Emergency Response

Planning Guide

(Revised)





EMERGENCY INFORMATION

Ambulance
Fire
Police
Poison Control Centre
Doctor
Companies Emergency Phone Number

Prepared by Canadian Centre for Occupational Health and Safety 135 Hunter Street East, Hamilton ON Canada L8N 1M5

Emergency Response Planning Guide

1st Edition

Revised

Published 2020 P02-3E ISBN 0-660-18910-0 DSS Catalogue Number CC273-2/02-3E

> Canada: \$15.00 (+ GST) US/Others: \$15.00 (USD)

(Prices subject to change without notice)

Ce guide est aussi disponible en français comme Guide de planification des mesures d'urgence.

Contact CCOHS Client Services at 1-800-668-4284 or clientservices@ccohs.ca ©CCOHS, 2020

Personal Information

ii

This handbook belongs to: Name _____ Company _____ Position _____ Address _____ Phone _____ Doctor _____ Phone _____ Allergies _____ Medical Conditions _____ In case of emergency please notify: Name _____ Relation _____ Address _____ Phone _____

Objectives

This booklet serves as a guide for developing a comprehensive emergency response plan. It will help you to:

- conduct a risk assessment:
- evaluate potential losses;
- identify potential emergencies;
- develop a comprehensive emergency preparedness policy and response program;
- develop a business continuity and business recovery plan;
- design, conduct and evaluate drills and exercises;
- · follow-up on and learn from incidents; and
- continuously improve the response capability.

Target Audience

This guide is written for anyone who wants to implement an emergency response plan and manage comprehensive prevention programs within the organization.

It will also assist:

- senior managers making decisions about the need for, or improvement to, emergency response plans;
- individuals assigned the responsibility of developing and implementing emergency response plans; and
- health and safety committees making informed recommendations regarding an organization's existing response plans.

The contents are organized by response plan elements, which apply to a wide range of business sectors.

Scope

This guide provides basic information to assist in the development of workplace emergency preparedness and response programs. All organizations should have an emergency response program in place. Customers and stakeholders expect it as an indication of reliable business operation. The content is presented by program components that apply to a wide range of business sectors.

Guidelines for establishing a comprehensive emergency preparedness program depend on:

- the potential risk of serious incidents and emergencies at your organization;
- the size of your organization; and
- the legal requirements in your jurisdiction.

Summary

This guide outlines ways of developing and implementing an emergency response plan. To be able to deal with emergencies when they occur, it is important that you develop and implement a plan in advance.

The objective of an emergency response plan is to be prepared to deal with unforeseen situations such as fires, chemical spills, explosions, floods, injury, illness and other crisis situations. Such a plan is essential to protect health, lives, property and the environment.

The plan outlines actions that employers and employees must take in the event of an emergency situation to ensure employee safety and to minimize property damage.

An emergency plan should be specifically tailored to your worksite. It must include ways of dealing with all potential emergencies that can occur in your workplace. The plan must clearly outline the procedures to be followed in the event of an emergency. Such procedures include:

- ways to alert employees;
- · reporting emergencies;
- · evacuation;
- · designated assembly locations;
- contact people and their telephone numbers;
- first aid and medical assistance;
- clean-up and business resumption;
- · business continuity;
- employee training;
- · ways of testing the plan (drills); and
- communication with media, community and employees and their families

A disorganized and unprepared approach to dealing with emergencies may result in confusion, loss of lives, injury, financial or business losses, and property damage.

NOTES		

Table of Contents

Target Audience	iii
Scope	iv
Summary	iv
Section I	
Emergency Response Overview	1
1. Emergency Situations	2
Definition	2
Types of Emergencies	
Emergencies May Have Severe Consequences	3
2. Emergency Response Plan	4
Definition	4
3. Cornerstones of an Emergency Plan	5
Prevention	5
Preparedness	5
Response	6
Recovery	6
4. Developing the Plan	7
Step 1: Establish the Planning Team	7
Step 2: Assess the Risks and Company Capabilities	7
Step 3: Develop the Plan	
Step 4: Implement the Plan	
Step 5: Evaluate Effectiveness of the Plan	
Step 6: Improve the Plan Continuously	12
Section II	
Establishing the Planning Team	13
1. Creating the Planning Team	14
Team Members	14
Management Commitment	14
2. Establishing an Emergency Response Policy	16
Communicate the Policy	

Section III

P	Assessing Risk and Capability	19
1.	. Performing Hazard Analysis	20
	Define Standards of Safe Conditions	23
	Review Basic Data	24
	Identify the Hazards	24
	Determine the Worst-Case Scenario	25
	Assess the Risk	
	Identify Preventive Measures	26
2	2. Assessing Company Capabilities	31
	Resources	31
	Supplies and Equipment	32
	Facilities and Equipment Lists	33
	Equipment Inspection	34
	Protection of Records	36
	Mutual Aid	37
0	ion IV Developing the Emergency Response Plan Objectives	
	2. Response Organization	
	Management of an Emergency	
	Emergency Response Functions	
	Job Descriptions	
3	3. Alarm Activation	
	Internal Alarm	
	External Alarm	
	Backup alarms	
	Off-site Alarms	
4	I. Reportina	53
	Triage Questions	
5	5. Resource Mobilization	
	Resource Consideration	
6	6. Response Procedures	
	Developing Response Procedures	
	Response to Specific Scenarios	
	r to opoo oooaoo	

	Responding to Spills	62
	Responding to Injury and Illness	64
	Responding to Storms	65
	Emergency Preparedness	71
	Bomb Threats	73
	Emergency Evacuation Procedures	77
	Administrative Tips for Workplace Evacuation	77
	Responding to Workplace Violence	78
	Responding to Power Failure	79
	Responding to Sabotage	80
	Emergency Shutdown Procedures	82
	Important Considerations in Developing Emergency Evacu	
	Providing Victim Support	
	Responding to Civil Demonstration	
, ,	Crisis Management	
<i>.</i> . (Notification	
	Reporting	
	Emergency Operations Centre	
	Safety and Security of Employees	
	Communication	
	Communication with the general public	
_	0 1	
ö.	Developing a Media Plan	
_	Preplanned Messages	
9.	Business Recovery Plans	
	Business Resumption	
	Business Impact Analysis	
	Incident Investigations	
	Damage Assessments	
10.	. Cleanup and Restoration Plans	102
	Claims Procedures	103

Section V

Plan Implementation	105
1. Personnel Training	106
2. Drills and Exercises	109
Full-Scale Exercise	110
Functional Drills	110
Tabletop Exercises	110
Drill Preparation	
Scenario Planning	
Drill Notification	112
After the Drill	112
3. Evaluating Exercise Effectiveness	113
Post-exercise evaluation	113
Section VI	
Continuous Improvement	117
1. Incident Follow-up	118
2. Tips for Continuous Improvement	119
Section VII	
Standards & Resources	123
1. Key References for Additional Information	124
Canada	124
United States	124
Emergency Response Planning Resources	126
2. NFPA Standards	127
3. Fire Code Inspection Requirements	130
4. Emergency Response Organizations	

Section I

Emergency Response Overview

- 1. Emergency Situations
- 2. Emergency Response Plan
- 3. Cornerstones of an Emergency Plan
- 4. Steps to Develop a Plan

1. Emergency Situations

Definition

An emergency is any situation or occurrence of a serious nature, developing suddenly and unexpectedly, and demanding immediate action.

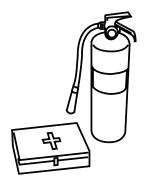
Types of Emergencies

Typical emergencies

- Fires
- Spills
- · Critical injuries
- Explosions
- · Heart attacks and strokes
- · Transportation accidents
- · Power or fuel loss
- Workplace violence
- Bomb threats

Natural disasters

- Ice storms
- Tornadoes and severe storms
- Floods
- Earthquake



Business emergencies

- Critical data loss
- Critical supply shutdown

Emergencies May Have Severe Consequences

- Employee health and safety
- Insurance costs
- Negative media attention
- Public pressure
- Liability
- Convictions and fines

The annual cost of fire, in Canada alone:

Deaths: 388

Injuries: 2,287

Property losses: \$1,231,936,723

Human Resources Development Canada, Fire Losses in Canada Annual Report 1999, http://info.load-otea.hrdc-drhc.gc.ca/fire_ prevention/ fire_losses/annual. shtml.

Effective emergency response protects employees and minimizes business losses

Studies have shown that companies with effective response plans "weather the storm" much more effectively than others.

Prepared companies have plans in place to protect the health, safety and lives of people, the environment and property.

2. Emergency Response Plan

Definition

An integrated set of policies and procedures that allows you to prepare for, respond to and recover from emergency incidents.

Emergency response procedures

Response procedures are steps you can take to:

- · control the event; and
- minimize the consequences.

The procedures developed must:

- be specific to the incident type;
- · be flexible to allow for a changing scenario;
- provide the resources to deal with the situation;
- · identify the source of critical resources; and
- identify procedures to activate appropriate resources.

EXAMPLE

Smaller organizations will depend on the fire department to handle fires. A large firm could have fire response personnel capable of responding until the fire department arrives

Summary

Be prepared in advance to:

- protect employees and others;
- protect property; and
- protect the environment.

3. Cornerstones of an Emergency Plan

Prevention

Prevention policies and procedures help to ensure that the risk of occurrence of emergencies is either eliminated or minimized.

Examples of proactive preventive actions include:

- risk assessment to identify hazards;
- implementation of controls to reduce or eliminate hazards;
- employee training;
- regular inspections of the workplace; and
- · excellent housekeeping.

Preparedness

Preparedness policies and procedures ensure that we are prepared to effectively respond to an emergency.

Examples include:

- identifying resources and capabilities;
- · documenting equipment lists;
- identifying special needs;
- providing personnel training;
- conducting drills and exercises; and
- ensuring mutual aid arrangements with other organizations.

Response

Response procedures, checklists and other resources are used during an incident response.

Examples include:

- · notification procedures;
- fire procedures putting out the flames;
- evacuation procedures ensuring safety of occupants.

Recovery

Recovery policies and procedures allow the organization to recover quickly and be back in operation with as little disruption as possible.

Organizations might, for example, have policies and procedures for:

- dealing with employee injuries and health and safety concerns;
- providing assistance to deal with employees' fears and stress;
- managing insurance claims;
- alternate offices and communications;
- alternate production capability;
- rebuilding/replacing damaged or lost property; and
- · responding to customer needs.



4. Developing the Plan

There are six key steps to developing an emergency plan:

- 1. Establish the planning team.
- 2. Assess the risks and company capabilities.
- 3. Develop the plan.
- 4. Implement the plan.
- Evaluate effectiveness of the plan by drills and other means.
- 6. Improve the plan continuously.

Step 1: Establish the Planning Team

Effective emergency response planning requires a team approach. The company should combine various skill sets and choose representatives from all levels of the organization.

A policy is required to ensure that appropriate resources are made available and that all employees understand the importance of response planning activities. The highest level of management must indicate the company's commitment.

Step 2: Assess the Risks and Company Capabilities

DETERMINE the types of potential and actual hazards.

ESTIMATE the probability of the hazard occurring.

ESTIMATE the number of people likely to be exposed.

ESTIMATE the extent of losses arising out of potential emergencies.

Step 3: Develop the Plan

Set a clear objective in order to maintain focus

Building an effective emergency response plan can be a significant undertaking. Prioritize your efforts. Use a step-by-step approach to develop the plan.

Review existing plans

Sources you might consult:

- An older plan in existence may be helpful as a starting point.
- A community emergency response plan is usually available through your local fire department.
- Plans may be found through industry associations and other companies.
- Sample emergency response plans are available on the internet.

Determine your organization's emergency preparedness needs

IDENTIFY the key functions of the emergency response team members needed to handle each potential emergency situation.

ASSIGN responsibility.

DEVELOP an organizational chart setting out the emergency functions and who is responsible for them.

DESIGNATE a backup person for every function.

ENSURE an adequate number of people in the response organization.

BALANCE is KEY. A small response group may be overwhelmed and effective control of the situation quickly lost. A very large group may be difficult to coordinate. Use your practice drills to determine an appropriate number of employees needed in the response group.

Step 4: Implement the Plan

Determine the plan format

Plans can be written in a variety of styles:

Checklists & Action Guides

These are short and simple action lists designed for simple situations or for use by highly trained individuals.

Response Plans

Detailed response plans for each likely event. For example, a fire response plan details exactly who does what, when and how.

Emergency Management Plan

A comprehensive plan detailing management activities for prevention, preparedness, response and recovery.

Write the plan

ORGANIZE gathered information.

WRITE a concise and logical single document.

DESIGNATE only one or two people to write the plan. This will ensure consistency.

REVIEW the plan to ensure clarity and understanding.

DIAL every telephone number and verify proper contact.

ENSURE approval of plan by senior management.

Develop response procedures

Depending on your objectives and scope, you may develop response procedures for fire, spill, medical emergency, industrial accident and other possibilities. Ensure that the procedures comply with applicable acts and regulations.

The procedures must:

- Provide step-by-step action plans.
- · Set out the activities of each person.
- State actions in chronological order.

Flowcharts are helpful in this step. Charts help visualize the overall process much more clearly than the written word.

Make sure that the layout of your chart is clear. A chart with too many boxes and lines will be confusing!

Key elements for success

COMMUNICATE the plan to all persons within the facility.

COMMUNICATE the plan to all neighbouring organizations, and other external parties affected (minimum is fire department).

TRAIN all persons who play a role in the emergency response plan.

CONDUCT a drill.

IDENTIFY issues that may have been missed.

CORRECT deficiencies immediately and update the plan.

COMMUNICATE the final plan to all employees.

Step 5: Evaluate Effectiveness of the Plan

Conduct an annual review

A review is best done in conjunction with an annual drill. The drill will likely identify weaknesses and recommend actions for improvement.

Management and employee health and safety representatives should participate in all steps including the annual review of the plan.

Review & analyze

- all accidents and incidents that occurred in the past year;
- all corrective actions taken following any incidents;
- all corrective actions taken following any drill or exercise:

- details of specific changes that have occurred in the workplace;
- details of any changes to prevention-based policies or procedures; and
- · the risk assessment on which the plan is based.

Step 6: Improve the Plan Continuously

Make changes to implement corrective actions to improve the effectiveness of the existing response plan.

Note: These steps are covered in greater detail in the following five sections.



A plan consists of many parts!

Section II

Establishing the Planning Team

- 1. Creating the Planning Team
- 2. Establishing an Emergency Response Policy

1. Creating the Planning Team

Team Members

There must be an individual or a group in charge of developing the emergency response plan. The size of the planning team will depend on the facility's operations, requirements and resources.

OBTAIN input from all functional areas of your organization.

DETERMINE who should be active members and who can serve in an advisory capacity.

Team members may include representatives from:

- · upper management;
- · line management;
- employees;
- human resources;
- · engineering and maintenance;
- safety, health and environment;
- · public relations; and
- security.

Committee members should be appointed in writing and their responsibilities should be clearly defined.

Management Commitment

Management support is the key to the success of the development and implementation of an emergency response plan. The following are examples of management actions to demonstrate commitment to the plan:

DEVELOP a clear policy for emergency response planning.

ISSUE a mission statement to demonstrate the company's commitment to the emergency response policy.

The mission 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 team.

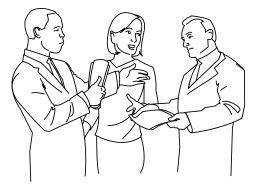
PROMOTE an atmosphere of cooperation by "authorizing" the planning team to take the steps necessary to develop the plan.

ESTABLISH a clear line of authority between team members and the team leader, though not so rigid as to prevent the free flow of ideas.

ESTABLISH a work schedule and planning deadlines.

Timelines can be modified as priorities become more clearly defined.

PROVIDE resources for research, printing, seminars, consulting services and other expenses that may be necessary during the development process.



Teamwork promotes a broader perspective

2. Establishing an Emergency Response Policy

A policy is a statement of management's commitment. The policy statement should be brief, but it must include the following:

- management's commitment to protect the safety and health of employees in case of emergency;
- the organization's basic emergency response philosophy;
- 3. responsibilities of employees at all levels; and
- 4. consequences of non-compliance to the policy.

The policy should be:

- stated in clear, unambiguous, and unequivocal terms;
- · signed by the incumbent Chief Executive Officer;
- kept up-to-date;
- communicated to each employee;
- understood by all employees; and
- adhered to in all work activities.

Communicate the Policy

Tell everyone about your emergency response policy. Some ways to do this are to:

- use it in training and orientation sessions;
- distribute copies to managers, supervisors, co-workers, contractors and visitors:
- post it in the workplace; and
- use it in new employee orientation.

Following is an example of an Emergency Response Policy.

SAMPLE

ABC COMPANY

[Date]

To All Employees:

At ABC Company, the safety and health of our employees comes first. Management is committed to doing everything possible to prevent injuries and to maintain a healthy environment.

To this end:

- All supervisors are responsible for ensuring that their employees are trained in approved work procedures to obtain optimal output without incidents and injuries and to ensure that employees follow safe work methods and all related regulations.
- 2. All personnel are required to support the Emergency Response Policy.
- All personnel will be held accountable for implementing this program.
- All relevant laws and regulations are incorporated in our program as minimum standards.
- All employees are responsible for working safely and for following the company's safety rules. Contact your supervisor, health and safety committee member or human resources department for further information.

John Smith, President ABC Company

Source: "An OSH Program in Your Workplace". Ottawa: Human Resources Development Canada, 1994.

NOTES		

Section III

Assessing Risk and Capability

- 1. Performing Hazard Analysis
- 2. Assessing Company Capabilities

1. Performing Hazard Analysis

Effective emergency response plans require a clear identification of:

- · factors that may contribute to emergencies;
- types of potential emergencies;
- consequences of emergencies, unless an emergency response plan is in place; and
- risk assessment.

Risk is a measure of the probability and severity of an adverse effect to health, property, or the environment.

Risk assessment involves the following steps:

- 1. Define the purpose of the risk analysis.
- 2. Identify the hazards.
- 3. Review basic data and information.
- 4. Evaluate the risk.
- 5. Develop company standards for safe conditions.
- 6. Implement controls to eliminate or minimize the risk.

Additional information on risk assessment ("A Primer on Risk") is available in the CSA Standard 0850-97.

The following steps can be used to get you started:

- Draw a simple block diagram representing your facility.
- Draw arrows representing products and processes used, goods produced and wastes to be disposed of.

Write a brief description of the process(es) used to create your product(s) or service(s). These may include:

- employees;
- contractors:
- electricity;
- raw materials;
- · natural gas;
- water;
- · maintenance chemicals; and
- identification of each individual energy source, raw material and chemical coming into the process.

Use site diagrams and schematics as a part of your emergency response plan.

SAMPLE

Facility Diagram Checklist		
Item	Yes	No
Hazardous material storage areas		
Building exits and entrances		
Fuel storage, transfer and control points		
Important indoor fixtures, features, equipment		
Outdoor hazardous areas		
Water supplies like wells, shut-off valves		
Sprinkler systems, risers, pumps, valves, etc.		
Location of onsite Fire Department connections		
Location of emergency lights		
Location of first aid supplies		
Location of fire extinguishers		
Location of spill cleanup kits & materials		
Location of alarm activators, panels, etc.		
Location of emergency operations centre		
Utility shut-off valves		

SAMPLE

Site Diagram Checklist		
Item	Yes	No
Distances to water sources		
Direction of water flow off site		
Location of closest offsite fire hydrants		
Location of roadways and railways		
Location(s) of industrial neighbours		
Location(s) of residential neighbours		
Location of schools, hospitals, nursing homes		
Utility shut-off valves		

Define Standards of Safe Conditions

Defining standards means establishing criteria to determine acceptable and unacceptable conditions.

This is a critical step in the process of risk analysis. Consider all areas of your business.

Also, company emergency response standards must include special requirements with respect to:

- occupational health and safety legislation and regulations;
- · environmental legislation and regulations;
- customer needs and requirements.

Review Basic Data

A review of basic data may include:

- technical information appropriate to the process under consideration;
- off-site backups
- inventory of chemicals;
- Material Safety Data Sheets;
- equipment manuals;
- industry specific injury data;
- company specific injury data;
- number of employees and contractors entering the facility;
- diagrams of site and facility;
- environmental issues in the neighborhood; and
- numbers of neighboring facilities and location.

Identify the Hazards

Determine what hazards exist that could lead to emergency situations. For each process formulate appropriate "What If" questions based on personal, company, or industry experience. Examples of emergency situations include:

- floods:
- · earthquakes;
- tornadoes:
- severe wind storms;
- · snow or ice storms;
- · fire;

- · explosion;
- building collapse;
- · major structural failure;
- spills of flammable liquid;
- release of toxic substances;
- exposure to ionizing radiation;
- loss of electrical power;
- loss of water supply; and
- loss of communication.

Determine the Worst-Case Scenario

Determine the consequences that could possibly arise from the use of the materials coming into, or leaving the process. For each identified hazard write down the worst consequences that could happen, such as:

- Fire causes death.
- Contact with live electrical wire causes death.

The descriptions used should be as realistic and graphic as possible. Following are some examples:

- A small fire could start in the electrical room and cause the destruction of the facility.
- Hazardous material spills or releases can cause severe illness and death.
- Highway accidents can cause a large number of casualties.
- Bomb threats pose potential threat to life and the facility.
- Smoke can kill.
- Terrorism can strike anywhere.

Assess the Risk

Perform a risk assessment for your facility events.

For each identified scenario, determine the risk. Ask these two simple questions:

What is the severity of the consequence? What is the probability of the event?

- Use the Risk Assessment Form on the following page to determine the risk value.
- Use the Prioritiy Setting chart (p. 30) to list all events considered and the risk of such events.

High and medium risks (score of 3 or greater) need preventive measures.

Identify Preventive Measures

REVIEW which preventive measures currently in place reduce the risk.

For example, risk of lift truck accidents will be reduced if:

- · all drivers are certified;
- all trucks are checked prior to each shift; and
- all trucks are maintained monthly.

IMPLEMENT additional measures that can reduce the risk even more, such as:

- · driver meetings; and
- close call reporting and investigations.

Although the risk may be reduced significantly in this manner, it is important to note that the event could still occur and there is a need to implement an emergency response plan.

SAMPLE

· · · · · · · · · · · · · · · · · · ·					
	Risk Assessr	ment Form			
Step 1: Worst Case	e Scenario				
Process Under Re	view:				
New Scenario 🖵 Y	/es 🖵 No Previo	usly Reviewed 📮	Yes 🖵 No		
Scenario:					
Step 2: Risk Asses	ssment				
On the following ch or thing if the risk h risk priority is the r	nappens. Next, circ	cle how often it co			
	Risk Assessn	nent Chart			
Probability How likely could it happen?	Severity How severe is the damage?				
	High	Medium	Low		
High Very likely	5	4	3		
Medium Could happen occasionally	Could happen 4 3 2				
Low Seldom happens	3 2 1				
What is the risk (so	core 1-5 from chart 4 or 5, implemen		asures now.		
If you score a 3, im	plement preventiv	e measures soon.	(set date)		
If you score a 1 or 2 Date Prevention Me Print Name: Signature:					

	Risk Assessment Form
Step 3: Risk (Control
The objective	of control is to eliminate or reduce the risk.
Hierarchy of	Control
Option 1 (Best Option)	Eliminate the risk
Option 2 (Good Option)	Minimize the risk by one or a combination of: Substitution Redesign of the work Isolation Engineering
Option 3 (Interim Option)	Minimize the risk by: ☐ Administrative controls ☐ Use of personal protective equipment (PPE)
Later:	

Risk Assessment Form

Step 4: Risk Management Review

Processes need to be reviewed to ensure that the controls remain effective. Any intended change to the process must be reviewed for risk and the appropriate controls included in the change project.

When a control is reviewed, attach a new copy of the Risk Management Form to the previous one for the identified process hazard.

Notes

Name of Assessor:

Signature:

Note: A copy of this review must be sent to the Health & Safety Committee.

SAMPLE

PRIORITY SETTING				
Type of Emergency Event	Risk (a)	Internal Resources (b)	External Resources (c)	Priority Rank
	High Low	Weak Resource	Strong Resource	
	5 ← → 1	5 ←	→ 1	

The sample form on the previous page can be used to capture the analysis of risks and the company's ability to respond to an occurrence. This should be used to set the priority for corrective action plans.

Complete this form after reviewing the next section (Assess Company Capability).

The higher the score, the greater the priority for corrective action and emergency response plans.

2. Assessing Company Capabilities

Resources

While your risk assessment identifies the severity of a possible emergency, the capability assessment determines where the resources to manage an event will come from and what capabilities exist.

Resources include:

- facilities:
- equipment;
- supplies;
- staff expertise;
- personnel employee experience; and
- · level of training.

Assess your company's capability to respond to emergencies. It is important to note that resources and capabilities must be assessed in relation to the potential of loss.

Assess resource requirements for the emergency response plan, considering:

- · types of resources that will be needed;
- level of resources required for an effective response; and
- resources currently available.

Emergency plans are written based on current resources and capabilities.

Supplies and Equipment

The emergency plan should include procedures for controlling and maintaining emergency supplies and equipment.

Equipment inventories include:

- first-aid supplies;
- chemical absorption material;
- shovels, vacuums, and other pick-up equipment;
- spark-free equipment for flammable materials;
- salvage drums and other temporary containers;
- · pumps, hoses and other transfer equipment;
- special firefighting equipment (extinguishers, foam agents, ventilation fans);
- leak repair kits;
- air quality testing devices;
- self-contained breathing apparatus;
- · respirators; and
- protective suits aprons, gloves, goggles, etc.



Facilities and Equipment Lists

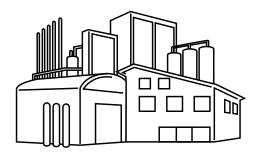
The lists should contain, at minimum, the following details:

- facility description including the Standard Industrial Classification (SIC) code;
- · number of employees;
- · operating hours;
- site diagram(s);
- location of Emergency Operations Centre (primary and alternate);
- building(s) description including occupancy classification;
- access routes and doors for emergency responder access;
- · description of fire alarm system;
- description of emergency lighting system (locations marked on site diagram);
- description of sprinkler systems including fire department connections, control valve(s), riser(s) and water line locations (indicated on site diagram);
- description of fire extinguishers used (mark on site diagram);
- description of standpipe and hose system (mark on site diagram);
- main natural gas shut-off valve (mark on site diagram);
- main power shut-off switch (mark on site diagram);
- description of hazardous material containment features;
- description and location of spill kits; and
- description of security systems employed at the facility.

All emergency equipment and supplies must be:

- inspected and maintained in accordance with standards of the manufacturer or as required by regulations;
- easily accessed by all emergency personnel;
- · adequately secured against unauthorized access; and
- kept separate from normal operating inventories.

Your plan should include a list of companies that carry emergency equipment and supplies. On this list, include phone numbers for ordering replacement supplies.



Equipment Inspection

In your plan, include procedures for inspecting and/or testing critical equipment, or their components, on a regular basis.

Specify the following:

- equipment and components to be tested or inspected;
- type of test (visual, monitoring, nondestructive, etc.);
- frequency of the inspection or test; and
- documentation of test or inspection results.

Examples of critical equipment or components to be inspected include:

- · transfer piping systems;
- pumps, valves, fittings, and hoses;
- tanks and containers:
- · emergency lighting;
- · eyewash and emergency showers;
- · electrical distribution systems and equipment;
- · fire suppression systems and equipment; and
- · detection and alarm systems.

The frequency of inspection must be in accordance with regulations and manufacturing standards. It is important to consult appropriate regulations or standards, as different components within a safety system have varying inspection requirements.

SAMPLE

Fire Systems Inspection Requirements			
Equipment Code* Inspection Freque		Inspection Frequency	
Fire doors	NFC	Monthly	
Fire Extinguishers	NFC	Monthly, Annually*	
Sprinkler Systems	NFC and NFPA	Weekly, Monthly, Annually*	
Hydrants and Hoses NFC Monthly, Annually*		Monthly, Annually*	
Emergency Lighting	NFC	Monthly, Annually*	
Alarms	NFC	Daily, Monthly	
* Annual inspections are done by a qualified authorized person(s)			

NFPA - National Fire Protection Association (USA)

NFC - National Fire Code (Canada)

Protection of Records

Vital records

A small fire or minor emergency could have disastrous effects if records for the business are lost.

Identify all records that are considered vital. These records include:

- employee records;
- customer records:
- supplier records;
- financial information:
- proprietary information; and
- product design information.

These records should be protected by special measures, such as fire safes, and their location should be identified in your plan. Records that are not protected by special measures should be duplicated and stored off-site. Take the following steps:

- Require each department to identify vital records (e.g., data processing, human resources (HR), purchasing, sales, engineering, etc.).
- 2. Identify any record protection procedures already in place.
- Include new or existing protection procedures in the plan.

Mutual Aid

Collaboration with other nearby organizations maximizes protection while minimizing cost. Through mutual aid, parties agree to share emergency resources such as:

Equipment – self-contained breathing apparatus (SCBA), protective suits, pumps, hoses, handling equipment, etc.

Information – usually expertise in hazardous chemicals.

Personnel – usually trained fire fighters or spill response personnel.

Facilities – to provide shelter for evacuated employees or to use communications equipment.

All mutual aid agreements should be attached to or incorporated into the emergency response plan.

The agreement should:

- define the type of support to be given by each party;
- define the level of support to be given by each party;
- list capabilities and resources for all the sites involved;
- outline under what condition(s) assistance would be rendered;
- outline the methods for communications and activation of resources; and
- outline any compensation agreements.

The following questions, while not exhaustive, will be useful in your assessment of company capabilities.

SAMPLE

Capability Assessment Checklist		
	Yes	No
Is there adequate fire fighting equipment?	۵	٥
Is there adequate personal protective equipment?	۵	٥
Is there adequate communications equipment with a backup system?	۵	٥
Has an inventory of this equipment been prepared?		٥
Are trained personnel available to provide responses such as fire fighting, spill control, or first aid?	۵	۵
Have arrangements been made with local hospitals to provide treatment for chemical exposures and other specific medical emergencies?	٠	٠
Are employee emergency evacuation plans in place?	۵	٠
Have employees been trained to respond to emergency evacuation plans?	۵	٥
Do employees know how to help visitors when alarms are heard?	٠	٠

Capability Assessment Checklist		
	Yes	No
Are alarm systems available?	۵	
What systems are available to warn neighbours of toxic releases?	۵	
Do people who live nearby know what to do when alarms are heard?	۵	
Does the facility belong to an industrial mutual aid association?	۵	
Does the facility have contracts with spill cleanup specialists?	۵	
Can this site determine concentrations of released chemicals?		
Does the facility have auxiliary power systems?	٠	
Is there a program for preventive maintenance inspection of emergency equipment and supplies?	۵	
Is the maintenance program regularly followed?	٠	

NOTES	

Section IV

Developing the Emergency Response Plan

- 1. Objectives
- 2. Response Organization
- 3. Alarm Activation
- 4. Reporting
- 5. Resource Mobilization
- 6. Response Procedures
- 7. Crisis Management
- 8. Developing a Media Plan
- 9. Business Recovery Plans
- 10. Cleanup and Restoration Plans

1. Objectives

The response plan serves several purposes. It should:

- outline action plans and strategies;
- list the skills of knowledgeable emergency managers;
- identify resources for emergency responders
- ensure availability of response from competent teams;
- provide a communications system that works efficiently to keep everyone fully informed; and
- consider the health and safety needs of employees and the public.

Begin with top priority (the most likely emergency scenario) and then expand the program to cover all potential emergencies such as fire, spill, medical emergency, industrial accident or other possibilities.

2. Response Organization

Management of an Emergency

It is important to develop an organized approach to manage the overall plan. Use the Emergency Planning Responsibility Checklist (on the following page) to help determine responsibilities within your organization.

The response team must:

- be able to handle likely situations, but not be so detailed and complex that it becomes rigid and ineffective; and
- supplement internal resources, where appropriate, with external service providers.

Emergency Response Functions

There are three distinct functions in the management of an emergency response:

- The administration function to manage the response plan;
- 2. The operations function to control the incident; and
- 3. The recovery function to resume the operation to normal.

Persons within your response team should be designated and trained to fulfill different roles.

The key functions within the emergency management organization are determined from an assessment of the needs and complexity of likely emergency scenarios that could occur. It is important to understand that many skill sets are required.

Job Descriptions

Develop a job description for each member of the response team.

- Are the duties and responsibilities of each position reasonable?
- Can the duties be performed under emergency conditions?

You may use the following sample chart as a guide in developing your own specific job descriptions.

SAMPLE

Emergency Planning Responsibi	lities
Task	Person(s) Responsible
Plan administration	
Develop the emergency response policy and organization	
Develop safe response procedures	
Take action on recommendations for improvement	
Specific response functions (fire, spill, evacuation, etc.)	
Provide emergency response training and education	
Provide hazard information in an emergency	
Purchase response equipment and supplies	
Provide first aid	
Plan fire and spill protection measures and evacuation plans	
Prepare records, statistics and reports	
Conduct incident investigations	
Plan and conduct emergency response audits	
Inspect and test emergency response equipment, emergency lights, fire extinguishers, sprinklers, etc.	
Conduct emergency drills and exercises	
Conduct risk assessment of business activities	
Conduct media relations activities	
Emergency shutdown of facility	
Ensure site security during and after an emergency	
Manage recovery operations	

Emergency Manager (Sample Job Description)

The Emergency Manager is responsible for the overall response to an emergency and recovery operations following an incident.

The Emergency Manager has the authority and responsibility to:

DETERMINE the response category, i.e., minor, serious, major.

ACTIVATE the response plan and the emergency operations centre.

AUTHORIZE the use of all necessary company resources.

AUTHORIZE the evacuation of the site or facility.

LIMIT access to the site.

AUTHORIZE the release of information.

ENSURE that company management, all appropriate government agencies, and other interested parties are notified.

DECLARE when the emergency situation is over.

The Emergency Manager performs the following duties during an emergency:

RECORD details of the event on an Incident Report Form (see sample on page 47).

ESTABLISH contact with the Site Coordinator.

ACTIVATE emergency operations centre.

DETERMINE evacuations required.

DETERMINE level of security required.

NOTIFY company spokesperson.

MAINTAIN communication with Site Coordinator, resource personnel, regulatory agencies and head office.

IDENTIFY needs for assistance, support services and other resources.

RECORD arrival times of personnel, equipment and resources.

KEEP a log of all communications and decisions made.

DETERMINE event termination.

ESTABLISH and CONDUCT debriefing meetings.

Site Coordinator (Sample Job Description)

The Site Coordinator is an operational responder responsible for security at the site, emergency response crew activities, and the allocation of personnel.

The Site Coordinator has the authority and responsibility to:

ESTABLISH action plans to control the event.

ESTABLISH appropriate site safety plans.

SUPERVISE response personnel.

SAMPLE

INCIDENT REPORT FORM		
DETAILS		
Date of Incident	Time of Incident	
Reported by	Phone Number	
Witnesses	Phone Number	
1. Describe the incident (give details	3)	
2. Was the building evacuated?	Yes □ No	
If yes, for how long?		
3. Why did the incident happen?		
4. What corrective actions were recommended?		
5. What corrective actions have been implemented to date?		
5. What corrective actions have been implemented to date?		
6. Was anyone hurt? ☐ Yes ☐ No		
7. Was there damage to building(s) or property? ☐ Yes ☐ No		
8. Were any Governmental Emergency Agencies contacted? ☐ Yes ☐ No If yes, please list:		
What action(s) were taken:		

PROVIDE liaison with other first responders such as fire, police, ambulance and other contract resources.

MAINTAIN contact with the Emergency Manager.

ENSURE adequate decontamination procedures for personnel and equipment.

MAINTAIN records of the event and actions taken.

The Site Coordinator performs the following duties during an emergency:

RECORD event details on the Incident Report Form.

IDENTIFY immediate response needs.

DETERMINE if evacuation is required.

DETERMINE status of site security.

ACTIVATE response team personnel.

ALLOCATE resources, supplies and equipment.

CONTACT Emergency Manager as required.

RECORD contact and arrival times of emergency response personnel, equipment and resources.

MAINTAIN contact with all resource personnel.

IDENTIFY ongoing needs for assistance, support services and other resources.

ADVISE Emergency Manager when work is complete.

COMPLETE reports required by the organization and/or health and safety regulations and submit for debriefing.

Response Leader (Sample Job Description)

A Response Leader acts as a supervisor of the response crew. The leader must have the knowledge, experience and training to be in charge of personnel, equipment and procedures. There may be one response team or several, depending on your specific situation.

Designated response teams could be assigned to:

- fighting fires;
- providing first-aid;
- assisting and supervising rescue and evacuation activities; and
- providing spill response.

The Response Leader has the authority and responsibility to implement response activities and to direct response team members.

The Response Leader will:

ACTIVATE response crew members.

ESTABLISH communications with the Site Coordinator.

EVALUATE the situation for immediate response activities.

ORDER local evacuation where appropriate.

MAKE site evacuation recommendations to Site

Coordinator.

ENSURE appropriate use of personal protective equipment.

MAINTAIN a record of response personnel and their responsibilities.

ESTABLISH appropriate decontamination criteria.

During an emergency the Response Leader will:

RECORD details on the Incident Report Form.

PROCEED to the site and assess the situation,

assume control and identify response needs.

COMMUNICATE needs to Site Coordinator.

DETERMINE evacuation parameters.

DETERMINE level of site security required.

BRIEF and SUPERVISE responders arriving at the scene.

ESTABLISH and MAINTAIN site safety of immediate work area.

MAINTAIN communication with Site Coordinator to exchange vital information.

ADVISE Site Coordinator when work is complete.

COMPLETE all applicable reports for debriefing.

Communications Officer (Sample Job Description)

The Communications Officer is responsible for communications and the release of internal and external information, during an emergency.

The Communications Officer will:

PROVIDE accurate and timely information to the media and the public.

RESPOND to requests for information and arrange interviews with appropriate company officials, as required.

ACTIVATE the communications centre, and ensure there is adequate staff.

ENSURE that information to be distributed is verified and approved by the Emergency Manager.

ENSURE that information is properly distributed.

ENSURE that all media calls are logged and records of interviews are kept.

During an emergency, the Communication Officer has the following duties:

RECORD event details on Incident Report Form.

ARRANGE for event status briefings from Emergency Manager.

ESTABLISH means of communication with the Emergency Manager.

ACTIVATE communications centre.

ACCESS contact lists of local media and use forms to maintain record of calls.

DETERMINE request for information and respond as soon as possible.

DETERMINE who will provide technical information on the event.

GATHER and ESTABLISH clear and accurate information for the media.

ENSURE all information released is approved by the Emergency Manager.

COMPLETE debriefing forms as required by the organization.

3. Alarm Activation

Internal Alarm

Your worksite's internal alarm system is used to initiate a response by internal teams and to alert all employees to the emergency.

For example, in case of fire:

PULL alarm.

CALL 911 or emergency contact number in your organization.

External Alarm

This is used to summon assistance from appropriate responder agencies. Any alarm system used to activate an external response resource, such as a fire alarm, must be confirmed by telephone as soon as possible.

Backup alarms

It is very possible that the emergency event itself has rendered your alarm system and your telephone system inoperative. This is why it is necessary to have several backup alarm systems.

For example, in case of fire:

USE cellular phone if phones do not work – your plan should state exactly where the cell phone is located.

SEND runner to fire department if cellular phone does not operate, or use closest public phone.

Off-site Alarms

For transportation incidents and other off-site emergencies, use a telephone or cell phone to obtain emergency assistance.

Include the following options in your plan:

- a specified 24-hour emergency telephone number;
- answering services during off-hours;
- trained staff who receive and answer emergency calls;
- initiation procedures that indicate where to call in an emergency;
- name(s) of person(s) responsible for receiving information;
- a standardized format for recording the emergency information; and
- an activation process that ensures authorized persons and response team are alerted.

Provide brief and written procedures as guidance to those receiving emergency calls. Prominently post or make available where calls are received.

4. Reporting

In most areas, emergency services are contacted by telephone with a 911 call. The number to be used in contacting emergency services should be posted at every telephone station. If the facility's telephone system uses special codes for access to outside lines, ensure that the posted number includes this special code (for example 9-911).

DIAL 911.

REQUEST police, fire or ambulance.

RFMAIN calm.

STATE location and address clearly.

STATE situation clearly.

ANSWER operators' questions.

REMAIN on line if safe to do so.

DO NOT DELAY contact of services.

DO NOT INTERRUPT operator.

DO NOT MISINFORM.

Triage Questions

An emergency operator will ask standard triage questions. A delay in providing answers may affect ambulance response time.

The operator might ask the following:

- A brief description of the person's condition (heart attack, cut(s), crushed or broken bones, burns, etc.).
- · Is the person breathing?
- · Is the person conscious?
- · Is there a substantial loss of blood?

Be prepared to answer these questions.

5. Resource Mobilization

Following an initial assessment by response personnel, the necessary resources must be assembled in an orderly and coordinated manner.

The risk assessment performed earlier will help to define what external and internal resources, both personnel and equipment, might be needed to deal with worst-case scenarios.

The plan must:

- designate the person responsible to mobilize the people, equipment, and materials from within the organization;
- define exactly how the response team will be notified;
- detail the procedures for requesting and obtaining resources from outside the organization;
- identify any special logistical considerations for moving required resources to remote sites.

Resource Consideration

For every worst-case scenario, be sure to consider:

- locations and quantities of equipment;
- alternative energy supplies (electricity, fuel, heat, etc.);
- food, clothing, and shelter (for responders, employees and displaced neighbours);
- maps and drawings;
- routine maintenance to ensure resource readiness; and
- verification of response capabilities of all responding organizations.

Many organizations are surprised to find out the external resource cannot handle a situation effectively. Make sure this isn't discovered during an emergency!

6. Response Procedures

The following table lists the type of workplace information you must have available to plan an effective response.

SAMPLE

CHECKLIST for Gathering Workplace Information			
Building related			
□ Construction □ Fire Protection □ Floor plans □ Electrical shutoff □ Security system □ Size □ Roof construction	☐ Window type ☐ Gas shutoff ☐ Exit locations ☐ Drain locations ☐ Floor construction ☐ Door locations		
Site related			
☐ Hydrants☐ Access routes☐ Backup water	☐ Fencing & gates ☐ Distance to water ☐ Drain locations		
Surroundings			
☐ Slope of land ☐ Sensitive areas ☐ Water contamination ☐ Runoff direction	□ Exposed water □ Potential for soil absorption □ Areas for diking □ Prevailing winds		
Hazardous materials			
☐ List of chemicals☐ Flammability☐ Storage location☐ Reactivity to water	☐ Packaging types ☐ Toxicity ☐ Storage quantities		
Personnel and public affected			
☐ Number of employees ☐ Names of employees ☐ People adjacent to property	☐ Utilities☐ Adjacent structures☐ Storm sewers		

Developing Response Procedures

When developing your specific response plans:

PROVIDE clear guidelines to follow.

DETERMINE how the emergency response will be initiated.

IDENTIFY the circumstances in which a command centre will be necessary.

OUTLINE how supervisors and other employees are expected to respond to emergencies.

IDENTIFY specific scenarios where you would call for emergency services.

IDENTIFY who is responsible for contacting outside emergency services.

ESTABLISH procedures to alert first responders and the fire department, police, or ambulance.

IDENTIFY scenarios where you would shut down or evacuate the organization.

OUTLINE safety procedures for all personnel.

INCLUDE adequate procedures to control emergencies that may occur outside of normal business hours.

A form like the one on the following page is useful for developing response procedures.

SAMPLE

Response Procedures
Response Procedure:
Action Required:
Person(s) Responsible:
Location:
Method:
Degree of Priority:
Response Procedure:
Action Required:
Person(s) Responsible:
Location:
Method:
Degree of Priority:
Response Procedure:
Action Required:
Person(s) Responsible:
Location:
Method:
Degree of Priority:

Response to Specific Scenarios

Fire / Explosion

Fire is the most common emergency situation in the workplace. Proper building design and safe work practices minimize the chances of fire. An emergency response plan helps eliminate or minimize the loss in case a fire does occur.

The appropriate response depends on the internal and external resources (such as Fire Department) available.

Small fires can be put out with portable fire extinguishers. The type of extinguisher to use depends on the type of fire. The following chart shows types of fires and extinguishers.

TYPES OF FIRE EXTINGUISHERS				
Class	Type of Fire	Approved Fire Extinguisher		
ORDINARY	Wood, paper, cloth	Type A; Type A-B		
FLAMMABLE B LIQUIDS	Gasoline, paints, oils, grease	Type A-B; Type B-C; Type A-B-C		
ELECTRICAL COMPANY CONTRACTOR CON	Electrical, wiring, fuse box	Type B-C; Type A-B-C		
COMBUSTIBLES	Metals, Magnesium, Sodium, Lithium, dusts or ribbon	Bucket of Sand		

Caution: Do not use a fire extinguisher unless you have received training in its proper use.

Use a fire extinguisher only if ALL of the following apply:

- the building is being evacuated and the fire alarm is activated;
- the fire department (911) is being called;
- the fire is small, contained and not spreading beyond its starting point;
- the exit is clear so you can exit safely;
- · you can avoid smoke inhalation;
- a proper extinguisher is readily available; and
- you know how to use the extinguisher.

If any of these conditions do not apply, do not use the fire extinguisher. Call for help and leave the area immediately.

Typical extinguishers and their uses

Water extinguishers are suitable for class A (paper, wood, etc.) fires.

Dry chemical extinguishers are useful for class ABC fires and are your best all-around choice. Their advantage over CO2 extinguishers is that they leave a blanket of non-flammable material on the extinguished material which reduces the likelihood of reignition. Dry chemical extinguishers cause a messy residue that will need to be cleaned.

CO2 (carbon dioxide) extinguishers are for class B and C fires. Their advantage over dry chemical is that they leave behind no harmful residue.

Metal/Sand extinguishers are for flammable metals (class D fires) and work by simply smothering the fire with powdered copper metal or sodium chloride (NaC1).

Halotron I extinguishers, like carbon dioxide units, are for use on class B and C fires. They are a replacement for Halon which was banned by international agreements starting in 1994. Halotron leaves no residue and is nonconducting. These properties make it ideal for computer rooms, clean rooms, telecommunications equipment, and electronics.

Fire response guidelines

When the alarm sounds, ensure that:

- all employees follow evacuation procedures;
- Emergency Management Team initiates the response plan;
- no team member will be exposed to unreasonable risk.
- a buddy system is used if response team members remain at risk for any reason;
- assessing the situation and meeting the fire department, rescue and first aid take priority over fire suppression; and
- the possibility of an explosion must always be avoided.

Sprinkler systems must not be shut off except by order of the Fire Department On-Scene Commander.

Fires may occur outside of normal business hours.

The specific response procedures needed after-hours should be established in consultation with the local fire department.

Responding to Spills

Minimize the environmental, safety, and health, hazards due to spills of hazardous materials. Only properly trained personnel should be allowed to clean up spills of hazardous chemicals. If trained personnel are not available, outside resources must be used.

Your local fire department may have a hazardous material response team or you may use a private spill response contractor.

Small spills

FVACUATE the area.

REPORT the spill to personnel trained in toxic spill clean-up procedures.

ELIMINATE the source of the spill by closing valves, turning over leaking containers, etc.

PREVENT the spill from entering any sanitary or storm water drainage system.

CLEAN up spill using equipment and principles addressed in training (consult MSDS).

CLEAN all equipment and floors.

LABEL all waste.

Dispose of waste in accordance with regulations.

Large spills

EVACUATE employees to a safe area.

PROVIDE first aid/medical help to exposed employees.

BLOCK storm sewer(s).

SHUT DOWN general ventilation systems if the spill occurs indoors.

REPORT the spill to person(s) trained in spill management.

CONTAIN the extent of the spill. Containment is always the first priority, unless there are injuries.

IMPLEMENT spill control measures as established by your organization.

Safety measures in case of a spill:

COVER your mouth and nose with a damp cloth.

TURN OFF heating, air conditioning and fans.

STAY as far from the emergency site as possible.

KEEP your body fully covered.

PREPARE for possible evacuation.

CLOSE all exterior and interior doors and windows.

DO NOT EAT or DRINK anything uncovered.

Always consider use of the Fire Department, even as backup!

Evacuation

If the spill is a threat to safety, evacuate the immediate area. If the spill is large and a threat to building occupants, order the evacuation of the building.

If it is judged that a site safety hazard exists, consider declaring a full site evacuation of all non-essential personnel.

Notification

Notify all agencies, such as the Environment Authority, Labour Authority, Police, Medical Officer, etc. The authority involved depends on the specific circumstances of the emergency.

Transportation of Dangerous Goods Reporting

Spills involving dangerous goods must be reported to the Police. A list of other Emergency Response Organizations can be found on page 147.

Responding to Injury and Illness

At most facilities there are hazards which could result in serious injury from fire, explosion, chemical exposure, mechanical energy, electrical energy, pneumatic or hydraulic energy, heart attack or stroke, etc.

In cases of serious injury or illness, prompt medical attention often makes the difference between life and death.

Procedures

PROVIDE first aid.

SECURE professional medical attention as quickly as possible.

First-aid person

A first-aid person must:

- · have current first-aid qualifications;
- provide emergency assistance;
- · direct others to assist;
- arrange transportation; and
- arrange medical intervention.

Reports

A team member should be assigned responsibility for the completion of appropriate reports such as internal company reports, and reports required by the Compensation Board, Ministry of Labour, etc.

Critical injury or fatality

NOTIFY immediately:

- senior management;
- regulatory authority; and
- legal resources.

PRESERVE the accident scene and all evidence.

ENSURE that you have adequate equipment and supplies required by health and safety regulations.

These include:

- first-aid supplies adequate to handle the potential event, not necessarily just what the law requires;
- adequate number and location of deluge showers; and
- adequate number and location of eyewash fountains.

Responding to Storms

The Emergency Response Team should maintain a state of readiness to respond in case of a storm to ensure the safety of employees and the security of facilities.

The Canadian Red Cross recommends these simple steps to prepare for disasters:

ASSEMBLE a disaster supplies kit; and

MAINTAIN a three-day supply of the following basic items:

- water
- · battery-operated radio
- food
- batteries

- manual can opener
- first aid kit
- flashlight
- cell phone

Source: Emergency Preparedness for Storms Due to Hurricane Isabel, Canadian Red Cross www.redcross.ca/disasterpreparedness

Tornado / High winds

Weather service tornado watch issued

ASSIGN personnel from the Emergency Response Team to monitor the weather and report on threatening conditions according to the established procedures.

REMOVE or SECURE loose materials and articles from the area if possible.

Weather service tornado warning issued

SEEK shelter/safety in the following areas:

- a basement, underground excavation, or lower floor of interior hallway or corridor (preferably a steel-framed or reinforced concrete building);
- if no basement is available, seek shelter under a sturdy workbench or heavy furniture (i.e., table or desk);
- in open country, move away from the tornado path at a right angle;
- if there is no time to escape, lie flat in the nearest depression (i.e., ditch or ravine).

AVOID the following:

- · top floors of buildings;
- areas with glass windows or doors;

- auditoriums, gymnasiums, cafeterias or other areas with large, free-span roofs; and
- automobiles.

KEEP the following items with you:

- flashlight;
- · radio: and
- · portable or cellular telephone.

LISTEN for radio reports.

If NO ADVANCE WARNING is received, employees should seek shelter in designated areas. If this is not possible, the next safest place to be is under a table or heavy piece of equipment that offers protection from falling debris.

After the storm, the emergency response team should begin appropriate rescue, first-aid, and damage control activities. The fire department should be informed as soon as possible. Damage assessment, cleanup, restoration, and other recovery activities should follow.

Severe winter storms

Severe winter storms can be accompanied by:

- violently blowing winds;
- · extremely cold weather;
- · heavy snow;
- freezing rain;
- ice storms:
- · white-outs; and
- electric power failures.

The following tips will help you prepare for such conditions:

KEEP adequate supply of food in case it is not safe to go out or businesses are closed.

WATCH for severe weather warnings in your area.

REMAIN indoors during severe weather conditions.

DRESS warmly if you must go out.

KEEP a winter storm kit in your vehicle. Typical winter kit supplies include:

- shovel:
- sand:
- tow-chain:
- flashlight;
- · warning light or flares;
- · extra clothing, warm blankets and footwear;
- · emergency food;
- matches;
- · maps;
- candle (in a deep can); and
- de-icing material for fuel line and windshield.

DRIVE with caution and, if necessary, turn back or seek shelter.

REMAIN on main roads and keep enough gasoline in your gas tank for the trip.

If you are stuck on the road:

STAY inside your vehicle.

AVOID overexertion and exposure to cold. Shoveling snow in bitter cold can kill you.

ALLOW some fresh air in the vehicle.

ENSURE that exhaust fumes do not enter the vehicle.

EXERCISE your limbs, hands and feet vigorously and do not fall asleep.

SIGNAL passing traffic for help.

After the storm is over:

A severe storm may cause dangerous conditions that must be handled with caution.

PROVIDE help to trapped workers only if you are trained to do so. Otherwise call for emergency help following your company guidelines.

STAY away from fallen, loose or dangling electrical wires. Report such conditions to the electric supply company.

AVOID going in areas where there are dangling tree limbs, building structures weakened by the storm, and weakened bridges.

DRIVE only when absolutely necessary. Keep the roads clear for emergency vehicles and rescue workers.

Floods / torrential rains

When you receive warnings of an impending flood or heavy rain via weather services, fire/ police department, etc., take the following steps:

DECIDE if closing down operations is appropriate.

CHECK nearby storm drains to ensure they are clear of debris.

REMOVE all movable equipment and supplies to a second floor or other elevated areas.

CHECK outside areas for equipment and materials that could be damaged by floodwaters or heavy rain accumulation.

CHECK and SECURE storage tanks.

SEAL securely all hatches and manholes.

CLOSE all valves.

SECURE to wooden pallets materials that cannot be moved easily.

UNPLUG electrical equipment and appliances.

FILL jugs with clean water in case water supplies become contaminated.

PLACE sandbags in and around all outside doors and thresholds.

EVACUATE quickly when you are advised to do so.

AVOID downed power lines.

LEAVE low lying areas immediately.

LEAVE the car and seek higher ground immediately if driving in a low-lying area or if your car stalls in rapidly rising water.

STAY away from storm drains and irrigation ditches.

DO NOT DRINK tap water.

DO NOT DRIVE through or around police/construction barricades

DO NOT DRIVE through flood water.

Emergency Preparedness

Suspicious packages and biological threats

A suspicious package may have one or more of the following characteristics:

- excessive postage;
- handwritten or poorly typed addresses;
- incorrect titles:
- title, but no name;
- misspellings of common words;
- · oily stains, discolorations or odour;
- 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;
- · a ticking sound;
- restrictive endorsements, such as "personal" or "confidential"; or
- a city or state postmark that does not match the return address.

Dealing with suspicious packages

PLACE the envelope or package in a plastic bag or some other type of container to prevent leakage of contents.

COVER the envelope or package with anything available (i.e., clothing, paper, trash can, etc.) if you do not have an appropriate container.

LEAVE the room and close the door, or section off the area to prevent others from entering.

WASH your hands with soap and water to prevent spreading. CALL 911.

LIST all people who were in the room/area when the letter or package was recognized. Provide this list to law enforcement agencies.

DO NOT SHAKE or EMPTY the contents of any suspicious envelope or package.

Dealing with spills from suspicious packages

COVER the spilled contents immediately.

TURN OFF fans or the ventilation system.

SHUT DOWN the air handling system, if possible.

LEAVE the room and close the door, or section off the area to prevent others from entering.

WASH your hands with soap and water to prevent spreading. DIAL 911.

REMOVE heavily contaminated clothing as soon as possible and place in a plastic bag or some other sealed container. Give to emergency responders.

SHOWER with soap and water as soon as possible. Do not use bleach or other disinfectant on skin.

LIST all people in the room/area and provide the list to law enforcement agencies.

DO NOT ATTEMPT to clean up the spilled contents.

Bomb Threats

When you receive a bomb threat:

TAKE all threats seriously.

BE CALM and courteous.

LISTEN carefully.

OBTAIN as much information as possible (who, what, where, when, how and why).

KEEP the caller on the line, if you can, by asking questions, or asking him or her to repeat the information.

NOTE voice characteristics and any background noises. Also, what does the caller appear to know about the workplace?

NOTIFY responsible authorities by prearranged signal while the caller is online.

RECORD the information on the Sample Bomb Threat Report Form (p. 75).

INFORM security, police and the fire department.

DO NOT INTERRUPT the caller.

Factors to consider in determining appropriate levels of response:

- a judgement of severity of threat.;
- any existing labour problems or known disgruntled employees;
- previous threats received; and
- recent attacks against other facilities in the area.

During a bomb threat evacuation:

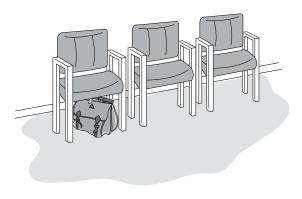
SEARCH your immediate area.

UNLOCK drawers, cabinets, etc. for the search crew and identify any strange or unfamiliar objects.

TAKE with you your personal belongings (such as briefcase, purse, etc.)

FOLLOW standard evacuation procedures.

DO NOT TOUCH any suspicious object or device. Report only.



DO NOT TOUCH a suspicious package...
REPORT it immediately.

SAMPLE

Bomb Threat Report Form (Responding to a bomb threat over a telephone)							
- LISTEN - DO NOT INTERRUPT THE CALLER - - GET AS MUCH INFORMATION AS YOU CAN -							
Name:							
Time:							
Date:							
Caller Identity:		☐ Male ☐ Female		Age:			
Origin of Call:		□ Local □ Long Distance □ Booth □ Internal					
Voice:	Loud High Pi Raspy Drunk Soft Deep Pleasar		Speech:	☐ Fast ☐ Distinct ☐ Stutter ☐ Slurred ☐ Slow ☐ Distorted ☐ Nasal ☐ Other			
Language:		□ Excellent □ Good □ Fair □ Foul □ Poor □ Other					
Accent:		□ Local □ Not Local □ Foreign □ Race □ Regional □ Other					
Manner:		□ Calm □ Rational □ Coherent □ Deliberate □ Righteous □ Angry □ Irrational □ Incoherent □ Emotional □ Laughing □ Other					
Background:		□ Office □ Machine □ Factory Equipment □ Bedlam □ Animals □ Quiet □ Mixed □ Street Traffic □ Aircraft □ Party Noise □ Trains □ Music □ Voices					

SAMPLE

Bomb Threat Report Form (Responding to a bomb threat over a telephone)						
Bomb Threat Questions						
What is your name?						
Time of Day:						
When will the bomb go off?						
Time remaining to detonation:						
Where is the bomb planted?						
Building:						
Area:						
What kind of bomb is this?						
What does the bomb look like?						
What is your location?						
Why did you place the bomb?						
How do you know about bombs?						

Remember to KEEP CALLER TALKING and note the exact wording of threat.

Emergency Evacuation Procedures

Evacuation procedures may vary depending on the nature of the emergency. Below are some general guidelines:

Fire evacuation

During evacuation:

REMAIN calm.

FOLLOW procedures established by your employer.

DIRECT everyone to use the designated fire exits.

PROCEED quickly and directly to the designated meeting area.

RESPOND to small fires with fire extinguishers, but only if you are trained to use a fire extinguisher.

PREPARE to receive and direct fire fighters.

CHECK security at all exits.

ALWAYS report the alarm or actual fire to fire fighters and police before you become distracted or preoccupied.

Administrative Tips for Workplace Evacuation

TEST fire alarms, fire extinguishers and smoke detectors regularly.

INSPECT fire exits, ensure that signs are visible and illuminated with no obstructions by the exits.

DESIGNATE a person (and an alternate) who will decide when to evacuate.

DESIGNATE staff who will notify personnel to evacuate and decide how to communicate the message.

DESIGNATE someone to ensure that everyone has been evacuated and to check washrooms, offices and hallways.

DRAW UP evacuation routes and post this information in prominent locations.

IDENTIFY exit routes and specific precautions, which must be followed before everyone evacuates the building.

LOCK away valuables and confidential materials.

ESTABLISH a "buddy" system to assist with the evacuation of employees with disabilities.

SHUT OFF specific equipment.

DETERMINE where everyone will meet once they have vacated the building.

ESTABLISH procedures for taking attendance of all personnel.

PREPARE emergency, security and operations staff in advance concerning evacuation policies and procedures.

TRAIN all employees in evacuation procedures.

PRACTICE your evacuation plan. Ensure that everyone responds to fire alarms and fire drills.

Responding to Workplace Violence

Workplace violence is occurring at an increasing rate.

Organizations need to be prepared to handle such situations.

For additional information see the "Violence in the Workplace Prevention Guide" available from the Canadian Centre for Occupational Health and Safety.

Responding to Power Failure

Weather extremes such as floods, tornadoes, hurricanes and ice storms may cause loss of electrical power.

Safety measures include:

- readily available flashlights;
- adequate emergency lighting;
- emergency exits and aisles maintained free of tripping hazards and obstruction:
- adequate evacuation procedures;
- · warm shelter available; and
- security measures to prevent theft and vandalism.

A recent ice storm in Ontario and Québec proved that a power failure has far greater implications than a simple "lights out" scenario.

Safety tips in case of loss of electric power:

NEVER use a generator indoors or in a garage. Exhaust fumes contain carbon monoxide which can be deadly if inhaled.

USE portable generators outdoors only, in a dry, ventilated area away from attached garages or air intakes to the building.

PLUG individual appliances into the generator using heavyduty outdoor-rated cords with a wire gauge adequate for the appliance load.

ENSURE the batteries in smoke alarms and carbon monoxide alarms are in good working condition.

DO NOT USE wet electrical appliances.

DO NOT TURN ON damaged electrical appliances.

DO NOT PUT candles on or near anything that will burn.

NEVER leave burning candles unattended.

NEVER use charcoal indoors, because burning charcoal gives off carbon monoxide.

Your equipment is commonly at risk in a power failure. The re-establishment of electrical power is usually accompanied by a power surge. Heavy equipment creates a significant electrical load, and a simultaneous start-up could have a serious impact on your power distribution system – causing failure, fire or an explosion. Computer equipment is particularly at risk.

Switch off all electrical and computer equipment in the event of a power failure. Turn this equipment back on only after power has been restored.

Responding to Sabotage

This section is intended to provide an effective means of preventing acts of sabotage or "vandalism" by employees or others, and offers advice on and how to react to such acts. Most companies are at risk of sabotage that can result in major fires, environmental spills, and equipment failures.

All critical equipment should have:

- · restricted access;
- locked operating devices; and
- tamper or intrusion alarms.

Access to your facility by vendors, contractors and other visitors, including employees from other sites, should be controlled. Assign responsibility for security, issuing of keys or pass cards, etc.

Specific individuals should be assigned the responsibility to secure all doors, gates, etc., at the end of a shift. The names of those responsible should be posted.

Facility access control should ensure that:

- all visitors are logged in and out;
- visitors wear an ID badge:
- an authorized employee escorts visitors throughout the entire visit: and
- contractors, vendors, truck drivers, etc., are to be restricted to only the work area, and must be supervised by an authorized employee.

Other important considerations:

- Appropriate managers should be informed immediately of any employee termination.
- Terminated employees should be escorted from the building.
- All keys and pass cards must be returned on termination of employment.
- All employees must report any suspected acts of sabotage to their supervisor.
- The results of an act of sabotage can be the same as those resulting from accidental events (i.e., fire, explosion, spill, etc.). Use appropriate response procedures.

All issues relating to sabotage or other security questions should be reported to the police.

Emergency Shutdown Procedures

It is essential to shut down equipment that:

- contributes to the emergency situation;
- increases the potential for the severity of the harmful outcome;
- poses danger to first responders.

Ensure that shutting down equipment does not create another danger.

Examples of equipment to shut down include:

- ventilation systems that may contribute to the intensity of the situation;
- ventilation systems that may contribute to the spread of contamination throughout the building;
- operating equipment that may be hazardous to emergency responders;



- process/equipment as required prior to worker rescue;
- process/equipment that is out of control;
- equipment that will be left unattended; and
- equipment that has been disabled due to power failure.

Important Considerations in Developing Emergency Evacuation Procedures

DETERMINE who gives the evacuation order.

DETERMINE who will notify personnel to evacuate and how the message will be communicated.

ASSIGN responsibility for ensuring that all areas have been evacuated, e.g., washroom, office, hallway checks.

ASSIGN responsibility to ensure that no one stays behind on the floor after an evacuation order has been given.

ESTABLISH procedures and assign responsibility for evacuation of physically challenged personnel.

DRAW up evacuation routes and post the routes in prominent areas.

IDENTIFY specific precautions that must be followed before everyone evacuates the building:

- Should cash, valuables, confidential records be locked away?
- Do employees with disabilities need assistance?
- Do emergency shutdown procedures need to be activated?
- Are there visitors in the building?

DETERMINE where everyone will meet once they have evacuated the building.

ESTABLISH procedures for taking attendance of all personnel.

DETERMINE communication methods for head count results.

TRAIN all employees on evacuation procedures.

PRACTICE your evacuation plan.

Providing Victim Support

After a violent incident, it is essential that the victim(s), other affected employees and, in some cases, the victim's family, obtain immediate counselling and trauma therapy. Early provision of victim support services will reduce the impact of a crisis.

Traumatized employees may require emotional support (e.g. critical incident stress management, post-traumatic incident counselling), job accommodations and/or medical treatment. Your organization should identify resources to provide these services and develop procedures for making appropriate use of these resources when an incident occurs.

Individuals who may be affected by a traumatic event include:

- the victim(s);
- other employees (including some remote from the scene);
- · witnesses;
- · first responders;
- family members; and
- others connected to the trauma.

Individuals affected by a violent incident may experience:

- shock;
- anger;
- a general mistrust of other people;
- mood swings;
- · alcohol and drug abuse;

- physical symptoms, such as:
 - inability to sleep
 - loss of appetite
 - trembling
- psychosomatic symptoms, such as:
 - stomach pain
 - headaches
- panic or anxiety, especially of returning to work;
- family tension and stress:
- · inability to concentrate;
- non-specific fears;
- · low morale and productivity;
- loss of memory;
- · feelings of helplessness;
- · loss of confidence;
- · feelings of isolation and loneliness;
- feelings of frustration and guilt;
- · increased sense of vulnerability; and
- flashbacks of the event.

In situations with a particularly high risk of workplace violence, it may be appropriate to provide preventive trauma counselling. If people are aware that their reactions to an event are normal, the severity of the reaction may be reduced.

Immediately following a violent incident, victims should be offered:

- medical attention:
- informal debriefing, which allows victims to talk through their experience with their co-workers and supervisor;
- formal debriefing with a skilled debriefer, if necessary;
- voluntary and confidential trauma counselling or therapy by an independent, qualified professional;
- time off work, which will vary as individuals react differently to different circumstances;
- information regarding their rights;
- assistance with compensation, insurance and/or legal advice; and
- ongoing follow-up and treatment as needed.

Co-workers should be encouraged to talk about problems they may be experiencing and to be supportive of the victim and sensitive to his or her feelings. In some situations, a group debriefing by qualified professionals may be appropriate. This debriefing can provide advice on how to communicate with a co-worker who has been the victim of a violent incident.

For additional information see the "Violence in the Workplace Prevention Guide" available from the Canadian Centre for Occupational Health and Safety.

Responding to Civil Demonstration

Everyone in the public domain is a stakeholder or a potential stakeholder of your company. Whether you share their views or not, you have a responsibility to treat everyone with respect and courtesy. This section refers to peaceful demonstrations only.

Your response plan should incorporate the following principles:

ALERT the Emergency Response Team on standby.

TREAT visitors as guests.

ENSURE workplace safety.

ANSWER questions factually and simply.

CONTINUE work.

REMAIN positive.

INFORM all employees of situation.

HAVE police remove demonstrator(s) if necessary for safety.

DO NOT ENGAGE in debate with protesters.

DO NOT INITIATE police presence.

DO NOT MISLEAD.

DO NOT USE any physical force.

Where an incident becomes violent, or threatens the safety of employees or the environment, the police must be contacted immediately.

Guidelines for handling demonstrations

DESIGNATE a person to communicate with protesters.

IDENTIFY leaders and initiate communication with protesters.

INVITE protesters, their representatives, or their leaders, inside for dialogue and/or a tour of the facility.

PROVIDE information kits on company principles and activities.

7. Crisis Management

Notification

It is your responsibility to inform certain agencies, where required by law. Such agencies include:

 Provincial or State Authorities for Environment for incidents affecting the environment;
 Provincial or State Authorities for Labour for work-related incidents;
□ Provincial or State Authorities for Hazardous Materials;
☐ Municipal Medical Officer and other City Authorities;
□ Internal emergency response organization(s);
□ Fire department;
□ Police;
□ Ambulance;
□ Hospital;
□ Poison Control Centre;
□ Electrical utilities;
□ Public Works department;
□ Natural gas or propane suppliers;
□ Weather office;
□ Your external security resources;
□ Railroads;
□ Internal management personnel (office and home contact numbers needed);
□ Spill clean-up contractor(s);
□ CANUTEC/CHEMTREC; and
□ Mutual aid companies.

The requirement for resources during an emergency can be extensive and cover a broad range of agencies. The list above is intended to be a quick reference for agencies most likely to provide emergency assistance.

Reporting

Emergencies must be reported in order to:

- · ensure the public's safety;
- satisfy legal requirements;
- comply with your company policies; and
- comply with your insurance underwriter's policies.

The emergency response plan must clearly identify:

- who will make and file reports;
- to whom the reports are made or sent;
- how reports are to be made or filed (verbal, written, faxed, electronic); and
- the time frame for filing reports.

Emergency Operations Centre

During major emergencies, there is usually a need to establish an Emergency Operations Centre.

There should be two centres – a primary and an alternate. These locations should be in separate buildings where the effect of the emergency situation is not present.

Emergency Operations Centre equipment list

- minimum two telephones with dedicated lines;
- portable cellular phone and charger;
- · approved first aid kit;
- Material Safety Data Sheets, inventory lists and locations;
- two flashlights and spare batteries;
- two log books (communications log and activity log);
- battery operated clock;
- mutual aid resource list:
- · employee address & telephone list;
- Two copies of the response plan;
- battery operated AM radio and tape; recorder, spare batteries, and spare tapes; and
- sufficient amounts of food and drink.

Safety and Security of Employees

Security may be required to:

- establish and maintain a secure workplace perimeter;
- preserve evidence for investigations;
- protect physical assets from exposure to the elements;
- facilitate restoring normal operations.

Communication

Develop procedures for internal and external communications during an emergency. Telephone systems can easily be affected by the emergency event. Typical alternative methods for communication include:

- · cellular phones;
- two-way radios;
- public address (PA) systems; and
- dispatching a person who is familiar with the location of a public phone or a phone in a neighbouring facility.

The response procedures must clearly designate the primary communication system and what to do if it fails.

Appropriate backup systems include:

- · location of public telephones;
- · location of the nearest fire department station; and
- agreements with neighbours allowing the use of their telephones.

All employees must free up all outside telephone lines whenever there is an alarm situation.

Communication with the general public

The public must be kept informed about the emergency situation. Response procedures must ensure:

- · accurate information; and
- · timely information.

In order to avoid the release of confusing, contradictory, or misleading information, only authorized persons should speak to the media on behalf of the company.

The responsibility for the release of names of affected persons must be clearly designated. Such names must never be released before the company has contacted the next of kin.

All persons authorized to release information to the media should receive proper training in communicating with the media.

The following are some helpful guidelines for communicating with media:

ESTABLISH a media centre.

RESTRICT access to the media centre.

DENY facility access to the media and the public during an emergency situation.

INSTRUCT employees to direct the media and the public to the media centre, or provide a contact telephone number of the person responsible for communicating with the media.

PROVIDE for periodic briefings by management. Generally, media briefings involve interview questions, but a written statement should form the basis of all released information.

For major events, the Community Emergency Response Plan may have a designated central media centre.

The media release

A media release should cover the following information:

- · nature and extent of the emergency incident;
- response actions underway;

- · impact on off-site areas; and
- coordination with the community and companies in the vicinity.

Guidelines to follow:

PROVIDE regular media releases. If a statement is promised, it must be delivered!

RELEASE only accurate, substantiated information.

EXPLAIN the reason(s) for denial of a request for information.

REMEMBER that the media and the public have a right to know how the incident will affect the community and the environment.

PLAN regular follow-up releases after the emergency.

Consider inviting the media and others to visit the emergency site, when it is safe to do so.

LOG all media inquiries and interviews for future reference.

News stories should be monitored to ensure that the media is distributing only factual information. Any misinformation or rumours should be corrected quickly or dispelled.

KEEP your promises.

HOLD regular briefings.

BE honest and forthcoming.

REMAIN calm.

ENSURE understanding.

AVOID jargon.

KEEP message simple.

REMAIN positive.

DO NOT RELEASE estimates of damage nor allow photographs on-site without approval from senior manager.

DO NOT SPECULATE.

DO NOT ATTEMPT to blame.

DO NOT MISI FAD.

DO NOT RELEASE names of victims to media before next-ofkin have been informed.

8. Developing a Media Plan

A communication plan for dealing with the media and the community is of utmost importance for any organization.

This plan should:

ESTABLISH a good rapport with the media in a pre-crisis period;

IDENTIFY the reporters you will deal with on a regular basis;

PROVIDE company background information the media will need:

ELIMINATE any public misperception about your organization;

ESTABLISH a reputation for integrity;

TAKE advantage of every good news opportunity to get your story out without having any of the facts distorted; and

BUILD a relationship with the media by including background stories on the company. Your plan must accomplish a good track record long before a crisis develops.

Preplanned Messages

A concise, positive message about your company can be easily included in the answer to any question posed by the media. This message must be pre-planned and ready for use during an emergency.

Here are some examples of preplanned messages:

- "We have implemented a comprehensive emergency response plan."
- "Our risk assessment process identifies and eliminates hazards at the source."
- "We have expended considerable resources developing our emergency response plan to handle this exact situation"
- "Our action plans, implemented by our highly trained staff, have been successful in bringing this situation under control quickly."
- "There will be no lasting effect on the community."

Rules to remember

ACCEPT and INVOLVE the public as a legitimate partner.

PLAN carefully what to say and evaluate your performance.

LISTEN to your audience.

BE honest, frank and open to reporters.

COORDINATE / COLLABORATE with other credible sources such as the fire department, police, etc.

MEET the media persons promptly. Don't keep them waiting.

SPEAK clearly and with compassion.

REMAIN calm.

ENSURE you are understood.

KEEP messages simple and focused on the positive.

DO NOT BE antagonistic - be gentle and gracious.

Once your credibility is lost, it can take years to recover!

9. Business Recovery Plans

The objective of a business recovery plan is to resume each activity to a specified level of service and within a specific timeframe.

Examples of planning objectives:

- to staff essential or designated positions at an alternate site within four hours of the business interruption;
- to have alternate information processing arrangements that will meet essential computer requirements within 48 hours of the business interruption;
- to be capable of answering 30% of incoming customer calls within one hour and 100% of calls within four hours of an interruption; and
- to be capable of resuming 50% of production within three days and 100% of production within two weeks of an interruption.

Business Resumption

Business resumption planning is a company-wide activity with focus on business processes and revenues and reduced recovery times.

Recovery planning involves all aspects of a company's business. The entire organization is analyzed, from top to bottom, to determine what is critical for survival in a crisis. Examples of issues addressed in business recovery planning:

- What if we lost production capacity from a fire? How would we deliver our product?
- What would we do if our communication network were incapacitated?

- What if a virus ravaged our computer network, or a hacker attacked?
- What if we had a strike?
- What if we lost power for a week or a month?
 How would we service our customers?

Recovery planning considers the impact of an emergency on:

- revenue:
- image; and
- employee, customer and shareholder confidence.

The objective of recovery planning is to:

- · identify critical activities;
- make prior arrangements to maintain continuity; and
- document and test recovery procedures.

The recovery planning process consists of the following steps:

- Identify all critical functions and the impact their disruption would have on the organization (Business Impact Analysis).
- Develop detailed strategies and plans to reduce the impact of emergency incidents.
- 3. Maintain and exercise the plans.

A good business continuity plan includes:

- clear scope and objectives;
- clearly defined responsibilities and team structure;
- a list of vital records and critical resources:

- all necessary forms and provisions; and
- expected recovery time.

For effective business continuity and recovery planning, vital records must be backed up off-site.

Organizations such as the **Disaster Recovery Institute** (www.dri.ca) and the **Disaster Recovery Information** Exchange (www.drie.org) provide training and/or forums for exchange of knowledge.

Business Impact Analysis

The following are some primary questions as they apply to your business or organization:

- 1. What functions would have to be done immediately after a business interruption?
- 2. What are your immediate internal requirements? Where do they come from?
- 3. What could be postponed?
- 4. What are your external requirements on a day-to-day hasis?
- 5. How long can your essential business functions be inoperative?
- 6. Are there regulatory requirements or penalties that must be considered if you cannot fulfill your obligations?
- 7. What are the financial consequences of delays in the performance of a business function?

- 8. What does it cost to respond/recover versus the short-term lost revenue?
- 9. Do other organizations depend on functions that your company performs?
- 10. What are your external outputs?
- 11. What would be the public relations implications of a curtailment of your activities?
- 12. Would the safety or security of personnel and property be jeopardized if your operations were interrupted?
- 13. Which of your essential operations are dependent on computer support? Are there alternative manual operating procedures in place with people who know how to perform these operations? How long could these operations be performed without computer support?

Prioritize time-critical activities

From a review of the information gathered in these questions, determine which activities have the most significant impact on the company's ability to survive.

The priority will assist you in maintaining focus and in controlling the expenditure of resources.

Incident Investigations

The purpose of investigation is to find the cause of the incident and NOT to blame people for it.

Incident investigations as related to emergency response have a threefold purpose:

- To identify the root cause of the event/occurrence and what steps might be taken to prevent a reoccurrence.
- 2. To identify the effectiveness of the existing emergency response plan and recommend improvements.
- To identify how to reduce its impact in case the emergency arises again.

Investigation team

The best approach to incident investigation is one that uses a team of knowledgeable persons. The incident investigation team may consist of:

- persons having appropriate expertise;
- supervisor responsible;
- joint health and safety committee / health and safety representative(s); and
- member(s) of the emergency response team.

The investigation team submits a formal report that includes:

- · date and time of report;
- location, date and time of the incident;
- · names of witnesses;

- description of the incident, including the equipment, working conditions and events leading to the incident;
- root cause of the incident;
- general description of the response steps taken;
- identification of any deficiencies noted in the response;
- recommendations for corrective action:
- recommendations for improvements to response plan; and
- names of the investigating team members.

Damage Assessments

The purpose of the damage assessment is to estimate losses detailing equipment, machinery, personnel injured and materials lost; and a prioritized list of necessary repair and reconstruction work, personnel assignments and completion schedules.

The procedures will clearly designate who is responsible for ensuring that all damage is properly assessed, reviewed and documented.

Consider the following while performing damage assessment: building structures;

- inspection and testing of equipment;
- development of the list of replacement items and services:
- contacting vendors of damaged items and materials;
- documenting damaged items, labour costs, contracted assessment services, etc.; and
- follow-up on any injured employees.

10. Cleanup and Restoration Plans

As soon as incident investigations are completed, cleanup and restoration activities should commence. The procedures must designate the person(s) who are responsible for the following activities:

- ensuring the safety of cleanup personnel;
- directing the repair, cleanup and restoration of utilities and of salvage activities;
- coordinating the activities of contractors and vendors and supply all necessary reference information;
- replacing or restoring all emergency equipment and supplies as necessary;
- expediting all orders for equipment, supplies, and services;
- monitoring and recording all costs related to recovery activities;
- arranging temporary storage facilities for damaged equipment and materials to facilitate inspection
- by insurance personnel; and
- maintaining documentation and reports.

The list of activities suggested above should be customized to suit the particular needs of your business.

There are many organizations that provide specialized recovery services. Local resources should be identified and procedures to secure these resources, if needed, should be developed. Areas to address might include:

 recovery from water damage including mould removal, drying paper documents;

- recovery of electronic data and computer systems following fire, smoke, electrical power surges or water damage;
- availability of temporary storage such as trailers or temporary buildings;
- · availability of replacement computers; and
- availability of temporary office space, manufacturing space, or storage space.

Claims Procedures

In most emergencies, damage to facilities and equipment does occur. The procedures for submitting claims to an insurance carrier(s) should be clearly established and included in the recovery procedures of your plan.

NOTES

Section V

Plan Implementation

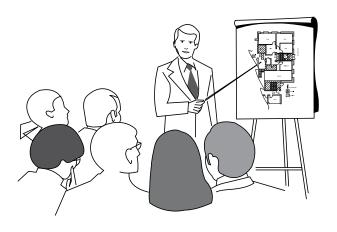
- 1. Personnel Training
- 2. Drills and Exercises
- 3. Evaluating the Effectiveness of the Exercises

1. Personnel Training

An effective emergency response plan will not succeed without trained personnel who have the knowledge and skills necessary to carry out the assigned task.

The training should include:

- detailed procedures for emergency response that addresses all types of hazards or emergencies covered by the plan;
- specific hazards and response duties as outlined in the plan;
- · regulations and appropriate standards; and
- specialized training for personnel responsible for responding to emergencies and facilitating the evacuation procedures.



☐ First-aid. ☐ MSDS information. ☐ Product labels and what they mean. ☐ Evacuation procedures. ☐ Emergency reporting procedures. ☐ Fire & leak detector systems.	□ Person	al protective equipment.
☐ Fire suppression equipment use. ☐ First-aid. ☐ MSDS information. ☐ Product labels and what they mean. ☐ Evacuation procedures. ☐ Emergency reporting procedures. ☐ Fire & leak detector systems.	⊐ Preven	tive maintenance of equipment
 □ Fire suppression equipment use. □ First-aid. □ MSDS information. □ Product labels and what they mean. □ Evacuation procedures. □ Emergency reporting procedures. □ Fire & leak detector systems. □ Portable fire extinguishers. 	□ Spill co	ontainment and cleanup.
 □ MSDS information. □ Product labels and what they mean. □ Evacuation procedures. □ Emergency reporting procedures. □ Fire & leak detector systems. 	□ Fire su _l	ppression equipment use.
□ Product labels and what they mean. □ Evacuation procedures. □ Emergency reporting procedures. □ Fire & leak detector systems.	□ First-ai	d.
□ Evacuation procedures. □ Emergency reporting procedures. □ Fire & leak detector systems.	□ MSDS i	nformation.
□ Emergency reporting procedures. □ Fire & leak detector systems.	□ Produc	t labels and what they mean.
□ Fire & leak detector systems.	□ Evacua	tion procedures.
•	□ Emerge	ency reporting procedures.
 Portable fire extinguishers. 	□ Fire & I	leak detector systems.
	□ Portabl	le fire extinguishers.

Personnel expected to deal with structural fires and hazardous materials require a high level of training.

Consult appropriate NFPA (National Fire Protection Association) and CSA (Canadian Standards Association) standards for training requirements for various emergency response activities.

Training Standards Guide			
Training	Standard	Title	
Fire Suppression	NFPA 600	Industrial Fire Brigades	
Hazardous Materials Response	NFPA 471	Recommended Practice for Responding to Hazardous Materials Incidents	
Hazardous Materials Responder Competencies	NFPA 472 NFPA 473	Competence of Responders	
Emergency Management	NFPA 1600	Disaster Emergency Management	
Emergency Management	CSA Z-731	Emergency Planning for Industry	
Pre-Incident Planning	NFPA 1620	Practice for Pre-Incident Planning	

NFPA = National Fire Protection Association CSA = Canadian Standard Association

108

2. Drills and Exercises

Drills and exercises are an effective training tool. They provide a means of measuring the state of preparedness and the effectiveness of an emergency response plan.

The emergency response plan should outline procedures, including:

- types of exercises or drills to be conducted;
- frequency of exercises and drills;
- plans for organizing, conducting, and evaluating exercises and drills;
- who is responsible for developing, scheduling, and conducting drills;
- provisions for including all levels of management in the exercise program;
- provisions involving off-site agencies where appropriate;
- provisions for correcting defects in the plan that are detected by the drills; and
- provisions for conducting an annual full-scale exercise.

Emergency drills must include the following key elements:

- evacuation;
- communications;
- fire control;
- medical assistance and first aid;
- spill control;
- emergency operations centre;
- monitoring; and
- cleanup.

Full-Scale Exercise

A comprehensive exercise should involve off-site personnel. The objective of this exercise is to fully test and evaluate your company's capability of responding to a realistic emergency scenario.

Functional Drills

Functional drills are designed to test and evaluate specific functional aspects of the plan.

For example:

- evacuation;
- · fire extinguisher use; and
- · spill cleanup.

Tabletop Exercises

The objective of tabletop exercises is a step-by-step evaluation of response procedures and process flow.

The emphasis is on problem-solving rather than rapid decision-making. These exercises should take place in a meeting room.

Key personnel can conduct "tabletop exercises" to evaluate the effectiveness of the plan in selected emergency scenarios.

These exercises should be conducted:

- at initial implementation of the plan;
- after any major revisions of the plan;
- · to orient key personnel;

- · to create problem-solving opportunities;
- to assess resources; and
- to evaluate identified problems.

Drill Preparation

Preparation for a drill or exercise varies depending on the type and scope involved. Following are some helpful hints:

ASSIGN responsibilities.

TRAIN event controllers and evaluators.

REVIEW the plan to identify possible problem areas.

ESTABLISH measurable objectives.

IDENTIFY resources needed including personnel.

DEVELOP:

- exercise scenarios;
- major sequence of events list; and
- expected action checklist.

Scenario Planning

Use scenarios that are realistic and based upon current operating conditions. The primary event (fire, spill, etc.) is to be determined based on the objective of the exercise.

ASSIGN mock victims, if any.

ORGANIZE props, victim make-up, smoke generators, etc.

ASSIGN persons to act as media representatives.

CONSIDER videotaping the exercise.

DEVELOP a sequence of major events. This will help simulate an actual emergency incident. The physical conditions should simulate, as closely as possible, actual emergency conditions.

CREATE a list of expected outcomes for evaluation purposes.

Drill Notification

Notify your alarm monitoring service, in writing, at least 48 hours in advance of the drill. They should also be notified by telephone immediately prior to the drill.

Meet one hour prior, to brief all members of the response teams on the exercise or drill.

After the Drill

RESET the alarm.

NOTIFY alarm monitoring service that the drill is over.

IDENTIFY deficiencies in the:

- plan;
- training;
- personnel;
- equipment; and
- evacuation time.

3. Evaluating Exercise Effectiveness

A thorough evaluation of the exercise will ensure that the emergency plan is successfully implemented and complete.

Post-exercise evaluation

All response team members should meet after the drill to evaluate the exercise.

All participants meet to:

- determine level of achievement of objectives;
- · identify problem areas;
- develop corrective actions;
- · make recommendations; and
- develop action plans.

Report

A written report should be prepared and submitted in writing to management. The report must include:

- · problems or difficulties;
- recommendations for corrective measures;
- responsibility for taking corrective action; and
- time frames for corrective actions.

SAMPLE

Checklist for Evaluating Emergency Respo	nse Di	ills
	Yes	No
Was the exercise completed within the expected time?		
Did the Emergency Management Team respond appropriately as planned?	۵	
Did response teams function as planned?		
Were internal and external communications clear?		
Did any employees have difficulty evacuating?		
Were all exits and entrances clear and functional – gates, doors, elevators, etc?	٠	
Were aisles clear?		
Were there sufficient emergency materials and equipment available?	٠	
Were the emergency materials and equipment in the proper place and proper working order?	٠	
Did vehicles need to be moved?		
If yes, were keys readily available?		
Did appropriate notification take place?		
Did everyone know what to do?		
Did anyone have too much to do?		
Did the fire department, ambulance, police arrive on time?	٥	
Remarks:		

SAMPLE

EMERGENCY PLANNING EXERCISE REVIEW
Exercise Type:
Function Reviewed:
Date of Exercise:
Issue Identified:
Consequence if NOT Corrected:
Recommended Action:
Responsible Person:
Date of Completion:
Copies To:
Reviewed By:
· · · · ,

NOTES

Section VI

Continuous Improvement

- 1. Incident Follow-up
- 2. Tips for Continuous Improvement

1. Incident Follow-up

The purpose of incident follow-up is to ensure that all lessons learned from situations are applied to prevent future incidents.

Incident follow-up occurs sometime after the incident has been investigated and recommendations made. It involves taking a second look at the situation.

All incidents should be classified according to key characteristics, such as:

- location;
- process involved;
- type of incident; and
- possible causes.

Look for similarities indicating common patterns in incident occurrences. For example, have the majority of incidents occurred:

- at a particular time of day?
- during a particular time of year?
- in a particular process?

These observations will help you identify new or previously undefined risks and will give you opportunity to strengthen your prevention program.

Revisit your training and education programs and determine if they should be redesigned or if refresher training should be provided. Outline what corrective actions are necessary and how you will achieve them.

Other points to consider:

- Are the victims okay? Do they require additional services or advice?
- Did your organization implement the recommendations that were developed during the investigation phase?
- Have you gained additional insight into the situation over time?

2. Tips for Continuous Improvement

REVIEW the effectiveness of the plan periodically.

MAKE changes as necessary to enhance the effectiveness of the plan.

TAKE each and every potential emergency situation seriously.

INTEGRATE response plans with other management systems.

SET achievable goals and allow reasonable time to achieve these goals.

DO NOT BELIEVE that it won't happen to you.

DO NOT SET expectations too high making them unachievable.

DO NOT ATTEMPT to achieve too much too soon.

DO NOT HOLD one person or one department responsible for the entire plan.

SAMPLE

Reminder Checklist		
	Yes	No
Do you have someone designated as an alternate leader for overall emergency response plans?	٥	
Do the Fire and Police departments servicing each of your locations have the phone number of both the person in charge and the alternate?	۵	۵
Are your backup files where you can readily get to them?		
Have you tested that you can actually read and restore your computer backup files?	٠	
Do your alarms work without power (do they have battery backup)?		
Are your safes fireproof?		
Do you have a binder off-site with a copy of every form you use, and the phone number of where you purchase them or get more?	٠	٠
Do you have the after-hours contact numbers for your insurance agents?	٠	٠
Do you have at least one telephone at each location that works when your main telephone system loses power or breaks?	۵	٥
Are your personnel records safe from fire?		
Do you know the street addresses of your local radio stations where you can submit emergency announcements?	۵	٥
Are your telephone and electrical service rooms protected from falling water?	٦	٠
Do you have a list of all employees' voice-mail pass- words in order to retrieve messages when an employee is suddenly ill or incapacitated?	۵	٥

Reminder Checklist	
Do you have at least one exit that unlocks when the fire alarm sounds, or activates fire alarm when opened?	
Do you have emergency cabinets containing at least: flashlights with extra batteries, a radio with extra batteries, and a first-aid kit?	
Do you regularly conduct mock drills/exercises and training?	

NOTES

Section VII

Standards & Resources

- 1. Key References for Additional Information
- 2. NFPA Standards
- 3. Fire Code Inspection Requirements
- 4. Emergency Response Organizations

1. Key References for Additional Information

Canada

CSA Z731-03 Emergency Preparedness and Response

CSA Q850-97 Risk Management: Guideline for Decision Makers

National Fire Code of Canada

National Building Code of Canada Canadian Electrical Code

National Plumbing Code of Canada

Provincial or Federal Occupational Health & Safety Acts

Provincial or Federal Environmental Protection Acts
Transportation of Dangerous Goods Act

Local Sewer Bylaws

Guide to Process Safety Management

Canadian Chemical Producers Association

United States

US workplaces follow OSHA standard 1910.120 Hazardous Waste Operations and Emergency Response (HAZWOPER).

For workplaces within the USA, consult "Emergency Management Guide for Business and Industry" published by the Federal Emergency Management Agency (FEMA).

The following publications are available from the US National Criminal Justice Reference Service:

Guide for the Selection of Chemical Agent and Toxic Industrial Material Detection Equipment for Emergency First Responders, NIJ Guide 100- 00, Volume 1. 2000, NCJ 184449.

Summary: www.ojp.usdoj.gov/nij/pubs-sum/184449.htm PDF: www.ncjrs.org/pdffiles1/nij/184449.pdf

Guide for the Selection of Chemical Agent and Toxic Industrial Material Detection Equipment for Emergency First Responders, NIJ Guide 100-00, Volume 2. 2000, NCJ 184450.PDF: www.ncirs.org/pdffiles1/nij/184450.pdf

Guide for the Selection of Chemical and Biological Decontamination Equipment for Emergency First Responders, Volume I. 2000, NCJ 189724.

Summary: www.ojp. usdoj.gov/nij/pubs-sum/189724.htm PDF: www.ojp.usdoj.gov/nij/pubs-sum/189724.htm

Guide for the Selection of Chemical and Biological Decontamination Equipment for Emergency First Responders, Volume II. 2000, NCJ 189725.

Summary: www.ojp.usdoj.gov/nij/pubs-sum/ 189724.htm PDF; www.ojp.usdoj.gov/nij/pubs-sum.189724.htm

Guide for the Selection of Communication Equipment for Emergency First Responders (Volume 2). 2002, NCJ 191161.

Summary: www.ojp.usdoj.gov/nij/pubs-sum/191160.htm PDF: www.ojp.usdoj.gov/nij/pubs-sum/191160.htm

Guide for the Selection of Personal Protective Equipment for Emergency First Responders. 2002, NCJ 191518.

Summary: www.ojp.usdoj.gov/nij/pubs-sum/191518.htm PDF: www.ncirs.org/pdffiles1/nii/191518.pdf

Guide for the Selection of Personal Protective Equipment for Emergency First Responders (Percutaneous Protection – Apparel). 2002, NCJ 191521.

PDF: www.ncjrs.org/pdffiles1/nij/191521.pdf

Guide for the Selection of Personal Protective Equipment for Emergency First Responders (Percutaneous Protection - Garments). 2002, NCJ 191520.

PDF: www.ncjrs.org/pdffiles1/nij/191520.pdf

Guide for the Selection of Personal Protective Equipment for Emergency First Responders (Respiratory

Protection), 2002, NCJ 191519.

PDF: www.ncjrs.org/pdffiles1/nij/191519.pdf>

Emergency Response Planning Resources

Business Continuity Planning

Public Safety and Emergency Preparedness Canada www.psepc.sppcc.gc.ca

Disaster Recovery Information Exchange www.drie.org

Transportation of Dangerous Goods, CANUTEC www.tc.gc.ca/canutec/

Self-help Advice for Business and Institutions: A Guide to Business Continuity Planning www.ocipep.gc.ca/info pro/self help ad/general/book busi e.asp

Disaster Recovery Planning

Links to firms providing recovery services and products www.disasterplan.com/yellowpages/tips.html

Disaster Recovery Institute Canada www.dri.ca

Community Emergency Response Teams (British Columbia) www.certbc.com

Plan Examples

Emergency Management Guide for Business and Industry www.fema.gov/library/bizindex.shtm

2. NFPA Standards

- Canadian Fire Codes often reference National Fire Protection Association (NFPA) standards. Following is a partial list of NFPA standards:
- NFPA 10: Standard for Portable Fire Extinguishers, 2002
 Edition
- NFPA 11: Standard for Low-, Medium-, and High- Expansion Foam, 2002 Edition
- NFPA 13: Installation of Sprinkler Systems, 2002 Edition
- **NFPA 14**: Standard for the Installation of Standpipe, Private Hydrants and Hose Systems, 2003 Edition
- NFPA 25: Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, 2002 Edition
- NFPA 30: Flammable & Combustible Liquids Code, 2003 Edition
- NFPA 32: Standard for Drycleaning Plants, 2000 Edition
- NFPA 34: Dipping and Coating Processes Using Flammable or Combustible Liquids, 2003 Edition
- NFPA 36: Solvent Extraction Plants, 2004 Edition
- NFPA 37: Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines, 2002 Edition
- NFPA 45: Standard on Fire Protection for Laboratories Using Chemicals, 2004 Edition
- NFPA 50: Standard for Bulk Oxygen Systems at Consumer Sites, 2001 Edition
- NFPA 51: Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes, 2002 Edition

NFPA 51B: Standard for Fire Prevention During Welding, Cutting and Other Hotwork, 2003 Edition

National Fuel Gas Code and Handbook Set, 2002 Edition

NFPA 55: Standard for the Storage, Use and Handling of Compressed and Liquefied Gases in Portable Cylinders, and Tanks, 2003 Edition

NFPA 61: Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities, 2002 Edition

NFPA 69: Standard on Explosion Prevention Systems, 2002

Edition

NFPA 70E04: Electrical Safety in the Workplace, 2004 Edition

NFPA 70B: Electrical Equipment Maintenance, 2002 Edition

NFPA 72: National Fire Alarm Code, 2002

NFPA 75: Standard for the Protection of Electronic Computer/ Data Processing Equipment, 2003 Edition

NFPA 77: Recommended Practice on Static Electricity, 2000 Edition

NFPA 110: Standard for Emergency and Standby Power Systems, 2002 Edition

NFPA 115: Recommended Practice on Laser Fire Protection, 2003 Edition

NFPA 231D: Standard for Storage of Rubber Tires, 1998 Edition

NFPA 232: Standard for the Protection of Records, 2000 Edition

NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2000 Edition

NFPA 303: Fire Protection Standard for Marinas and Boatyards, 2000 Edition

- **NFPA 325**: Guide to Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids, 1994 Edition
- **NFPA 326**: Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair, 1999 Edition
- NFPA 329: Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases 1999 Edition
- NFPA 395: Standard for the Storage of Flammable and Combustible Liquids at Farms and Isolated Sites, 1993 Edition
- NFPA 471: Recommended Practice for Responding to Hazardous Materials Incidents, 2002 Edition
- **NFPA 472**: Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2002 Edition
- **NFPA 473**: Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents, 2002 Edition
- NFPA 600: Standard on Industrial Fire Brigades, 2000 Edition
- **NFPA 601:** Standard for Security Services in Fire Loss Prevention, 2000 Edition
- **NFPA 651:** Standard for the Machining and Finishing of Aluminum and the Production and Handling Aluminum Products, 1998 Edition
- NFPA 654: Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 2002 Edition
- NFPA 664: Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities, 2002 Edition
- NFPA 1600: Standard for Disaster Emergency Management, 2000 Edition
- NFPA 1620: Recommended Practice for Pre-Incident Planning, 2003 Edition

3. Fire Code Inspection Requirements

Examples of inspection requirements are included in the following tables. These examples are taken from the Ontario Fire Code. Please refer to the Fire Code applicable to your workplace for inspection requirements applicable to your workplace.

Fire Prevention Officers may check to ensure that the necessary checks, inspection and/or tests are being done, when conducting their inspections.

This list has been prepared for purposes of convenience only. For accurate reference, consult the current version of the Fire Code.

Definitions for key words are as follows:

- **CHECK** Visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.
- TEST Operation of device or system to ensure that it will perform in accordance with its intended operation or function.
- **INSPECT** Physical examination to determine that the device or system will apparently perform in accordance with its intended function.
- It is stated in the Fire Code that records of all tests and corrective measures are required to be retained for a period of two years after they are made.

Portable Fire Extinguishers		
Fire Code Reference	Requirements	Inspection Frequency
6.2.7.2.	Inspect all portable extinguishers	Monthly
6.2.7.1.	Subject to maintenance	Annually
6.2.71.	Hydrostatically test carbon dioxide and water type extinguishers	Every 5 years
6.2.7.1	Empty stored pressure type extinguishers and subject to maintenance	Every 6 years
6.2.7.1	Hydrostatically test dry chemical and vapourizing liquid type extinguishers	Every 12 years
6.2.7.6. & 6.2.7.1.	Recharge extinguisher after use or as indicated by an inspection or when performing maintenance.	As Required

Refer to NFPA 10-1998 "Portable Fire Extinguishers" for exact details. Refer to NFPA 12-1993 "Carbon Dioxide Extinguishing Systems" for exact details.

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT. 1997.

131

Fire Alarm and Voice Communication Systems		
Fire Code Reference	Requirements	Inspection Frequency
6.3.2.1.	Check fire alarm AC power lamp trouble light	Daily
6.3.2.1.	Check trouble conditions	Daily
6.3.2.2.	Check central alarm and control facility	Monthly
6.3.2.1.	Check all fire alarm compo- nents including standby power batteries	Monthly
6.3.2.1.	Test fire alarm system	Monthly
6.3.2.3.	Test voice communication to and from floor areas to the central alarm and control facility	Monthly
6.3.2.1.	Test fire alarm system by persons acceptable to the authority having jurisdiction for service	Annually
Refer to CAN/ULC S536-1997 "Inspection and Testing of Fire Alarm		

Refer to CAN/ULC S536-1997 "Inspection and Testing of Fire Alarm Systems" for exact details.

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Standpipe and Hose Systems		
Fire Code Reference	Requirements	Inspection Frequency
6.4.2.1.	Inspect hose cabinets to ensure hose position and that equipment is in place and operable	Monthly
6.4.2.4.	Inspect hose valves to ensure tightness to ensure no water leakage	Annually
6.4.2.5.	Remove and re-rack hose and replace worn gaskets	Annually
6.4.1.2.	Remove plugs or caps on fire department connections and inspect for wear, rust or obstructions	Annually
6.4.3.6.	Hydrostatically test standpipe system piping which normally remains dry	Every 5 years
6.4.3.1.	Hydrostatically test standpipe systems that have been modified, extended or are being restored to use after a period of disuse exceeding one year	As Required

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT. 1997.

133

Sprinkler Systems		
Fire Code Reference	Requirements	Inspection Frequency
6.5.3.1.	Check that unsupervised sprinkler system control valves are open	Weekly
6.5.3.3.	Check that air pressure on dry pipe systems is being maintained	Weekly
6.5.5.2.	Test sprinkler alarms using Alarm Test connection	Monthly
6.5.5.7.	Test sprinkler supervisory transmitters and waterflow devices	Every 2 months
6.5.5.7.	Test gate valve supervisory switches and other sprinkler and fire protection system supervisory devices	Every 6 months
6.5.3.2.	Check exposed sprinkler system pipe hangers	Annually
6.5.3.5.	Check all sprinkler heads	Annually
6.5.4.3	Inspect dry pipe valve priming level	Every 3 months
6.5.4.4.	Remove plugs or caps on fire department connections and inspect for wear, rust or obstructions	Annually
6.5.5.3.	Test waterflow on wet sprinkler systems using most remote test connection	Annually
6.5.5.4.	Trip-test dry pipe trip system	Annually
6.5.5.5.	Test flow of water supply using main drain valve	Annually

Sprinkler Systems		
Fire Code Reference	Requirements	Inspection Frequency
6.5.4.2.	Inspect dry pipe system for obstructions and flush where necessary	Every 15 years
6.5.3.4.	Check dry pipe valve rooms or enclosures during freezing weather	As Required
6.5.4.1.	Inspect auxiliary drains to prevent freezing	As Required

Source: Ontarion Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Emergency Power Systems		
Fire Code Reference	Requirements	Inspection Frequency
6.71.1.	Check all components of the system and operate the generator set under at least 50% of rated load for 30 mm.	Weekly
6.71.1.	Check and clean crankcase breathers, governors and linkages on emergency gener- ators	Every 6 months
6.71.1.	Check torque heads and valve adjustments for engines	Every 2 years
6.71.1.	Inspect and service injector nozzles and valve adjustments on diesel engines	Every 3 years
6.71.1.	Check insulation of generator windings	Every 5 years

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Water Supplies for Fire Protection		
Fire Code Reference	Requirements	Inspection Frequency
6.6.3.2.	Check fire pump room temperature	Daily during freezing weather
6.6.2.2., 6.6.2.3.& 6.6.2.4.	Check tank heating equipment and water temperature of fire protection water tanks during freezing weather	Daily during freezing weather
6.6.1.2.	Inspect valves controlling fire protection water supply	Weekly
6.6.2.12.	Check water level and air pressure for pressure water tanks	Weekly
6.6.2.13.	Inspect relief valves on air and water supply lines of pressure tanks	Weekly
6.6.3.1.	Check water level in fire pump reservoirs	Weekly
6.6.3.3. & 6.6.3.4.	Operate and inspect fire pump	Annually
6.6.2.8.	Inspect water level in gravity tanks	Monthly
6.6.2.1.	Inspect fire protection water supply tanks	Annually
6.6.2.7.	Inspect cathodic protection on water supply tanks	Annually
6.6.2.9.	Inspect all parts of gravity tanks	Annually
6.6.3.5.	Test fire pump at full rated capacity	Annually
6.6.5.1.	Inspect all fire hydrants	Annually
6.6.5.7.	Inspect all fire hydrant waterflow	Annually

Water Supplies for Fire Protection		
Fire Code Reference Requirements		Inspection Frequency
6.6.2.5.	Check for corrosion on fire protection water supply tanks	Every 2 years
6.6.2.6.	Inspect fire protection water tanks connected to nonpotable water supply for sediment	Every 2 years
6.6.2.6.	Inspect fire protection water tanks connected to potable water supply for sediment	Every 5 years

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Means of Egress		
Fire Code Reference	Requirements	Inspection Frequency
2.2.3.4.	Inspect all doors in fire separations	Monthly
2.2.3.5.	Check all doors in fire separation to ensure they are closed	As Required
2.7.3.1.	Maintain exit signs to ensure they are clear and legible	As Required
2.7.3.2.	Maintain exit lights to ensure they are illuminated and in good repair	As Required
2.71.7.	Maintain corridors free of obstructions	As Required

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Means of Egress		
Fire Code Reference	Inspection Frequency	
2.5.1.2.	Ensure streets, yards and private roadways provided for fire department access are kept clear	As Required

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

Service Equipment		
Fire Code Reference	Requirements	Inspection Frequency
2.6.1.4.	Check hoods, filters and ducts subject to accumulation of combustible deposits and clean as necessary	Weekly
2.2.3.7.	Inspect all fire dampers and fire stop flaps	Annually
2.6.1.5	Inspect chimneys, flues and fluepipes and clean as necessary	Annually
2.6.1.8.	Inspect disconnect switch for mechanical air conditioning and ventilation	Annually
7.2.3.1.	Inspect controls for airhandling systems used for venting	Annually
2.6.3.3.	Clean incinerator spark arrestors	Annually
2.4.1.7.	Clean lint traps in laundry equipment	As Required

Source: Ontario Fire Code. O. Reg. 388/97. Made under the FIRE PROTECTION and PREVENTION ACT, 1997.

SAMPLE

Emergency Management Checklist			
Element	Documented	Functional Ability Proven	
Statement of policy on emergency response.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan given appropriate authority by highest management level.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan is distributed to all that need to know.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan establishes the emergency organization.	☐ Yes ☐ No	☐ Yes ☐ No	
The following functions have been clearly defined and assigned to individuals:			
Plan administration	☐ Yes ☐ No	🖵 Yes 🖵 No	
Operational control	🖵 Yes 🖵 No	🖵 Yes 🖵 No	
- Coordination of support	🖵 Yes 🖵 No	🖵 Yes 🖵 No	
Plan maintenance	🗅 Yes 🗅 No	🗅 Yes 🗅 No	
Regular risk assessment	🖵 Yes 🖵 No	🖵 Yes 🖵 No	
Training	☐ Yes ☐ No	🖵 Yes 🖵 No	
Drills and exercises	☐ Yes ☐ No	☐ Yes ☐ No	
Maintenance of equipment	☐ Yes ☐ No	☐ Yes ☐ No	
Specific response functions	🗅 Yes 🗅 No	🗅 Yes 🗅 No	
Coordination of off-site plans	☐ Yes ☐ No	☐ Yes ☐ No	
Alternates for all key positions exist.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan is based on risk assessment.	☐ Yes ☐ No	☐ Yes ☐ No	

Emergency Management Checklist			
Element	Documented	Functional Ability Proven	
Plan provides for annual drills and exercises.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan establishes various levels of emergencies with levels of response.	□ Yes □ No	□ Yes □ No	
Plan includes basic elements:			
Evacuation procedures	☐ Yes ☐ No	☐ Yes ☐ No	
- Shutdown procedures	☐ Yes ☐ No	☐ Yes ☐ No	
Employee role call procedures	☐ Yes ☐ No	☐ Yes ☐ No	
Rescue and medical duties	☐ Yes ☐ No	☐ Yes ☐ No	
- Reporting procedures	□ Yes □ No	☐ Yes ☐ No	
- Fire prevention plan	☐ Yes ☐ No	☐ Yes ☐ No	
All types of risk are considered:			
- Natural	☐ Yes ☐ No	☐ Yes ☐ No	
- Man-made	☐ Yes ☐ No	☐ Yes ☐ No	
- Civil disorders	□ Yes □ No	☐ Yes ☐ No	
All hazardous materials are listed.	☐ Yes ☐ No	☐ Yes ☐ No	
Assessment includes adverse impact off-site.	☐ Yes ☐ No	☐ Yes ☐ No	
Comprehensive accident investigation procedures exist.	☐ Yes ☐ No	☐ Yes ☐ No	
Good housekeeping procedures exist.	☐ Yes ☐ No	☐ Yes ☐ No	

Emergency Management Checklist			
Element	Documented	Functional Ability Proven	
Procedures exist for inspection or testing of critical equipment.	☐ Yes ☐ No	☐ Yes ☐ No	
Procedures call for the review of all new processes and equipment for compliance with:			
Occupational Health and Safety Act	☐ Yes ☐ No	☐ Yes ☐ No	
National Fire Code	🗅 Yes 🗅 No	☐ Yes ☐ No	
National Electrical Code	🗅 Yes 🗅 No	☐ Yes ☐ No	
Environmental Protection Act	☐ Yes ☐ No	☐ Yes ☐ No	
Fire protection equipment is inspected per fire code	☐ Yes ☐ No	☐ Yes ☐ No	
Contractors are briefed about Emergency Response Plans.	☐ Yes ☐ No	☐ Yes ☐ No	
The plan establishes a command post.	☐ Yes ☐ No	☐ Yes ☐ No	
Command post locations provide protection from hazards.	☐ Yes ☐ No	☐ Yes ☐ No	
The command post is adequately equipped.	☐ Yes ☐ No	☐ Yes ☐ No	
Provisions have been made for emergency power, light, utilities, etc.	□ Yes □ No	☐ Yes ☐ No	
Call lists and letters of agreement are up-to-date.	☐ Yes ☐ No	☐ Yes ☐ No	
Plan provides for emergency response training.	☐ Yes ☐ No	☐ Yes ☐ No	

Emergency Management Checklist		
Element	Documented	Functional Ability Proven
Emergency response training is based on specific hazards and response duties.	☐ Yes ☐ No	☐ Yes ☐ No
Testing of knowledge and skills is required.	☐ Yes ☐ No	☐ Yes ☐ No
Plan specifies type and frequency of training for each response function.	☐ Yes ☐ No	☐ Yes ☐ No
Adequate training records are kept.	☐ Yes ☐ No	☐ Yes ☐ No
Minimum training levels are defined.	☐ Yes ☐ No	☐ Yes ☐ No
Training of first responders complies with standards.	☐ Yes ☐ No	☐ Yes ☐ No
A current inventory list of all equipment and supplies exists.	☐ Yes ☐ No	☐ Yes ☐ No
Maintenance and decontamination procedures are included.	☐ Yes ☐ No	☐ Yes ☐ No
Equipment is tested as specified by the manufacturer.	☐ Yes ☐ No	☐ Yes ☐ No
Equipment and supply needs are reviewed when changes occur.	☐ Yes ☐ No	☐ Yes ☐ No
Contact lists for suppliers of emergency equipment and supplies maintained, updated and readily available.	☐ Yes ☐ No	☐ Yes ☐ No
Respiratory equipment selection, use and maintenance comply with current standard.	☐ Yes ☐ No	☐ Yes ☐ No

Emergency Management Checklist		
Element	Documented	Functional Ability Proven
Mutual aid agreements are in place.	☐ Yes ☐ No	☐ Yes ☐ No
Drills involving mutual aid have been held.	☐ Yes ☐ No	☐ Yes ☐ No
Capabilities of community organizations have been reviewed and considered.	☐ Yes ☐ No	☐ Yes ☐ No
Communications procedures include:		
• Telephone	☐ Yes ☐ No	☐ Yes ☐ No
Two-way radios	☐ Yes ☐ No	☐ Yes ☐ No
- Intercom	☐ Yes ☐ No	☐ Yes ☐ No
- Runners	☐ Yes ☐ No	☐ Yes ☐ No
Are emergency numbers posted at telephones?	☐ Yes ☐ No	☐ Yes ☐ No
Effective detection systems are installed, such as:		
Smoke detectors	□ Yes □ No	☐ Yes ☐ No
Heat detectors	☐ Yes ☐ No	☐ Yes ☐ No
Remote substance monitors	☐ Yes ☐ No	☐ Yes ☐ No
Leak detectors	☐ Yes ☐ No	☐ Yes ☐ No
Process control alarms	☐ Yes ☐ No	☐ Yes ☐ No
Detection devices undergo regular testing, inspection, maintenance and calibration.	☐ Yes ☐ No	☐ Yes ☐ No

Emergency Management Checklist		
Element	Documented	Functional Ability Proven
Regular tests of the alarm systems are conducted.	☐ Yes ☐ No	☐ Yes ☐ No
All response personnel are medically fit to perform such work.	☐ Yes ☐ No	☐ Yes ☐ No
All response personnel are volunteers.	☐ Yes ☐ No	☐ Yes ☐ No
At least two evacuation routes exist from each area.	☐ Yes ☐ No	☐ Yes ☐ No
The authority to declare a full evacuation is designated.	☐ Yes ☐ No	☐ Yes ☐ No
The authority to declare the emergency is "over" is designated.	☐ Yes ☐ No	☐ Yes ☐ No
All emergency exits are properly marked.	☐ Yes ☐ No	☐ Yes ☐ No
All employees are instructed in evacuation procedures.	☐ Yes ☐ No	☐ Yes ☐ No
Maps and procedures are posted.	□ Yes □ No	☐ Yes ☐ No
Assembly areas consider safe distances.	☐ Yes ☐ No	☐ Yes ☐ No
All employees and visitors can be accounted for.	☐ Yes ☐ No	☐ Yes ☐ No
Procedures address special needs of person(s) with disabilities.	☐ Yes ☐ No	☐ Yes ☐ No
Temporary shelter or transportation is considered.	☐ Yes ☐ No	☐ Yes ☐ No
The security function is defined.	☐ Yes ☐ No	☐ Yes ☐ No
Facility access is controlled during an emergency.	☐ Yes ☐ No	☐ Yes ☐ No

Emergency Management Checklist		
Element	Documented	Functional Ability Proven
Traffic control has been considered.	☐ Yes ☐ No	☐ Yes ☐ No
Pilferage and theft have been considered.	☐ Yes ☐ No	☐ Yes ☐ No
High security risk areas have been identified.	☐ Yes ☐ No	☐ Yes ☐ No
There are physical security devices.	☐ Yes ☐ No	☐ Yes ☐ No
The plan includes media relations before, during and after an emergency.	☐ Yes ☐ No	☐ Yes ☐ No
Public information documents exist.	☐ Yes ☐ No	☐ Yes ☐ No
Those dealing with the media/ public are trained.	☐ Yes ☐ No	☐ Yes ☐ No
Contacts with the media are established and maintained.	☐ Yes ☐ No	☐ Yes ☐ No
Media information is reviewed annually and updated.	☐ Yes ☐ No	☐ Yes ☐ No
Procedures control the release of information to the public during an emergency.	☐ Yes ☐ No	☐ Yes ☐ No
Names and information regarding the injured are restricted.	☐ Yes ☐ No	☐ Yes ☐ No
Regular media releases are made during an emergency.	☐ Yes ☐ No	☐ Yes ☐ No
Emergency shutdown procedures exist.	☐ Yes ☐ No	☐ Yes ☐ No
Responsibility for shutdown is assigned.	☐ Yes ☐ No	☐ Yes ☐ No

Emergency Management Checklist		
Element	Documented	Functional Ability Proven
Procedures and checklists have been developed.	☐ Yes ☐ No	☐ Yes ☐ No
Diagrams and maps indicating critical components are available.	☐ Yes ☐ No	☐ Yes ☐ No
All critical components are clearly identified.	☐ Yes ☐ No	☐ Yes ☐ No
Persons with special technological knowledge are available to emergency personnel.	☐ Yes ☐ No	☐ Yes ☐ No
An alternate location for continuing operations management is identified.	☐ Yes ☐ No	☐ Yes ☐ No
Resource list been developed for sources of equipment, supplies, services or contractors.	☐ Yes ☐ No	☐ Yes ☐ No
Agreements have been made with other facilities to continue production of products.	☐ Yes ☐ No	☐ Yes ☐ No
Procedures are adequate to document all compensable losses.	☐ Yes ☐ No	☐ Yes ☐ No
Procedures provide for preserving the accident scene for investigations.	☐ Yes ☐ No	☐ Yes ☐ No
A safety plan is required prior to re-entry into affected areas.	☐ Yes ☐ No	☐ Yes ☐ No

4. Emergency Response Organizations

Canada

Federal

National Search and Rescue Secretariat Environment Canada

400-275 Slater Street Ottawa, ON K1A OK2

Toll-free: 1-800-727-9414 (English and French)

Fax: (613) 996-3746 Web Site: www.nss.gc.ca

Public Safety Canada

269 Laurier Avenue West

Ottawa, ON K1A OP8 Phone: (613) 944-4875 (General Inquiries)

Toll-free: 1-800-830-3118 Fax: (613) 954-5186

E-mail: communications@ps.gc.ca Web Site: www.publicsafety.gc.ca/

Provincial

Alberta

Emergency Management Alberta Alberta Municipal Affairs

18th Floor Commerce Place

10155-102 St.

Edmonton AB T5J 4L4 Phone: (780) 422-9000 Fax: (780) 422-1419

Toll-free (Alberta): 310-0000 E-mail: comments@gov.ab.ca

Web Site: www.municipalaffairs.gov.ab.ca/

British Columbia

Provincial Emergency Program (PEP) Ministry of Public Safety and Solicitor General

PO Box 9201 Stn Prov Govt

Victoria, BC V8W 9J1 Phone: (250) 952-4913

Phone: (250) 952-4913 Fax: (250) 952-4888

Provincial Emergency Reporting: 1-800-663-3456

Web Site: www.pep.bc.ca/

Manitoba

Emergency Measures Organization

405 Broadway, Room 1525,

Winnipeg MB R3C 3L6 Phone: (204) 945-4772

Toll-free: 1-888-267-8298 Fax: (204) 945-4620 E-mail: emo@gov.mb.ca

Web Site: www.ManitobaEMO.ca

Newfoundland & Labrador

Emergency Measures Organization Municipal & Provincial Affairs

Main Floor, West Block Confederation Building

P.O. Box 8700

St. John's, Newfoundland A1B 4J6

Phone: (709) 729-3703 Fax: (709) 729-3857

E-mail: fhollett@mail.gov.nf.ca MAPAinfo@mail.gov.nf.ca

Web Site: www.gov.nf.ca/mpa/emo.html

New Brunswick

Department of Public Safety

P.O. Box 6000 Argyle Place

Fredericton, NB E3B 5H1 Phone: (506) 453-3992

Fax: (506) 453-7481 E-mail: emo@gnb.ca

Web Site: www.gnb.ca/0276/index-e.asp

Northwest Territories

Emergency Measures Organization Municipal and Community Affairs

Box 1320

Yellowknife, NT X1A 2L9 Phone: (867) 873-7785 ddecker@maca.gov.nt.ca

Web Site: www.maca.gov.nt.ca/about/emergency.html

Nova Scotia

Emergency Measures Organization

PO Box 2581

Halifax, NS B3J 3N5

Phone: (902) 424-5620 (24 hrs) E-mail: lestermr@gov.ns.ca Web Site: www.gov.ns.ca/emo/

Nunavut

Nunavut Emergency Management Department of Community Government & Transportation

PO Box 1000, Station 700 Iqaluit, Nunavut X0A 0H0 Phone: (867) 975-5319 Fax: (867) 979-4221

E-mail: edoig@gov.nu.ca

Web Site: www.gov.nu.ca/june282001.htm

Ontario

Emergency Management Ontario Ministry of Community Safety and Correctional Services

Box 222

77 Wellesley Street West Toronto, ON M7A 1N3

Toll Free: 1-888-795-7635 Fax: (416) 314-3758

Web Site:www.emergencymanagementontario.ca/

Prince Fdward Island

Emergency Measures Organization Community and Cultural Affairs National Bank Tower

134 Kent St Suite 600

Box 2000

Charlottetown, PE C1A 7N8 Phone: (902) 894-0385 1-902-892-9365 (24 hrs)

Fax: (902) 368-6362

Web Site: www.gov.pe.ca/commcul/emo/index.php3

Ouebec |

Sécurité publique Ministère de la sécurité publique

2525, boul. Laurier, 5th floor

Tour du Saint-Laurent

Sainte-Foy, QC G1V 2L2

Toll-free: 1-866-644-6826

Monday to Friday, 8:30am to 4:30pm

Fax: (418) 643-0275

E-mail: Infocom@msp.gouv.qc.ca

Web Site: www.msp.gouv.qc.ca/index en.asp

Saskatchewan

Protection and Emergency Services

#100 -1855 Victoria Avenue

Regina, SK S4P 3T2

Phone: (306) 787-8568 Fax: (306) 787-1694

Web Site: www.cpsp.gov.sk.ca/ ProtectionandEmergencyServices

Yukon

Emergency Measures Organization Combined Services Building, 2nd Floor

60 Norseman Road

Whitehorse Airport

Government of Yukon

Box 2703, EMO

Whitehorse, YK Y1A 2C6 Phone: (867) 667-5220

Toll-free (In Yukon): 1-800-661-0408, local 5220

Fax: (867) 393-6266

E-mail: emo.yukon@gov.yk.ca

Web Site: www.community.gov.yk.ca/emo/index.html

United States

American Association of Poison Control Centers

3201 New Mexico Avenue, Suite 310

Washington, DC 20016

1-800-222-1222 (poisoning emergencies)

Phone: (202) 362-3867 Fax: (202) 362-8377 E-mail: pc@poison.org Web Site: www.aapcc.org/

CHEMTREC (Chemical Transportation Emergency Centre)

1300 Wilson Blvd. Arlington, VA 22209 Phone: (800) 262-8200 Fax: (703) 741-6037

Web Site: www.chemtrec.com/Chemtrec/

Department of Homeland Security

Washington, DC 20528. Phone: 202-282-8000 Web Site: www.ready.gov/ www.dhs.gov/index.shtm

Environmental Protection Agency

Ariel Rios Building

1200 Pennsylvania Avenue N.W.

Washington, DC 20460 Phone: (202) 272-0167 National Response Centre

To Report Oil and Chemical Spills:

Toll-free: 1-800-424-8802

To contact the EPA:

Web Site: www.epa.gov/epahome/comments2.htm Web Site: www.epa.gov/epahome/emergenc.htm

Federal Emergency Management Agency

500 C Street, SW

Washington, D.C. 20472

Phone: 1-800-621-3362 Web Site: www.fema.gov/

FEMA Regional Offices

Region I: Maine, New Hampshire, Vermont, Rhode Island, Connecticut, Massachusetts

99 High Street

6th Floor

Boston, MA 021109

Phone: (617)-956-7506

Region II: New York, New Jersey, Puerto Rico, Virgin Islands

26 Federal Plaza, Suite 1337 New York, NY 10278-0002 Phone: (212) 680-3600

Region III: District of Columbia, Delaware, Maryland, Pennsylvania, Virginia, West Virginia

615 Chestnut Street

One Independence Mall, Sixth Floor

Philadelphia, PA 19106-4404

Phone: (215) 931-5608

Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

3003 Chamblee Tucker Road

Atlanta, GA 30341

Phone: (770) 220-5200

Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

536 South Clark St., 6th Floor

Chicago, IL 60605

Phone: (312) 408-5500

Region VI: Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Federal Regional Center

FRC 800 North Loop 288

Denton, TX 76209-3698

Phone: (940) 898-5399

Region VII: Iowa, Kansas, Missouri, Nebraska

9221 Ward Parkway, Suite 300

Kansas City, MO. 64114-3372

Phone: (816) 283-7063

Region VIII: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Building 710, Box 25267

Denver, CO 80255-02674404

Phone: (303) 235-4800

Region IX: Arizona, California, Hawaii, Nevada, American Samoa, Guam, Northern Mariana Islands, Marshall Islands, Micronesia, Palau

1111 Broadway, Suite 1200

Oakland, CA 94607-4052

Phone: (510) 627-7100

Region X: Alaska, Idaho, Oregon, Washington

130 228th Street, Southwest

Bothell, WA 98021-8627

Phone: (425) 487-4600

International

International Programme on Chemical Safety (IPCS) INTOX Project, World Health Organization INTOX Programme

CH-1211 Geneva 27

Switzerland

Phone: +41-22-791-3590 Fax: +41-22-791-4848 E-mail: ipcsmail@who.ch

or

Canadian Centre for Occupational Health and Safety Inquiries & Client Services

135 Hunter Street Fast

Hamilton, ON Canada L8N 1M5

Phone: 1-800-668-4284 or 1-905-570-8094

Fax: 1-905-572-4500

E-Mail: clientservices@ccohs.ca

Web Site: www.intox.org/

World Health Organization

Avenue Appia 20 1211 Geneva 27

Switzerland

Phone: (+00 41 22) 791 2111 Fax: (+00 41 22) 791 3111

Telex: 415 416

Telegraph: UNISANTE GENEVA Web Site: www.who.int/en/

Regional Office for the Americas / Pan American Health Organization (AMRO / PAHO)

525, 23rd Street, N.W.

Washington, DC 20037 USA Phone: +1 (202) 974-3000

Fax: +1 (202) 974-3663

E-mail: postmaster@paho.org

NOTES

Additional Resources from CCOHS

eCourses eCourses - Special Packages Classroom Courses Posters Electronic Products

Accident Investigation

Accident Investigation in Ontario

AODA Accessible Customer Service Regulation

AODA IASR Employment Standard

AODA IASR General Requirements

AODA IASR Information and Communication Standard

AODA IASR Transportation Standard

Asbestos in the Workplace

Assembling the Pieces Toolkit

Being a Mindful Employee: An Orientation to Psychological Health and Safety in the Workplace

Bullying in the Workplace

Business Case for Health and Safety

Business Case for Workplace Wellness

Canada Labour Code, Part II: An Overview

Compressed Gases

Confined Space Management

Confined Spaces: The Basics

Contractor Health and Safety

Contractor Health and Safety in Ontario

Core Competencies for First Line Supervisors - Yukon Mining

Dealing with a Hostage Situation

Dealing with Difficult or Hostile Customers

Dealing with Robbery

Developing an Occupational Health and Safety Program

Developing Your Workplace Violence and Harassment

Program in Ontario

*also available as a classroom course

Domestic Violence in the Workplace Due Diligence in Occupational Health and Safety

Electrical Hazards Emergency Preparedness for Workers Emergency Response Planning Environmental Management Systems

Federal Hazard Prevention Program Fire Safety: The Basics

rife Salety: The basics

GHS: HazCom 2012 for Workers Global GHS for Workers

Hazard Identification, Assessment and Control
Health and Safety Awareness for Ontario Supervisors
Health and Safety Awareness for Ontario Workers
Health and Safety Committees
Health and Safety Committees in the Canadian Federa

Health and Safety Committees in the Canadian Federal
Jurisdiction

Health and Safety for Managers and Supervisors (E-course)
Health and Safety for Managers and Supervisors in Ontario
Health and Safety for Managers and Supervisors in the USA
Health and Safety for Office Managers
Health and Safety for Senior Executives: Legislation & Liability
Health and Safety For Small Business

Impairment and Cannabis in the Workplace Incident Investigations in Saskatchewan Healthcare Workplaces

*also available as a classroom course

Incident Investigations in Saskatchewan Workplaces Indoor Air Quality: An Introduction

Joint Health and Safety Committees in Ontario

Ladder Safety Ladder Safety in Ontario Lockout

Managing Pain from Physical and Psychosocial Workplace Demands

Manual Materials Handling Mental Health: Awareness

Mental Health: Communication Strategies

Mental Health: e-Course Package

Mental Health: Health and Wellness Strategies Mental Health: Psychologically Healthy Workplaces Mental Health: Signs, Symptoms and Solutions Musculoskeletal Disorders (MSDs): Awareness Musculoskeletal Disorders (MSDs): Prevention

Occupational and Environmental Cancer: Recognition and Prevention

Occupational Health and Safety Management Systems

Occupational Health, Safety and Environmental Management Systems

Occupational Health, Safety and Environmental Management Systems: Awareness

Office Ergonomics

Office Ergonomics in Ontario

*also available as a classroom course

Office Health and Safety

Orientation on Health and Safety for New Agricultural Workers Orientation on Health and Safety for New Workers

Pandemic Awareness

Pandemic Planning

Personal Protective Equipment: The Basics

Preventing Falls From Slips and Trips

Preventing Falls From Slips and Trips in Ontario

Preventing Hearing Loss From Workplace Noise

Return to Work in Ontario Return to Work: The Basics

Safe Driving: Backing Up

Saskatchewan Asbestos Awareness: Understanding the Risk

Saskatchewan Workplace Inspections

Saskatchewan Workplace Inspections in Healthcare Small Business Health and Safety Certificate Program

Stress in the Workplace

TDG: An Overview TDG for Carriers

TDG for Consignors/Consignees

Transportation of Dangerous Goods

Travel Safety for Canadian Businesses

Violence in the Workplace: Awareness

Violence in the Workplace: Establish a Prevention Program Violence in the Workplace: Recognize the Risk and Take Action

*also available as a classroom course

WHMIS 1988 for Managers and Supervisors

WHMIS 1988 for Managers and Supervisors in Ontario

WHMIS 1988 for Office Environments

WHMIS 1988 for Saskatchewan Workers

WHMIS 1988 for Workers

WHMIS 1988 for Workers in Ontario

WHMIS 1988 Refresher

WHMIS 1988 Refresher in Ontario

WHMIS 1988: Understanding MSDSs

WHMIS 2015: An Introduction

WHMIS 2015 for Managers and Supervisors

WHMIS 2015 for Manitoba Workers in Provincially-Regulated Workplaces

WHMIS 2015 for Office Environments

WHMIS 2015 for Saskatchewan Workers

WHMIS 2015 for Workers

WHMIS 2015 for Workers in the Northwest Territories and Nunavut

WHMIS 2015 for Workers in the Northwest Territories and Nunavut (Inuktitut)

WHMIS 2015: Understanding SDSs

Working at Heights

Workplace Inspections

Workplace Violence in the Canadian Federal Jurisdiction: Establish a Prevention Program

Workplace Violence in the Canadian Federal Jurisdiction: Recognize the Risk and Take Action

*also available as a classroom course

eCourse Special Packages

Mental Health: e-Course Package Small Business Health and Safety Certificate Program (11 courses)

Classroom courses from CCOHS

Health and Safety for Managers and Supervisors
Health and Safety for Managers and Supervisors in the
Canadian Federal Jurisdiction

Posters...available in print and PDF

Be Air Aware

Bullying is Not Part of the Job

Cranes & Hoists Hand Signals

Day of Mourning (Remember and Commit)

Day of Mourning (Clouds)

Day of Mourning (Butterfly)

Day of Mourning (Candle)

Day of Mourning (Dragonfly)

Day of Mourning (Forget-me-not)

Day of Mourning (Sun)

Day of Mourning (Tear/Flame)

Don't Let Safety Slip

Get the Upper Hand on Germs

GHS/WHMIS SDS: Mix With Caution

Healthy Living at Work

Healthy Minds: Workplace Support is Key

Healthy Minds at Work

Heat-Related Illness: Watch for Signs

How Chemicals Enter the Body

Keep Your Cool

Manual Materials Handling (MMH)

Mental or Physical, Illness is Illness

MSDS -> SDS: Not Just Dropping the "M"

Personal Protective Equipment

Pick Up Tips on How to Lift Safely

Position for Safety and Comfort

Prevent the Spread

Respect: Everyone Deserves It

Visit www.ccohs.ca/products/posters/

for a complete list and descriptions of the posters.

Posters...available in print and PDF

Repetitive Strain Injury (RSI) Awareness Day Scent-Free Zone See Signs of Violence at Your Workplace? Tension Relief: It's a Stretch Three Basic Rights of Canadian Workers Weight Lifting Tips WHMIS 2015 Labels WHMIS 2015 Pictograms Workers' Basic Rights in Canada 10 Healthy Habits for Mental Fitness

> Visit www.ccohs.ca/products/posters/ for a complete list and descriptions of the posters.

Electronic Products

CCOHS offers a variety of electronic products, some of which are highlighted below. For more information, contact CCOHS Client Services at 1-800-668-4284 or clientservices@ccohs.ca

Chemical Information

(M)SDS ((Material) Safety Data Sheets) FTSS (French Language Material Safety Data Sheets) CHEMpendium

CHEMINFO

RTECS®

IPCS INCHEM

Databases

OSH References (CISILO (English/French), HSELINE, Canadiana, OSHLINE® with NIOSHTIC®, INRS Bibliographic)
Canadian enviroOSH Legislation
Canadian enviroOSH Legislation plus Standards

(M)SDS Services

CANManage

Software

CANWrite

Visit http://www.ccohs.ca/products/ for a complete list and descriptions of the various electronic services available.

Publications - Available in print and pdf

Pocket Guides

Cold Weather Workers Safety Guide

Emergency Response Planning Guide

Food Service Workers Safety Guide

Groundskeepers Safety Guide

Health and Safety Committees Reference Guide

Health and Safety Guide for Custodial Workers

Health and Safety Guide for Human Resources Professionals

Health and Safety Guide for Libraries

Indoor Air Quality Health and Safety Guide

Mould in the Workplace: A Basic Guide

Noise Control in Industry: A Basic Guide

Office Ergonomics Safety Guide

Office Health and Safety Guide

Orientation for New Workers

School Workers Health and Safety Guide

Telework and Home Office Health and Safety Guide

Violence in the Workplace Prevention Guide

Warehouse Workers Safety Guide

Welders Health and Safety Guide

Working in Hot Environments: Health and Safety Guide

Workplace Health and Wellness Guide

Other Publications

Implementing a Chemical Safety Program
Implementing an Occupational Health and Safety (OH&S)

Program

Musculoskeletal Disorders (MSD) Prevention Manual

The Safety Data Sheet: A Guide to First-Aid Recommendations

WHMIS After GHS: Preparing for the Change

WHMIS 2015 Instructor's Toolkit

WHMIS 2015 Participant Workbook

Visit www.ccohs.ca/products/print.html for a complete list and descriptions of the publications.

CCOHS...

Canada's national centre for occupational health and safety. We provide unbiased information, advice and training on how to prevent illness and injury in the workplace.

Contact CCOHS at:

Inquiries Service

1-800-668-4284

905-570-8094

clientservices@ccohs.ca

www.ccohs.ca

