EMERGENCY PREPAREDNESS
TOOL KIT FOR BUSINESSES

ABBOTSFORD

FIRE · RESCUE · SERVICE
ABBOTSFORD

INTRODUCTION

This toolkit provides important information on what businesses need to do before, during and after a major disaster to ensure a rapid recovery.

Businesses are important members of the community, contributing to the economy and providing jobs, goods and services. Businesses also have a critical role to play in the community's recovery if a large-scale emergency occurs.

In times of disaster, the City of Abbotsford will take a leadership role in providing support to the incident site while working to restore services. It will be important that local businesses recover quickly so they can help to support the community by providing goods and services.

All Abbotsford businesses are encouraged to take advantage of this toolkit to help ensure they make a fast and complete recovery after a disaster.

For more information on business recovery, contact the City of Abbotsford Emergency Program at: 604-853-3566 or visit: https://www.abbotsford.ca/AEP

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CITY OF ABBOTSFORD EMERGENCY PROGRAM

The City of Abbotsford has a comprehensive Emergency Program in place to ensure the community is prepared for large-scale emergencies such as an earthquake, fire, or flood. In the case of a disaster, the City will focus its efforts on those impacted and restoring services. Aspects of the program include:

- Training of staff in emergency preparedness and emergency operations.
- Training and coordinating volunteers for Emergency Social Service call-outs, reception center setup, group lodging and other support services.
- Community education through participation in special events and free emergency preparedness training for local residents, businesses and groups.
- Information on the City website about disasters such as earthquakes and floods along with basic information on the program and how to volunteer.
- Implementation and preparation of plans for response and recovery initiatives.
- Participation in regional emergency preparedness activities.

For information about the Emergency Program

Visit: https://www.abbotsford.ca/AEP

or Contact 604-853-3566

BUSINESS PREPAREDNESS OVERVIEW ——

24 *An estimated 25% of businesses forced to close for 24 hours or more by a disaster will never reopen.*

-Insurance Institute for Business and Home Safety

Emergencies and disasters are inevitable, and recent disasters have shown how devastating these catastrophic events can be to businesses and local economies.

Is your business prepared for emergencies such as major storms, earthquakes, floods, fires, or hazardous materials spills?

Businesses that are prepared for disasters:

- Are better able to survive disasters and protect their employees and operations.
- Play a significant role in their community's recovery.
- Are more likely to meet safety and workplace regulations, including the provincial Workers Compensation Act and Occupational Health and Safety (OHS) Regulations (www.worksafebc.com) and the Canada Labour Code (www.laws-lois.justice.gc.ca/eng/acts/L-2/).

ABOUT THIS GUIDE

This guide was developed through the City of Abbotsford's Emergency Program to help local businesses consider the kind of risks they face and develop a plan to address them.

Information, tools and suggestions are provided to help begin developing a business emergency plan. The guide addresses the needs of a wide variety of businesses, so choose what tools and steps make the most sense for a specific organization.

Even one simple step now can help make a big difference in how well a business survives an emergency – or if it survives at all.

The City of Abbotsford Emergency Program acknowledges the assistance of the City of Surrey and the City of Port Coquitlam Emergency Program in developing this guide.

Please note: The content in this guide has been adapted from information from the City of Surrey Emergency Program, North Shore Emergency Management Office, the Institute of Business & Home Safety, and the Emergency Preparedness for Industry & Commerce Council. While every reasonable effort has been made to ensure the accuracy of the guides contents at the time of publication, the City of Abbotsford does not guarantee the accuracy of the information

POTENTIAL HAZARDS AND RISKS

NATURAL HAZARDS

Flood/Debris Flows
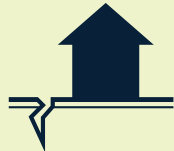
Earthquakes

Extreme Weather

Landslides

Volcanic Eruptions

Wildfires

TECHNOLOGICAL/ ACCIDENTAL HAZARDS

Carbon Monoxide

Hazardous Materials

Power Outages

HEALTH & OTHER HAZARDS

Influenza

Pandemics

Chemical, Biological, Radiological, Nuclear

Structure Fires

RISKS TO BUSINESSES

Loss of Services (e.g. water, gas)

Building Damage

Inventory or Equipment Damage

Loss of Files and Critical Data

Employee or Customer Injury

Damage to Employee Homes

School Closures

Road Damage

Distribution to suppliers, service providers etc.

BASIC PREPAREDNESS CHECKLIST ————

Consider these items when developing an emergency plan. These topics and others are discussed in following sections.

DATA AND DOCUMENTATION

☐ Check your insurance policy to ensure important business assets are covered in the event of a disaster.

☐ Make sure your emergency contact information is posted in your office.

☐ Back up critical business data and retain an off-site copy.

SITE SAFETY

☐ Review checklists for building safety.

☐ Keep first aid kits well stocked and consider offering basic first aid training to employees.

☐ Maintain fire extinguishers to keep in working order.

☐ Regularly check smoke detector batteries.

☐ Keep a properly stocked emergency kit in the office.

ADVANCE PLANNING

☐ Develop and train employees on a business emergency preparedness plan, including:
  ○ Business risk analysis
  ○ Crisis communications plan
  ○ Evacuation and shelter-in-place plans
  ○ Aiding employees or customers with special needs

☐ Discuss emergency plans with suppliers, service providers and other business network partners.

☐ Consider contingency plans in case of utility disruption.

☐ Encourage employees to develop household emergency plans

☐ Provide payroll deductions towards household emergency kits

DEVELOPING YOUR PLAN

While plans vary to some degree based on the needs of the business, they all generally assist your business:

- Identify local hazards and critical business assets and processes.
- Analyze what risks those hazards pose to business assets and processes.
- Act by developing strategies to reduce identified risks.

SIX STEPS TO DEVELOPING YOUR PLAN

Further examples and useful resources can be found in the Appendices starting on page 18.

STEP 1: PUT TOGETHER A PLANNING TEAM
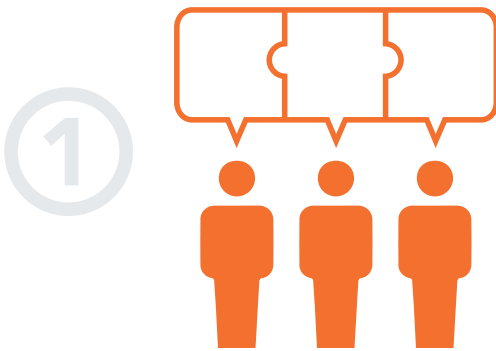
- For small businesses, it may make more sense for a single person (e.g. the owner) to work on the plan. For larger businesses, a team will be valuable.
- Include people with a collective knowledge of the business to ensure all assets and processes are covered.
- Ensure the team has support from upper management.

STEP 2: IDENTIFY RISKS AND ASSESS IMPACTS

See Risk Analysis, Appendix C, Pages 22-25 and Business Impact Assessment, Appendix D, Page 26 for detailed steps, examples and links to templates for risk and impact assessments.

- Compile a list of all hazards your business might face, including likelihood of occurrence and severity of impact.
- Create an inventory of critical business assets and processes that are essential to core business functions.
- Using the two lists, develop a risk analysis by imagining how each hazard might affect your critical business assets and processes.
- Use the risk analysis to develop a business impact assessment that identifies the financial and operational impacts of each risk for your business.

DEVELOPING YOUR PLAN CONT.

STEP 3: REDUCING RISK – MITIGATION AND PREPAREDNESS

See Risk Reduction, Appendix E, Page 27 for more information and risk-reduction strategies.

Develop risk-reduction strategies for your identified risks using both of these approaches:

- Mitigation is applied in advance to reduce risks which improve outcomes later.
  Example: applying waterproof sealant to the lower level of the building to keep water out in the event of a flood.
- Preparedness is getting ready now to act later to reduce risk.
  Example: stockpiling emergency supplies to use later if a flood closes roads and there is need to provide shelter in the building.

STEP 4: PLANNING YOUR RESPONSE

See the Employee Safety and Building Safety sections on the following pages for more information.

Identify response activities that will be required during and immediately after the event to address the following in order presented:
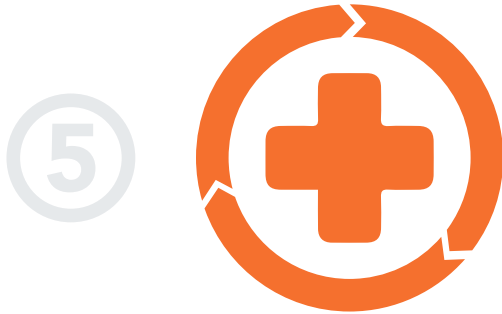
1. Ensure the physical safety of employees and on-site customers.
2. Secure facilities as much as is safe to do so.
3. Conduct initial damage assessments.

DEVELOPING YOUR PLAN CONT.

STEP 5: PLANNING YOUR RECOVERY

Identify activities that will help the business recover as soon as possible after an emergency. Consider:

- Who would need to be called to conduct a comprehensive damage assessment?
- How will a cleanup crew be contacted to handle debris?
- What contractors might be needed to make repairs?
- What suppliers will be needed to turn to for replacement equipment or inventory?
- What options would be available for a temporary alternative work location?
- What kind of assistance will be offered to employees whose families or homes have been affected by the emergency?

STEP 6: TEST AND UPDATE

It is imperative the plan is a tested plan, employees are aware of it, and regularly review it to see if it needs updating. A plan that is out-of-date or not known to on-site employees could cost valuable time and put employees' safety as well as business operations at risk. Some of the ways to ensure the plan remains relevant is by holding mock or table-top exercises with employees, testing out the emergency communications plan, and keeping backup supplier lists current.

EMPLOYEE SAFETY

Plan for the following to ensure employee safety.

TRAINING AND SUPPLIES

- Keep first aid kits well stocked.
- Consider offering first aid classes to employees.
- Keep a properly stocked emergency kit in the office and encourage employees to create their own kits (See Workplace Emergency Kit Checklist, Appendix F, Page 28).

EDUCATION ABOUT THE PLAN

- Familiarize staff with the emergency preparedness plan.
- Develop and train employees on the evacuation and shelter in place plans (See Shelter in Place, Appendix H, Page 31-32).
- Hold regular drills for relevant emergency situations, such as fire drills and the annual BC Shakeout earthquake drill in October (www.shakeoutbc.ca).

OTHER ADVANCE PLANNING

- Account for any special needs of employees, e.g. mobility, hearing, vision or language.
- Plan ahead so you can communicate effectively with employees (See Communications section, Page 13).
- Consider telework/work-from-home contingency plans for employees who may be unable to reach the office.
- Encourage all employees to develop a household emergency plan. Safe homes and families mean employees are more likely to return to work after an emergency. (Get tips and info from the Abbotsford Emergency Program website, https://www.abbotsford.ca/AEP).

BUILDING SAFETY

Plan for the following to ensure your building's safety.

Consider that different types of emergencies – e.g. a flood vs. an earthquake – will pose very different risks and therefore may require different actions.

- When managing building utilities, designate individuals to be responsible for shutting them off in an emergency if needed.
- Identify contact information for any inspection and repair professionals required after an emergency.
- Make sure building contents are properly secured in case of an earthquake (See Building Earthquake Safety Checklist, Appendix J, Page 34).
- Identify alternate work locations in the event that a building becomes severely damaged or inaccessible.
- Discuss options for addressing any structural safety issues regarding earthquakes, floods, fires, etc. with a professional.
- Keep property well maintained to ensure proper storm drainage, lessen risk of trees falling on structures/power lines, etc.
- Review insurance policies to ensure building structure and contents are adequately covered (See Insurance section, Page 14).

BUILDING SAFETY

UTILITIES

UTILITIES DISRUPTION

Some areas could lose utility services for significant periods of time following a disaster. Plan ahead start by considering how extended disruptions of electricity, gas, telecommunications, sewer and water service would affect the business operations.

IDEAS OF WHAT TO CONSIDER

Know the emergency and outage reporting lines for all of your utility service providers (appendix A, Page 19-20, and Appendix B, Page 21)

Identify backup options such as water storage, generators, alternate power sources, etc.

Plan secondary means of accessing the Internet if it is vital to business operations

If food storage or refrigeration is critical, identify ice and dry ice vendors, and/or partner with another company or develop backup power sources.

COMMUNICATION

Emergency Communication

- Develop a Crisis Communication Plan (See Crisis Communication Plan Checklist, Appendix K, Page 35-36) to determine how to communicate with employees, customers, business partners, service providers and the media during an emergency.
- Ensuring loved ones are safe will be an employees' first priority, so encourage them to develop their own emergency communications plans with family.
- Plan for where and how you will get up to date information during an emergency, such as the news media and local government agencies.

INSURANCE

Proper insurance coverage is essential to helping ensure recovery after an emergency or disaster.

BUSINESSES ARE <u>NOT</u> ELIGIBLE FOR GOVERNMENT DISASTER FINANCIAL ASSISTANCE IF INSURANCE WAS AVAILABLE FOR THAT LOSS.

DEFINE YOUR INSURANCE NEEDS

ASK:

1. What can go wrong?
2. What can be done to prevent harm from occurring and what can be done in response to the harm or loss?
3. How will we pay if something happens?

Insurers recommend businesses have a risk management plan that identifies and addresses risks to business operations. The steps in preparing the plan will provide a good foundation for this task. Speak with your insurance representative about specific coverage needs.

OPTIONS INCLUDE:

- Boiler & Machinery
- Business Interruption
- Contents
- Contents at Unnamed Location
- Contractors Equipment Replacement
- Cost
- Data Coverage - named perils
- Debris Removal
- Earthquake
- Employees Tools
- Equipment Breakdown
- Exterior Signs
- Extra Expense
- Fine Arts
- Flood

- Gas in underground tanks - named perils
- Insured Tools
- Hazardous Substance Cleanup
- Leased, Rented or Borrowed Equipment
- Loss of Earnings - Contractor
- Pollution
- Professional Fees
- Non-Owned Auto
- Stock Spoilage
- Supply and Distribution Chain Distribution
- Tools
- Transit
- Valuable Papers
- Water Damage/Sewer Backup

BUSINESS RECOVERY

The speed and extent of your recovery will rely on the effectiveness of your business recovery and continuity planning. Some of the major considerations are as follows.

BUSINESS NETWORK

It is important to consider how disruptions to suppliers, service providers, clients and customers – your business network – would impact the business operations. Are all suppliers and service providers in the same geographic area as the business, and could therefore be affected by the same emergency? If a key supplier or service provider isn't available, are there dependable, pre-vetted backup options?

CONSIDER SCENARIOS SUCH AS:

- If the transportation network is damaged, are there alternate service strategies for clients who can't reach the office?
- If a manufacturer is forced to temporarily shut down or a service provider's equipment is damaged, are there backup companies identified?
- If port operations are halted, are there alternate ways of transporting your goods to customers?

Discuss preparedness plans with business network partners in advance. Quality of preparedness planning is also a useful measure to consider when evaluating future suppliers and service providers.

EMPLOYEES

Considerations include:

- Up-to-date, comprehensive 24-hour contact information for all employees, including emergency / family contacts and both email and phone information.
- Alternate forms of transportation for employees (e.g. carpooling – determine if any employee has four-wheel drive or a van).
- Emergency housing, food, water and other provisions for displaced employees.
- Payroll continuity and potential financial assistance.
- Identification for employees returning to your business in the emergency zone.
- Professional trauma counseling.

BUSINESS RECOVERY CONT.

LOGISTICAL

- Alternate locations for operations.
- Transportation options if company vehicles not available (e.g. rentals).
- Security to control access to facilities if the building is damaged.

ADMINISTRATION

- Timely insurance claim filing and follow-up.
- Contact list for critical post-emergency contacts, e.g. staff not on shift, families of staff on shift, board of directors, supplier and vendors, customers.
- Off-site secure backup of essential company data and documentation (e.g. cloud).
- Regularly updated inventory list and video/ photographic record of all equipment and stock.
- Re-ordering information for critical supplies needed to maintain operations.

COMMUNICATIONS

- Auxiliary communication system – such as a radio transmitter and receiver – that can operate independently of normal power supplies.
- Ability to access / reprogram main business line remotely (e.g. to set up call forwarding).
- Provisions for communications other than telephones, so employees can contact their families and vice versa.
- In case local phone lines are overwhelmed, a remote voicemail number on which you can record messages for employees.
- Posts on the company website to keep staff, customers, vendors and other contacts updated following an emergency.
- Surge protection for all computer and phone equipment.
- Non-cordless telephone handsets can operate without electricity whereas cordless phones cannot.

BUSINESS CONTINUITY

- Identification of critical functions that must remain operating– e.g. functions necessary to fulfill legal and financial obligations and maintain cash flow –and the staff needed to perform them.
- Staff succession planning – who will replace essential personnel who are injured or unavailable?
- A plan for the orderly return of various employee groups.
- A priority list for the replacement and/or repair of facilities and equipment.
- Prearranged agreements with suppliers from outside the emergency zone to provide critical parts for damaged equipment.

BC DISASTER FINANCIAL ASSISTANCE

The provincial Disaster Financial Assistance (DFA) program provides financial assistance to help individuals and communities recover from catastrophic events that cause uninsurable property and infrastructure damage.

Businesses must meet all DFA program eligibility criteria to qualify, and only uninsurable items essential to the operation of the business will be considered for financial assistance. If coverage was available but a business chose not to purchase insurance, that loss is not eligible

BUSINESSES CRITERIA FOR DFA ASSISTANCE:

- The business must be managed by the owner on a day-to-day basis,
- The business must be the major source of income (greater than all other sources of income combined) for ALL owners,
- The business must have gross sales of less than $1 million per year and employ less than 50 employees at any one time, and
- The owner must demonstrate that, without the claimed assistance, the future of the business could be placed in financial jeopardy (financial jeopardy is defined as when the assistance payment to repair the damage would exceed 10 percent of the net income of the business)

ELIGIBLE LOSSES INCLUDE REPAIR/REPLACEMENT OF:

- Parking areas,
- Books and papers required to carry out the business,
- Tools and equipment essential to the business,
- Business furnishings, and
- Inventory at replacement cost.

▶ Applications for financial assistance must be submitted within 90 days of the DFA authorization date.

APPENDICES

EMERGENCY CONTACT INFORMATION

SAFETY SERVICES

In case of police, fire or medical emergency, dial 9-1-1.

NON-EMERGENCY CONTACTS:

- Abbotsford Police Department: 604-859-5225
- Abbotsford Fire Rescue Service: 604-853-3566
- Central Fraser Valley Search and Rescue: 604-852-7271
- BC Ambulance Service: 604-872-5151
- Health Link BC (Non-emergency health/pharmaceutical information): 8-1-1
- City of Abbotsford Website: abbotsford.ca

UTILITIES

- Electrical emergencies or to report an outage, contact 1-866-436-7847.
- Report a power outage: 1-888-POWERON (1-888-769-3766) or *HYDRO (*49376) on a cell phone
- Evacuation preparedness, visit https://www.bchydro.com/safetyoutages/safety/safety-in-emergencies/evacuation-preparedness.html
- Electrical accidents, visit https://www.bchydro.com/safetyoutages/safety/safety-in-emergencies/electrical-accidents.html
- Utility safety during emergencies: https://www.bchydro.com/safety-outages/safety/safety-inemergencies/earthquakes-wildfires.html
- Natural gas emergencies: 1-800-663-9911.
- Natural gas safety during emergencies: http://www.fortisbc.com/SAFETY/EMERGENCYPREPAREDNESS/
- City of Abbotsford Operations: 604-853-5485
- City of Abbotsford Water and Wastewater: 604-864-5514
- Abbotsford City Hall Enquires: (Hours-8:30am-4:30pm Monday-Friday) 604-853-2281

COMMUNICATIONS

- Shaw customer service: 1-877-742-9249 (business) or 1-888-472-2222 (personal), or visit www.shaw.ca.
- TELUS customer service: 1-800-361-3311 (business) or 310-2255 (personal), or visit www.telus.com.
- Bell customer service: 1-800-667-0123 (mobility) or 1-888-333-2811 (internet & phone services), or visit www.bell.ca.

MUNICIPAL SERVICES

WATER & SEWER

If a break or leak occurs on private property, property owners are responsible for hiring a plumber to locate the source and carry out repairs. If the leak is on Abbotsford public property or you notice a water/sewer main break, contact the City of Abbotsford Operations (Public Works Yard) 604-853-5485 during business hours or 604-864-5552 after hours for flooding, street light repair etc. **For medical emergencies call 9-1-1**

EMERGENCY PLANNING AND PREPAREDNESS INFORMATION

For emergency resources, contact the Abbotsford Emergency Program at 604-853-3566

ROADS

If you notice hazards on a local road, such as dangerous debris in the street or damaging potholes, contact 604-853-5485 during business hours or 604-864-5552 after hours.

HIGHWAYS

Highway hazards should be reported to the local maintenance company contracted by the Ministry of Transportation for that region.

- Abbotsford/Fraser Valley: Emil Anderson Maintenance Co. Ltd, 1 800 667-5122
- Lower Mainland: Mainroad Lower Mainland Contracting, 604-271-0337
- Ministry of Transportation Lower Mainland District Office - 604 527-2221

Go to http://www.th.gov.bc.ca/popular-topics/maps/serviceareacontacts.htm for more information on reporting highway problems.

Use this space to write down important business contacts:

_____

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_____

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There are three main parts to the business risk analysis process:
Identify hazards, inventory critical business assets, and analyze impacts and risks.

STEP 1: LIST ALL HAZARDS YOUR BUSINESS MIGHT FACE

Contact the City of Abbotsford to see if any hazard maps or information (e.g. trees, contaminated food, landslide, liquefaction, etc.) are available for a specific area. Think about the likelihood of each hazard occurring and the level of severity if it did occur. For example, earthquakes happen infrequently in this area, but there is the potential for catastrophic damage if a major one did occur. Past history of events in the area, weather reports, and university research studies are also useful resources to consider when thinking about how likely or severe a hazard might be. The start of a hazards list might look like the example to the right.

STEP 2: INVENTORY OF CRITICAL BUSINESS ASSETS AND PROCESSES

Critical assets and processes are the equipment, supplies, inventory, administrative processes, manufacturing operations, sales actions, client services, etc. that are essential to keeping a business running. A bakery, for example, may start their inventory by including some of the items to the right.

STEP 3: DEVELOP A RISK ANALYSIS FOR YOUR BUSINESS

A risk analysis determines how the hazards on your list might affect the items in your critical business inventory. Work with your planning team to brainstorm the possible impacts each hazard could have on your business. Those impacts listed on the right are some that a bakery would include in their analysis. There are many formats that can be used to develop a risk analysis (links to examples can be found in Appendix K). How simple or complex analysis is depends on the needs of the business. For smaller businesses, creating a tailored version of the three lists above will be enough to get started on preparedness planning. Businesses with more complex operations and larger number of employees will find it helpful to develop an analysis with more detail.

SAMPLE HAZARDS LIST

Hazard	Probability	Impact
Earthquake	Unlikely	Severe
Flood	Possible	Moderate
Wind Storm	Possible	Moderate

SAMPLE CRITICAL BUSINESS ASSETS & PROCESSES INVENTORY

-Employees

-Refrigerated Inventory

-Daily baking

Online customer ordering portal

SAMPLE IMPACTS LIST

-Employee Injury

-Refrigerator, freezer damage

-Power outage

-Damage to transportation network

RISK ANALYSIS SAMPLE

Below is one example of what a more detailed risk analysis might look like (download a blank electronic version here: http://www.fema.gov/media-library/assets/documents/89542) This example is organized by critical business asset:

- For each asset or process in your inventory, the table lists the possible hazards and the likelihood of occurrence.
- To help with prioritizing risks later in the analysis, each hazard is given a score based on likelihood of occurrence (i.e. higher for hazards that occur often receive and lower for ones that rarely occur).
- Possible impacts each hazard could have on business assets follow in the next column. Sitting down with the planning team and brainstorming "what if" in each of the hazard situations is a good way to fill in this column.
- This analysis also assigns a score to how severe the impacts you just brainstormed are— would they disrupt operations for a few hours? A few days? Shut business down completely?

SAMPLE RISK ANALYSIS

ASSET	HAZARD	PROBABILITY SCORE	POTENTIAL IMPACTS/ SCENARIOS	IMPACT SCORE	RISK RATING
Employees	Earthquake	Unlikely (2)	• Injury • Damage to homes/schools • Disruption to transportation network	Severe (5)	High (10)
	Flood	Possible (3)	• Damage to homes/schools • Disruption to transportation network	Moderate (3)	Medium (9)
	Wind Storm	Possible (3)	• Damage to homes/schools • Disruption to transportation network	Moderate (3)	Medium (9)
Refrigerated Inventory	Earthquake	Unlikely (2)	• Damage to refrigerators/freezers (from impact or displacement) • Power outage	Significant (4)	Medium (8)
	Flood	Possible (3)	• Damage to refrigerators/freezers (from water) • Power outage	Significant (4)	High (12)
	Wind Storm	Possible (3)	• Power outage	Moderate (3)	Medium (9)

SAMPLE PROBABILITY & IMPACT SCORES

SCORE	1	2	3	4	5
Probability *(How likely a hazard is to occur)*	Very Unlikely	Unlikely	Possible	Likely	Very Unlikely
Impact *(How great an impact the hazard might have)*	Negligible	Low	Moderate	Significant	Severe

It is important that the planning team knows all business processes well, so each are covered thoroughly.

ASSESSING SEVERITY

Estimating severity of potential hazards can help to prioritize what risks to address first in your preparedness plan.

In this example, likelihood of risk and severity of impact are combined to produce an overall "risk rating" (e.g. Earthquake Risk to Employees: Probability Score 2 x Impact Score 5 = Risk Rating 10). Risks with the highest ratings are the most dangerous to your business and are logical places to start your planning

SAMPLE RISK MATRIX

PROBABILITY	Negligible (1)	Low (2)	Moderate (3)	Significant (4)	Severe (5)
Very likely (5)	5	10	15	20	25
Likely (4)	4	8	12	16	20
Possible (3)	3	6	9	12	15
Unlikely (2)	2	4	6	8	10
Very Unlikely (2)	1	2	3	4	5

IMPACT

RISK LEVEL

EXTREME (20-25)
HIGH (10-19)
MEDIUM (4-9)
LOW (1-3)

Some businesses find it helpful to create a risk matrix, which helps to organize risk ratings into levels or categories. The probability and impact scores on each side of the matrix match those used in the risk analysis table, and the risks ratings they produce are grouped into Low, Medium, High and Extreme levels based on the value.

While not necessary for your risk analysis, developing risk levels can be useful for quickly identifying groups of risks you may want to spend more or less time focusing on in your emergency preparedness plan.

The risk information presented is to identify hazards that are most likely to result in large consequences for the community. Risk represents the potential for loss and is made up of two components: Probability and consequence. The greater the probability of an adverse event, the greater the risk. The frequency of events over a given time period is a commonly applied measure of probability. The greater the potential consequences of an incident, the greater the risk. Consequences may include physical, social, and economic impacts.

Considering both components of risk becomes important when allocating limited time and effort for emergency management. The highest priority is given to hazards that are both probable and likely to lead to severe consequences. Low priority is allocated to low probability occurrences of little consequence. With these considerations in mind, a list of 14 primary hazards presented to the City of Abbotsford yields the hazards and priorities identified below.
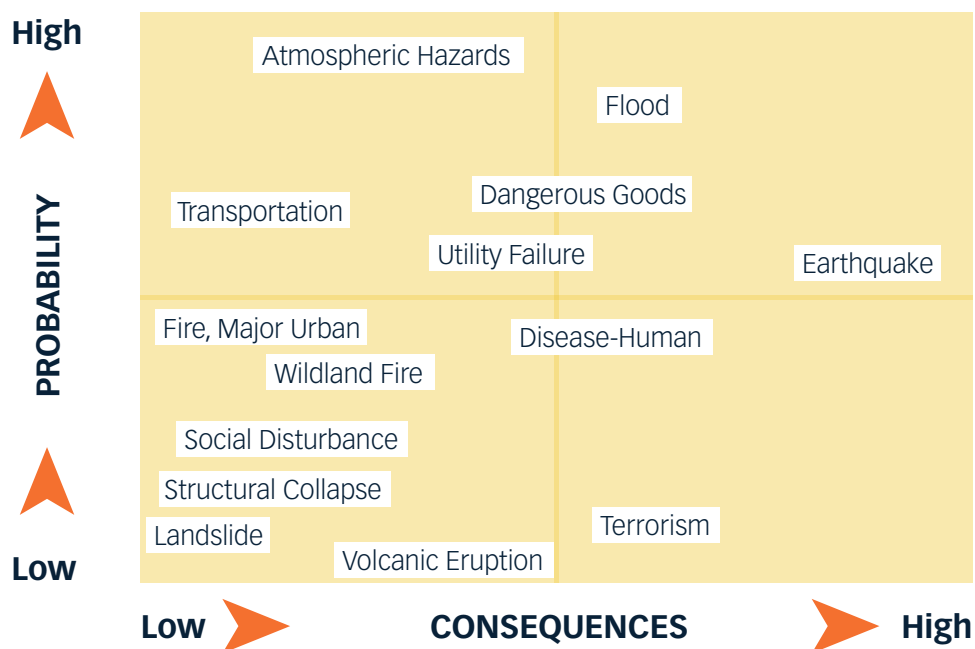
BUSINESS IMPACT ASSESSMENT

A business impact assessment takes a more detailed look at the risk analysis (see Appendix C) to determine the financial and operational implications for your business.

A business impact assessment also identifies how timing factors in – e.g. how damaging a disruption might be if it occurs for a certain length of time or at a certain time of year – and a business's goals or minimum requirements for restoring that process after a disruption.

Start with the risks rated highest in the risk analysis. The example on the next page begins with the highest risk from the risk analysis (i.e. injuries to employees resulting from an earthquake), and then:

- Estimates the financial and operational impact of injured employees.
- Notes whether there are any legal requirements associated with each risk (for example, building code requirements or food safety regulations).
- Discusses what targets the business has determined for restoration—what is the minimum functionality the business needs from that asset and how soon in order to keep running. Examples: having a minimum of six employees working within 12 hours, or backup power within four hours.
- Assign a priority that takes into the account the likelihood of each impact and how severely it would affect the business. This can be done using whatever method makes sense for the business.

More information can also be found at http://www.ready.gov/business-impact-analysis

SAMPLE BUSINESS IMPACT ANALYSIS

ASSET/ PROCESS	RISK/IMPACT (HAZARD)	LIKELIHOOD	DURATION/ TIMING	FINANCIAL IMPACT	OTHER IMPACTS	LEGAL REQUIREMENTS	SEVERITY	RESTORATION TARGETS FUNCTIONALITY | RESTORE TIME		PRIORITY (H,M,L)
Employees	Injury *(Earthquake)*	Unlikely	Most vulnerable early mornings, holidays when greatest # of staff are in	$$$ in productivity loss, $$ sales loss per day	Reduced workforce	Yes - Building Code	Severe	Prevention focus - office & employee safety to prevent injury		**High**
Employees	Some can't come to the office due to road or school closures *(Earthquake, Windstorm or Flood)*	Possible	Most vulnerable early mornings, holidays when greatest # of staff are needed	$$ in productivity loss, $ sales loss per day	Reduced workforce	No	Significant	Minimum 3 employees in the office; 3 working from home	Minimum staff working within 12 hrs	**Medium**
Refrigerated Inventory	Power loss *(Earthquake, Windstorm, or Flood)*	Possible	Food spoilage if temperatures exceed 4ºC for more than 2 hrs	$$ in direct inventory loss, $$ sales loss per day	Reduced customer satisfaction levels	Yes - Food Safety regulations	Moderate	Backup power or alternative cooling option	Backup power/ dry ice within 4 hrs; full power/ alternative within 12 hrs	**Medium**

RISK REDUCTION

As the planning team discusses the various risks identified, determine what risk-reduction options make the most sense for business. It is important to consider cost, time required, and the expected benefit of each option.

From the business impact assessment example (see Appendix D), listed below are some possible risk-reduction strategies.

SAMPLE RISK REDUCTION STRATEGIES

ASSET/ PROCESS	RISK/IMPACT *(HAZARD)*	RESTORATION TARGETS		PRIORITY (H,M,L)	RISK REDUCTION OPPORTUNITIES	
		FUNCTIONALITY	*RESTORE TIME*		MITIGATION	PREPAREDNESS
Employees	Injury *(Earthquake)*	Prevention focus - office & employee safety to prevent injury		**High**	• Conduct building safety check & take necessary actions *(e.g. secure non-structural items that could fall down in an earthquake)*	• Hold earthquake drills
Employees	Some can't come to the office due to road or school closures *(Earthquake, Windstorm or Flood)*	Minimum 3 employees in the office; 3 working from home	Minimum staff working within 12 hrs	**Medium**		• Develop work-from-home plan
Refridgerated Inventory	Power loss *(Earthquake, Windstorm, or Flood)*	Backup power or alternative cooling option	Backup power/dry ice within 4 hrs; full power/long term alternative within 12 hrs	**Medium**	• Install a backup generator • Stock Spoilage insurance	• Identify area dry ice providers

Brainstorm all the potential options with your planning team to compare which are the most appropriate for your business given the cost, timing, benefit and priority of the risk. For example, if you need to keep your products cold but don't have the budget for a backup generator, you could develop a list of local dry ice vendors. Numerous resources are available from government, safety, insurance and research organizations. Start with the sites listed below and in Additional Resources, Appendix K, Page 35-36.

- Disaster Financial Assistance:
  http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/emergency-response-and-recovery/disaster-financial-assistance
- Institute for Catastrophic Loss Reduction – Disaster Prevention:
  http://iclr.org/disasterprevention.html
- Insurance Institute for Business & Home Safety – Risks:
  http://www.disastersafety.org/

WORKPLACE EMERGENCY KIT CHECKLIST ——

This checklist is adapted from PrepareMyBusiness.org (www2.agilityrecovery.com/assets/SBA/drkitsba.pdf). Prepare emergency kits ahead of time and ensure they are easily accessible. Be prepared for the possibility that your office might serve as a temporary shelter for employees or customers. The following checklist includes workplace emergency kit basics. Add in any additional supplies you may need, and store in easily transportable bags (like backpacks or duffel bags) – your "Grab and Go" bags.

In an emergency, employee and customer safety is always the first priority.

IMPORTANT BUSINESS RECORDS*

- [ ] Insurance Policies*
- [ ] Fixed Asset Inventory*
- [ ] Contracts
- [ ] Employee Information
- [ ] Other*: _____

SOFTWARE & OFFICE SUPPLIES

- [ ] Software installation disks and licensing keys*
- [ ] Hardware serial numbers*
- [ ] Pens, notepads & printer paper
- [ ] Stapler, staples, & tape
- [ ] Company letterhead & stamps
- [ ] Calculators
- [ ] Other: _____

TOOLS & SUPPLIES

- [ ] Duct tape
- [ ] Pocket knife, wrench/pliers and screw driver
- [ ] Lighter/matches (sealed in plastic bag)
- [ ] Leather-palmed work gloves
- [ ] Safety goggles or glasses
- [ ] Hard hats for falling debris
- [ ] For snow/ice: shovel, sand and rock salt

SANITATION

- [ ] Dust filters/masks
- [ ] Moist towelettes
- [ ] Plastic garbage bags
- [ ] Paper towels
- [ ] Toilet paper

EMERGENCY SUPPLIES

- [ ] First Aid kit
- [ ] Bottled water (4 litres per person per day)
- [ ] Non-perishable food (canned foods & juices, energy bars, ready-to-eat packaged meals, etc.)
- [ ] Can opener for food
- [ ] Flashlights
- [ ] Extra alkaline batteries
- [ ] Light sticks
- [ ] Whistles (3 short blasts for help)
- [ ] AM/FM radio (windup and/or battery operated)
- [ ] Emergency blanket & ponchos
- [ ] Emergency cash in small denominations

INDIVIDUAL EMPLOYEES

- [ ] Medications
- [ ] Personal hygiene items
- [ ] Cell phone/battery charger
- [ ] Change of clothing/footwear (including long-sleeved shirt, pants, boots or closed-toe shoes)
- [ ] Extra pair of glasses (if used)
- [ ] Family Emergency contact info* (daycare, school, work, out-of-area contacts, etc.)

IF YOU CANNOT RETURN HOME, PLAN FOR:

- [ ] Alternate accommodation arrangements with co-workers, family or friends
- [ ] Designated person(s) to pick up and care for children, other dependent individuals and pets.

Store important records securely; backup copies should be stored in accessible, offsite storage or included in your business's "Grab and Go" bag with other essential supplies.

EVACUATION GUIDE

Some emergencies may make staying put dangerous. In such cases, it may be safer to evacuate the immediate area and go to family or friends or an emergency reception centre.

The authority to order an evacuation can rest with different levels of government (local, provincial or federal). A standard three-stage evacuation process has been adopted by all levels of government and is described below.

HOW WILL YOU KNOW IF THERE IS AN EVACUATION ALERT OR ORDER?

Various methods will be used to advise residents and businesses in the event that emergency messaging is needed, including an "evacuation alert" or an "evacuation order." Tools include going door-to-door (if applicable), in a patrol car or fire vehicle using the PA system, alerting the media (radio, TV, Internet), and social media (Twitter, Facebook and website). Every emergency is different and people may be asked to evacuate to a specific location or shelter-in-place

▶ GET READY (BEFORE THE EVACUATION)

ADVANCE PLANNING & PREPARATION

- ☐ Prepare business and employee "Grab and Go" bags for use in case of emergency.
- ☐ Develop an evacuation plan, including;
    - ○ routes and exits from your building
    - ○ emergency shut off procedures for utilities, equipment, processes, etc. as necessary
    - ○ procedures for assisting those with disabilities
    - ○ designated post-evacuation assembly area (note that this might need to be changed during an evacuation emergency if your assembly are is inside an evacuation process.)
    - ○ system for accounting for all personnel during an evacuation
- ☐ Designate an individual to coordinate your business's evacuation process.
- ☐ Ensure that employees are aware of the evacuation plan and all emergency exits.

STAGE 1: EVACUATION ALERT

Individuals are advised of the potential need to get ready for evacuation. The alert highlights the nature of the danger and that evacuation may be required at any time. Information will be provided on where to go if the evacuation is ordered. Whenever possible, emergency officials will provide as much notice as possible so people have time to get ready

▶ GO (DURING THE EVACUATION

STAGE 2: EVACUATION ORDER

All persons in the affected area are ordered to leave the area immediately and provided again with the information required. In some instances there will not be time to alert the impacted individuals to get ready in advance and for safety an evacuation order will be immediately made. Listen carefully to the instructions being provided and act quickly. Emergency officials may provide you with a specific evacuation route.

- Move quickly and calmly and follow instructions provided by emergency officials.
- Carry out emergency shut off procedures for utilities, equipment, etc. if necessary.
- Take your business and individual Grab and Go bags (employees should remember to bring along any medication they require).
- Assist those with mobility issues or disabilities to evacuate as needed.
- Close and lock your windows and doors.
- Evacuation coordinator should account for personnel and visitors after evacuating and take note of any missing individuals.
- Employees should send a message to their out-of-area contacts.

▶ RETURN (AFTER THE EVACUATION)

STAGE 3: EVACUATION RESCIND

All persons in the affected area are advised that the emergency is under control and the area has been declared habitable and safe and the evacuation order has been rescinded.

Listen carefully to emergency officials; they will advise you when it is safe to return and if there is anything you need to do to ensure it is safe to re-enter your place of work.

SHELTER-IN-PLACE GUIDE

For some emergencies, such as a hazardous material spill, it may be safer to stay inside your facility. This procedure is called "sheltering-in-place" and is only for a few hours. You will be instructed by emergency officials when you need to shelter-in-place.

▶ GET READY
(BEFORE THE SHELTER-IN-PLACE EMERGENCY)

ADVANCE PLANNING & PREPARATION

- [ ] Pre-select an interior room(s) with the fewest windows or vents, such as
  - ○ Conference Rooms
  - ○ Storage Rooms
  - ○ Hallways
  - ○ Room(s) should have adequate space for everyone to be able to sit down
  - ○ Ideally a room with an adjoining bathroom
  - ○ Avoid rooms with mechanical equipment like ventilation blowers or pipes
  - ○ Avoid overcrowding by selecting several rooms (consider #of employees, possible # visitors, clients, etc.)
- [ ] Prepare a Shelter-in-Place Kit containing the following:
  - ○ A battery-operated/hand cranked AM/FM radio and batteries
  - ○ Plastic sheeting (preferably, pre-cut to size to cover windows and doors and labeled)
  - ○ Duct tape for sealing cracks around doors and windows
  - ○ Alternate lighting, in the event of a power outage. E.g. lantern(s) for overall lighting, flashlight(s), headlights (keeps your hands free), batteries and light-sticks
- [ ] Note: Plan to account for all staff, visitors, and customers as you would in a fire drill
- [ ] Ensure a hard-wired telephone is in the room(s) you selected. If not, plan to bring in a cellular phone(s)
- [ ] Create a Shelter-in-Place announcement for staff, customers/clients/visitors in the building. It is important to provide for the safety of everyone by asking them to stay and not leave. When authorities advise to shelter-in-place, they want everybody to take those steps immediately and not walk outdoors or drive. In general, employees, clients/visitors cannot be forced to shelter.
- [ ] Pre-assign Shelter-in-Place duties. They should be assigned to Facility Manager/specific employees.
- [ ] Conduct a Shelter-in-Place drill once a year.
- [ ] Check the supplies of the Shelter-in-Place Kit every six months (when you change your clocks in the spring and fall is a good time to do this.)

► SHELTER-IN-PLACE
(DURING THE SHELTER-IN-PLACE EMERGENCY)

☐ Announce to staff there is a Shelter-in-Place emergency and inform staff to stay.

☐ Request visitors, clients, customers to stay and not leave.

☐ Instruct everyone outside to come inside immediately.

☐ Close all doors, windows and any opening to the outside.

☐ Post Shelter-in-Place signage.

☐ Shut down air handling equipment (e.g. heating, ventilation/air-conditioning, etc.)

☐ Consider security concerns (e.g. cash , inventory, etc.)

☐ Direct staff and all visitors to the designated Shelter-in-Place room(s).

☐ Retrieve the Shelter-in-Place Kit once inside the Shelter-in-Place room(s).

    ○ Seal any doors, windows, vents with plastics sheeting and tape

    ○ Place wet towels at base of door(s)

    ○ Monitor media for updates (e.g. radio, cell phones, etc.)

☐ Account for all employees and visitors.

☐ Remain in the Shelter-in-Place room(s) until the 'All Clear' is given by emergency officials.

Note: Reminder that instructions to Shelter-in-Place are usually provided for durations of a few hours, not days or weeks. There is little danger that the room in which you are taking shelter will run out of oxygen.

► ALL CLEAR
(AFTER THE SHELTER-IN-PLACE EMERGENCY)

☐ When the 'All Clear' is issued have all staff/visitors/clients leave the Shelter-in-Place room(s).

☐ Open all doors and windows to ventilate.

The following checklist is taken from Public Safety Canada – Earthquake Preparedness Guide
http://www.getprepared.gc.ca/cnt/rsrcs/pblctns/rthqks-wtd/rthqks-wtd-eng.pdf

- [ ] If responsible for managing building utilities, clearly label the on-off positions for the water, electricity and gas and know how to turn off in the event of an earthquake or other emergency.
- [ ] Have appropriate professionals repair any loose roof shingles, faulty electrical wiring or leaky gas fittings.
- [ ] Secure water heaters to wall studs or masonry using a bracing kit to reduce the possibility of the water heater falling and rupturing gas and water connections.
- [ ] Secure major appliances to walls, such as refrigerators.
- [ ] Secure costly and heavy electronics.
- [ ] Secure the tops of top-heavy furniture to a wall by anchoring to studs and using flexible fasteners.
  Keep heavy items on lower shelves.
- [ ] Secure expensive or fragile items that if damaged would be a significant loss.
- [ ] Affix minors, paintings and other hanging objects securely, so they won't fall off hooks
- [ ] Locate chairs away form chimneys and windows.
- [ ] Don't hang heavy pictures and other items over areas where people sit.
- [ ] Put anti-skid pads under TV's, computer and other small appliances, or secure them with velcro or other such product.
- [ ] Keep flammable items and household chemicals away from heat and where they are less likely to spill.
- [ ] Consult a professional for additional ways to protect your building, such as bolting the building to its foundation and other structural mitigations techniques.

The following checklist is taken from PrepareMyBusiness.Org – Emergency Communications
http://www.preparemybusiness.org/planning

DETERMINE ROLES AND RESPONSIBILITIES

- ☐ Appoint primary decision maker/coordinator
- ☐ Appoint back-up decision maker(s)
- ☐ Outline roles and responsibilities for additional participants

DETERMINE WHO YOU NEED TO COMMUNICATE WITH:

- ☐ Employees
- ☐ Stakeholders
- ☐ Client/Customers
- ☐ Regulator Agencies
- ☐ Media
- ☐ Other:_____

DOCUMENT WHEN TO ACTIVATE PLAN, USING CRITERIA SUCH AS:

- ☐ Length of time of outage/interruption
- ☐ Severity of interruption
- ☐ Percentage/number of employees, departments impacted
- ☐ Prolonged loss of contact with clients and/or vendors
- ☐ Other:_____

DETERMINE, DOCUMENT AND PUBLICIZE AN EMERGENCY COMMUNICATIONS PLAN:

- ☐ Phone/email tree (include spouse/family information for employees)
- ☐ Employee evacuation plan
- ☐ Website emergency messaging system
- ☐ Phone/voicemail emergency messaging system
- ☐ Plan for multiple forms of communication: text, email, voicemail, etc.

EDUCATE EMPLOYEES ABOUT THE COMMUNICATIONS PLAN:

- ☐ Document in hard copy and electronic formats
- ☐ Train current and new employees
- ☐ Remind employees about emergency communications plan, including pocket cards, fold-out cards, brochures, booklets, etc.
- ☐ Update information regularly and re-educate employees

ADDITIONAL RESOURCES

For more information on disaster preparedness and business continuity planning, the following are useful resources.

EMERGENCY PREPAREDNESS FOR INDUSTRY AND COMMERCE COUNCIL (EPICC)

EPICC is a non-profit government endorsed society supported by and for the benefit of business and institutions throughout British Columbia, to influence and help businesses prepare for emergencies and disasters. http://www.epicc.org/

EMERGENCY MANAGEMENT BRITISH COLUMBIA (EMBC) - BUSINESS PREPAREDNESS

Emergency Management British Columbia (EMBC) is the coordinating agency for the provincial government's emergency management activities. The overall purpose of EMBC is to increase life, safety and resiliency for individuals and communities throughout BC.
http://www.embc.gov.bc.ca/em/hazard_preparedness/business-industry.html

WORK SAFE BC – SMALL BUSINESS EMERGENCY RESPONSE PLANNING

Basic guidelines and plan template for emergency response planning for small businesses.
http://www.worksafebc.com/publications/health_and_safety/by_topic/assets/pdf/emergency_response_ guide.pdf

MINISTRY OF ENVIRONMENT - BC GUIDELINES FOR INDUSTRY RESPONSE PLANS

The main purpose of these guidelines is to promote development of comprehensive and consistent emergency response plans by industry in cooperation with the provincial government and local governments. http://www.env.gov.bc.ca/eemp/resources/guidelines/bc.htm

PUBLIC SAFETY CANADA - BUSINESS CONTINUITY PLANNING RESOURCES

Summary and general guidelines for business continuity planning.
http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/bsnss-cntnt-plnnng/index-eng.aspx

HEALTH CANADA - PSYCHO-SOCIAL EMERGENCY PREPAREDNESS AND RESPONSE HANDBOOK

Intended to help managers develop and maintain a supportive environment for employees who experience a traumatic workplace event and to support the delivery of critical services to Canadians during and after a major traumatic event.
http://www.hc-sc.gc.ca/ewh-semt/occup-travail/empl/response-intervention-eng.php

ADDITIONAL BUSINESS CONTINUITY RESOURCES

These resources offer various examples and templates for developing a business continuity plan.

- Institute for Catastrophic Loss Reduction – "Open for Business" Planning Tools http://iclr.org/businesses/openforbusinesstm.html
- Canadian Federation of Independent Businesses – Basic Emergency Management Guidelines http://www.cfib.ca/research/businfo/pdf/din0490.pdf
- Insurance Bureau of Canada – Risk Management http://www.ibc.ca/en/Business_Insurance/documents/brochures/RM_Getting%20started_Process.pdf
- Small Business BC – Emergency Planning http://www.smallbusinessbc.ca/general-business/your-business-prepared-emergency
- Provincial Emergency Program – Hazard, Risk & Vulnerability Assessment Online Tool http://embc.gov.bc.ca/em/hrva/hazard.html
- US Federal Emergency Management Agency – Business Preparedness Planning http://www.ready.gov/business http://www.fema.gov/media-library/resources-documents/collections/357
- PrepareMyBusiness.org – Business Preparedness Planning Resources & Templates http://www.preparemybusiness.org/planning
- Queensland Government – Business Continuity Planning http://www.business.qld.gov.au/business/running/risk-management/businesscontinuity-planning
- Non-Profit Coordinating Committee of New York – Disaster Planning http://npccny.org/info/disaster_plan.htm