on hand.

What does a three-day emergency food supply look like?
What should you consider and where do you start?
As you prepare your three-day food supply, keep the following in mind:
- Store food you like and normally eat.
- Rotate and use food and water every 6 to 12 months.
- Consider small can sizes that provide just the number of servings you will consume at one time. If your power is off, refrigerating leftovers is not an option.
- Keep a manual can opener and eating utensils on hand.
- If you don’t have an alternative way to boil water, do not include instant foods.
- Store foods packaged in cardboard boxes, thin plastic, or paper in a metal, glass or rigid plastic container to avoid insect and rodent damage.
- Choose shelf-stable foods that do not require a refrigerator or freezer for storage. Once opened or prepared, many foods no longer are shelf stable.

### Shelf-stable foods you may want to include in your emergency food supply

<table>
<thead>
<tr>
<th>Bread, Cereal, Rice, and Pasta</th>
<th>Crackers, dry bread sticks; pretzels; Melba toast; matzo bread; chow mein noodles; ready to eat cereal; granola bars; rice cakes; cookies; hard taco shells; commercially canned bread; instant cereal; Wasa bread; popcorn cakes; instant rice; Cup-a-Noodles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>Canned fruit; fruit leather (roll-ups); canned or bottled fruit; dried fruits (raisins, prunes, apricots, etc.); powdered juice drinks; juice concentrates; applesauce</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Canned vegetables; canned vegetable juice; canned vegetable soups; instant potatoes; instant vegetable soups; sun dried tomatoes and other dried vegetables</td>
</tr>
<tr>
<td>Milk, Yogurt and Cheese and Other Calcium Foods</td>
<td>Canned evaporated milk; canned pudding; canned sardines; processed cheese; snack cup pudding; canned salmon and other fish canned with bones; dry milk; canned spinach; Boxed (shelf-stable) milk, rice milk or soy milk</td>
</tr>
<tr>
<td>Meat, Poultry, Fish, Dry Beans and Nuts</td>
<td>Canned tuna; canned chicken/turkey; canned soup with meat; canned chili (meat or bean); peanut butter; textured vegetable protein (soy protein); canned chow mein with meat; sardines; canned meat; canned beans; canned ravioli/spaghetti; shelf-stable tofu (silken); Vienna sausage; canned ham/pork; canned stew; instant refried beans; nuts; instant soup (beef or meat); commercially prepared turkey or beef jerky</td>
</tr>
<tr>
<td>Water</td>
<td>Plan to have on hand one gallon of water per day, per person, for drinking, cooking and personal hygiene</td>
</tr>
</tbody>
</table>
**Three-day emergency food supply for one adult:**

**Example**
The following is an example to give you an idea of what a 3-day supply of shelf-stable foods (for one person) may look like. It is based on the Food Guide Pyramid [before MyPyramid 2006]. This example may contain foods you like and then again it may not. If this example contains foods you don’t like, substitute foods you do like, in the same food group. Use the menu you develop to help decide what foods you may want to store.

### Sample menu for a three-day food supply

<table>
<thead>
<tr>
<th>Bread, Cereal, Rice and Pasta Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Single serving packages ready-to-eat cereal</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Single serving package instant oat cereal*</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>9-oz. box wheat crackers</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>3.6-oz. bag popcorn mini cakes</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>1.5-oz. granola bars</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total # Servings (one person, three days)</strong></td>
<td></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fruit Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6-oz. can orange juice</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>4-oz. can mixed fruit</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>.75-oz. fruit roll</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1.5-oz. box raisins</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>8-oz. boxes apple juice</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4-oz. cups apple sauce</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total # Servings (one person, three days)</strong></td>
<td></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vegetable Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>11.5-oz. can vegetable juice</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1.5-oz. cup instant mashed potatoes*</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>8.5-oz. can mixed vegetables</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>9-oz. can yams</td>
<td>1.5</td>
</tr>
<tr>
<td>1</td>
<td>8-oz. can green beans</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>8-oz. can stewed tomatoes</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total # Servings (one person, three days)</strong></td>
<td></td>
<td><strong>10.5</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meat, Poultry, Fish, Dry Beans, Eggs &amp; Nuts Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10-oz. can chili with beans</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2-oz. can chicken</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>3.25-oz. can tuna</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2.29-oz. cup split pea instant soup*</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>12-oz. jar peanut butter</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total # Servings (one person, three days)</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Milk, Yogurt &amp; Cheese Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>8-oz. boxes of shelf-stable milk or enriched soy milk</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>8.75-oz. box shelf-stable processed cheese</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>5-oz. can evaporated milk</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total # Servings (one person, three days)</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Group</th>
<th>Item</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bag hard candy and chocolate</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gallons boiled water</td>
<td></td>
</tr>
</tbody>
</table>

*Note: If you don’t have a way to boil water when the power is off, do not include instant foods. They will consume your water supply too fast.*
Your three-day emergency food supply for one person

Shelf-stable foods and the [pre-2006] Food Guide Pyramid

The amount of food you need depends on your age, gender, physical condition and activity level. The general nutrition guidelines for a 3-day supply, shown in the table below, are based on the Food Guide Pyramid (pre-2006).

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Servings for 3 days (daily servings)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bread, Cereal, Rice and Pasta Group</strong></td>
<td>18-33 servings for 3 days (6-11 servings daily)</td>
</tr>
<tr>
<td><strong>Vegetable Group</strong></td>
<td>9-15 servings for 3 days (3-5 servings daily)</td>
</tr>
<tr>
<td><strong>Fruit Group</strong></td>
<td>6-12 servings for 3 days (2-4 servings daily)</td>
</tr>
<tr>
<td><strong>Meat, Poultry, Fish, Dry Beans, Eggs and Nuts Group</strong></td>
<td>6-9 servings for 3 days (2-3 servings daily)</td>
</tr>
<tr>
<td><strong>Milk, Yogurt and Cheese Group</strong></td>
<td>6-9 servings for 3 days (2-3 servings daily)</td>
</tr>
</tbody>
</table>

Crackers, dry bread sticks, pretzels, melba toast, read-to-eat cereal, granola bars, rice cakes, popcorn cakes. **If you can boil water, include** instant cereal, instant rice and Cup-a-Noodles.

Canned vegetables, canned vegetable soups. **If you can boil water, include** instant vegetable soups and instant potatoes.

Canned fruit, fruit leather (roll-ups), applesauce, dried fruits (raisins, prunes, apricots), canned or bottled fruit juice. **If you can boil water, include** powdered fruit drinks.

Canned tuna, canned chicken/turkey, canned meat, canned soup with meat, canned chili (meat or bean), sardines, canned beans, canned ravioli/spaghetti, canned ham/pork, canned stew, Vienna sausage, nuts, commercially prepared turkey or beef jerky. **If you can boil water, include** instant soup (meat or bean).

Canned evaporated milk, canned pudding, boxed (shelf-stable) milk or soymilk. **If you can boil water, include** powdered milk.

Plan to have on hand **one gallon of water per day, per person**, for drinking, cooking and personal hygiene.

Once assembled, your emergency food supply should be stored in the coolest cabinets or pantry and away from appliances that produce heat. Canned foods should not be stored in outside buildings where the temperature gets extremely high in the summer or where it may freeze in the winter. Remember to store the food supply where it will be safe from insects, rodents and possible flooding.

**Menu Sample**

Here is a list of shelf-stable meals that can be provided at disaster sites. All meals can be individually packaged on a foam tray with clear-cling plastic wrap.

**Breakfast:**
- Cereal bar
- Orange Juice, 6-oz.
- Hot cereal envelope
- Paper kit

**Meal I:**
- Peanut butter cups (2)
- Grape jelly cups (2)
- Peanut butter-filled crackers 2 (2 pk.)
- Apple sauce, 4-oz.
- Creme sandwich cookies (4 pk)
- Water, bottled, 16-oz.
- Paper kit

**Meal II:**
- Tuna, 3-oz.
- P/C mayo
- Crackers 2 (2 pk.)
- Mixed Fruit, 4-oz.
- Cookies (4 pk.)
- Water, bottled, 16-oz.
- Paper kit
SECTION THREE
SOURCES & RESOURCES

Note: Some of the websites listed may require visitors to register their email addresses in order to gain access to the site. Others are membership organizations, and some are companies that sell disaster-planning materials.

GOVERNMENT RESOURCES

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
www.cdc.gov

CDC’S EMERGENCY PREPAREDNESS AND RESPONSE
www.bt.cdc.gov

CDC’S NATIONAL AG SAFETY DATABASE (NASD)
www.cdc.gov/nasd/index.html

NASD’S BASIC FIRST AID
www.cdc.gov/nasd/docs/d000101-d000200/d000105/d000105.html

CONSUMER ADVICE: DISASTER ASSISTANCE
www.foodsafety.gov/%7Efsg/fsgdisas.html

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
www.fema.gov

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)’S DISASTERS AND EMERGENCIES WEBSITE
www.fema.gov/library/dizandemer.shtm

“EMERGENCY MANAGEMENT GUIDE FOR BUSINESS AND INDUSTRY” PUBLISHED BY FEMA
www.fema.gov

FOOD AND NUTRITION INFORMATION CENTER
www.nal.usda.gov/fnic

KANSAS STATE DEPARTMENT OF EDUCATION’S “OVERVIEW OF EMERGENCY READINESS RESOURCES FOR SCHOOL FOOD SERVICE”
Note: There are many websites with state-specific emergency information, such as emergency contact numbers, local shelters and disaster-alert signals. Often, the websites for state universities will offer such information.

NONGOVERNMENTAL AGENCIES & ORGANIZATIONS & SERVICES

AMERICAN BIO-RECOVERY ASSOCIATION (ABRA)
www.americanbiorecovery.com

AMERICAN HEART ASSOCIATION
www.americanheart.org

AMERICAN HEART ASSOCIATION, “HANDBOOK OF EMERGENCY CARDIOVASCULAR CARE,” THE LATEST CONSENSUS RECOMMENDATIONS FROM THE 2005 INTERNATIONAL CONSENSUS CONFERENCE ON CARDIOPULMONARY RESUSCITATION AND EMERGENCY CARDIOVASCULAR CARE SCIENCE
www.americanheart.org

AMERICAN HOSPITAL ASSOCIATION
www.aha.org

AMERICAN RED CROSS
www.redcross.org

AMERICA’S SECOND HARVEST
www.secondharvest.org

DISASTER RESOURCE GUIDE
www.disasterresource.com

HARVARD HEALTH PUBLICATIONS
www.health.harvard.edu

INSTITUTE FOR BUSINESS & HOME SAFETY
www.ibhs.org

MAYO CLINIC
www.mayoclinic.com

NATIONAL RESTAURANT ASSOCIATION
www.restaurant.org

PANDEMIC

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
www.pandemicflu.gov

“AVIAN INFLUENZA AND PANDEMIC COMPARISONS AND REGULATORY ISSUES,” BY BRUCE R. CORDS, PH.D., VICE PRESIDENT, ENVIRONMENT, FOOD SAFETY AND PUBLIC HEALTH, ECOLAB INC.
CDC’S GUIDELINE FOR ENVIRONMENTAL INFECTION CONTROL IN HEALTH-CARE FACILITIES
www.cdc.gov/ncidod/dhqp/gl_environinfection.html

CDC’S HAND HYGIENE AFTER A DISASTER
www.bt.cdc.gov/disasters/handhygiene.asp

CDC’S HAND HYGIENE IN EMERGENCY SITUATIONS
www.bt.cdc.gov/disasters/handhygienefacts.asp

“INFLUENZA CONTROL PROCEDURES,” FROM ECOLAB INC.

“LEADERSHIP AND CHANGE, AVIAN FLU: WHAT TO EXPECT AND HOW COMPANIES CAN PREPARE FOR IT,” KNOWLEDGE@WHARTON, A WEBSITE FOR WHARTON BUSINESS SCHOOL, UNIVERSITY OF PENNSYLVANIA
http://knowledge.wharton.upenn.edu/article/1402.cfm

NATIONAL CHICKEN COUNCIL, THE NATIONAL TURKEY FEDERATION AND THE EGG SAFETY CENTER ON THE INDUSTRY’S DEFENSES AGAINST THE SPREAD OF AVIAN INFLUENZA
www.avianinfluenzainfo.com

NATIONAL INSTITUTES OF HEALTH’S NATIONAL INSTITUTES OF ALLERGY AND INFECTIOUS DISEASES
http://www3.niaid.nih.gov

PUBLIC ENTITY RISK INSTITUTE
www.riskinstitute.org

“WORKPLACE INFLUENZA PANDEMIC HEALTH PLAN,” FROM MICHAEL STAPLETON ASSOCIATES, AN EXPLOSIVES DETECTION SECURITIES COMPANY, NEW YORK, NY
www.mikestapleton.com

BIOTERRORISM

HEALTH SERVICE SUPPORT IN A NUCLEAR, BIOLOGICAL, AND CHEMICAL ENVIRONMENT. HEADQUARTERS, DEPARTMENT OF THE ARMY; OCTOBER 2002, ARMY FIELD MANUAL 4-02.7 (8-10-7).

www.ashfsa.org

www.eatright.org

www.cfsan.fda.gov/~dms/securi11.html

USDA’S “BIOSECURITY CHECKLIST FOR SCHOOL FOODSERVICE PROGRAMS: DEVELOPING A BIOSECURITY MANAGEMENT PLAN”

TERRORISM

AMERICAN RED CROSS, “TERRORISM—PREPARING FOR THE UNEXPECTED”
www.redcross.org/services/disaster/0,1082,0_589_,00.html

“BEST PRACTICES IN WORKPLACE SECURITY,” A HOMELAND SECURITY GUIDE DEVELOPED BY THE STATE OF SOUTH CAROLINA
www.llr.state.sc.us/workplace/Full%20Report.pdf


FDA’S FREQUENTLY ASKED CONSUMER QUESTIONS ABOUT FOOD SAFETY AND TERRORISM
www.cfsan.fda.gov/~dms/fssterrqa.html

FREE COPIES OF “IMPROVING SECURITY FROM THE INSIDE OUT”
http://nsi.org

NATIONAL SECURITY INSTITUTE’S SECURITY RESOURCE NET
http://nsi.org/Library/Terrorism/bombthreat.html

FOOD & WATER SAFETY & FOODBORNE ILLNESS

CDC’S FOOD SAFETY OFFICE
www.cdc.gov/foodsafety

CDC’S “NATURAL DISASTERS: KEEP FOOD AND WATER SAFE AFTER A NATURAL DISASTER OR POWER OUTAGE”
www.bt.cdc.gov/disasters/foodwater.asp

FDA’S “BAD BUG BOOK”
www.cfsan.fda.gov/~mow/intro.html

FDA’S CENTER FOR FOOD SAFETY AND APPLIED NUTRITION
http://vm.cfsan.fda.gov/list.html

FDA’S “FOOD SAFETY INFORMATION FOR HURRICANE AFTERMATH”
www.cfsan.fda.gov/~dms/fsdisas.html
FEMA’S EMERGENCY FOOD AND WATER SUPPLY GUIDELINES
www.fema.gov/library/emfdwtr.shtm

FEDERAL, STATE AND LOCAL GOVERNMENT FOOD SAFETY INFORMATION
www.foodsafety.gov

USDA ALERT: KEEPING FOOD SAFE DURING FLOODING AND POWER OUTAGES

USDA’S “KEEPING FOOD SAFE DURING AN EMERGENCY”
www.fsis.usda.gov/Fact_Sheets/keeping_food_Safe_during_an_emergency/index.asp

USDA MEAT AND POULTRY HOTLINE:
1-888-MPHotline.
Available for consumers’ questions and concerns about food safety.

GENERAL OVERVIEW: CRISIS MANAGEMENT

AMERICAN RED CROSS DISASTER PLANS
www.redcross.org/preparedness/cdc_english/CDC.asp

AMERICAN RED CROSS, “DISASTER SERVICES, BE PREPARED”
www.redcross.org/services/disaster/beprepared

AMERICAN RED CROSS, “PREPARING YOUR BUSINESS FOR THE UNTHINKABLE”
www.redcross.org

BARTON, LAURENCE. CRISIS IN ORGANIZATIONS II. ORDERING INFORMATION AT:
www.thomsonedu.com

BLYTHE, BRUCE T. BLINDSIDE: A MANAGER’S GUIDE TO CATASTROPHIC INCIDENTS IN THE WORKPLACE. ORDERING INFORMATION AT:
www.penguininputnam.com or www.amazon.com

“EMERGENCY READINESS PLAN: A GUIDE FOR THE SCHOOL FOODSERVICE OPERATION,” BY THE NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE AND USA’S FOOD AND NUTRITION SERVICE
www.nfsmi.org

“EMERGENCY MANAGEMENT GUIDE FOR BUSINESS AND INDUSTRY,” PUBLISHED BY FEMA
www.fema.gov

FINK, STEVEN. CRISIS MANAGEMENT: PLANNING FOR THEINEVITABLE. ORDERING INFORMATION AT:
www.amazon.com/

“OPEN FOR BUSINESS,” DEVELOPED BY THE INSTITUTE FOR BUSINESS & HOME SAFETY AND THE SMALL BUSINESS ADMINISTRATION
www.ibhs.org/docs/openforbusiness.pdf

OSHA’S “DOES YOUR FACILITY NEED AN EMERGENCY ACTION PLAN?”
www.osha.gov/dep/evacmatrix/evacplan_appa.html

OSHA’S EMERGENCY RESPONSE TECHNICAL LINKS
www.osha.gov/SLTC/emergencypreparedness/index.html

OSHA’S EVACUATION PLANNING MATRIX
www.osha.gov/dep/evacmatrix/index.html

PUBLIC ENTITY RISK INSTITUTE
www.riskinstitute.org

RESTAURANT & BAR 911 EMERGENCY INFO-BOOK™
www.911infobook.com
Contact: Nicole@911infobook.com

STROHL SYSTEMS
www.strohl.com/Education/WhatisBCP/default.asp

CRISIS, DISASTER, EMERGENCY & RISK COMMUNICATION

“IFDA CRISIS COMMUNICATION MANUAL,” BY THE INTERNATIONAL FOODSERVICE DISTRIBUTORS ASSOCIATION
www.ifdaonline.org

THE PETER SANDMAN RISK COMMUNICATION WEBSITE. SANDMAN IS A CONSULTANT WHO SPECIALIZES IN RISK COMMUNICATION: PRECAUTION ADVOCACY (“WATCH OUT!”), OUTRAGE MANAGEMENT (“CALM DOWN!”), AND CRISIS COMMUNICATION (“WE’LL GET THROUGH THIS TOGETHER”).
www.psandman.com

WORKPLACE ACCIDENTS & VIOLENCE

OSHA’S JOB HAZARD ANALYSIS
www.osha.gov/Publications/osha3071.html


BUSINESS CONTINUITY

AMERICAN SOCIETY FOR INDUSTRIAL SECURITY (ASIS)
www.asisonline.org

ASSOCIATION OF CONTINGENCY PLANNERS
www.acp-international.com

THE BUSINESS CONTINUITY INSTITUTE
www.thebci.org

CONTINGENCY PLANNING & MANAGEMENT
www.contingencyplanning.com

CRISIS COMMUNICATION (NORTHERN ILLINOIS UNIVERSITY)
www.niu.edu/newsplace/crisis.html

DISASTER RECOVERY INSTITUTE INTERNATIONAL
www.drii.org

DISASTER RECOVERY JOURNAL
www.drj.com

DISASTER RESOURCE GUIDE
www.disaster-resource.com

DISASTER RECOVERY YELLOW PAGES
www.TheDRYP.com/

GETTING BACK TO BUSINESS: RESOURCES FOR RESTAUREURS, BY THE NATIONAL RESTAURANT ASSOCIATION
www.restaurant.org

GLOBAL PARTNERSHIP FOR PREPAREDNESS
www.globalpreparedness.org

INFORMATION RELATED TO CRISIS MANAGEMENT & ORGANIZATIONS

COURSE OFFERING
“Crisis & Emergency Response Management” a course offered 3 times during the year at Florida International University in Miami. Taught by Edward Glab, acting director, Knight Ridder Center for Excellence in Management, FIU College of Business Administration. Glab was a public affairs executive with ExxonMobil for more than 25 years, managing government, community, and media relations, corporate marketing and advertising, and emergency response, including crisis management and media training for hundreds of executives. To register, download a registration form at: http://ope.fiu.edu/Registration.doc

AFCOM (an association for data center professionals)
Area of Focus: Emergency Management, Crisis Management, Business Continuity, Security, Safety & Education
www.afcom.com/afcomnew/index.asp

AMATEUR RADIO DISASTER SERVICES
www.ares.org

AMERICAN ACADEMY OF MEDICAL ADMINISTRATORS (AAMA)
www.aameda.org

AMERICAN BIO-RECOVERY ASSOCIATION (ABRA)
www.americanbiorecovery.com

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION (AIHA)
www.aiha.org

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS (AIChe)
www.aiche.org

AMERICAN LIFELINES ALLIANCE (ALA)
www.americanlifelinesalliance.org

AMERICAN PSYCHOLOGICAL ASSOCIATION (APA)
www.apa.org

AMERICAN PUBLIC WORKS ASSOCIATION
www.apwa.net

AMERICAN RADIO RELAY LEAGUE (ARRL)
www.arrl.org
Area of Focus: Emergency Management, Homeland Security

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)
www.asce.org

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE)
www.asse.org

APPLIED TECHNOLOGY COUNCIL
www.atcouncil.org

ARMA INTERNATIONAL
www arma.org

ASSOCIATION FOR ENTERPRISE INTEGRATION (AFEI)
www.afei.org

ASSOCIATION FOR FACILITIES ENGINEERING (AFE)
www.afe.org
DRI INTERNATIONAL
www.drii.org

EARTHQUAKE ENGINEERING RESEARCH INSTITUTE (EERI)
www.eeri.org

EMERGENCY INFORMATION INFRASTRUCTURE PROJECT (EIP)
www.emforum.org

EMERGENCY MANAGEMENT ACCREDITATION PROGRAM (EMAP)
www.emaponline.org

EMPLOYEE ASSISTANCE PROFESSIONALS (EAP) ASSOCIATION
www.eapassn.org

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
www.fema.gov

FLORIDA EMERGENCY MEDICINE FOUNDATION
www.femf.org
Area of Focus: Emergency Management

GLOBAL PARTNERSHIP FOR PREPAREDNESS
www.globalpreparedness.org

GLOBAL WARMING INTERNATIONAL CENTER (GWIC)
www.GlobalWarming.net

GOVERNMENT EMERGING TECHNOLOGY ALLIANCE (GETA)
www.getaevents.org

HEALTHCARE INFORMATION & MANAGEMENT SYSTEMS SOCIETY (HIMSS)
www.himss.org

HIGH TECHNOLOGY CRIME INVESTIGATION ASSOCIATION (HTCIA)
www.htcia.org

HOME SAFETY COUNCIL
www.homesafetycouncil.org

HUMANE SOCIETY OF THE UNITED STATES
www.hsus.org/disaster
Area of Focus: Emergency Management, Homeland Security

INFORMATION SYSTEMS AUDIT & CONTROL ASSOCIATION (ISACA)
www.isaca.org

INFORMATION SYSTEMS SECURITY ASSOCIATION (ISSA)
www.issa.org

INFRAGARD
Area of Focus: This FBI site provides information about security.
www.infragard.net

THE INFRASTRUCTURE SECURITY PARTNERSHIP (TISP)
www.tisp.org

INSTITUTE FOR BUSINESS & HOME SAFETY (IBHS)
www.ibhs.org
Area of Focus: Business Continuity

INSTITUTE OF INTERNAL AUDITORS (IIA)
www.theiia.org

INSURANCE INFORMATION INSTITUTE
www.iii.org

INTERNATIONAL SOCIETY FOR TRAUMATIC STRESS STUDIES (ISTSS)
www.istss.org

INTERNET SECURITY ALLIANCE
www.isalliance.org

IT GOVERNANCE INSTITUTE
www.itgovernance.org

JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS (JCAHO)
www.jcaho.org

THE MASONRY SOCIETY
www.masonrysociety.org

MERCY CORPS
www.mercycorps.org

MULTIDISCIPLINARY CENTER FOR EARTHQUAKE ENGINEERING RESEARCH (MCEER)
mceer.buffalo.edu
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<th>Organization</th>
<th>Website</th>
<th>Area of Focus</th>
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<tr>
<td>THE NATIONAL ACADEMIES</td>
<td><a href="http://www.nationalacademies.org">www.nationalacademies.org</a></td>
<td>National Security</td>
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<td>NATIONAL ACADEMIES OF EMERGENCY DISPATCH (NAED)</td>
<td><a href="http://www.emergencydispatch.org">www.emergencydispatch.org</a></td>
<td>Emergency Management</td>
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<td>NATIONAL ASSOCIATION OF CATASTROPHE ADJUSTERS (NACA)</td>
<td><a href="http://www.nacatadj.org">www.nacatadj.org</a></td>
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<td>NATIONAL ASSOCIATION OF EMERGENCY MEDICAL TECHNICIANS (NAEMT)</td>
<td><a href="http://www.naemt.org">www.naemt.org</a></td>
<td>Education</td>
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<td>NATIONAL ASSOCIATION OF EMS PHYSICIANS (NAEMSP)</td>
<td><a href="http://www.naemsp.org">www.naemsp.org</a></td>
<td>Emergency Management</td>
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<td>NATIONAL CENTER FOR POST-TRAUMATIC STRESS DISORDER</td>
<td><a href="http://www.ncptsd.org">www.ncptsd.org</a></td>
<td>Crisis Management</td>
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<td>NATIONAL COMMUNICATIONS OFFICERS ASSOCIATION</td>
<td><a href="http://www.nciusa.com">www.nciusa.com</a></td>
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<tr>
<td>NATIONAL EMERGENCY COMMUNICATIONS INSTITUTE (NECI)</td>
<td><a href="http://www.neci911.com">www.neci911.com</a></td>
<td>911 Training</td>
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<tr>
<td>NATIONAL EMERGENCY MANAGEMENT ASSOCIATION (NEMA)</td>
<td><a href="http://www.nemaweb.org">www.nemaweb.org</a></td>
<td>Emergency Management, Homeland Security</td>
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<tr>
<td>NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION (NEHA)</td>
<td><a href="http://www.neha.org">www.neha.org</a></td>
<td>Emergency Management, Crisis Management, Safety, Environmental Health &amp; Counter Bioterrorism</td>
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<td>NATIONAL FIRE SPRINKLER ASSOCIATION (NFSA)</td>
<td><a href="http://www.nfsa.org">www.nfsa.org</a></td>
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<tr>
<td>NATIONAL HYDROLOGICAL WARNING COUNCIL</td>
<td><a href="http://www.alertsystems.org">www.alertsystems.org</a></td>
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<tr>
<td>NATIONAL INSTITUTE FOR URBAN SEARCH &amp; RESCUE</td>
<td><a href="http://www.niusr.org">www.niusr.org</a></td>
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<tr>
<td>NATIONAL LIGHTNING SAFETY INSTITUTE</td>
<td><a href="http://www.lightningsafety.com">www.lightningsafety.com</a></td>
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<td>NATIONAL MENTAL HEALTH INFORMATION CENTER</td>
<td><a href="http://www.mentalhealth.samhsa.gov">www.mentalhealth.samhsa.gov</a></td>
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<td>NATIONAL NEXT OF KIN REGISTRY (NOKR)</td>
<td><a href="http://www.nokr.org">www.nokr.org</a></td>
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<td>NATIONAL ORGANIZATION FOR VICTIM ASSISTANCE (NOVA)</td>
<td><a href="http://www.trynova.org">www.trynova.org</a></td>
<td>Emotional / Spiritual Care (Crisis Intervention)</td>
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<tr>
<td>NATIONAL SAFETY COUNCIL (NSC)</td>
<td>Email: <a href="mailto:info@nsc.org">info@nsc.org</a></td>
<td><a href="http://www.nsc.org">www.nsc.org</a></td>
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<td>NATIONAL SHERIFF'S ASSOCIATION</td>
<td><a href="http://www.sherriffs.org">www.sherriffs.org</a></td>
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<tr>
<td>NATIONAL VOLUNTARY ORGANIZATIONS ACTIVE IN DISASTER</td>
<td><a href="http://www.nvoad.org">www.nvoad.org</a></td>
<td>Emergency Management, Crisis Management</td>
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<td>NATIONAL WATERSHED COALITION</td>
<td><a href="http://www.watershedcoalition.org">www.watershedcoalition.org</a></td>
<td>Emergency Management, Safety &amp; Watershed Management</td>
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<td>NATURAL HAZARDS PROJECT (NHP)</td>
<td><a href="http://www.oas.org/nhp">www.oas.org/nhp</a></td>
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NORTH AMERICAN CENTER FOR EMERGENCY COMMUNICATIONS (NACEC)
www.nacec.org

NORTH EAST STATES EMERGENCY CONSORTIUM
www.nesec.org
Area of Focus: Emergency Management

NORTHERN NEW ENGLAND DISASTER RECOVERY INFORMATION EXCHANGE (NEDRIX)
www.nedrix.com

OPERATION USA
www.opusa.org
Area of Focus: Crisis Management, Disaster Relief & Development

PARTNERSHIP FOR EMERGENCY PLANNING (PEP)
www.pepkc.org

PRIVATE & PUBLIC BUSINESSES, INC.
www.ppbi.org

PUBLIC AGENCY RISK MANAGERS ASSOCIATION (PARMA)
www.parma.com

PUBLIC RISK MANAGEMENT ASSOCIATION (PRIMA)
www.primacentral.org

PUBLIC UTILITIES RISK MANAGEMENT ASSOCIATION (PURMA)
www.purma.org

RISK & INSURANCE MANAGEMENT SOCIETY (RIMS)
www.rims.org

SALVATION ARMY
www.salvationarmyusa.org
Area of Focus: Emergency Management

SECURITIES INDUSTRY ASSOCIATION
www.sia.com

SECURITY INDUSTRY ASSOCIATION
www.siaonline.org
Area of Focus: Homeland Security, Safety & Security
Geographic Region of Service: National

THE SECURITY INSTITUTE
www.thesecurityinstitute.org

SEISMOLOGICAL SOCIETY OF AMERICA
www.seismosoc.org
Area of Focus: Earthquake Science

SHARE
www.share.org
Area of Focus: IT Training

SOCIETY FOR HUMAN RESOURCE MANAGEMENT (SHRM)
www.shrm.org

SOCIETY FOR RISK ANALYSIS
www.sra.org
Area of Focus: Earthquake Science Research, Education, & Outreach. Geographic Region of Service: Southern California

SOUTHERN CALIFORNIA EARTHQUAKE CENTER (SCEC)
www.scec.org
Area of Focus: Earthquake Science, Education, Outreach & Knowledge Transfer

STORAGE NETWORKING INDUSTRY ASSOCIATION (SNIA)
www.snia.org

UNITED WAY
http://efsp.unitedway.org

U.S. CHAMBER OF COMMERCE
www.uschamber.com

U.S. GEOLOGICAL SURVEY - NATIONAL EARTHQUAKE INFORMATION CENTER
http://neic.usgs.gov
Area of Focus: Government

U.S. GEOLOGICAL SURVEY - NATIONAL LANDSLIDE INFORMATION CENTER
http://geohazards.cr.usgs.gov
Area of Focus: Crisis Management, Risk Management

U.S. VETERANS AFFAIRS DEPARTMENT
www.ncptsd.org

VOLUNTEERS IN TECHNICAL ASSISTANCE (VITA)
www.vita.org

WALL STREET TECHNOLOGY ASSOCIATION (WSTA)
www.wsta.org
Area of Focus: Business Continuity, Crisis & Risk Management, Information Security & Education via publications, seminars & conferences for financial technology members
WESTERN STATES SEISMIC POLICY COUNCIL (WSSPC)
www.wsspc.org

WISCONSIN TECHNICAL RESCUE OPERATIONS TEAM
wtrot.tripod.com
A private non-profit Technical Rescue Team that offers training in Technical, Urban and Wilderness Search & Rescue

ADDITIONAL RESOURCES: PUBLICATIONS & PORTALS

ABERDEEN GROUP
www.aberdeen.com

AVAILABILITY.COM
www.availability.com

BITPIPE, INC.
www.bitpipe.com

CANADIAN SECURITY MAGAZINE
www.canadiansecuritymag.com

CFO ONLINE
www.cfo.com

CHIEF EXECUTIVE
www.chiefexecutive.net

CIO ONLINE
www.cio.com

CONTINGENCY PLANNING & MANAGEMENT (CPM)
www.contingencyplanning.com

CONTINUITY CENTRAL
www.continuitycentral.com

CONTINUITY INSIGHTS MAGAZINE
www.continuityinsights.com

CONTINUITY INSURANCE & RISK (CIR)
www.cirmagazine.com

CHIEF SECURITY OFFICER MAGAZINE AND CSO ONLINE
www.csoonline.com

DATA CENTER MANAGER
www.afcom.com

DATALINK
www.datalink.com

DISASTER RECOVERY JOURNAL (DRJ)
www.drj.com

DISASTER RESOURCE GUIDE (DRG)
www.disaster-resource.com

EVERY SECOND COUNTS
www.nsc.org/pubs/esc.htm

E-SECURITY PLANET
www.ecomsecurity.com

ECONOMIST INTELLIGENCE UNIT (EIU)
www.eiu.com

ENTERPRISE SECURITY JOURNAL
www.esj.com

ER MAGAZINE
www.er-magazine.com

FM LINK
www.fmlink.com

FORRESTER RESEARCH
www.forrester.com

GANTTHEAD
www.gantthead.com

GARTNER GROUP
www.gartner.com

HOMELAND DEFENSE JOURNAL
www.homelanddefensejournal.com

HOMELAND PROTECTION PROFESSIONAL
www.hppmag.com

IAEM BULLETIN
www.iaem.com

IDC RESEARCH
www.idc.com

INFORMATION AVAILABILITY NEWSLETTER
www.mimix.com/latestnews/express.asp

INFORMATION SECURITY MAGAZINE
www.infosecuritymag.com

INFORMATION WEEK
www.informationweek.com

INTERNETWEEK
http://internetweek.cmp.com

JOURNAL OF EMERGENCY MANAGEMENT
www.emergencyjournal.com

NATURAL HAZARDS OBSERVER
www.colorado.edu/hazards/o/
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<tr>
<th>Publication</th>
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<td>Network Computing</td>
<td><a href="http://www.networkcomputing.com">www.networkcomputing.com</a></td>
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<td>Network World</td>
<td><a href="http://www.nwfusion.com">www.nwfusion.com</a></td>
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<td>NFPA Journal</td>
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<td>Occupational Health &amp; Safety</td>
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<td>Risk &amp; Insurance</td>
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<td>Safety &amp; Health</td>
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**Foodservice Industry Publications**

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<td>Foodservice Director</td>
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<td><a href="http://www.foodservice411.com/rimag">www.foodservice411.com/rimag</a></td>
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