

(Mid Island Emergency Coordinators & Managers)



Emergency Preparedness Workbook

2017



How to Use this Workbook

1. Take the **Emergency Preparedness Challenge!** Find out how prepared you are!
2. Get prepared using the **26 Weeks to Emergency Preparedness** as a guide.
3. Refer to **Workbook Sections** to find out how to **prepare** and **respond** appropriately in an emergency/disaster.
4. Keep this workbook near your main phone for **easy access** in an emergency.
5. Locate your **Community Emergency Program** information for specifics in your community (pages i-ii).

Section 1 - Before and Emergency - Emergency Preparedness for You (page 1)

- Emergency preparedness suggestions to help you and your family become self-sufficient before an emergency/disaster.

Section 2 - Emergency Preparedness for Your Home (page 19)

- Prepare your home for a variety of emergencies and reduce risks to make your home a safer haven before an emergency/disaster.

Section 3 - During an Emergency - Responding Safely (page 41)

- Suggestions to help you and your family know how to respond appropriately during emergencies/disasters and increase your ability to survive well.

Section 4 - After an Emergency - Moving Forward (page 67)

- Suggestions for recovering and getting back on track after emergencies/disasters.

Section 5 - Information Resources (page 77)

- Provides additional information resources that you may wish to pursue (anytime)

Acknowledgements

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Disclaimer

Every reasonable effort has been made to ensure the accuracy of this Workbook. Local authorities assume no responsibility and disclaim any liability for any injury or damage resulting from the use or effect of the information specified in the manual.

Table of Contents

Community Emergency Program Information	i
We're In This Together	iii
Personal Preparedness is THE Foundation!	iv
Volunteer Opportunities	v
Workplace Preparedness	vi
British Columbia Emergency Management System Fact Sheet	viii
Take the Emergency Preparedness Challenge!	ix
26 Weeks to Emergency Preparedness	x
Before an Emergency - Emergency Preparedness for You	1
Emergency Comfort Kits	2
Develop a Communication and Reunion Plan	3
Develop a Family Emergency Plan	4
C-MIST A Function-Based Needs Framework	5
Emergency Water Supplies	7
Emergency Food Supplies	9
First Aid Supplies	11
Home Emergency Supplies	12
Your Pets are Counting on You	15
Emergency Planning for Farm Animals	16
Emergency Preparedness for Your Home	19
Home Hazard Hunt (Risk Assessment)	20
Making Your Home Structurally Safe	22
Securing the Water Heater	25
Securing Furniture and Its Contents	26
Natural Gas & Propane Safety	28
Electrical Safety	29
Shutting Off Water	31
Protecting Your Home from Fire	32
Fire Safety	35
Protecting Your Home from Forest Fire	37
Protecting Your Home from Flooding	38
Hazardous Materials Safety	40
During an Emergency - Responding Safely	41
Earthquakes	42
Evacuations/Sheltering In Place	44
Fires - Structural	48
Forest Fires	50
Floods	51
Hazardous Materials	54
Landslides	55
Pandemics (Disease Outbreaks)	56

Power Outages.....	59
Tsunamis.....	61
Water Supply Interruptions.....	63
Winter Storms.....	64
After an Emergency - Moving Forward	67
Getting Back on Track	68
Health and Safety Guidelines.....	69
Emotional Responses in Emergencies	72
Helping Children Cope with Their Fears	73
Helping Pets Cope with their Fears.....	74
Recovery Resources.....	75
Information Resources	77
Useful Information & Resource Links.....	78
Local Community Emergency Services	79
Emergency Preparedness Glossary	81

Community Emergency Program Information

The Mid Island Emergency Coordinators & Managers encompass an area from the Malahat to Port Hardy on Vancouver Island and across to Powell River and the Sunshine Coast. Some emergency programs are regional, others are individual municipalities. This list is provided to identify where you can get more detailed emergency program information for your community.

Community Information Resources		Phone
 Alberni-Clayoquot Regional District	Alberni-Clayoquot Regional District Website: www.acrd.bc.ca/emergency-preparedness	250-724-1356
 Bamfield Community Emergency Program	Bamfield Website: www.communityemergency.mybamfield.ca Facebook: Bamfield Community Emergency Program Email: communityemergency@mybamfield.ca	
 City of Campbell River	Campbell River Website: www.campbellriver.ca/city-services/public-safety	250-830-6702
 Comox Valley Regional District	Comox Valley Regional District Website: www.comoxvalleyemergencyprogram.com/ www.comoxvalleyrd.ca/EN/main/departments/emergency-services/emergency-program.html	
 CVRD	Cowichan Valley Regional District Website: www.cvrld.bc.ca/86/Emergency-Management Email: ep@cvrd.bc.ca Facebook: Cowichan Valley Regional District Twitter: @mycvrd	250-746-2560
 CITY OF NANAIMO THE HARBOUR CITY	City of Nanaimo Website: www.nanaimo.ca/EN/main/departments/Fire-Rescue/4232/emergency-preparedness.html	
 EMO City of Parksville Town of Qualicum Beach Regional District of Nanaimo	Regional District of Nanaimo (School District No. 69) Website: www.rdn.bc.ca/cms.asp?wpID=2696	250-390-6565
	Parksville Website: www.parksville.ca/cms.asp?wpID=513	250-954-4672
	Qualicum Beach Website: www.qualicumbeach.com/emergency-preparedness	250-752-6232
 POWELL RIVER REGIONAL DISTRICT	Powell River Regional District Website: www.powellriverrd.bc.ca/community-services-2/emergency-preparedness/	

Community Information Resources		Phone
	Quadra Island Website: quadraemergency.ca Facebook: Quadra Island Emergency Program	250-285-2150
	Regional District of Mount Waddington Website: www.rdmw.bc.ca/regional-services/emergency-planning/ Facebook: Regional District of Mount Waddington Twitter: @RDMW_EM	
	Regional District of Nanaimo (School District No. 68) Website: www.rdn.bc.ca/cms.asp?wpID=2696 Email: emergencyplanning@rdn.bc.ca	250-390-6565
	Sayward Website: www.sayward.ca/municipal-services/emergency-services/sayward-emergency-program/ Email: epc@saywardvalley.net	250-282-5512 250-282-3760
	Strathcona Regional District Website: www.strathconard.ca/preparedness Email: preparedness@strathconard.ca Facebook: Strathcona Emergency Program Twitter: @SEP_EPC / Instagram: @ SEP_EPC	250-830-6702
	Sunshine Coast Regional District Website: www.scrd.ca/Emergency-Program	604-885-6887
	Tahsis Website: villageoftahsis.com/resident-services/emergency-info/ Facebook: Tahsis Emergency Response	250-934-6344
	Tofino Website: www.tofino.ca/emergencypreparedness	250-725-3229 ext. 708
	Ucluelet Website: ucluelet.ca/community/emergency-management-ucluelet-bc	250-726-4780
	Zeballos Website: www.zeballos.com/category/zeballos-emergency-program/ Facebook: Zeballos EPC Twitter: @zebep1	250-761-4229

We're In This Together

Emergencies and disasters are opportunities for communities to work together to build back better! Sharing the responsibility for emergency management means we all win!



Emergency Planning
Together Building Community Resilience
and Sustainability

Personal Preparedness is THE Foundation!

When we all do our part to prepare for taking care of ourselves in emergencies or disasters, our ability to cope with trouble multiplies exponentially!

ARE YOU READY?

Read this workbook and complete the Household Emergency Plan!

Neighbourhood Preparedness - Working Together to Thrive!

From small events like power outages or windstorms to major events like forest fires and earthquakes, take time to check on neighbours and provide assistance as needed. Some day it might be you, lying helpless on the floor unable to call for assistance!

1. Get prepared and develop your household plan
2. Meet your neighbours
3. Identify a safe meeting place
4. Assign responsibilities (training may be available)
5. Map your street
6. Keep in touch
7. Review and update your neighbourhood plan annually (have a fun get together)

Find out more through your Community Emergency Program (see pages i - ii)

Volunteering with Your Community - Building Resilience!

Ever wondered how you could help your community? Wonderful opportunities to volunteer!

Community Organization	Opportunities to help
Emergency Social/Support Services	Helping those impacted by disaster!
Search & Rescue	Finding lost and missing people!
Volunteer Fire Rescue	Fighting fires, saving lives!
Citizen's on Patrol	Help promote crime prevention!
Community Recovery/Resilience	Helping with the aftermath of disasters!

Find out more through your Community Emergency Program (see pages i - ii)

Government - Coordination and Support!

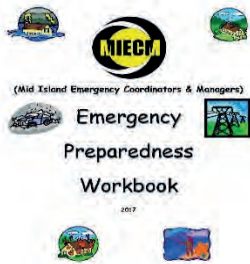
Local governments focus on coordinating the response and repairing/rebuilding infrastructure. We NEED YOU! - when we all work together we can create communities that we all can enjoy and be proud of!

Work together with us = Strength, Resilience & Better Communities!

Volunteer Opportunities

Interested in Volunteering with your Community Emergency Program?
Check out the opportunities outlined below.

Emergency Preparedness



Personal Preparedness is the foundation! Get prepared for your peace of mind!

Neighbourhood Emergency Preparedness



Neighbours
Helping
Neighbours

Learn to help yourself and help others so that no one is alone during emergencies or disasters! Free courses may be available!

Emergency Communications Team



Do you have your Amateur Radio Licence?
Would you like to learn what it takes?
Learn how to provide emergency communications services in your community? Check out your Community Emergency Communications Team!

Emergency Social Services



Interested in working with people in crisis?
Emergency Services workers listen, provide emotional support and where needed provide referrals to resources such as food, clothing and lodging.

Community Recovery



Want a more long-term commitment working with people impacted by a disaster? Community Recovery workers listen, provide emotional support and connect people to community resources to rebuild their lives.

Search and Rescue



Do you enjoy tramping in the woods? Are you a bit of a detective? Join Search and Rescue and help to find the lost or search for evidence under RCMP direction.

Fire Rescue

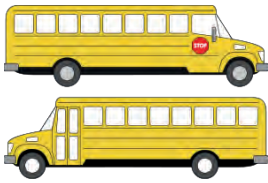


Always dreamed about becoming a firefighter? You can make your dream a reality by joining a local volunteer Fire Rescue in your community.

Connect with your Community Emergency Program (pages i - ii) for more information!

Workplace Preparedness

Every workplace in British Columbia is required to have an emergency plan. At its most basic, this must meet **WorkSafeBC** requirements by identifying potential hazards and providing instructions and training to employees for emergency response and safe evacuation (OHS Regulation Section 5.97 - 5.102).



Schools, with their additional responsibility for children need to have emergency plans and regular drills. Find out from your local School Board or Ministry of Education what schools must do to keep your children safe! Work with your local Parent Advisory Councils (PAC) to help your schools prepare for emergencies.

Disaster Recovery Planning Questionnaire

When disasters happen, your business or agency may sustain direct damage such as fire, flooding or building damage. To increase the chances of your business recovering from a disaster and staying in business, check out these questions!

Taking Care of Your Business!

1. Does your business/organization have a business continuity or disaster recovery plan?
How often do you review and test your plan?
2. What are your most important business functions and how quickly can you resume following a disaster?
3. Do you have a backup system for your information and records?
4. Do you have backup power?
5. Do you have a backup location where employees can work on key functions off site?
6. Do you have supplies to operate the business manually in extended power outages?
7. How current is your contact information for your employees, clients, suppliers and insurance?
8. Do you have access to multiple, reliable methods of communicating with your employees (emergency phone numbers, texting, social media, pagers, radios or website)?
9. How will customers/clients/suppliers contact you after a disaster?
10. Do your employees know the emergency plan? Are they trained and know their roles?
11. Have you discussed emergency preparedness with your employees? Have you clearly identified your expectations? Do employees know your expectations and are they agreeable to meet those expectations? If not, you need a plan B!
12. How will you notify employees to return to work?
13. Do you have basic food, water, first aid and sanitary supplies on hand for yourself and employees?



14. If you must evacuate, what critical business information or equipment needs to come with you?
15. Can you pay employees manually via cheques?
16. Is there enough cash on hand for immediate needs?
17. Is your bank prepared for emergencies? Will Internet banking services be available?
18. How will you safeguard cash if bank deposits/security pickups are not available?



Helping Your Community Recover!

1. Is your organization able to offer goods and services at a discount or for free to assist others in disaster recovery?
2. Do employees have key skills that could assist with recovery efforts (construction, medical, counselling, etc.)?
3. Would you be able to release employees to volunteer on recovery efforts? How many hours may be available?
4. Is your organization able to provide support outside the normal operations (i.e. trucks and personnel for deliveries, rooms for rent, transportation assistance, etc.)?

If your answers concern you and you would like information on emergency preparedness or some guidance in developing your Disaster Recovery Plan, **please contact your local Emergency Program (see pages i-ii).**



British Columbia Emergency Management System Fact Sheet

Essentials of BCEMS

Vision

Resilient communities across British Columbia.

Mission

To facilitate the use of a proactive, collaborative, and integrated approach to emergency management to minimize loss and promote effective response and recovery in BC.

Purpose

BCEMS is a comprehensive framework that helps ensure a coordinated and organized approach to emergencies/disasters. It provides a structure for a standardized approach to developing, coordinating, and implementing emergency management programs across the province.

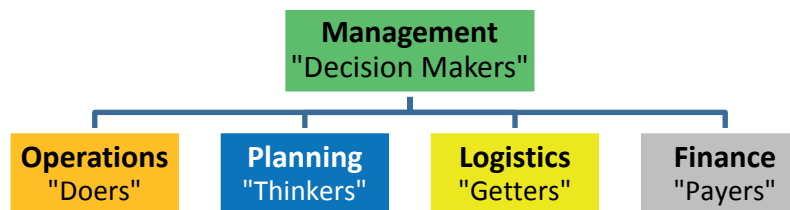
Guiding Principles

- Health and safety
- Shared responsibility
- All-hazards approach
- Collaboration and stakeholder engagement
- Common approach
- Clear communication
- Continuous improvement

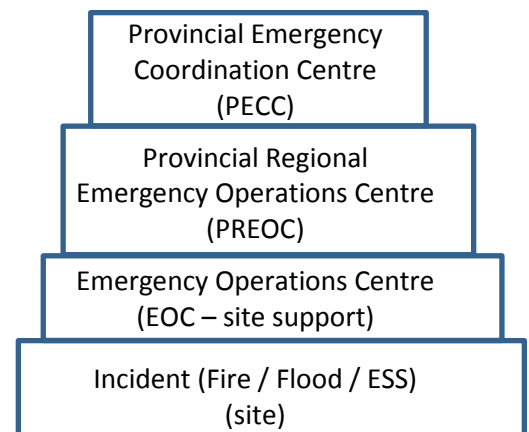
BCEMS Response Goals

1. Ensure the health and safety of responders
2. Save lives
3. Reduce suffering
4. Protect public health
5. Protect infrastructure
6. Protect property
7. Protect the environment
8. Reduce economic and social losses

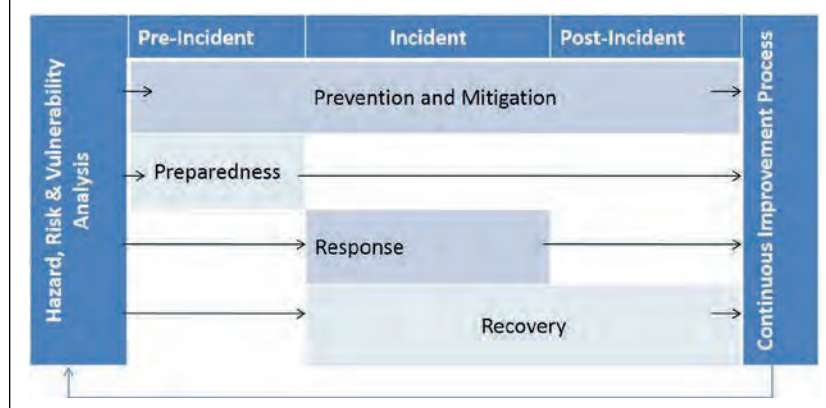
Five Primary Management Functions



BCEMS Response Levels



Emergency Management Cycle



Be Prepared! Help Others! Together we are so much more!



Take the Emergency Preparedness Challenge!

Are You Prepared for Winter Storms, Blackouts, Flooding, Forest Fires and Earthquakes?

Yes/No

- | | | | |
|--------------------------|--------------------------|-----|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. | Do you and/or your family members know how to keep safe in a disaster? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. | Have you identified any functional needs for your family - communications, medical, independence, supervision or transportation? (see pages 5-6) |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. | Does each member of your family have a Grab 'n Go kit ? (see page x/2) |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. | Does your family have a Communication and Reunion Plan in case you are separated during a disaster? (see pages 3-4) |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. | Do you know what plans your children's or grandchildren's schools have developed for protection and care of children during disasters? |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. | Do you have at least 7 days of drinking water (31.5 litres or 7 gallons per person) safely stored for your family? (see pages 7-8) |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. | Have you collected and stored emergency supplies to provide for your family and pets for an extended period of time? (see pages 9-14) |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. | Have you conducted a Home Hazard Hunt ? (see pages 20-21) |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. | Have you conducted a FireSmart vulnerability assessment? (see pages 37) |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. | Can you prepare meals if the power is out for an extended period of time? (see page 12) |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. | Does each member of your family know how to turn off home utilities such as water, gas and electricity? (see pages 28-31) |
| <input type="checkbox"/> | <input type="checkbox"/> | 12. | In a sudden power outage, could you <u>quickly</u> locate a flashlight or home power failure lights? (see page 12) |
| <input type="checkbox"/> | <input type="checkbox"/> | 13. | Do you have a basic first aid kit and first aid training? (see page 11) |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. | Do you know where to get local emergency information ? (see pages i-ii) |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. | Do you have a whistle to signal for assistance? |
| <input type="checkbox"/> | <input type="checkbox"/> | 16. | Is your workplace prepared in the event of a major disaster? (see pages vi-vii) |

How Did You Do?

- | | |
|----------------------------|---|
| • 16 out of 16 yes answers | - Congratulations! |
| • 12 - 15 yes answers | - A little more work to do here |
| • 9 - 11 yes answers | - You are halfway there |
| • 5 - 8 yes answers | - This weekend would be a good time to continue preparing |
| • 0 - 4 yes answers | - Please get started now |

If you answered "no" to any of these questions, now is the time to act.


DISASTERS HAPPEN!! *Don't wait until it is too late!*

For more information, please contact the local Community Emergency Program (see pages i-ii)


26 Weeks to Emergency Preparedness

1. **Identify safe places** in your home and on your property. Practice earthquake "drop, cover, and hold on" and fire evacuation drills using different escape routes. When the smoke detector sounds practice evacuating promptly and safely (see pages 44-49).
2. Identify a **family meeting place** outside your home and in your neighbourhood so you'll know everyone got out safely! (see page 3)
3. Arrange an **out-of-area emergency contact**, add family and emergency phone numbers and provide each person a list for their wallet or backpack. (see pages 3-4)
4. Supply family members with a Grab 'n Go Kit for their vehicles, work or school locations.

Suggested Grab 'n Go Kit (personalize for your needs & keep with you at all times)

Bottled water		Flashlight/radio
Nutritious foods (dried fruits, granola bars, nuts or beef jerky)		Whistle
Personal medications		Emergency blanket and garbage bags
Personal toiletries		Extra pair of eye glasses
Dust masks and gloves		Extra money, coins, phone cards
Family photos (recent)		Book and/or game
Personal papers (copies of insurance, emergency contacts, prescriptions & identification)		

Suggested Car Kit (Keep up car maintenance & fuel so you don't run out)**

- | | | |
|---|---|---------------------------------|
| Bottled water | | First aid kit & manual |
| Nutritious foods (dried fruits, granola bars, nuts or beef jerky) | | Fire extinguisher |
| Comfortable, sturdy walking shoes |  | Flashlight (extra batteries) |
| Warm blanket | | Flares, candles w/matches & jar |
| Heavy-duty work gloves (leather) | | Ziploc bags, toilet tissue |
| Dust masks and gloves | | Hardhat |
| Change of clothing | | Large, sturdy backpack |
| Road map & compass | | Deck of cards, good book |
| Shovel and sand, kitty litter or other traction aids | | Ice scraper and brush |
| Duct tape and garbage bags | | Booster Cables |
5. **Learn about hazards. What hazards are you vulnerable to?** Do a home hazard hunt to make your home safer. Do a FireSmart assessment to understand fire vulnerability. Secure appliances and heavy furniture and move beds away from overhead objects. (see pages 20-40)
 6. Get a portable container with tight-fitting lids and wheels (i.e. storage bin, suitcase or garbage) to use as your home **emergency kit**. Store near an exit, garage or storage shed and label. Make sure all family members know where the container is. (see pages 7-14)
 7. Stock your home with **at least 7-day supply of water** (~30 litres or 7 gallons) per family member and any pets. A strapped hot water tank can provide potable water. (see page 25)
 8. Add **food items and supplies for pets** to your emergency kit. (see pages 15)
 9. Get a **portable radio** for your emergency kit. Label with your local radio station.
 10. Stock your kit with **packaged, canned or dried foods**. Include a **manual can opener & waterproof matches**. If needed, include **infant supplies** - cloth & disposable diapers, bottles, formula, etc. Plan for a 7-day food supply per family member. (see pages 9-10)

11. **Prepare a first-aid kit** that includes prescription medications (blister packs work well), eyeglasses, bandages, sterile gauze pads, tape, scissors, tweezers, antibiotic ointment, and other items such as over-the-counter pain relievers. (see page 11)
12. Give family members **specific safety tasks** to do. (i.e. turn off electricity, collect the emergency container, track down family members and make sure people with functional needs are provided for. Make sure someone is looking after any pets.
13. Place **flashlight & extra batteries**, under beds along with sturdy shoes. (see page 12)
14. Add some **dried soups and other nutritious items** to your emergency kit.
15. **Check your insurance policies** and make list of your possessions (photos can help you with potential claims) and add to your emergency kit. Store a copy with a trusted friend.
16. Stock kit with large and medium-sized **plastic garbage bags** (orange or yellow bags make good visible signals). Large bags can also be used as ponchos, ground covers or blankets.
17. Add a **change of clothing** for each family member to your kit. Be sure to include seasonal clothing (winter/summer), heavy work gloves and sturdy shoes.
18. Add additional **canned or freeze-dried food** like stews, tuna fish, baked beans and vegetables to your kit. Add reusable **dishes and cups**.
19. Enroll a **family member** in a first-aid course. Place **HELP/OK signs** in window, cars & kits.
20. **Assemble important documents** like wills, insurance papers, medical records, credit card numbers, inventory of possessions, identification, etc. Make copies and store originals in a fireproof/waterproof container or store with a trusted person that will be accessible if your home is damaged. Keep recent photos of family and pets to help to reunite you.
21. Add **personal items** such as toilet paper, handi-wipes, soap, toothbrush, toothpaste, comb, sanitary supplies, etc. to your emergency kit.
22. Get strong garbage bags to use in your toilet if the sewer lines break or use a **bucket** with a tight-fitting lid, and put it with your emergency kit. Use the bucket to store other **emergency tools** like an axe, a folding shovel, rope and powdered lime for deodorizing.
23. Add **sleeping bags, blankets and sheets** (emergency blankets take up less space) and consider adding plastic **emergency ponchos** to your kit.
24. Add more **canned, freeze-dried, or dehydrated foods** to your kit until you have *at least* a 7-day supply for each family member. Add **evaporated, canned or powdered milk** to your kit
25. Add a **pocket knife, cutlery, dishes, whistle** and **spare set of house and car keys** as well as items such as **books, toys, cards and a family photo album** to your kit.
26. **Meet with neighbours to discuss emergency preparations**, plans for helping each other and the possibility of sharing items such as generators.

Now you and your family are personally prepared for most emergencies!
Rotate supplies to keep them fresh. Use or donate to the local food bank!

TOGETHER BUILDING COMMUNITY RESILIENCE AND SUSTAINABILITY

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Before an Emergency – Emergency Preparedness for You

Top 5 Recommendations:

1. Practice Drop, Cover and Hold On (*see page 42*).
2. Keep a **sturdy pair of shoes in a bag** under your bed for safe escape. Keep a **flashlight** tucked into one shoe or ensure each bedroom has a power failure light.
3. **Practice** getting out of your home, school and/or work place safely.
4. Pack a **small grab 'n go comfort kit** for each family member to keep with them at all times (water, food bars, light stick, emergency blanket, whistle, etc. - *see page viii/2*).
5. **Use ICE (In Case of Emergency)** in your cell phone address book to designate who to notify if you are injured or carry emergency contact info at all times (*see page 2*).



This section of the workbook:

1. Provides preparedness strategies that are common to all disasters. You plan only once, and are able to apply your plan to all types of hazards.
2. Provides suggestions to help you and your family become self-sufficient in the event of an emergency/disaster.
3. Offers a guideline for putting together a family emergency plan.
4. Outlines water, food, medical, and other emergency supplies you should have on hand.
5. Teaches you how to practice and maintain your family emergency plan.

Emergency Information

Check with your Community Emergency Program (*see pages i-ii*) to find out which radio station or social media to follow. Listen to your local media to get timely information during and after an emergency/disaster.

Plan for the worst (major earthquake) and be ready for anything.

Emergency Comfort Kits

A major emergency/disaster could cause you to spend an extended time away from home and you will want to have supplies to keep you as comfortable as possible.

Suggested Personal Grab 'n Go Kit

(personalize for your needs & keep with you at all times)

Bottled water

Flashlight/radio

Nutritious foods (dried fruits, granola bars, nuts or beef jerky)

Whistle

Personal medications

Emergency blanket and garbage bags

Personal toiletries

Extra pair of eye glasses

Dust masks and gloves

Extra money, coins, phone cards

Family photos (recent)

Book and/or game

Personal papers (copies of insurance, emergency contacts, prescriptions & identification)



Suggested Car Kit

(**Keep up car maintenance and fuel so you don't get stuck)

Bottled water

First aid kit & manual

Nutritious foods (dried fruits, granola bars, nuts or beef jerky)

Fire extinguisher

Comfortable, sturdy walking shoes

Flashlight (extra batteries)

Warm blanket

Flares, candles w/matches & jar

Heavy-duty work gloves (leather)

Ziploc bags, toilet tissue

Dust masks and gloves

Hardhat

Change of clothing

Large, sturdy backpack

Road map & compass

Deck of cards, good book

Shovel and sand, kitty litter or other traction aids

Ice scraper and brush

Duct tape and garbage bags

Booster Cables



Contact Numbers to Use In Case of Emergency (ICE)

Your **cell phone** can help in times of crisis. It can be used to call 9-1-1 or the police, as well as to reunite loved ones separated during a disaster.

At the scene of an accident, first responders or rescue services arrive and want to treat you quickly and also notify your family or friends.

You can make their job easier by adding entries in your cell phone address book under the label **ICE** with the names and phone numbers of people that should be notified in case of an accident or injury. Simply put the acronym **ICE** before the names you want to designate — creating entries such as **ICE1**, **ICE2** and **ICE3** etc.

It only takes a few seconds to help Responders know right away who to notify.

Congratulations! You are ready to look after your basic needs wherever you are!



Develop a Communication and Reunion Plan

There is a good chance you may not be with your loved ones when an emergency occurs. Identify at least 3 reunion sites and an emergency contact person to help you find each other and get back together.

***Remember - local telephone and cell phone services may not be available!**

Reunion Sites

Your family's first reunion site should be your home. Identify 2 other places to go if your home is not accessible. Possible sites may include: neighbours, friends, nearby relatives or designated reception centres, if you have been formally evacuated. If you need to leave your reunion site, make sure you leave a note telling others where you have gone.



In Neighbourhood: _____

Outside Immediate Area: _____

Fill in the reunion sites on the back of the emergency contact cards for each family member to carry with them at all times (*see Household Emergency Plan Booklet*).

Emergency Contact Person

Choose a relative or friend who lives outside the disaster area, preferably across the mountains, in another province or country that family members can contact if it becomes impossible to reach your home or reunion sites. Communication within a disaster area is harder to establish than calling to an area not affected by the disaster.

EMERGENCY CONTACT INFORMATION CARD	Out-of-Area Contact
◆ After a major disaster, local phone service may be limited, so phone or text your out-of-area contact to keep in touch with your family	Name: _____ CityProv: _____ Phone: _____
◆ Listen to the radio or TV for phone-use instructions, then call or text your contact person to say what your plans are	Places to meet family
◆ Keep the call short and, if possible, arrange to call back to check-in again	Working days: Day _____ Evening _____
	Non-working days: Day _____ Evening _____

Fill in the emergency contact cards for each family member to carry with them at all times (*see Household Emergency Plan booklet*).

If family members cannot reach one of your reunion sites, remind them to contact the emergency contact as soon as possible after an emergency to report how, where they are and their plans for the next few days. Use text messages and/or social media, keep conversations short as the phone systems will be overloaded with people trying to contact their loved ones.

Update Family Photos (including pets) often so searchers can help reunite families!

Develop a Family Emergency Plan

Safety during emergencies requires advance planning and preparation. Taking time to identify a nearby neighbour and acquainting them with your needs can provide peace of mind now as well as vital help following a disaster.

Before the Emergency

- Assess your own needs, capabilities, and limitations and write them down. Be sure to include any requirements for special equipment and medications.
- Sketch your home's floor plan. Mark exits, hallways, and alternate escape routes. Note obstacles that might make a safe exit difficult and plan to remove them if possible.
- Create a network of neighbors, relatives, friends, and coworkers to assist you in an emergency. Discuss your needs and make sure everyone knows how to operate necessary equipment.

Local Contact Information

Name: _____

Address: _____

Phone Number: _____

Name: _____

Address: _____

Phone Number: _____

Name: _____

Address: _____

Phone Number: _____

Name: _____

Address: _____

Phone Number: _____

Name: _____

Address: _____

Phone Number: _____

C-MIST A Function-Based Needs Framework

C-MIST is a tangible framework created by Barbara Purdy (www.freetobe.ca) to help everyone speak the same language around vulnerabilities and needs. C-MIST identifies people's actual needs during an emergency rather than labeling them as "special needs" and is more inclusive of temporary needs or for those who do not identify themselves as having a disability. This is critical in an emergency!

These "needs" are organized into 5 categories:



Communication:

Consider people with limited or no ability to speak, see, hear or understand. During an emergency, people with communication needs may not be able to hear announcements, see signs, understand messages or verbalize concerns.



Medical:

Consider people who require assistance in managing activities of daily living such as eating, dressing, grooming, transferring and going to the toilet. Includes managing chronic, terminal or contagious health conditions (such as ongoing treatment and administration of medications, IV therapy, catheters, tube feeding, dialysis, oxygen, operating life-sustaining equipment) During an emergency, people may be separated from family and friends. Early identification of needs and intervention can avoid deterioration of health.



Independence:

Consider people who are able to function independently if they have their assistive devices and/or equipment. Includes: *mobility aids* (such as wheelchairs, walkers, canes, crutches); *communication aids*; *medical equipment*, (such as catheters, oxygen, syringes, medications); and *service animals*. Individuals may become separated from their assistive equipment and/or animals in an emergency. Those whose needs are recognized and restored early can better maintain their independence. Effectively meeting their functional needs prevents secondary complications.



Supervision:

Consider people with supervision needs including: those who have psychiatric conditions (such as dementia, Alzheimer, Schizophrenia, depression or severe mental illness); addiction problems; brain injury, or become anxious due to transfer trauma. During an emergency, some people with mental illness may be able to function well while others require a more protected and supervised setting.








Transportation:

Emergency response requires mobility and this category includes people who are unable to drive because of disability, age, temporary injury, poverty, addiction, legal restriction or have no access to a vehicle. Wheelchair accessible transportation may be necessary. Pre-planning evacuation needs helps prevent chaos during an emergency and many people can function independently once evacuated to safety.

Some Considerations for Functional Needs

If you or someone close to you has a disability or a functional need, you may have to take additional steps to protect yourself and your family in an emergency.

Functional Need	Additional Steps to Consider
	<ul style="list-style-type: none"> • Arrange to receive warnings in other ways. • Carry paper & pen to express needs. • Use translation services. • Build your support network.
	<ul style="list-style-type: none"> • Pack an adequate emergency food supply for dietary needs. • Pack an adequate supply of medication. • Arrange for access to medical support equipment like oxygen. • Discuss needs with support agencies before an emergency.
	<ul style="list-style-type: none"> • Arrange for alternate childcare. • Arrange for assistive equipment to travel with you or work with your support network to replace missing or damaged equipment. • Ask for help when you need it.
	<ul style="list-style-type: none"> • Work with support network to plan for and respond to emergencies. • Arrange for care through your support network in advance. • Support workers need to plan to evacuate with their clients.
	<ul style="list-style-type: none"> • Work with neighbours and support networks to arrange for transportation. • Plan ahead for potential evacuations.

Planning for Functional Needs:

- Find out about special assistance that may be available in your community.
- Discuss your needs with your employer.
- If you have mobility challenges & live or work in a multi-story building, suggest that management consider purchase a stairway escape chair to assist mobility challenges.
 - If you live in an apartment building, ask the management to mark accessible exits clearly and to make arrangements to help you leave the building.
 - Keep specialized items ready, including extra wheelchair batteries, oxygen, catheters, medication, food for service animals, and any other items you might need.
 - Make arrangements for medications that need refrigeration.
 - Keep a list of type & model numbers of medical devices you require.



Emergency Water Supplies

Water is essential for survival. All household members should learn how to shut off the water at the main house valve. Storing an alternative supply of water is also essential.

Storing Emergency Water

Store water in **sturdy, opaque** plastic food grade pails, jugs or bottles for best results. Juice or soft drink bottles can also be used.




Rinse inside of the bottle thoroughly. Add a few drops of chlorine bleach OR vinegar (not together) to some rinse water and shake well. Empty bottle and fill with fresh water.

Date the bottle and label it "Drinking Water". Ideally replace every six months.

Store bottles in **cool, dark locations**. Storing water in **freezers** provides additional water and helps keep food frozen longer should the power be off for an extended period of time.



 **Avoid** using **milk jugs** that degrade quickly, **cement floors** that can leach radon into water over time, or storing water in areas where **toxins** are stored (i.e. gasoline & pesticides). These vapours can penetrate the plastic over time.



How Much Water to Store

Store 5 litres per person per day. Seven days is the absolute minimum for which you should be prepared. This water will be required for drinking, food preparation, washing dishes, brushing teeth and other hygiene needs.

Additional Sources of Water

- Hot water heaters (check page 25 for instructions for securing your hot water heater).
- Utility Water such as water from swimming pools, waterbeds, garden ponds and rain barrels is for **laundry & housecleaning ONLY**

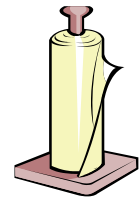
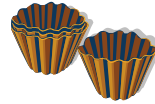


Caution: Do NOT drink water from swimming pools or waterbeds. High concentrations of salts and/or chlorine can cause serious health problems. Use for hygiene purposes only.

Purifying Water for Immediate Needs

Water from lakes and streams still needs to be purified!

Strain out sediment or particles from the water by pouring it through several layers of paper towels, cheesecloth, or coffee filters.



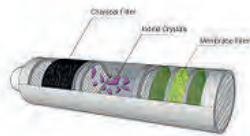
Use **ONE** of the following purification methods.

- Boil the water for 1-2 minutes.
Let cool and store in clean containers.
- Purification tablets may be used, but have a short shelf life so make sure you note the expiration date and replace them regularly.
- Add **liquid, unscented bleach** (5.25% sodium hypochlorite & less than one year old)



WATER AMOUNT	WATER IS <u>CLEAR</u>	WATER IS <u>CLOUDY</u>
1 litre (quart)	2 drops	4 drops
5 litres (~1 gallon)	5 - 8 drops	16 drops
25 litres (~5 gallons)	$\frac{1}{2}$ teaspoon	1 teaspoon

- Purification filters come in many shapes and sizes. Read and follow the directions carefully. **Not all filters can make dirty or toxic water safe!**



Preparing to Shut Water Off (see page 31)

- Locate the shut-off valve for the water line that enters your home.
- Make sure this valve can be completely shut off (right = tight). Your valve may be rusted open, or it may only partially close. Replace it if necessary.
- Label this valve with a tag for easy identification, and make sure all household members know where it is located.
- If you have an electric hot water tank, turn off the electric circuit so the unit will not burn out as water is used and not replaced.
- Contact your water supplier to find out what emergency plan they have in place (i.e. water main breaks, pipes, etc).



Emergency Food Supplies

An emergency can disrupt your ability to buy food. It is wise to store an extra **2 weeks supply of food** at home. Buy a little bit extra each week until you build up a good supply. Check your supplies regularly to make sure you have enough. Use them up before expiry.

Selecting Foods for Emergency Supply

- Ready to eat canned goods
- Freeze-dried foods
- Dry goods like rice, oatmeal, etc.
- Foods to meet needs of special diets
- Choose portions your family can eat in one meal.
- Foods familiar to your family (comfort foods).

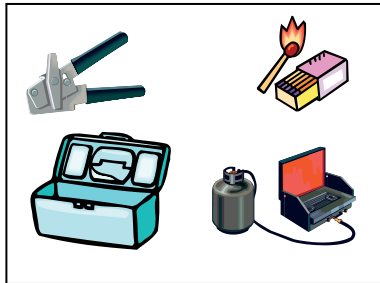


Suggested Foods to Store

- Ready-to-eat canned meats, fish, beans, fruits and vegetables
- Packaged juices, milk and soup
- Peanut butter, jelly, crackers, granola bars and trail mix
- Comfort foods, such as chocolate, cereal, snacks and cookies
- Dried or smoked foods
- Instant meals that don't need cooking or water

Additional Items to Store

- Manual can opener
- Utility knife
- Bottle opener
- Camping stove & fuel
- Waterproof matches
- Pots & pans



- Paper towels
- Aluminium foil
- Charcoal grill & charcoal
- Heavy duty plastic bags
- Small Tool Kit
- Utensils

Storing Emergency Foods

1. Keep food in covered containers, date, rotate into use 1 or 2 times a year and replace.
2. Store foods in a cool, dry, dark place (i.e. a closet and package in opaque containers). High temperatures contribute to rapid deterioration of many food types.
3. Protect food from rodents and insects by storing in metal containers or large sealable plastic garbage containers on wheels.



Using Emergency Food



- Use perishable foods in your refrigerator first.

- Use frozen foods in your freezer second.



- Use canned and dry foods last.



Note: Thawed food usually can be eaten if it is still "refrigerator cold." It can be re-frozen if it still contains ice crystals. Remember, "When in doubt, throw it out."

Cautions

- Discard cans that bulge at the ends or are leaking.
- Do not eat or drink anything from open containers near shattered glass.
- Do not eat or drink anything exposed to flood waters or smoke from house fires.

Cleanliness

- Clean cooking and eating utensils between meals.



- Wash hands frequently with soap and water that has been boiled or disinfected. Remember to wash hands for at least 20 seconds each time.

- Keep garbage in closed containers and dispose outside. Make sure any hazardous materials including human waste is stored separately for biohazardous waste disposal.



First Aid Supplies

Your first aid kit should contain items necessary to meet the needs of your family. Use this kit for everyday first aid needs and replace items you use to keep them fresh.

- Assemble or purchase a first aid kit. Storing in a case, fishing tackle or toolbox, or even in a small cardboard box with a handle, for easy carrying. Tape a list of the contents to the inside of the lid.
- Store prescription medications and copies of critical medical information in your Grab 'n Go kit or in watertight bags in the refrigerator.
- Check expiration dates periodically. Replace items that have expired.

Suggestion of bandages to store

- Band-Aids
- Pressure bandages
- Butterfly bandages
- 3 to 6 triangular bandages



- Rolled gauze (1", 2", 3" widths)
- Cotton tipped swabs
- Adhesive tape (1/2 ", 1" wide rolls)
- Bandage, sterile rolls (2", 4" widths)

Additional supplies

- First Aid manual
- Writing materials (pen, paper, etc)
- Scissors, tweezers & safety pins
- Needle & thread
- Thermometer
- Tissues
- Skin lotion, sunscreen, insect repellent
- Plastic bags
- Pre-moistened towelettes
- Sanitary napkins
- Hot water bottle
- Instant cold packs
- Foil emergency blankets
- Splinting materials
- Glasses, contact lenses & supplies
- Waterproof matches

Suggestion of medicines to store

- Pain relievers
- Antibiotic ointment
- Individually wrapped alcohol swabs
- Diarrhea & laxative medications
- Eye drops
- List of prescription medications

Prescription medications
(2 week supply in blister
packs for easy storage)



Home Emergency Supplies

It is important to plan in advance for other ways to care for your needs if normal community services are disrupted. These lists offer suggestions and safety tips to help you prepare for the unexpected.

Lighting Options

- Flashlights - solar, windup, shake-up or battery operated.
- Light sticks - these can provide light for 1 - 2 hours (great if there is concern about gas leaks as these won't ignite the gas).



- Home Power Failure Lights are an inexpensive way to provide immediate emergency lighting during power failures. Plug them into outlets in hallways - automatically turn on in power outages.



- Candles - in candle holders or glass jars taller than the candle in case the candle is knocked over.

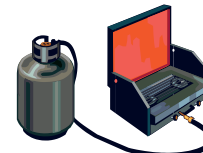


- Camping lanterns - store extra fuel, wicks, mantles, and matches - **use only outdoors.**

Caution: Make sure there are NO gas leaks before using any open flame (matches, candles, lanterns) or even flicking any electrical switches on or off.

Cooking Options

- Camp stoves, sterno stoves, barbecues, and hibachis - store extra propane, charcoal, lighter fluid, and matches **outside.**
- Fireplaces - inspect chimney and flue for cracks before using.
- Fondue pots and chafing dishes - store extra fuel.
- Pressure Cookers and old fashioned hay boxes can reduce fuel consumption.



Caution: Never light charcoal or barbecues indoors (causes carbon monoxide poisoning)

Quick Tips:

- Heavy-duty aluminium foil - requires less clean up than a pan.
- Paper plates and cups, plastic utensils and paper towels save water but create more garbage.

Shelter Options

Due to concern about aftershocks, it is common for people to be uncertain about sleeping in their homes for the first few days following a major earthquake. Make sure you have other shelter options available to help you and your family stay as comfortable as possible.

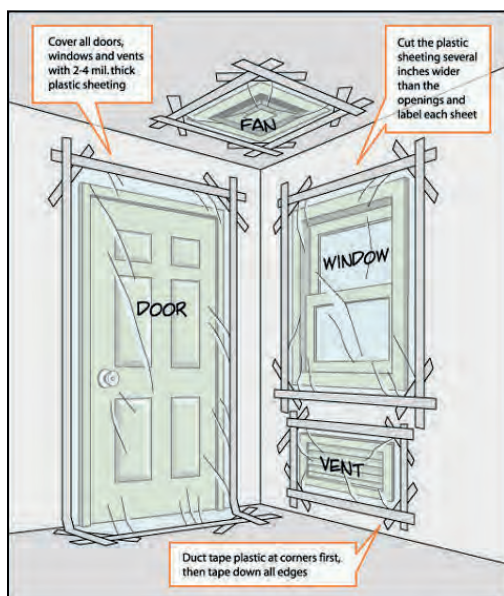
Camping Shelter



- Tents, campers, lean-tos
- Sleeping bags
- Blankets
- Newspapers (for insulation)
- Air mattresses or cots
- Radios to keep informed



Sheltering in Place (for hazardous materials spills)



- Clear plastic garbage bags
- Duct tape
- Radio for information
- Turn off all heating & cooling systems
- Choose an interior room with less openings

Sanitation Options



If water/sewer lines are damaged, or if damage is suspected, please do not flush the toilet.

- Store a large supply of heavy-duty plastic bags, twist ties, & toilet paper.
- Ideally use different containers for liquids (which can be dumped in green spaces) and solids (which must be bagged and disposed of as biohazardous waste)
- Add some deodorant/disinfectant after each use (powdered chlorinated lime or bleach mixture - 1 part liquid bleach to 10 parts water)
- Portable camp toilets, small trash cans or sturdy buckets lined with heavy-duty plastic bags are other alternatives for waste disposal.
- Large zip lock plastic bags and toilet paper should be kept at work and in the car for use if you are away from home.
- "Brief Relief" waste bags gel the waste and start to biodegrade it instantly.

NOTE: Avoid digging holes in the ground as untreated raw sewage can pollute fresh ground water supplies, attract flies and spread disease.

Storage Suggestions

Finding extra space to store your emergency supplies can be a challenge. Consider fire or earthquake when deciding where to store your supplies.

Store emergency supplies in a large, covered garbage can, preferably plastic or metal and on wheels. Put the contents inside a tightly closed plastic bag before placing them in the container.

Perishable supplies will remain stable longer if they are stored in a cool, dark place.



In a shed or other outbuildings, make sure that all supplies are up off cement floors (condensation will rust cans), and away from gasoline and chemicals that can contaminate your supplies.

On a closet floor, behind a sofa, or under a bed preferably close to an exit.

If you have a camper or trailer, you may already have all the emergency supplies you need. Remember to **restock** so that your emergency 'home away from home' is ready for emergencies.



Your Pets are Counting on You



Do you have a plan for your family pet in case of emergencies or disasters?

Gather supplies and make a plan before a disaster to give you peace of mind, save precious time and maybe even your pet's life.

Don't expect rescue centres to have supplies for your pets - this is your responsibility.

Designate someone to help your pets if you are not home when a disaster strikes.

Take pictures of your family with pet(s) to help rescue workers find and connect you together.

Pet Emergency Kit Checklist

Food/water (7-day supply)		Manual can opener
Identification tag and collar		Recent photos of your pet
Sturdy crate and/or carrier		Copy of your pet's current vaccination history
Pet first-aid kit		Any special medications & instructions
Leash and harness		Emergency phone numbers & addresses (pet friendly hotels, emergency vet clinic, local animal shelter, boarding kennels, etc.)
Non-spill bowls		
Litter box & litter for cats		

During a Disaster

Try your best to take your pet with you. If this is NOT possible when you evacuate, follow these guidelines to help ensure your pet's safety:

1. Prepare a poster of your pets with pictures and descriptions (update as needed) and post in a window to let rescue workers know how many pets were left behind.
2. Leave plenty of water in a large tip-proof container inside and outside your home.
3. Leave dry food in timed feeders (check local pet stores) to prevent your pet from eating a week's worth of food in one day.
4. Do not tether or cage pets as chances of survival are greater if they can escape easily.

Finding Your Pet Following a Disaster

1. When it's safe, return home to search for your pet and distribute "lost pet" posters.
2. Ask neighbours, mail & newspaper carriers, joggers & others to look out for your pet.
3. Check with local animal shelter(s). They may have already rescued your pet.
4. Don't give up, sometimes lost pets turn up months after they have gone missing.

Emergency Planning for Farm Animals



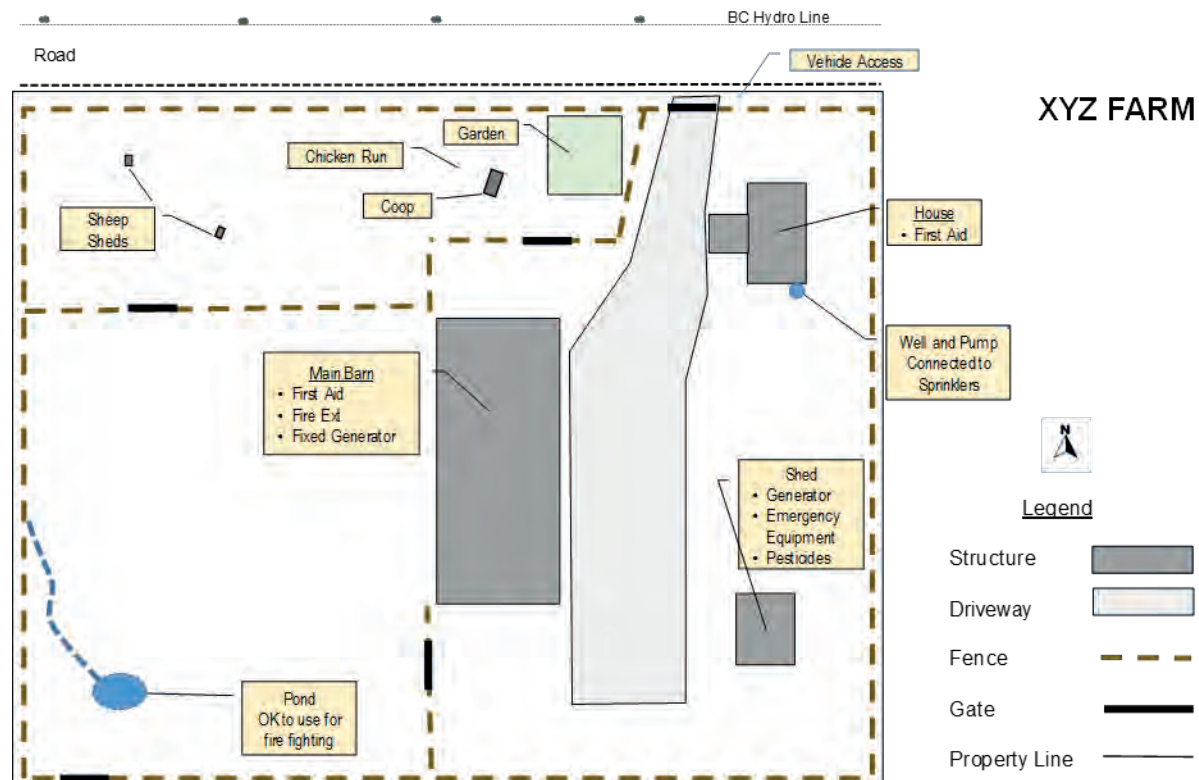
If you are interested in completing a Farm Emergency Plan check out <https://www.cvr.d.bc.ca/2843/Emergency-Planning-for-Livestock> for a template to get you started.

Basic Steps:

1. Identify the potential hazards for your farm.
2. Identify ways to reduce risks (FireSmart, Water Storage, etc.)
3. Implement risk reduction strategies.
4. Plan for potential care of animals in your absence

Additional Tips:

1. List all your animals, including their names and any behavioral challenges they may have.
2. Have backup person spend time with animals so they feel mutually comfortable.
3. Update regularly on where transport cages, gloves, leashes, halters & lead ropes are kept.
4. Exchange phone numbers including: work, cell phone, pager and emergency contact person outside the area where messages can be left.
5. Exchange keys and any security codes (remember to only do this with people you trust)
6. Establish a meeting point (google earth can help identify clearings nearby).
7. Create a Farm Map that identifies key information for helpers and responders.



PLAN AHEAD AND THEN CHOOSE THE APPROPRIATE OPTION WHEN NECESSARY.

☐ Option 1: Shelter livestock in barn.

Shelter-in-place is best for animals if:

- There is a barn on the farm where animals will be safely removed from danger (i.e., barn is protected by sprinklers).
- It would require the least amount of time.

☐ Option 2: Move livestock to on-farm outdoor location.

Moving animals to an outdoor location is best if:

- There is a pasture on the farm where the animals will be safely removed from the danger (i.e., large field with food and water).
- There is sufficient time, personnel, and equipment to round up and move our animals to this area.

☐ Option 3: Relocate livestock off the farm.

Relocating the animals is the best option if:

- You have located and prearranged an off-farm relocation site.
- You can gather the animals into a safe location to be evacuated.
- You have or can arrange for trucks, trailers, drivers, and handlers, if necessary.
- You can arrange for feed, water, and veterinary care at the relocation site.

☐ Option 4: Open gates and/or cut fences to free animals IF SAFE TO DO SO.

Freeing the animals is only considered if:

1. Livestock cannot be moved to a safer area.
2. There is no danger to people or vehicular traffic from freeing the animals.
3. You have the time and personnel to open gates and/or cut fences to allow the animals to avoid the wildfire.
4. You will inform emergency responders of your decision to free the livestock.

Plan ahead – Do Not wait until the last minute to start evacuating animals!

[illegible]

Emergency Preparedness for Your Home

Top 5 Recommendations:

- Install **smoke and/or carbon monoxide alarms** to save lives!
- **Practice fire and earthquake drills** with your whole family.
- **Secure your hot water tank** to the studs with steel strapping (see page 25).
- **Secure furniture** and contents (see pages 26-27). Use Velcro strips or putty to **secure picture frames and mirrors** (see page 27).
- Only **shut off** natural gas if you smell it.

As much as 1/3 of all reported earthquake loss is caused by non-structural damage to building contents that is relatively easy to prevent. Preparing your home is well worth the investment because of the huge losses it can prevent.



This section of the workbook:

- Provides a Home Hazard Hunt (risk assessment) to help you determine what needs to be done to make your home safer in an earthquake.
- Offers step-by-step guidelines for securing the contents of your home.
- Explains how you can help ensure that your home is structurally sound.
- Teaches you how and when to shut off any utilities.
- Outlines the basic steps of fire prevention.

Emergency Information

Check with your Community Emergency Program (see pages i-ii) to find out which radio station or social media to follow. Listen to your local media to get timely information during and after an emergency/disaster.

Home Hazard Hunt (Risk Assessment)

Do you believe that your home is a safe place to be?
Statistics show that most fires, accidents and injuries occur in the home.

An important step in family preparedness is to identify the hazards in your home. It doesn't take much time or effort to make your home a safer place to live.

Getting Started: Involve your whole family, especially your children in a home hazard hunt. Remember that anything that can move, break, fall or burn is a potential hazard. Foresight, imagination and common sense are the only tools you will need! After identifying what needs to be done, devise a plan to do it.

Yes	No		Fixed
		Keep cooking areas clean and clear of combustibles	
		Ensure electrical outlets near water are Ground Fault Interrupt (GFI) equipped	
		Secure hot water heater to studs <i>(page 25)</i>	
		Secure tall furniture <i>(page 26)</i>	
		*** Keep heavy objects down low or secured	
		Secure electronic equipment and small appliances	

***** If these objects are not secured, everyone in your home must be made aware of the potential danger during an earthquake. *****

Yes	No		Fixed
		Secure mirrors and framed pictures <i>(page 27)</i>	
		Secure hanging plants and lights <i>(page 27)</i>	
		Secure kitchen, bathroom and storage cabinet doors <i>(page 27)</i>	
		Secure chemical hazards <i>(page 40)</i>	
		Ensure that your home is bolted to its foundation <i>(pages 22-23)</i>	
		Strengthen cripple walls <i>(page 22)</i>	
		Secure chimney, roof and attic spaces <i>(page 24)</i>	
		Identify utility locations and determine shut off options <i>(pages 28-31)</i>	



Congratulations for making your home a safer place to be!

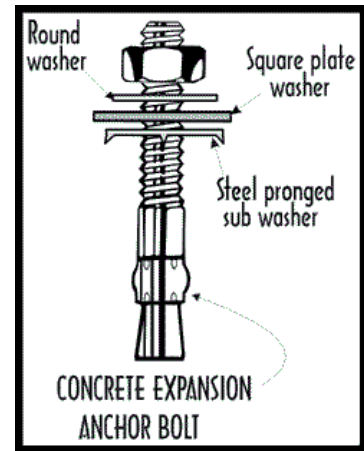
Making Your Home Structurally Safe

Wood-framed homes are generally quite resistant to earthquake damage. Watching tall trees in a strong wind demonstrates this resistance. Conventionally framed houses are less likely to collapse, if the home remains on its foundation and the roof, ceiling & walls remain connected.

Foundation

The majority of residential structural damage is caused by homes sliding off their foundations during major earthquakes.

- Check your house and garage for foundation bolts. It is strongly recommended that you have your home inspected to ensure anchor bolts have been properly installed. These bolts secure the wood structure to the concrete foundation. They are placed approximately 2 metres (~6 feet) apart along the sill plate and should look like the one illustrated.
- Using a hammer drill and carbide bit, drill a hole through the sill plate into the foundation. Place these holes every 2 metres (~6 feet).
- Drop a $\frac{1}{2}$ " x 8" expansion bolt into the hole and finish by tightening the nut and washer.



Cripple Walls

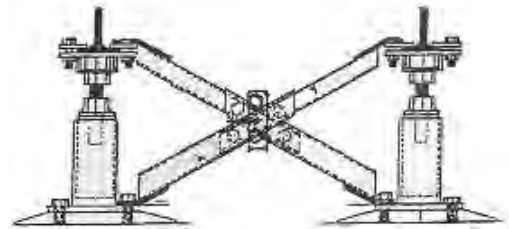


- Inspect the vertical studs that extend from the foundation to the first floor of your home. These are called cripple walls. If they are exposed on the inside, they could buckle with severe ground motion.
- Strengthen the cripple walls by installing diagonal bracing between studs and screwing plywood sheeting to the vertical studs.
- Inspect the garage for exposed walls. This is particularly important if the garage is supporting living quarters.

Mobile Home Foundations

It is relatively easy for a mobile home to be thrown off its supports during an earthquake, even those that produce minor shaking.

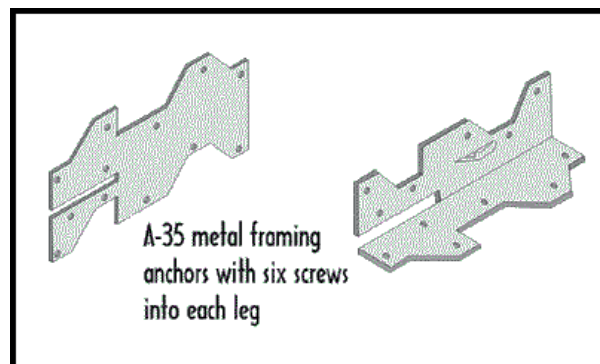
- Leave the wheels on the coach to limit its fall.
- Check the undercarriage to make sure that it has been securely tied to the foundation.
- Tie doublewide mobiles together. The two halves generally are of different weights. Because of this, they move differently in an earthquake and can easily pull apart.



Strengthening the Frame

For a building to stay together in an earthquake, all its parts must be fastened together. Metal connectors (brackets) are used to strengthen places where the posts and beams of the walls, and the floor and ceiling join.

- Strengthen the connection between ceilings, walls and floors using the appropriate hardware:



- Inspect all exposed framing in garages, basements, porches and patio covers. Strengthen this where necessary.

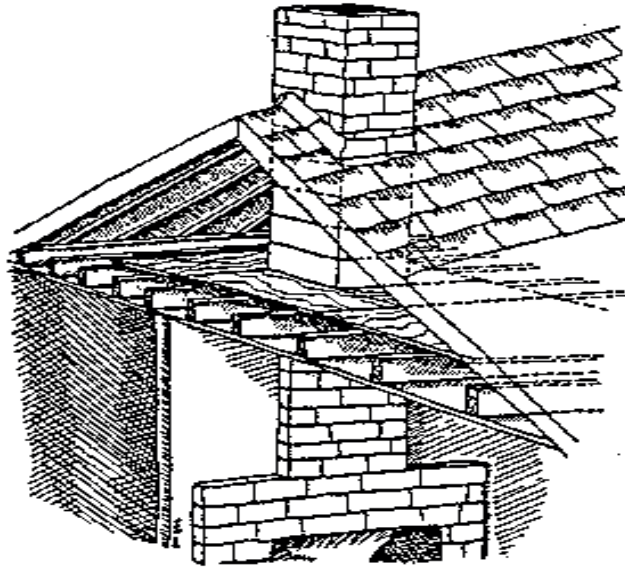
Brick and Masonry

Brick, masonry and stone facades are very susceptible to earthquake damage. Family members need to keep away from such facades. If you have a large amount of brick or stone in your home you may want to consult a structural engineer for advice on how to secure it.

Chimney

One of the most common types of damage suffered is a toppled chimney. This becomes extremely dangerous when bricks penetrate the roof and fall to the rooms below.

- Check the chimney for loose tiles and bricks.
- Reinforce the ceiling surrounding the chimney with $\frac{3}{4}$ " plywood screwed to the beams. This will provide protection from falling bricks that might break through the roof.



Windows

Windows are a major hazard in an earthquake. As the building moves, pressure builds up on the windows which may result in them shattering.

Replace single pane windows with double or tempered glass.

- Consider adding a **safety film** to the inside of all windows greater than 60 centimetres (2 square feet) in size. This does not prevent the window from cracking, but it does keep the glass from falling and injuring loved ones.
- Safety film can also be used on mirrors as well to keep them from shattering during an earthquake

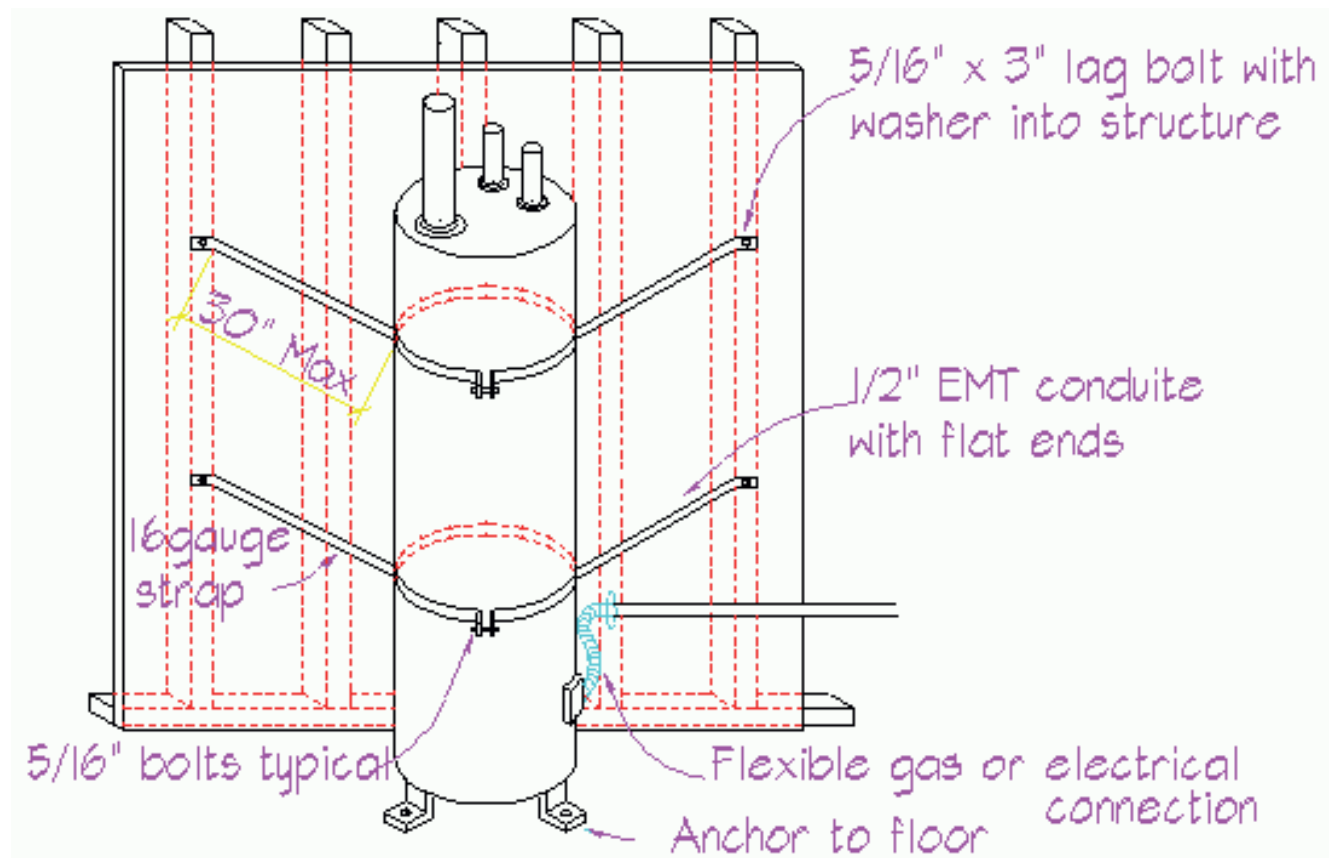


Securing the Water Heater

A typical water heater weighs between 200 to 400 kilograms when full. A sudden jolt and/or the rolling motion that accompanies most earthquakes can cause them to topple over. This movement can also cause the natural gas and water line connectors to break.

- Wrap a 1 $\frac{1}{2}$ " wide, 16-gauge thick metal strap around the top of the water heater and about 1/3 of the way up from the bottom. Bolt the ends together.
- Take four lengths of EMT electrical conduit, each no longer than 30 inches. Flatten the ends. Bolt one end to the metal strap as shown. Screw the other end to a 2" by 4" stud in the wall using a 5/16" by 3" lag screw (see illustration).

Once the appliance has been secured a flexible pipe may be installed to connect the gas supply. The installation of this pipe should only be carried out by a licensed gas fitter.

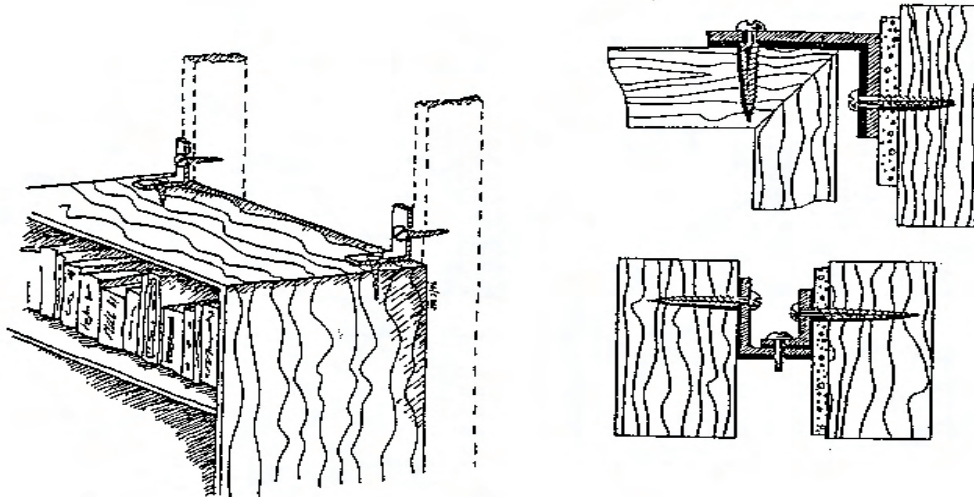


Securing Furniture and Its Contents

A major earthquake may cause substantial damage to your possessions. Approximately one-third of the cost of earthquake damage is due to non-structural losses like furniture, equipment, heirlooms, etc.

How you secure your furniture depends upon its value, location and your imagination. There are many ways to protect each piece.

- Secure tall free-standing furniture (over 120 cm or four feet), such as bookcases, china cabinets and shelving units to the wall studs using "L" brackets, corner brackets or anodized aluminium moulding. Examples are illustrated.
- Attach a wooden or metal guardrail to open shelves to keep items from sliding off. This is especially important wherever there are a lot of glass items.
- Place heavy and/or large items on lower shelves.



Securing Items to Shelves or Countertops

Secure items such as televisions, stereos, computers, microwaves and breakable collectibles with Velcro, putty, dental wax or double-sided tape.

- Choose Velcro with adhesive on the back and cut into 1" squares.
- Leaving the two sides of the Velcro together, remove the paper to expose the adhesive on one side and attach this to the legs or corners of the equipment or appliance.
- Leaving the two sides of the Velcro fastened together, remove the paper from the other side and set the item down on the shelf or countertop where you want it placed.
- Lay a rubber strip across the front of shelves to help keep books and files from sliding forward.
- Line shelves with rubbery shelf liner that keeps items from sliding off the shelves.

Securing Wood Burning Appliances

A typical wood burning stove or heater weighs between 100 and 150 kilograms. It can easily topple over from the rolling action of an earthquake. This movement can cause a fire or let smoke and other gases to leak into the house.

Have a professional secure your wood-burning appliance so it will not move or topple over. If you do the work yourself, have it inspected.

Do not compromise your safety!



Securing Pictures, Mirrors, Hanging Objects and Cabinets

Earthquakes have a tendency to knock pictures and mirrors off walls.

You may be seriously injured if they happen to fall on you.

Consider moving all framed pictures and mirrors away from beds, couches and chairs.

Securing pictures and mirrors

- Place angle screws on the top and bottom or secure them with wire to an eyebolt. Screw these directly into wall studs if possible.
- Poster Putty or Velcro may also be used in diagonal corners to secure pictures, mirrors, wall clocks, etc. to the wall.

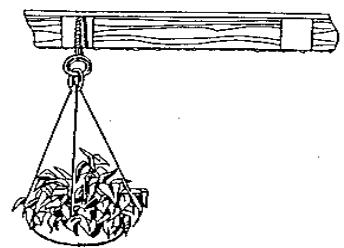


Eyebolt

Securing hanging objects

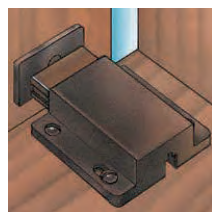
Carefully check the location of all hanging plants and other hanging objects. Determine if they are close enough to windows to strike them in the motion of an earthquake. If they are, consider moving them.

- Secure objects by closing the opening in their hook. Make sure the hook is screwed directly into a ceiling stud.



Securing kitchen cabinets

To prevent cabinet doors from flying open, install one of these types of latches.



Push Latch



Pull Latch

Natural Gas & Propane Safety

Natural gas pipeline is constructed to maximize public safety and minimize loss of service in the case of an emergency. Most disruption of gas service and other underground utilities has occurred because of landslides or the collapse of pipe-supporting structures such as bridges.

Smell rotten eggs or sulphur? Could be natural gas or propane leak!

STOP! Don't smoke, light matches, operate electrical switches, use either cell phones or telephones, or create any other source of ignition.

Leave the building immediately. Leave the door open and any windows that may already be open. Use your cell or a nearby phone and **call 911**.



Carbon monoxide alarms

Carbon monoxide alarms provide a warning for extra protection between maintenance visits. They are NOT a substitute for regular inspection and maintenance, nor are they a substitute for smoke alarms. Alarms must be Canadian Standards Association (CSA) certified! Look for a model that clearly lists the replacement date and warranty period.

Installation tips

The best place to install carbon monoxide detectors is in the hallway outside your bedrooms (on each level if you have more than one floor).

Don't install carbon monoxide alarms within 15 feet of fuel-burning appliance including cars.

Propane safety

Propane is a safe fuel but is heavier than air, so stay away from low-lying areas if leaking.

Store tanks outside. Always store propane cylinders outside in a well ventilated and secure location — never in an enclosed building.

Keep tanks painted a white or other reflective colour. Dark-coloured tanks do not reflect sunlight and may absorb heat. Increases in pressure, can lead to a possible discharge from the pressure-relief valve. Paint regularly to keep them light and reflective.

Keep your head away from the valves on your tank or cylinder. A sudden release of propane liquid from the safety relief valve could result in serious injury.

LEARN how to shut off the gas supply from your tank or cylinder!

DO NOT shut off gas unless you smell it (i.e. rotten egg odour). **DO NOT** turn gas back on as the system needs to be checked by a qualified technician.

Fortis BC Safety:

<https://www.fortisbc.com/Safety/NaturalGasSafety/Pages/default.aspx>

Phone Number - 1 (800) 663-9911



Electrical Safety

If power is disrupted during a disaster, turning off the main circuit breaker lessens the possibility of fire damage if no one is home when the power is restored.

- Locate the electricity circuit box. It may look like one of these:



Turn fuses to the left to unscrew.

Turn the power off by flipping the individual circuits to the off position or unscrewing the fuses and finally flip the main breaker to the off position.

When power is restored, turn circuits on as needed or as power comes back on.

7 Steps to Electrical Safety

Electricity is a part of our everyday lives and must be treated with respect. Everyone should know the 7 Steps to Electrical Safety. Learn them and pass them on. Remember, they don't call it power for nothing!

1. Ten Metres to Safety

Stay at least 10 metres (33 feet) away from any downed or exposed power lines.

2. Look up and live

Look up, check and keep equipment clear of overhead power lines.

3. Know your limits

When using equipment near power lines, always stay at least 3-7 metres (10-20 feet) away depending on the voltage.

4. Don't hang around operating equipment

Stay 10 metres (33 feet) away from operating equipment working near energized lines.

5. Shuffle or hop - Don't Step

If your vehicle makes contact with an energized line remain inside until help arrives. If you must get out due to fire, jump out with your feet together without touching the vehicle. Then shuffle away, keeping both feet close together.

6. Call before you dig

Avoid contacting underground power lines - before you dig, call **1 (800) 474-6886**.

7. Don't become a victim

Always call 9-1-1 when someone is injured in an electrical accident. Perform CPR as needed.

Electrical Safety Inside

- Don't overload outlets. Have an electrician install more outlets as appropriate.
- Be extra careful around water. Even something as simple as using an appliance with wet hands can lead to a fatal shock. Don't turn on the tap near a plugged-in appliance, and keep electrical appliances away from the bathtub.
- Don't form a natural circuit. For example, don't touch a metal object (especially a faucet) as you unplug or plug in an appliance.
- When you disconnect anything from an outlet, use the plug (not cord) when you pull it out.
- Leave electrical wiring projects to the professionals.

Electrical Safety Outside

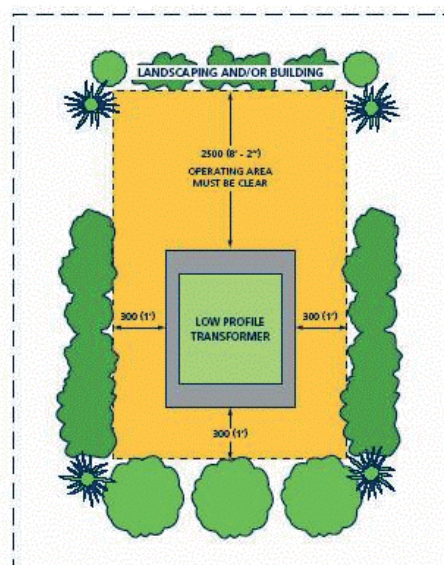
- Stay away from power lines. It's your best protection. When playing, stay at least a bus-length away from power lines whether on the pole, laying on the ground or on a tree.
- Water, electronics and power lines don't mix. The current can flow through the water stream and cause electrocution.
- Trimming trees around power lines should only be done by trained professionals. Serious injuries have occurred when untrained individuals attempt to do this work themselves.

When planting trees remember the following:

1. Visualize the tree at its full size height and width when preparing to plant.
2. Avoid planting trees near a power line.
3. Plant large growing trees in an area where they will maintain a safe distance from the power line when fully grown and be sure to allow for wind sway.
4. Avoid planting trees near underground power lines. If there are underground power lines on your property, be sure to call **1 (800) 474-6886** before digging.

Before Planting:

- Call **(1-800-474-6886)** before digging to get information about buried wires and cables.
- Draw a plan marking the location of plants (with no plants obstructing the doors).
- Note the height of the transformer so you can choose the right sized plants.
- Get advice from a nursery or garden specialist on which plants to use and how to plant them.

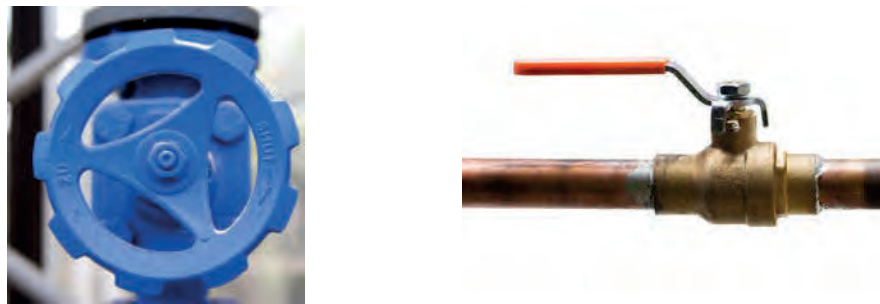


Shutting Off Water

Potable or safe water is a precious and rare commodity following major earthquakes. It is important that all family members learn how to shut off water:

- The normal supply of water to your home will likely be disrupted or polluted because of broken or cracked lines. It is wise to shut the water supply off until you hear from the proper authorities that it is safe for drinking.
- Shut water off to save the water that is in the hot water heater and toilet tanks.
- Shut off the water supply to prevent water damage to your house if the pipes inside your home are broken during an earthquake or one of its many aftershocks.

Locate the water main shut off valve that enters the house. Label this valve with a large tag and ensure all family members know where it is located. It may look something like this:



Make sure this valve can be completely shut off. Valves that have not been turned recently may be rusted open. Or they may only partially close. Replace this valve if necessary.

Water Main Valve Shut Off (only if permitted by your water purveyor)

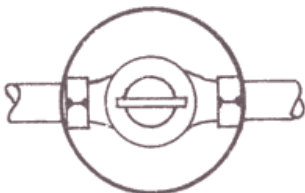
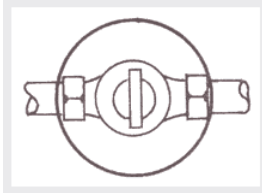
Newer water shut off valves only turn one quarter clockwise or counter clockwise.

- To stop the water flow, turn the key clockwise to close the valve

Older water shut off valves are designed to change water flow rate as the valve turns. Turn older valves slowly, in increments.

- ☐ To stop the water flow, turn valve key clockwise until the flow stops completely

These images show the position of the water shut off valve in the open and closed position.

Open position	Closed position	
Valve lock is in line with water supply pipe	Valve lock is 90° to water supply pipe	
		

Report a broken water shut off valve to water purveyor (supplier)

Protecting Your Home from Fire



HOME FIRE SAFETY CHECKLIST (Simple changes that can save your life)

- ☐ Install smoke alarms on every level of your home. Place them on the ceiling inside bedrooms, in stairways, and near (but not in) the kitchen area.
- ☐ Install and maintain carbon monoxide alarms anywhere you have fuel burning appliances.
- ☐ **Test and vacuum smoke alarms** once a month and **replace batteries** every six months when the clocks change. Replace smoke alarms every 10 years.
- ☐ **Clean out storage areas.** Do not let trash and recycling materials stack up.
- ☐ **Plan & review escape routes** with your family. **Practice escaping** from each room in the day time and in the dark (see Household Emergency Plan booklet).
- ☐ Make sure **windows can open** and are not nailed or painted shut. Make sure security gratings on windows have a fire safety opening feature that can easily be opened from the inside.
- ☐ Consider **escape ladders** if your home has more than one level.
- ☐ Teach family members to **stay low to the floor** (where the air is safer in a fire) when escaping from a fire.
- ☐ Gather family at a **safe meeting place** and wait for the fire department.



Flammable Liquids (Gas, diesel, oil, benzene, naptha, etc.)



- Never use indoors.
- Never smoke near flammable liquids.
- Store in approved containers in well-ventilated storage areas.
- Soak with water any rags or materials that were soaked in flammable liquids. Keep outdoors in a metal container. Do not store in direct sunlight.

Heating

- All heaters need space. Keep things that can burn, such as paper, bedding or furniture, at least 3 feet away from heating equipment.
- Have a three-foot "kid-free zone" around open fires and space heaters. Keep a screen in front of the fireplace.
- Never use your oven for heating.
- Have heating units inspected and cleaned annually by a certified specialist.

Space Heater Safety - Fuel Burning

- Always use the proper fuel as specified by the manufacturer.
- When refueling, allow appliance to cool and refuel outside or in a well-ventilated area.
- When using the heater, open a window to ensure proper ventilation.
- In portable kerosene or other liquid-fueled space heaters, always use the proper grade of the proper fuel.
- All new unvented gas-fired space heaters have an oxygen depletion sensor that detects a reduced level of oxygen in the area where the heater is operating and shuts off the heater before a hazardous level of carbon monoxide accumulates. If you have an older heater without this feature, replace it.
- If the pilot light of your gas heater goes out, allow 5 minutes or more for the gas to go away before trying again, do not allow gas to accumulate, and light the match before you turn on the gas to the pilot to avoid risk of flashback.
- If you smell gas in your gas heater, do not attempt to light the appliance. Turn off all the controls and open doors and window. Call a gas service person.

Space Heater Safety - Electric

- Turn heaters off when you go to bed or leave the room.
- Use and purchase portable space heaters with an automatic shut off so they will shut off immediately if tipped over.
- Place space heater on solid, flat surface.
- Plug power cords directly into outlets not into extension cord.
- Check for damaged plugs or loose wires. Replace before using.



Wood burning stoves

- Install the stove, chimney connectors and chimneys following manufacturer's instructions or have a professional do the installation.
- Insulate chimneys and place spark arresters on top. The chimney should be at least 1 metre (~3 feet) higher than the roof. Remove branches hanging near the chimney.
- In wood stoves, burn only dry, seasoned wood. In pellet stoves, burn only dry, seasoned wood pellets.
- Start the fire with newspaper or kindling, never with a flammable liquid, such as lighter fluid, kerosene or gasoline.
- Keep the doors of your wood stove closed unless loading or stoking the live fire.
- Place cooled ashes in a metal container. Douse, stir and saturate with water. Let stand in water for at least 24 hours before disposing.
- Inspect and clean chimneys and vents at least once a year.

Electricity



- Have the electrical wiring in your residence checked by an electrician.
- Inspect extension cords for frayed or exposed wires or loose plugs.
- Make sure outlets have cover plates and no exposed wiring.
- Make sure wiring does not run under rugs, over nails, or across high-traffic areas.
- Do not overload extension cords or outlets. If you need to plug in two or three appliances, get a UL-approved unit with built-in circuit breakers to prevent sparks and short circuits.
- Make sure insulation does not touch bare electrical wiring.
- Sleep with your doors closed.
- Install A-B-C-type fire extinguishers in your residence and teach family members how to use them.
- Consider installing an automatic fire sprinkler system in your residence.
- Ask your local fire department to inspect your residence for fire safety and prevention.

Clothes Dryer Safety Tips

- **DO** clean the lint screen/filter before or after drying EACH load of clothes.
- **DO** clean the dryer vent and exhaust duct periodically.
- **DO** have a certified service technician clean and inspect the dryer and venting system regularly.
- **DO** replace plastic or vinyl exhaust hoses with rigid or flexible metal venting, which provides maximum airflow.
- **DO** keep the area around the dryer clean and free from clutter.
- **DON'T** place clothing or fabric stained with a flammable substance, such as alcohol, cooking oils, gasoline, spot removers or motor oil, in the dryer. Flammable substances give off vapors that could ignite or explode. Instead, dry the materials outdoors.
- **DON'T** forget to read the manufacturer warnings in the user manual and on the inside of the dryer door.
- **DON'T** dry any item containing foam, rubber or plastic, such as bathroom and non-slip rugs and athletic shoes.
- **DON'T** dry any item that contains glass fiber materials, such as a blouse or sweater with glass buttons or decorations.
- **DON'T** overload the dryer with wet clothes.



Fire Safety

Exit Drills In The Home

People can survive even major fires if alerted quickly, and get out right away and stay out.

Prepare and Practice

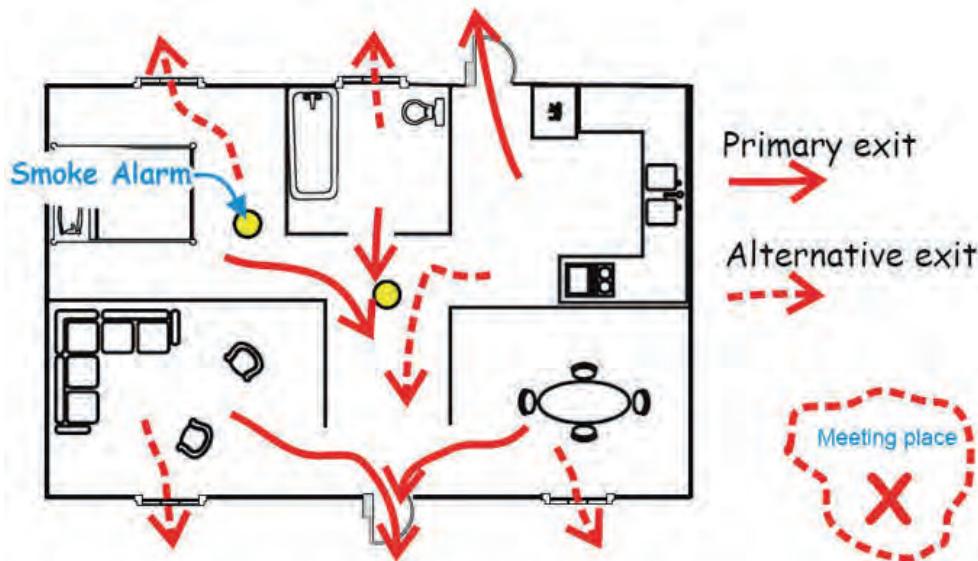
Install smoke detectors



Install fire extinguishers



Make an escape plan and "practice" it.



Play It Safe

Install Smoke Detectors. Smoke detectors improve your survival rate by 50%! Install smoke detectors inside every bedroom and on every level of your home, including the basement. Follow installation instructions carefully, and test smoke detectors monthly. Change smoke detector batteries every 6 months when the clocks change unless it comes with a 10-year battery. Replace your smoke detector every 10 years.

Fire Extinguishers. Only use fire extinguishers on small fires! Hang near kitchen doorways for easy access while keeping your means of exit clear. Every 6 months, turn them upside-down, hit the bottom and shake them. Call the fire department even if the fire is out to have them come and inspect for potential hot spots.

Automatic fire-sprinkler systems. These systems attack a fire in its early stages by spraying water only on the area where the fire has begun. Consider including sprinkler systems in plans for new construction and installing them in existing homes.

If you get trapped, close all doors between you and the fire. Stuff the cracks around the doors with wet towels to keep out smoke. Wait at a window and signal for help with a flashlight or by waving a light colored cloth. If there is a phone in the room, call the fire department and report exactly where you are.

If you live in an apartment building, use stairways to escape. NEVER use an elevator during a fire (may stop between floors or get stuck). Find out what your building's emergency plan is.

If you live in a multi-storey house identify safe ways to reach the ground from upper story windows, such as a fire-resistant fire escape ladder. Make special arrangements for children and people with disabilities. People with mobility challenges should have a phone and, if possible, sleep on the ground floor.

GET OUT FAST . . .

In case of a fire, don't stop for anything. Do not try to rescue possessions or pets. Go directly to your meeting place, and then call **911** from a cell, your neighbor's phone, or an alarm box. Every member of your household should know how to call **911**.

Test doors before opening them - Reach up as high as you can and with the back of your hand feel near (do not touch) the door, knob, and crack between the door and its frame. If you feel warmth radiating in, use another escape route. If cool, open cautiously. Put your shoulder against the door and open it slowly. Be prepared to slam it shut if there is smoke or flames on the other side. Close it behind you as you leave. Cover your mouth and nose with a wet towel or your clothing to reduce breathing in toxic fumes.

Crawl low under smoke.

Smoke contains toxic gases, and heat rises. During a fire, cleaner air may be near the floor. If you encounter smoke when using your primary exit, use an alternative escape route. If you must exit through smoke, crawl on your hands and knees, keeping your head 30 - 60 centimeters (12 to 24 inches) above the floor and use a wet towel to reduce breathing in toxic fumes.



. . . AND STAY OUT

Once you are out of your home, don't go back for any reason. If people are trapped, firefighters have the best chance of rescuing them. Firefighters have training, experience, and protective equipment needed to enter burning buildings.

NOW, use what you've learned, **SET UP YOUR PLAN**, including two ways out, a meeting place and **CONDUCT A PRACTICE DRILL** to determine if anything has been overlooked. **EVERYONE** in the household **NEEDS TO PARTICIPATE** for it to be successful. It may **SAVE YOUR LIFE**.



Protecting Your Home from Forest Fire



Mark your property entrance with address signs that are reflective and clearly visible from roads and back alleys.

BC FireSmart Manual:

http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/wildfire-management/prevention/prevention-home-community/bcws_homeowner_firesmart_manual.pdf



Follow FireSmart Principles



- Cut lawns, rake leaves and clean roof and rain gutters regularly.
- Stack firewood at least 10 metres (33 feet) away from your residence.
- Store flammable materials, liquids, and solvents in metal containers in shade outside your residence at least 10 metres (33 feet) away from structures and wooden fences.
- Thin trees and brush within 10 metres (33 feet) around your residence. Limb large trees 1-3 metres (6-10 feet) up from the ground. Beyond 10 metres (33 feet), remove dead wood, debris, and low tree branches.
- Choose fire resistant plants and vegetation around your home (www.firesmartcanada.ca)
- Make sure water sources, such as hydrants, ponds, swimming pools, and wells, are accessible to the fire department.
- Use fire resistant roofing and materials like asphalt shingles, cement board and metal to protect your residence.
- Cover exterior vents, attics, and eaves with metal mesh screens no larger than 3 millimeters or 1/8 inch to prevent debris from collecting and to help keep sparks out.
- Install double-pane windows, tempered safety glass, or fireproof shutters to protect large windows from radiant heat.
- Use fire-resistant draperies for added window protection.
- Have chimneys, wood stoves, and home heating systems inspected and cleaned annually by a certified specialist.
- Insulate chimneys and install spark arresters on chimneys and stovepipes. The chimney should be at least 1 metre (~3 feet) above the roof. Remove branches hanging above and around the chimney.
- Follow Local Burning Laws. Have a fire extinguisher and garden hose on hand when burning debris.



Protecting Your Home from Flooding

To minimize flood damage to your personal property and disruption of your day-to-day life, there are certain precautions you may take. Contact your local authority for specifics relating to the incident affecting you.

If your home is located near a creek, river, lake or ocean, find out if your property is located in a known "flood plain." Take precautions outlined in "Flood Information for Homeowners and Home Buyers", available through your local authority offices or through [Emergency Management BC \(http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/preparedbc/know-the-risks/floods\)](http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/preparedbc/know-the-risks/floods).

Preparing in Advance

- Store valuable or important items on upper floors
- Anchor fuel sources
- Seal foundation cracks
- Install backflow valves on basement floor and appliance drains
- Install a sump pump if your basement is below grade
- Choose water resistant materials when finishing basements
- Ensure landscaping and downspouts drain far enough away from your home
- Clear gutters, perimeter and storm drains regularly

When Flooding is Imminent:

Shut Off Electrical Power

Shut off all electrical power by shutting off the main power breaker to your house and outbuildings. In suburban or rural areas the yard switch must be opened.

Shut Off Natural Gas or Oil Fired Appliances

Shut off the gas supply valve to all appliances. These valves are usually in the gas line near the bottom of the appliance.

Turn Off Propane Tanks

Turn off the valve at the tank. Disconnect tubing to tank and securely plug it. Fasten a cable, heavy rope or chain around the tank and secure the other end to a pole, building or substantial structure to prevent the tank from floating away.

Remove Chemicals to Dry Area

Dangerous chemicals such as weed killer, insecticides and corrosives should be removed to dry areas to reduce the dangers of contamination, fires, explosions and personal injuries.



Building Sandbag Dykes

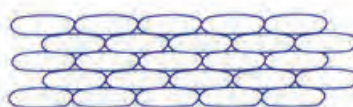
If you choose to construct a sandbag dyke to protect your property, you will need to follow specific steps to ensure that it is effective.

1. Build the dyke on high ground close to your home
2. Dig a trench one sack deep and two sacks wide as a foundation.
3. To effectively resist the forces of flood water, a dyke needs to be 3 times as wide at its base as it is high. For example, a 1 metre (~3 feet) high dyke needs to be 3 metres (~10 feet) wide at the base.
4. Fill sandbags half-full of clay or sand, lap the top unfilled portion underneath the next sack and lay them in alternating crisscross directions.
5. Layer with a set back of one-half sandbag width on both sides from the previous layer so that the cross-section looks like a triangle.
6. Tamp each bag firmly into place, to ensure that the finished dyke works properly.

Sandbags may be available from local authority facilities. Know where you can access them before you need them. Work with your local authority to help protect everyone!

RECOMMENDED METHOD FOR SANDBAG DYKING

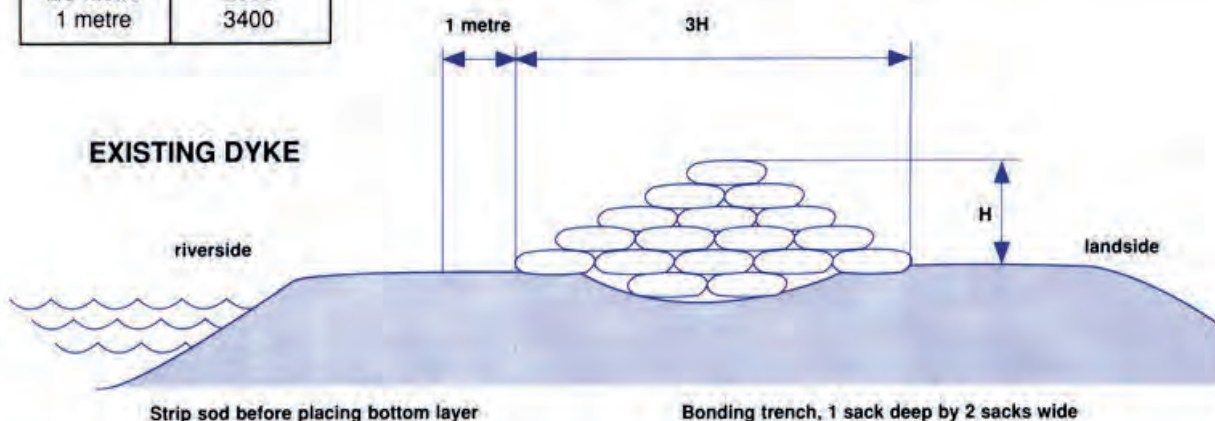
Bags Required for 100 Linear Feet of Dyke	
Height Above Dyke	Bags Required
1/3 metre	600
2/3 metre	2000
1 metre	3400



PLAN OF BOTTOM LAYER



METHOD OF LAPPING SACKS



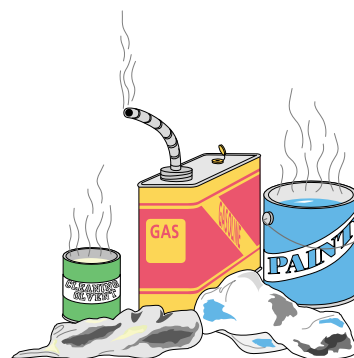
1. Alternate direction of sacks with bottom layer, i.e. bottom layer lengthwise with dyke, next layer crosswise.
2. Lap unfilled portion under next sack.
3. Tying or sewing of sacks not necessary.

4. Sacks should be approximately one-half full of clay, silt or sand.
5. Tamp thoroughly in place.

Hazardous Materials Safety

Improperly stored chemicals can create a secondary disaster following a major earthquake. Care must be taken to store them properly now.

- Keep only those chemicals you need and use on hand. Dispose of old or unwanted chemicals at a designated collection depot.
- Secure pesticides, gasoline, paint thinners, and other chemicals on the floor, on a low shelf or in a locked cabinet. It should also be away from children's play area.
- Chemicals should be stored well away from any water or food storage items.
- Make sure container lids are tightly closed.
- Store ammonia and bleach in different locations. If mixed, they create toxic fumes.



Following an Earthquake

Though not an immediate priority, you will want to check on the status of your stored chemicals as soon as possible.

- Only clean up spilled chemicals with rags or paper towels that can be discarded **IF IT IS SAFE TO DO SO!** Do not use your water supply to rinse out rags.
- If multiple bottles have broken, try to clean up each chemical separately. Then place rags in individual plastic garbage bags. Reaction may take place if you mix the chemicals.
- These individual plastic bags may be put in a larger trash bag. Do not dispose with regular garbage pickup. Take to an appropriate facility for disposal.



Shelter In Place

If there is a Hazardous Materials Spill in your area, you may be instructed to Evacuate or Shelter-In-Place (see pages 44 - 47 of this workbook).

During an Emergency – Responding Safely

Top 5 Recommendations:

- In an earthquake, **DROP** yourself safely to the ground, **COVER** yourself with furniture, cushions, blankets or next to an interior wall, and **HOLD ON**. **Count out loud** until the shaking stops and then **COUNT** to 60 before moving
- **Check for hazards** around you and stay aware of potential danger
- To extinguish fire on your clothing, **Stop, drop and roll**
- **Close doors** when exiting a building during an emergency
- **Stay Calm** so you can think clearly



This section of the workbook identifies:

- Ways to prevent injury and stay safe
- What to do for specific hazards
- Where to seek shelter from all types of hazards
- What you should do after an emergency or disaster.

Emergency Information

Check with your Community Emergency Program (see pages i-ii) to find out which radio station or social media to follow. Listen to your local media to get timely information during and after an emergency/disaster.

Earthquakes

Earthquakes create violent ground motion and loud noise. Most injuries occur as people run in or out of buildings. Instead of running: **DROP** to the floor. Take **COVER** under anything sturdy or next to an inside wall. **HOLD ON** tightly until the motion stops.



Practice being safe:

Conduct earthquake drills. Call out "EARTHQUAKE!" Give family members time to react. After the drill, discuss what each one did to be safe, and what each could have done better.

Before an Earthquake

- Ensure each member of your family knows how to keep themselves safe.
- Search for potential hazards in your home using the Home Hazard Hunt on pages 20-21.
- Know the safe spots in each room— inside walls, under sturdy tables or desks & in closets.

One of the safest places in your home is an inside hallway which is usually free of windows, heavy furnishings, etc. and is only a few steps away from any room in the house.

During an Earthquake

- **DROP, COVER and HOLD ON!** Immediately move to your safe place if you can. Remember, don't run! Protect your head and back of your neck as much as possible.
- If you are unable to get to your safe place, grab whatever you can to protect your head and face. Arms, sofa cushions, pillows, blankets, coats, etc. are better than nothing.
- Count out loud for the duration of the earthquake and when the shaking stops, start counting from 1 to 60 slowly to give things time to settle, before attempting to exit.
- Stay away from anything that may fall or break and hurt you (glass, bookcases, etc.).
- If you are in a wheelchair, face an inside wall and lock the wheels. Cover your head and body with your arms, pillows or blankets to protect your head from falling objects.
- If outdoors, get into an open area away from trees, buildings, walls and power lines.
- In a high-rise building, stay away from windows and outside walls. Get under a table or next to an inside wall. Do not use the elevators.

- In a moving vehicle, slow down and stop as safety permits and stay in the vehicle until the movement stops. Avoid stopping near or under buildings, trees, overpasses and utility wires. Turn on your radio and listen for safety announcements. Travel may not be safe.
- In a crowded public place, do not rush for the doors. Move away from display shelves containing objects that may fall. Try to move to an interior wall if you can.
- If you get trapped under debris:
 - Do not light a match and do not move about or kick up dust.
 - Cover your mouth with a handkerchief or clothing.
 - Use a whistle to help rescuer's find you. Use your flashlight selectively so the batteries don't wear out. Shout only as a last resort (takes energy & causes you to inhale dust etc.).
- If you choose to try to rescue someone trapped under debris:
 - Start at the top and work your way down to reduce the likelihood of creating a cavity that could collapse on you or others assisting you.

After the Earthquake

- Remain calm. Stay in your safe location and count at least 60 seconds to give things time to settle. Take a few moments to check yourself for injuries and to check for hazards.
- During aftershocks, squat, cover and hold on but watch for debris before kneeling down.
- Before you move, check your immediate area for hazards, including broken glass, spilled chemicals, or items that shifted and may easily fall during an aftershock.
- Home power failure lights can light your way (if you have them). If not, use a light-stick. DO NOT use an open flame or electric light until you are sure there are no gas leaks.
- Check those around you for injuries. Apply first aid treatment where needed. Do not move the seriously injured unless absolutely necessary.
- Evacuate your family to an outside location free of potential hazards (trees, power lines, etc.) until you have ensured your home is safe to occupy.
- Check for fires. Extinguish small fires, but do not try to put out ones that are too large. Evacuate immediately!
- Carefully check for gas leaks. If you smell gas, shut off the valve, wait a few minutes and then shut off the water and electricity. Turn off all your appliances. *(see pages 28-31)*
- Listen to the radio for details. *(see your Community Emergency Program information on pages i-ii to find out which local media to tune to.)*

Ground movement is seldom the actual cause of death or injury. Most casualties result from falling objects and debris, like toppling chimneys, ceiling plaster and light fixtures.

Remember – Stay calm and lend a hand to others in need.

Evacuations/Sheltering In Place

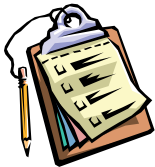
These instructions are for information purposes only. During an evacuation, emergency personnel will contact you and supply further instructions (what to do, where to go, etc.)

They may alert you by several methods including:

1. Personal Contact (emergency personnel door-to-door)
2. Public Address System (PA's)
3. Local TV, Radio, and News Media Broadcasts
4. Outdoor Alerting Systems (siren, horn, etc.)
5. Cable TV Interrupts
6. Telephone Systems (manual or automatic dialling systems)

Get Ready to Leave

1. Stay Calm.
2. Gather your family, take a neighbour or someone who needs help.
3. If you get an Evacuation ORDER: take critical items (medicine, purse, wallet, keys, etc.) if they are immediately available. Take pets in pet kennels or on a leash. LEAVE NOW!
4. If you get an Evacuation ALERT: Pack essential items (diapers, baby food, clothes, money, insurance papers, etc.) - make a list ahead of time.
5. Turn off all appliances (stove, washing machine, etc.)
6. Do not turn off your utilities (gas, water, electricity) unless instructed to do so (i.e. flood). If you do, do not turn them on unless you consult the proper utility authority.
7. Lock your house. If this is a local apartment complex evacuation - do NOT lock doors!!! Fire departments must check every apartment unit to ensure everyone has evacuated.
8. Do not use more cars than you have to. During fire season pack your camper so you are ready to go.
9. If there are problems with air quality, keep windows and vents in the car closed.



Start now (before the disaster) to make a list of important and irreplaceable items that you want to protect or take with you should you have to evacuate. Planning ahead saves valuable time and ensures that the things that really matter to you are taken care of.

Evacuation Information and Procedures

Evacuations can be chaotic, scary and a time of worry and strain. Make yourself aware and be prepared. Fire fighters and other emergency personnel cannot work on the fire or other problems until life and safety issues are under control - that means YOU! Resisting evacuation consumes the rescuers precious time. Once you receive information of an Evacuation Order, evacuate immediately. Delay can result in roadways being blocked by smoke, other materials or rescue equipment. Listen to emergency broadcasts and follow the directions of emergency personnel.

Be Prepared, Informed, And Organized. Be Safe.

Whether you need to leave your home due to a quickly approaching fire, or because of rising flood waters, you should be aware of Evacuation Alerts and Orders, what they mean, and how to prepare yourself and your family. Depending on the nature of the emergency, BC has several legal Acts which authorize evacuations.

Evacuations are an incremental process that can be implemented more efficiently if people are informed and keep tuned into local media for information releases (tune into radio stations in your local area).

Evacuation Stages

Regardless of which agency initiates an evacuation - they should follow the provincial standards:

Stage 1 - Evacuation Alert



Get ready to leave! Alerting the population at risk of impending danger. While there is time, those more vulnerable should be relocated promptly as this may take additional time. Follow the instructions provided and pack up important things for your well-being and safety.

Stage 2 - Evacuation Order

Leave the area NOW! All persons in the affected area will be ordered to leave the area for their safety. Evacuation and relocation should begin immediately. Police will control access to the evacuated area until the evacuation order is rescinded.



Stage 3 - Evacuation Rescind



Return home. When the emergency is under control and the area is declared safe, the Evacuation Order will be rescinded and information will be broadcast to advise evacuees that they may return home.

Remember, if the emergency reoccurs, another evacuation may be necessary starting at stage 1 or may go directly to stage 2 if the danger is imminent.

If you hear that an Evacuation is anticipated, be sure to note whether it is an **Alert** or an **Order**. How you respond is different for each stage, and important to remember. Following these guidelines helps first responders to help you more quickly and safely.



If an Evacuation Alert has been issued:

- **GET READY TO LEAVE!** Take your Grab 'n Go kit or, if you do not have one, gather essential items such as medications, eyeglasses, valuable papers, immediate care needs for dependents, and valuable keepsakes. Include a couple of blankets and pillows. Be practical about what to take with you. Make them available for immediate access for a quick departure.
- Keep track of all family members and determine a planned meeting place should an evacuation be called while separated.
- Relocate large pets and livestock to an area outside of the evacuation area if practical.
- Arrange accommodation for your family in the event of an evacuation. Emergency Social Services may be available to provide reception centres and emergency relief for periods up to 72 hours if necessary and available.
- Water vegetation adjacent to structures if water supplies and time permits.

If an Evacuation Order has been issued:

- You **MUST LEAVE THE AREA IMMEDIATELY**. Report to one of the Reception Centre(s) indicated to allow for effective communications from the evacuation team, Emergency Operations Centre and emergency responders. Registering at the reception centre assists in connecting separated family members and concerned friends and family.
- If you need transportation assistance, check with neighbours and advise the individual providing the notice of evacuation.
- Close all doors and windows in your home. Leave gates unlocked and clear driveways for emergency responder access.
- Keep a flashlight and portable radio with you at all times.
- Follow directions from emergency personnel and obey traffic control. Travel will be one-way only out of your area to allow emergency vehicles access. Re-admission is not permitted until the Order is lifted.

As information is received from the operational front lines, and examined for specific actions, the public will be kept notified of developments, level of evacuation awareness, location of reception centres and other important information.

If you hear about evacuation in other areas where you have family and friends, invite them to come stay with you – having a place to go helps people cope with evacuation.

Shelter in Place Instructions

An accident may cause a hazardous material to enter the air. Unless the hazardous material is flammable, emergency response professionals may tell you to stay protected indoors until you receive instructions to leave. This usually lasts only a few hours so listen to your radio for updates.



In a major earthquake, Sheltering In Place may take the form of long-term camping at home! During an emergency, if official local authority messages state that people in your area are **Ordered to Shelter in Place**, you should:



■ **Go inside.**



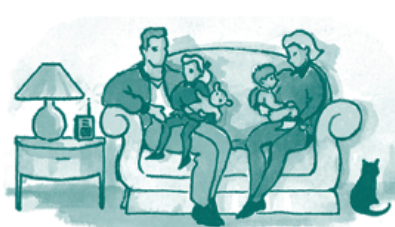
■ **Close all windows and doors.**



■ **Turn off ventilation systems (heating and air-conditioning, and fireplace dampers).**



■ **Go into a room with the fewest doors and windows and seal the room.**



■ **Stay in the room until told by the authorities that it is safe to come out.**

While inside, you should stay tuned to local television or radio for information updates and use telephones only to call 9-1-1 for emergencies. When the emergency has passed, ventilate the building thoroughly to bring in fresh, clean air.

Weather-stripped buildings slow the movement of air into them and any hazardous material that does enter is weakened when it mixes with the indoor air. It is imperative that you stay indoors, especially if you see a cloud, vapour, or smoke from the hazardous material outdoors or you can smell it indoors. You will be safer inside! If the danger persists for more than 2 - 3 hours local officials will consider evacuation of the area.

If you are Sheltering in Place, DO NOT:

- Risk your safety for your pets. If they are not inside, shelter in place without them.
- Leave your building or home until you receive notification that the danger has passed.

Try to have enough emergency supplies on hand to last you and your family for a minimum of 7 days. Check out the emergency preparedness information of this workbook or check with your Community Emergency Program for more information (see pages i-ii).



Fires - Structural

Structure fires occur frequently. Having a fire extinguisher and **knowing how** to use it may save your home, your possessions and even your life. This is especially true following a major earthquake when local fire departments will be overwhelmed and may not get to you. Knowing how to put out small fires is great but you need to know when the fire is too big for you to extinguish. Do not endanger yourself or your family by trying to save your home.

Possible Fire Sources

- Human caused fires - cigarettes, candles, heaters, etc. Use an A:B:C dry chemical extinguisher (designed to work on most types of fires) to try to put out the fire if it is small. Call 9-1-1 and get out!
- Cooking fires - **PUT A LID ON IT** to cut off oxygen supply. NEVER PUT WATER ON GREASE FIRES! Call 9-1-1 and get out!
- Wood stove or chimney fires - call 9-1-1 and get out!
- Electrical fires - If safe to do so, shut off the electricity. Use an A:B:C extinguisher to try to put out the fire if it is small. Call 9-1-1 and get out!
- Natural gas or propane fires - Go outside and shut off the gas. Call 9-1-1 and stay out!

Escaping a Fire

- **Stop, drop, and roll**—until the clothing fire is out. Running makes the fire burn faster.
- **Check closed doors for heat before you open them.** Use the **back** of your hand to feel near the top of the door, the doorknob and the crack between the door and doorframe **before** you open it. Keep your hands safe to climb down ladders or crawl out to safety.

Hot Door	Cool Door
Do not open. Escape through a window or other exit.	Open slowly and ensure fire and/or smoke is not blocking your escape route.
If you cannot escape, stuff wet towels in door cracks, hang a light-coloured sheet outside window, alerting fire fighters to your presence.	If escape route blocked, shut the door and use another escape route, such as a window.
	If clear, crawl low under the smoke to exit.
Use a whistle to draw attention to your plight.	Close doors behind you as you escape to delay the spread of the fire.
Stay out. Do not re-enter. Call 9-1-1.	Stay out. Do not reenter. Call 9-1-1.

Fire Extinguisher Safety

An A:B:C dry chemical extinguisher is recommended for most types of fires.

Twice a year when the clocks change, turn your fire extinguisher upside-down, smack the bottom and shake it to keep the chemical powder from caking into a solid that won't work.

Check your fire extinguisher gauge to ensure the pressure is at the recommended level. (i.e. in the green zone). Follow manufacture instructions for maintenance & use.

IMPORTANT: Recharge all extinguishers immediately after any use.

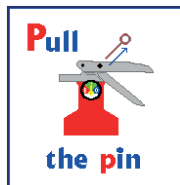


Only fight a fire if:

- The fire is small and contained
- You are safe from toxic smoke
- If you have a means of escape
- If your instincts tell you it's okay

Using a fire extinguisher:

- Keep calm.
- If the fire spreads or does not go out quickly - GET OUT!
- Close the door on your way out to slow the spread of the flames.



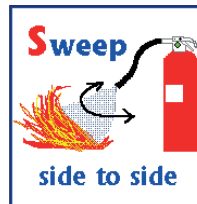
Pull the pin to unlock the lever.



Aim at the BASE of the fire to put it out.



Squeeze lever slowly. Release handle to stop discharge.



Sweep from side to side, moving carefully toward the fire, aim at the base of the fire and sweep back and forth until the flames appear to be out.

Call 9-1-1 anytime there is a fire in your home, even if you've put the fire out. Fire departments will ensure there are no lingering hot spots that might erupt later and let you know about necessary further precautions.

After a Fire

1. Cool and cover burns to reduce chance of further injury or infection.
2. Stay out of damaged buildings.
3. If you are a tenant, contact the landlord.
4. Do not try to open safe or strong boxes until they have cooled for several hours.
5. If your building inspector says the building is unsafe, ask for security guard for property.
6. Follow the instructions for recovering from a disaster (*see pages 67-76*).

Forest Fires

Forest fires are a reality. Urban and rural subdivisions, farms, acreages and cottages are all potentially threatened by forest fires. In British Columbia, wildfires threaten or destroy many homes every year. FireSmart your home and property to help reduce the threat of forest fires to your home and family.



Before the Fire Approaches Your Home

- **Evacuate the vulnerable.** Evacuate pets and family members not essential to preparing your home. Anyone with medical or physical challenges should be evacuated immediately.
- **Remove combustibles.** Clear items that will burn from around the house, including wood piles, lawn furniture, barbeque grills, tarp coverings, etc.
- **Close or protect all openings.** Close outside attic, eaves, fireplace and basement vents, windows, doors, pet doors, etc. Close all shutters, blinds or heavy non-combustible window coverings to reduce radiant heat.
- **Shut off gas** at the meter. Only a qualified professional may turn the gas back on.
- **Turn off propane** tanks and move them at least 10 metres (33 feet) from your home if possible.
- Connect garden hose to outside taps. Place **sprinklers on the roof** and near above-ground fuel tanks. Wet the roof.
- **Top up** pools, hot tubs, garbage cans, tubs or large containers with **water**.
- **Wet** or remove **shrubs** within 5 metres (~15 feet) of your residence.
- **Gather fire tools** such as a rake, axe, handsaw or chainsaw, bucket, and shovel.
- **Face car in the direction of escape.** Shut doors and roll up windows. Leave key in ignition and doors unlocked. Close garage windows and doors, but leave them unlocked.
- Disconnect automatic garage door openers so doors can be opened manually.
- **Move flammable furniture** into the center of the residence away from windows and sliding-glass doors.
- **Valuables.** Place important papers, mementos and anything "you can't live without" inside your car, ready for departure.
- **Lights - turn outside and inside lights on** to make house more visible in heavy smoke.

If advised to evacuate, do so immediately. Follow instructions provided and use route identified in the evacuation notice. Watch for changes in fire speed and direction.

Once you are safely out of the evacuation area, contact your insurance agency to start your claim for immediate assistance while evacuated.

After a Forest Fire

Follow the instructions provided by your local authority and see pages 67-76 for information regarding recovering from a disaster.

Floods

It is important to be aware of your community's vulnerability to floods in order to be prepared if a flood should occur.



Before The Flood

- Make an inventory of your possessions, valuables, papers and property.
- Store valuable items on upper floors and keep all chemicals up and out of the house.
- Identify safe routes from your home or business to higher ground.
- Install check valves in sewer traps so flood water cannot backup in sewer drains.
- Be aware that flooded roads can cut off your escape route.

If You Must Leave Your Home:

1. Close all doors and windows and double check to ensure gas and other heating fuel sources are turned off and that electricity and water are shut off at the main valve or breaker leading to the house.
2. Remove insecticides and toxic chemicals from the house to prevent contamination.
3. Pack blankets, warm clothing and waterproof coats and boots for each family member.
4. Bring identification for all family members including pets.
5. Seal personal documents and family papers in plastic bags.
6. Take a supply of essential medications for each family member. Try to keep a minimum two week supply of prescription medications in your grab 'n go bag.
7. Carry items necessary for the care of infants, including diapers, feeding bottles and food.
8. Plan ahead for family members that have functional needs.
9. Bring hand towels and toiletry items for each person.
10. Take a portable AM/FM radio and flashlight (preferably one that uses solar or windup so you don't have to depend on batteries).
11. Identify friends and family or local campgrounds to relocate to and make sure family members knows where to go. Provide younger children with a note sealed in plastic stating the family's destination. This will help the family reunite if separated for any reason.

Flood Safety

Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.

Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the stability of the ground in front of you.

Stay out of any building if it is surrounded by floodwaters. Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.



DO NOT visit a disaster area. Crowds hamper rescue and other emergency operations.

Do not drive into flooded areas. If floodwaters rise around your car, leave it and move to higher ground if you can do so safely. You and the vehicle can quickly be swept away.

Driving in flood conditions:

Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.

Take extra care when driving. Familiar roads will appear drastically different when covered by flood waters.

Be on the lookout for damaged bridges, slides and washouts and be particularly alert for downed power lines. Report these to the power company.

Be alert for emergency personnel and signs providing evacuation route directions.

Obey officials who are directing traffic or involved in rescue or flood control operations. They are there to assist you and to make sure the situation is handled safely and effectively.

Did You Know?

- **Six inches of water** will reach the bottom of most passenger cars causing loss of control and possible stalling.
- **A foot of water** will float many vehicles.
- **60 centimetres or 2 feet of rushing water** can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.



Returning Home

DO NOT RETURN HOME until the local authority announces the emergency situation is over and that it is safe to return to the affected area.

DO NOT LIVE IN YOUR HOUSE UNTIL:

- The regular water supply has been inspected and officially declared safe for use.
- Every flood-contaminated room is thoroughly cleaned, disinfected and surface-dried.
- All contaminated dishes and utensils have been thoroughly washed and disinfected, either by using boiling water or by using a sterilizing solution of 1-part chlorine bleach to 4-parts water; then rinse dishes and utensils thoroughly.
- Adequate toilet facilities are available.

For detailed information concerning the potential contamination of food stuffs contact your local health unit. DO NOT EAT FOOD that was submerged in flood waters.

Health officials recommend disposal of the following food stuffs:

- **ALL FRESH OR DRIED FOODS**
- **CANNED GOODS** (if damaged and showing signs of leakage)
- **HOME CANNED OR BOTTLED FOODS** (contamination can gather under caps)

NOT SAFE!
DO NOT EAT!

After the Flood

Have the house inspected for structural damage to ensure there is no danger of collapse.

Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations. Wear rubber boots & gloves to avoid electrical shock and contamination.

Have all utilities professionally checked and repaired!

Let the building air out before entering to remove foul odours or escaped gas & do not heat above 4° C to reduce mould and bacteria growth.

If water occupies the home, pump out a third of the flooded water each day. Further damages to the structure can occur by pumping water out too quickly.

Add 2 litres of **bleach** to the remaining flood waters every 3 days to reduce growth of bacteria and mould.

DO NOT handle live electrical equipment in wet areas. DO NOT use electrical equipment exposed to floodwaters until it has been professionally checked and serviced.

Service septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.

Clean and disinfect everything. Mud from floodwater contains sewage and chemicals.



Hazardous Materials



Hazardous spills can occur anywhere. They can also create a secondary disaster following an event such as an earthquake or flood.

Before A Hazardous Materials Spill

- Make plans now for ways to reunite with family members. (see page 3-4).
- Know where utility shut-off valves are and show everyone how to turn them off.
- Know where all in-take and exhaust fans for air conditioning and heating system are.
- Be prepared to evacuate the building if necessary.

During A Hazardous Materials Spill

- Listen to the radio for instructions and information about a possible evacuation.
- For hazardous materials accidents, call 9-1-1.
- Stay away from the incident site to minimize the risk of contamination.
- If outside during an incident, try to stay upstream, uphill and upwind. Hazardous materials can quickly be transported by water and wind.
- Never move through a gas cloud. Travel cross-wind to avoid fumes.
- In a vehicle, close windows and shut off engine to reduce the risk of toxic fumes.
- If evacuation is necessary, follow the directions of emergency responders. Take emergency kit, medications and valuables, and leave a note stating destination.
- Take pets with you when you evacuate!
- If told to stay inside, close all doors and windows, sealing leaks with duct tape or wet towels. Turn off ventilation (see instructions on pages 13 and 47).



After A Hazardous Materials Spill

- If evacuation is necessary, do not return home until local authorities say it is safe.
- Upon returning home, open windows and vents and turn on fans to provide ventilation.
- If you have been exposed to a hazardous material, follow decontamination instructions from local authorities. You may be advised to shower or follow other procedures.
- Place exposed clothing and shoes in tightly sealed containers. Call local authorities to find out about proper disposal.
- Seek treatment for unusual symptoms as soon as possible.
- Find out from local authorities how to clean up your home and property.

Landslides



Landslides occur in many places. Masses of rock, earth, or debris move down a slope. Landslides are activated by storms, earthquakes, volcanic eruptions, fires, and human modification.

Debris and mudflows are rivers of rock, earth, and other debris saturated with water. They develop when water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt.

These flows can develop rapidly, striking with little or no warning at avalanche speeds and can travel several miles from their source, growing in size as they pick up trees, boulders, cars, and other materials.

Before a Landslide or Debris Flow

- Do not build near steep slopes, close to mountain edges, near drainage ways, or natural erosion valleys.
- Consult an appropriate professional for advice on risks and potential corrective measures.
- Minimize home hazards by installing flexible pipe fittings to avoid gas or water leaks, as they are more resistant to breakage (only qualified professionals should install gas fittings).
- Get a geotechnical assessment of your property if you detect issues such as:
 - Changes in your landscape such as patterns of storm-water drainage on slopes (especially the places where runoff water converges), land movement, small slides, flows, or progressively leaning trees.
 - New cracks appearing in plaster, tile, brick, or foundations.
 - Outside walls, walks, or stairs begin pulling away from the building or cracks on the ground or on paved areas such as streets or driveways develop over time.
 - Fences, retaining walls, utility poles, or trees tilt or move.

During a Landslide or Debris Flow

- Move away from the path of a landslide or debris flow as quickly as possible.
- Curl into a tight ball and protect your head if escape is not possible.

After a Landslide or Debris Flow

- Stay away from the slide area. There may be danger of additional slides.
- Watch for associated dangers such as broken electrical, water, gas, and sewage lines and damaged roadways and railways.
- Replant damaged ground as soon as possible since erosion caused by loss of ground cover can lead to flash flooding and additional landslides in the near future.
- Seek advice from a geotechnical expert for evaluating landslide hazards or designing corrective techniques to reduce landslide risk.



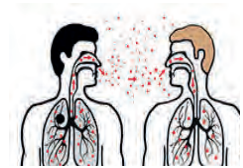
Pandemics (Disease Outbreaks)

Disease outbreaks happen when a virus spreads easily from person to person and around the world. New virus strains are likely to cause more illnesses and potentially more deaths than seasonal flu due to a lack of immunity.

Influenza pandemics happen every ten to forty years. No one can predict exactly when a pandemic will happen.

Some disease outbreaks spread easily from person to person by:

- Breathing tiny droplets in the air after an infected person coughs or sneezes;
- Touching tiny droplets of nose or eye secretions from an infected person and then touching your eyes, nose or mouth; and,
- Touching objects like dirty tissues or surfaces that have been handled by an infected person and then touching your eyes, nose or mouth.



Virus can be spread from hard surfaces like doorknobs for up to twelve hours, and from softer/porous surfaces, like hands and tissues, for several minutes.

Virus can be spread by an infected person from about one day before symptoms appear to five days after symptoms appear, and maybe longer in children and some adults.

Staying Healthy

- **Have good routine health practices** like eating well, getting enough sleep and exercising regularly.
- **Wash your hands often** and for at least 20 seconds with soap and warm water, and always after you cough or sneeze. An anti-bacterial hand cleaner may also work if you do not have ready access to water and soap. This is still the best way to protect yourself!
- **Practice good cough manners.** Cover your mouth and nose with a tissue when you cough or sneeze, or cough into your upper sleeve if you don't have a tissue. Throw the used tissue into the garbage right away and wash your hands.
- **Stay home if you are sick** to make sure that you get the rest you need and also so you don't spread your germs to others.
- **Stay away from people who are sick.** You should especially try to stay at least 1 metre (~3 feet) away from people sick with the contagious illnesses.
- **Try not to touch your eyes, nose or mouth.** This is a common way to spread or come in contact with germs.
- **Avoid public gatherings and crowds.**

It is recommended that you get a flu shot each year. Flu vaccine, when available, is considered to be the primary public health intervention during a flu pandemic. The provincial government is working with the federal government and other provinces and territories to ensure that there will be enough vaccines for all Canadians. Since vaccine may not be available early in a pandemic, it is important to learn and use other ways to protect yourself and your family.

How can I care for myself during a disease outbreak?

During a disease outbreak, many people will be sick and it may be difficult to get medical care. For this reason, it is very important to be prepared to take care of yourself and others at home as much as possible.

Because you may need to be home for a time during the pandemic, it is a good idea to stock up on basic supplies, such as food and water, for several days. Make sure you have two weeks supply of your regular medications on hand, and a list of phone numbers for family, friends, neighbours, and your doctor.

Home treatment and self care can relieve most symptoms and reduce the risk for further problems. If you get the flu, ways to monitor and improve your health at home include:

- ***Stay home if you are sick*** to ensure that you get the rest you need and don't spread the virus to others.
- ***Drink lots of fluids*** including water, real juice, milk and herbal teas. It is best to have drinks without caffeine, because caffeine actually makes you lose fluid from your body.
- ***Use a hot water bottle or heating pad*** for short periods of time to help reduce muscle pain. Watch for burns and blisters.
- ***Get lots of rest.***
- ***Take a warm bath with Epsom salts.***
- ***Gargle with warm water and/or suck on sugarless hard candy or lozenges*** to ease your sore throat.
- ***Avoid alcohol and tobacco.*** Smoking especially irritates damaged airways.
- ***Avoid sharing anything that may carry germs*** such as towels, lipstick, cigarettes, drinks, or toys.
- ***Wash your hands often.*** Use soap and warm water for at least 20 seconds each time, or alcohol-based hand cleaners if your hands do not look dirty. This will help you avoid spreading the flu to others.
- ***Ask your pharmacist for advice if you buy over-the-counter medicine such as pain relievers or cold/flu medicines.*** Let the pharmacist know if you have any chronic medical problems.
- ***Call someone to help you until you are feeling better.*** This is especially important if you are alone, are a single parent or are responsible for the care of someone who is frail or disabled.

During a Disease Outbreak

Always call your doctor and let him/her know about your symptoms before visiting, so that you don't infect other people at the office. If special clinics for people with flu-like symptoms have been set up, your doctor's office might ask you to go there instead.

In children, seek medical care immediately, if you notice any of the following:

- Fast or troubled breathing
- Bluish or dark coloured lips or skin color
- Drowsiness to the point that you cannot wake your child up
- Severe crankiness, not wanting to be held
- Not drinking enough fluids and/or not going to the bathroom (peeing) regularly (about every 6 hours when awake)
- Symptoms improve and then suddenly become worse

In adults, seek medical care immediately if you have any of the following:

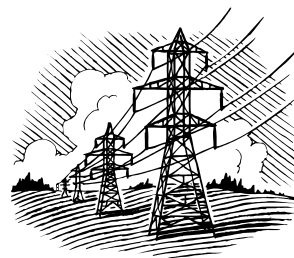
- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or stomach
- Confusion or disorientation
- Coughing up bloody sputum
- Severe vomiting or vomiting that does not go away
- Symptoms improve and then suddenly become worse

Hand-washing Instructions



Power Outages

When your power goes out but neighbours have power, check your fuse box or circuit breaker panel. Make sure large appliances and electronics are turned off before replacing fuses or throwing breakers. This reduces possible damage to your electrical system and electronic devices.



Before the Power Outage

- People relying on life-sustaining equipment should contact their local health provider and consider purchasing or renting a small generator on a priority basis.
- Home Power Failure Lights are an inexpensive way to provide immediate emergency lighting during power failures.
- Consider alternate heating sources for your home so that you can stay warm during winter storms.
- Keep fuel for barbeques and camp stoves full, stored safely and use only outside.
- If you rely on power to pump water, make sure you have lots of extra water stored for use during power outages.
- Keep manual tools such as can openers around or choose cans with peel back lids. Keep dry goods and recipes for alternative cooking methods available for use when needed.
- If you have an electric garage door opener, learn how to open it without the electric power. Make sure to read the instructions supplied by the manufacturer.

During a Power Outage

- Switch off appliances and tools with electronic controls (microchips) such as a stereo, television, VCR, microwave oven, stove, refrigerator, computer and light control system. This will help to avoid possible damage when the power comes back on.
- If you leave your home during the outage, double check to make sure all heat-producing appliances, such as your range and iron, are unplugged to minimize the risk of fire.
- Visually scan the neighbourhood to look for trouble indicators such as flashes of light and downed wires and make sure you keep away from these dangerous areas.
- Report the Outage using a regular wired phone (portable house phones will not work) to call the BC Hydro 24-hour emergency number 1 (888) 769-3766 (POWERON) or *49376 (HYDRO) on a cell phone, and give the operator as much information as you can. **Please call only once**, to keep phone lines open to other customers.
- Conserve water
- Keep doors, windows and drapes closed to retain heat
- Do not open freezers or refrigerators unless necessary.

- Be very careful of fire hazards caused by candles or other open flame light sources. Use a shiny aluminium pan behind the candle to reflect more light.
- If you have a fireplace, use it for both warmth and cooking but keep a window slightly open in the room in order to provide combustion air and ventilation.
- Use all barbeques, camp stoves and hibachis **outside only**.
- Keep a windup, solar or battery-operated radio on hand for information updates.
- Keep clear of wires or anything in contact with them and warn others of the danger. Always assume that wires are live and capable of killing people.

Warning: Do not use the burners or the oven in a gas stove to heat the kitchen. This is dangerous. A draft could blow out the oven pilot light on a gas stove, and maintaining too high an oven temperature for long periods of time can cause a fire.

If an extended outage occurs during cold weather, drain water systems and have an alternative heating system available that is not dependent on electricity. For example use a wood-burning fireplace, a gas fireplace or a portable kerosene heater. (Do not use a kerosene heater in an unattended room. Open a window slightly to provide combustion air and ventilation.)

Home Generators (MUST STAY OUTSIDE)

Home generators are handy for backup electricity in case of a service interruption or where no electrical service is available. To safely operate a generator, follow these steps:

1. Follow the generator manufacturer's instructions.
2. Connect lights, tools or appliances directly to the generator with standard CSA-approved extension cords. Never connect portable generators to the house wiring. This can cause dangerous feedback into the utility system.

AFTER A POWER OUTAGE

- When the power comes back on, give the electrical system a chance to stabilize. Turn on only the most essential appliances and wait 10 to 15 minutes before reconnecting others.
- If the outage lasts more than four hours in cold weather, it is helpful to reconnect the heating system and appliances gradually. For example, reconnect appliances over a 45-minute period after a 6-hour outage, reconnect over 2 hours after a 12-hour outage, and reconnect over 4 hours following a 24+ hour outage.
- Check to make sure the refrigerator and freezer are back on. Check whether food can safely be refrozen.
- Plug in appliances. Reset clocks. Be sure to check automatic timers, alarms and smoke detectors.
- Restock emergency supplies.

Tsunamis

Before a Tsunami - Know the risks where you live!



Follow instructions to prepare for flood (pages 51-53).

In British Columbia there are two main types of tsunami threats.

- Tsunamis generated out in the Pacific Ocean could severely impact BC's outer coastal communities with waves from the north, south or west.
- Tsunamis generated in local waters can be triggered by earthquakes, landslides and/or underwater slides and can impact other coastal areas of BC.

If you live in a coastal area of British Columbia, you and your dependents need to be prepared to respond to a potential tsunami and know what to do.

In the event a **distant** tsunami is generated, notifications may be issued by local emergency officials who will keep people in their communities informed.

Tsunami Information Message

- awareness notification to provide advance alert to areas that could be impacted by a tsunami.

Tsunami Watch Message

- alert notification based on early seismic information. Watches should activate local emergency plans and local authorities should prepare for possible evacuation if their area is upgraded to a Warning.

Tsunami Warning Message

- Warning notifications are issued when there is imminent threat of a tsunami or confirmation of a tsunami wave. When communities are issued a warning, local emergency plans should be activated and safety actions taken that may include evacuating low-lying coastal areas and restricting access to coastal beaches. Warnings are updated as conditions change.

Tsunami Cancellation Message (All Clear): Issued when the tsunami threat is over.

Tsunami Alert Levels

There are five alert levels and each of which has a distinct meaning. The alert levels are:

ALERT LEVEL	THREAT	ACTION
WARNING	Flood wave possible	Full evacuation suggested
ADVISORY	Strong currents likely	Stay away from the shore
WATCH	Danger level not yet known	Stay alert for more information
INFORMATION STATEMENT	Minor waves at most	No action suggested
CANCELLATION	Tidal gauges show no wave activity	Confirm safety of local areas

During a Tsunami

- **Move inland to higher ground and stay there** until you receive the All Clear bulletin. Tsunami danger can last for many hours with multiple waves and short or long intervals!
- Familiarize yourself with the tsunami evacuation areas and routes. Practice walking up to higher ground with your family and emergency supplies.
- Tsunamis generated in distant locations will generally give people enough time to move to higher ground. For locally generated tsunamis, where you may feel the ground shake, you will only have a few minutes so move to higher ground immediately.
- If you are at the beach, near the ocean or near rivers and streams that lead to the ocean and you feel the earth shake, move immediately to higher ground. **DO NOT** wait for a tsunami warning to be announced.
- **DO NOT** go to the beach to watch. **If you notice a sudden very low tide this is nature's tsunami warning and should be heeded. You should move inland to higher ground immediately.**
- If you hear a tsunami bulletin, follow information and instructions immediately.
- If you hear a tsunami evacuation order is given, move immediately to higher ground - know the safe zones in your community and in locations you frequent.
- Stay tuned to your radio for further tsunami updates.
- Do not use the telephone for 24 hours except to report life threatening emergencies.
- Follow the instructions of emergency officials. This is for the safety of everyone.



As dangerous as tsunamis are, they do not happen very often. You should not let this natural hazard diminish your enjoyment of the beach and ocean. But, if you think a tsunami may be coming, the ground shakes under your feet or you hear there is a warning, tell those near you, and ***move quickly to higher ground.***

After a Tsunami

- Do not use the telephone for 24 hours except to report life threatening emergencies.
- Stay away from flooded and damaged areas until officials say it is safe to return.
- Stay away from debris in the water; it may pose a safety hazard to boats and people.
- Check with local authorities to find out about assistance and resources that may be available for your recovery.

Work with your community - together we accomplish so much more!



Water Supply Interruptions

Water supply interruptions can arise without warning due to a variety of natural and man-made events. Many of us are familiar with annual water conservation measures that restrict water use during the summer months. Local authorities are increasingly instituting more water conservation measures to conserve this valuable and critical resource.

Before the Water Supply Interruption

- Know how to shut-off the water line that enters your home (see page 31).
- Store 35 litres of water per person to have enough to last you for at least seven days. Store water in sturdy, opaque plastic food grade pails, jugs or bottles (see pages 7-8 for more information).
- Keep canned goods and meals stocked that require little or no water to prepare.



During the Water Supply Interruption

- Follow the instructions of local officials regarding water usage and purify water if necessary (see pages 7-8 for general instructions).
- If a "boil water advisory" is issued, just boil the water for the number of minutes stated in the advisory, then let it stand and settle before using. You can then use it as regular tap water or filter it further through a coffee filter or paper towel if you prefer.

Conserve water

- Keep a jug of water in the refrigerator for drinking to reduce running tap water
- When using large jugs of water for small jobs like washing hands or brushing teeth, pour some water into a cup or glass and only use that amount rather than letting it pour straight from the big container.
- Wash essential clothing by hand only and wait to do laundry until the water supply is back in service.
- Turn off all garden sprinkler systems and hand water only food plants as necessary. Use mulch and compost to reduce evaporation, promote plant growth and control weeds.
- Capture rainwater off the roof for use in your garden and for hygiene purposes.

After the Water Supply Interruption

- Restock your water and food supplies.
- Brainstorm to share lessons learned and to get better prepared for the next time.
- Develop the habit of conserving water whenever you can.

Winter Storms

Winter storms can create beautiful pristine landscapes and fun times for families to enjoy the outdoors but they also cause all kinds of challenges for travel with blocked driveways and roads and lengthy power outages.



Before a Winter Storm

- Stock up on **rock salt** to melt ice on walkways.
- Keep **sand or non-clumping kitty litter** in your car trunk and at home to improve traction.
- Have **snow shovels** and other snow removal equipment on hand.
- Prepare for possible isolation in your home by having **sufficient heating fuel**. Prepare alternate sources of heat such as your fireplace or wood-burning stove.
- **Winterize your home** to extend the life of your fuel supply by insulating walls and attics, caulking and weather-stripping doors and windows, and installing storm windows.
- **Winterize your car** before the season begins.
- **Trim branches** and dead trees to reduce the threat of trees falling onto your home, vehicle or power lines.
- **Check drainage** around your house to reduce the flooding risk after heavy rain or snow.

During a Winter Storm

- **Check on your neighbours**, especially those living alone. You may be their only resource.
- **Wear several layers** of loose fitting, lightweight, warm clothing rather than one layer of heavy clothing. The outer garments should be tightly woven and water repellent.
- Wear a hat and mittens which are warmer than gloves.
- Cover your mouth with a scarf to protect your lungs.
- **Listen to local weather reports** and stay tuned for emergency information.
- **Eat regularly and drink ample fluids**, avoid caffeine and alcohol that dehydrate.
- **Avoid overexertion** when shoveling snow. Stretch before going outside and again afterwards to keep from getting stiff and sore.
- **Watch for signs of hypothermia** - uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. Move person to a warm location, remove wet clothing, warm the center of the body first. Give warm, non-alcoholic, non-caffeine beverages if conscious. Get medical help as soon as possible.
- **Watch for signs of frostbite** - loss of feeling and white or pale skin in extremities such as fingers, toes, ear lobes, and the tip of the nose. Get medical help immediately.

- **Conserve fuel**, if necessary, by keeping your residence cooler than normal or closing off heat to some rooms temporarily.
- **Keep a window open slightly** when using kerosene heaters to avoid build-up of toxic fumes. Refuel kerosene heaters outside and keep them at least 1 metre (~3 feet) from flammable objects.

Vehicle Safety During Winter Storms:

- Drive only if it is absolutely necessary.
- **Travel during the day**, travel together with someone, and keep others informed of your schedule.
- **Stay on main roads** and avoid back road shortcuts



If a blizzard traps you in the car:

1. **Pull to the side of the road.** Turn on hazard lights and hang a distress flag from the radio antenna or place a HELP sign in the window.
2. **Remain in your vehicle** where rescuers are most likely to find you. Do not set out on foot unless you can see a building close by where you know you can take shelter. Distances are distorted by blowing snow. A building may seem close, but be too far in deep snow.
3. Run the engine and heater about 10 minutes every half hour to keep warm. Periodically clear snow from the exhaust pipe to prevent carbon monoxide poisoning. Remember, you can't smell carbon monoxide fumes.
4. **Keep a window open slightly** on the side away from the wind to allow fresh air in.
5. **Exercise to maintain body heat**, but avoid overexertion. In extreme cold, use foil emergency blankets, road maps, seat covers, and floor mats for insulation. Huddle with passengers and use your coats as blankets. A burning candle can provide much needed heat to keep you from freezing but contain it properly to prevent fires.
6. **Take turns sleeping.** One person should be awake at all times to look for rescue crews.
7. **Drink fluids** to avoid dehydration.
8. Use lights, heat, and radio sparingly to conserve battery power.
9. **Turn on the inside light at night** so work crews or rescuers can see you.
10. If stranded in a remote area, stomp large block letters in an open area spelling out **HELP** or **SOS** and line with rocks or tree limbs to attract the attention of rescue personnel who may be surveying the area by airplane.

After a Winter Storm

- **Check your home** for storm damage.
- Make any necessary repairs.
- **Restock all supplies** so you are ready for the next time.

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After an Emergency - Moving Forward

Top 5 Recommendations:

1. Unfamiliar **emotional responses** are normal reactions to our emergency/disaster experiences
2. **Recovery** can take a long time (even years) so be kind to yourself and others as you work your way through this process
3. **Help your children and pets** learn to cope with their fears
4. Follow **Health and Safety Guidelines** throughout the recovery process
5. **Attend** community meetings or information sessions to find out what resources are available and how we can help each other



This section of the workbook outlines:

- Ways to start getting back on track after an emergency/disaster.
- Health and Safety Guidelines for when you return home.
- The normal emotional responses you may experience after an emergency/disaster.
- Where to begin looking for financial resources.

Emergency Information

Check with your Community Emergency Program (see pages i-ii) to find out which radio station or social media to follow. Listen to your local media to get timely information during and after an emergency/disaster.

Getting Back on Track

Emergencies/disasters generally have a beginning and an end. Coordinated response is required by individuals, agencies, local authorities and communities to deal with the emergency or disaster. Ideally, recovery starts at the same time as the response but will likely continue on for some time depending on the severity of the emergency/disaster.

1. Take care of yourself and your family first.
 - Attend town hall sessions in your community to get information on resources, issues and timelines and to get questions answered.
 - Promote physical health by eating healthy meals and getting exercise and fresh air.
 - Promote emotional health by talking about our experiences with understanding family and friends or with a professional if you are struggling in any way.
2. Take care of safety and security issues.
 - Contact your insurance company to start a claim and request security if your home is not able to be locked up.
 - Stay with family and friends if possible as their support can be invaluable.
 - Determine where you will live during the recovery.
3. Assess the losses.
 - Start making a list of items and property that you have lost (identification, furniture, family keepsakes, etc.).
 - Find out if special precautions need to be taken before entering your home.
 - Look for items that can be salvaged.
 - Take time to appreciate what you still have.
4. Determine what needs to be done.
 - Remove items you want to try to salvage.
 - Have your home inspected to determine whether it can be repaired or needs to be removed and rebuilt.
 - Find out when it will be safe to begin rebuilding or repairing.
5. Determine recovery resources.
 - If a Recovery Centre been established this is a good place to find the agencies you need to work with.
6. Start the recovery work.
 - Take care of yourself and your family first.
 - Begin the process of rebuilding your lives and your residence.

Health and Safety Guidelines

Recovering from a disaster is usually a gradual process. Safety is a primary issue, as are mental and physical well-being. If assistance is available, knowing how to access it makes the process faster and less stressful. This information offers some general advice on steps to take after disaster strikes in order to begin getting your home, your community, and your life back to normal.

Your first concern after a disaster is your family's health and safety. You need to consider possible safety issues and monitor family health and well-being.

Aiding the Injured

Check for injuries. Do not attempt to move seriously injured persons unless they are in immediate danger of death or further injury. If you must move an unconscious person, first stabilize the neck and back, then call for help immediately.

- If the victim is unresponsive, call 9-1-1.
- Care for life-threatening problems first (Airway, Breathing & Circulation) using Cardiopulmonary Resuscitation (CPR) as needed if you have the training to do so.
- Maintain body temperature with blankets. Be sure the victim does not become overheated.
- Never try to feed liquids to an unconscious person.

Health

- Be aware of exhaustion. Don't try to do too much at once. Set priorities and pace yourself. Get enough rest.
- Drink plenty of clean water.
- Eat well.
- Wear sturdy work boots and gloves.
- Wash your hands thoroughly with soap and clean water often when working in debris.

Safety Issues

- Be aware of new safety issues created by the disaster. Watch for washed out roads, contaminated buildings, contaminated water, gas leaks, broken glass, damaged electrical wiring, and slippery floors.
- Inform local authorities about health and safety issues, including chemical spills, downed power lines, washed out roads, smoldering insulation, and dead animals.



Returning Home

Returning home can be both physically and mentally challenging. Above all, use caution.

- Keep a battery-powered radio with you so you can listen for emergency updates & news.
- Use a wind-up or battery-powered flashlight to inspect a damaged home.

Note: Turn the flashlight on outside before entering — the battery may produce a spark that could ignite leaking gas, if present.

- Watch out for animals.
- Use the phone only to report life-threatening emergencies.
- Stay off the streets. If you must go out, watch for fallen objects; downed electrical wires, and weakened walls, bridges, roads, and sidewalks.

Before You Enter Your Home

Walk carefully around the outside and check for loose power lines, gas leaks, and structural damage. If you have any doubts about safety, have your residence inspected by a qualified building inspector or structural engineer before entering.

Do not enter if:

- You smell gas.
- Floodwaters remain around the building.
- Your home was damaged by fire and the authorities have not declared it safe.

Going Inside Your Home

Enter the home carefully and check for damage. Be aware of loose boards and slippery floors. Check the following inside your home:

Natural gas. If you smell gas or hear a hissing or blowing sound, open a window and leave immediately. Turn off the main gas valve from the outside, if you can. Call the gas company from another location to have the system inspected and repaired. Do not smoke or use oil, gas lanterns, candles, or torches for lighting inside a damaged home until you are sure there is no leaking gas or other flammable materials present.

Sparks, broken or frayed wires. Check the electrical system unless you are wet, standing in water, or unsure of your safety. If possible, turn off the electricity at the main fuse box or circuit breaker. If the situation is unsafe, leave the building and call for help. **Do not turn lights on** until you are sure they are safe to use. You may want to have an electrician inspect your wiring.

Roof, foundation, and chimney cracks. If it looks like the building may collapse, leave immediately.



Appliances. If appliances are wet, turn off the electricity at the main fuse box or circuit breaker. Then, unplug appliances and let them dry out. Have appliances checked by a professional before using them again. Also, have the electrical system checked by an electrician before turning the power back on.

Water and sewage systems. If pipes are damaged, turn off the main water valve. Check with local authorities before using any water as it could be contaminated. Pump out wells and have the water tested by authorities before drinking. Do not flush toilets until you know that sewage lines are intact.

Food and other supplies. Throw out all food and other supplies that you suspect may have become contaminated or come in to contact with floodwater (see pages 9-10).

Your basement. If your basement has flooded, pump it out gradually (about one third of the water per day) to avoid damage. The walls may collapse and the floor may buckle if the basement is pumped out while the surrounding ground is still waterlogged.

Cabinets. Open cabinets carefully and be alert for objects that may fall.

Clean up household chemical spills. Disinfect items that may have been contaminated by raw sewage, bacteria, or chemicals. Also clean salvageable items.

Call your insurance agent. Take pictures of damages. Keep good records of repair and cleaning costs including the hours you and your family and friends spend cleaning, etc.

Animals. Disaster and life threatening situations will exacerbate the unpredictable nature of wild animals. To protect yourself and your family, learn how to deal with wildlife.

- Do not approach or attempt to help an injured or stranded animal. Call your local animal control office or wildlife resource office.
- Do not corner wild animals or try to rescue them. Wild animals will feel threatened and may endanger themselves by dashing off into floodwaters, fire, and so forth.
- Do not approach wild animals that have taken refuge in your home. Wild animals such as raccoons often seek refuge from floodwaters on upper levels of homes and have been known to remain after water recedes. If you encounter animals in this situation, open a window or provide another escape route and the animal will likely leave on its own. Do not attempt to capture or handle the animal. Should the animal stay, call your local animal control office or wildlife resource office.
- Do not attempt to move a dead animal. Carcasses can present serious health risks. Contact your local authority or health department for help and instructions.
- If bitten by an animal, seek immediate medical attention.





Emotional Responses in Emergencies



Typical First Reactions:

- Disbelief and shock
- Fear
- Problems with concentration or memory
- Need for help and information
- Disorientation & numbness
- Reluctance to abandon property
- Difficulty in making decisions
- Helpfulness to others

Some Later Responses:

- Frustration and anxiety
- Moodiness and irritability
- Unexplained crying
- Change in appetite
- Difficulty sleeping or sleeping too much
- Feelings of powerlessness
- Guilt for survival or not preventing disaster
- Anger and suspicion
- Apathy and depression
- Fatigue, low energy
- Digestive problems
- Headaches, body pain
- Feeling overwhelmed
- Isolation from family and friends

Special Effects on Children:

- Return to earlier behaviour such as thumb-sucking or bed wetting
- Reluctance to go to bed
- Fantasies that the disaster never happened
- Inability to concentrate
- Clinging to parents, crying or screaming
- Nightmares
- Refusal to attend school
- Withdrawal, immobility

Special Effects on Pets:

- Unusually nervous or fearful
- Excessive protectiveness
- Sensitive to noise or storms
- Increased aggression

Healing Emotionally

- Discuss what happened
- Recognize the losses you have suffered
- Give yourself and your family permission to grieve and time to heal
- You may want to limit exposure to media covering the event

Helping Children Cope with Their Fears



Before the Emergency

- Talk about your own experiences and/or read aloud about emergencies. Local libraries have some good books. Be sensitive to your children's needs as you do this. The point is not to frighten but to increase their awareness of some of the things that may happen.
- Walk through your house with them and have them practice quickly getting in each room's safe place. Hold frequent earthquake and fire drills to reinforce this practice.
- Walk with your children around their favourite outside places to play. Identify the safe places to be in these locations.
- Ask your children's school about their emergency response plan. The school's plans may include holding the child until parents arrive. Make sure to explain this to your children and the reason why.
- Provide your children with the name of a relative or friend who will care for them if you should get stuck at work, etc. Preferably this will be a person that the children know and are comfortable with.

After the Emergency

- Give lots of hugs to your children and tell them everything will be okay. This provides physical and verbal reassurance to them.
- Encourage your children to express their feelings, especially through play and physical activities. Listen to them carefully when they share these things with you.
- Be careful not to ignore the emotional needs of your children once you have determined that everyone is physically okay. Fear is a normal reaction to any dangerous situation.
- Include children in clean up activities. It is comforting to the child to watch the household begin to resume its normal functions. It also gives them a job to do.
- Children may revert to immature behaviour for a few days. Do not focus on this behaviour, rather praise them for their help in cleaning up, etc.
- Maintain routines but reduce performance expectations. If fears, sleep, or unusual behaviours get worse for more than two weeks, take the time to seek professional help.

Helping Pets Cope with their Fears



Before the Emergency

- Teach your pet to go into a carrier readily and experience it as a safe place (not just when they have to go to the vet or experience other scary things).
- If your pet can be transported in your vehicle, help them to get used to traveling early on (and not just to the vet or kennel) so that they look forward to rides.

During the Emergency

1. Speak to them in soft, reassuring voices.
2. Whenever possible take your pets with you and pre-arrange places for them to stay.

After the Emergency

Pets may not respond normally after an emergency/disaster. They may show fear, be in physical pain or display other "unfriendly" behaviours. Take the time to explain to your children that pets get hurt or afraid too and that because they can't talk to us and tell us what is going on, they sometimes act differently and we need to take our time with them and not rush in to pat or hold them.

1. Approach pets slowly and cautiously, watch for injuries or "unfriendly" behaviours.
2. Avoid direct eye contact as you approach pets slowly and calmly.
3. Speak to them in soft, reassuring voices. *Don't forget they are survivors, too.*
4. Familiar routine always feels comforting. Provide food and fresh water on a regular schedule for caged or fostered animals.
5. Time and patience are often the best medicines, but some pets will require the professional care of a board-certified veterinary behaviorist.

Remember, intense fear and anxiety should be considered forms of pain that deserve immediate treatment.

Livestock

Livestock are an even greater challenge during emergencies so you need to do emergency planning for them well before the event. Work with your veterinarian and local farming groups to plan for how best to protect livestock (see pages 16-17).

Recovery Resources



Recovery Begins with YOU!

- What risks can you reduce before a disaster happens? See the Emergency Preparedness information at the beginning of this workbook.
- Do you know how to take care of yourself and your family during a disaster? See the During Emergencies - Responding Safely information in the middle of this workbook.
- Do you know what to do to start your recovery? Use the After An Emergency - Moving Forward information and information you get from local community information provided during and after the disaster to help you get started on your recovery.

Helping Each Other - Community Recovery

- Work with your neighbours and community groups to start the clean-up process
- If you can take someone or some family into your home temporarily, let your local authority know as we may need lots of temporary housing assistance for those displaced during the disaster.
- If you belong to a service club, offer your group services to local authority to assist with clean-up, food services, shelter or whatever services you can offer the community.

Recovery takes a lot longer than the original disaster so let's be patient. Recognize that this is an opportunity to improve and make our communities better and safer than before the disaster!

Seeking Disaster Assistance

Throughout the recovery period, it is important to monitor local radio or television reports and other media sources for information about where to get emergency housing, food, first aid, clothing, and financial assistance. Your local authority emergency programs will be working to coordinate the recovery process during large events affecting the communities so check with them on what recovery resources may be available to you.

Although we appreciate the generosity of individuals and groups that wish to donate goods (food, clothing, toys, furniture, etc.) to those in disaster areas, these donations become a secondary disaster for those areas that now have to deal with truckloads of goods that need to be sorted and stored. Please note that the best gift is financial assistance and donations can be made to the Canadian Red Cross and sometimes even in the local community if a disaster fund has been established.



Another great resource is individuals that have been trained and are ready to assist at Emergency Social Services Reception Centres so please contact your local emergency program to become a volunteer and receive the free training.

Community Resources And Beyond

Community Resources to individuals and families may come from many organizations, including:



Emergency Social Services (through your local community) will assist with family reunification and facilitate the provision of emergency food, clothing, lodging and emotional support to evacuees.



Canadian Red Cross
Croix-Rouge canadienne

Canadian Red Cross provides family reunification and collects donations to assist with disaster relief.



Giving Hope Today

Salvation Army provides disaster relief and emotional support services.

125



BC Housing

Provides cots and blankets for Emergency Group Lodging facilities and facilitates the provision of emergency and long-term housing options.



Tzu Chi Foundation
(Buddhist Compassion Relief)

Tzu Chi provides material aid and encourages mutual help among disaster victims and helps them become independent by involving them in rebuilding their own communities. The ultimate goal is to inspire disaster victims to contribute to others when they have the ability to do so, thus creating a global village of Great Love.

Disaster Financial Assistance

Insurance is a critical component of emergency preparedness. If a disaster is not insurable, British Columbia has a program to help those impacted by a disaster cope with some of the cost of repairs and recovery for disaster-related property damage. When such a disaster occurs, the Province of British Columbia determines whether Disaster Financial Assistance will be made available.

Those impacted by the disaster may apply to the Province of British Columbia for Disaster Financial Assistance. Disaster Financial Assistance helps to replace or restore only essential items and property destroyed or damaged by disasters, to pre-disaster condition.

Assistance is available to qualifying home owners, residential tenants, small businesses, farm operations, and not-for-profit charitable organizations.

Information Resources



Top 5 Recommendations:

1. **Listen to local radio and television stations** to find information updates during an emergency/disaster.
2. Before adopting information that is contrary to this guide, **check** with your local emergency program to find out if this information is accurate.
3. **Apply** the Emergency Preparedness suggestions in this guide to help reduce the level of risk to your family and your home and may reduce the extent of your losses.
4. **Share information** with friends and family wherever they may be and encourage them to find out what Emergency Preparedness plans are in their community.
5. **Get involved** in helping your community prepare for and respond to emergencies (see pages iv-vii for ways to get involved).



This section of the workbook:

- Provides additional Emergency Preparedness tips.
- Provides lists of additional information resources.
- Provides information regarding ways that you can volunteer and help your community.
- Provides Local Community Emergency Services information.
- Provides a Glossary of Emergency Preparedness terms.

Emergency Information

Check with your Community Emergency Program (see pages i-ii) to find out which radio station or social media to follow. Listen to your local media to get timely information during and after an emergency/disaster.



Useful Information & Resource Links

Emergency Management British Columbia (EMBC)

<http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery>

Public Safety Canada (PS)

<https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/mrgnc-prprdnss/index-en.aspx>

British Columbia Centre for Disease Control (BCCDC)

www.bccdc.org/

British Columbia Society for the Prevention of Cruelty to Animals (BCSPCA)

www.spca.bc.ca

Canadian Red Cross

www.redcross.ca

Emergency Preparedness for Industry and Commerce Council

<http://www.epicc.org/>

First Nations' Emergency Services Society

www.fness.bc.ca

HazNet: The Magazine of the Canadian Risks and Hazards Network

www.haznet.ca

Insurance Bureau of Canada

www.ibc.ca/en/Home_Insurance/

Ministry of Transportation - Road Condition Reports

www.drivebc.ca

Noah's Wish

www.noahswish.org

Salvation Army

www.salvationarmy.ca

WorkSafe BC

www.worksafebc.ca

Local Community Emergency Services

The following Emergency Services are available in your local community.

9-1-1 Emergency Services

- This number allows you to contact a Dispatcher when you need immediate emergency assistance from Police, Ambulance or Fire Departments.
- These departments are dispatched separately, so the first question you need to answer is: "Police, Ambulance or Fire?"
- Once you get connected to the right dispatch centre you need to:
 - Give the address or location and phone number you are calling from.
 - Speak clearly and describe the problem (i.e. there has been a car accident, someone is injured, there has been a break in, etc.).
 - Follow instructions from dispatch or emergency personnel.
 - Stay with the injured person and give comfort.
 - Ask bystanders to stay out of the way, clear the way for responders.
- Never call 9-1-1 unnecessarily as you may be endangering someone else's life that is experiencing a true emergency.

Emergency Preparedness Information Sessions

- Find out about local hazards and how you can protect yourself and your family.
- Find out how to be better prepared for emergencies no matter where you are when they occur (e.g. after a major earthquake most people will have to stay where they are as transportation routes may be impassable).
- Presentations are free and can be requested for your community, workplace, association, club, society or neighbourhood group by calling your Community Emergency Program.

Neighbourhood Emergency Preparedness

Take Emergency Preparedness to the next level by helping to organize your neighbourhood. It's as simple as following these steps:

1. Talk to the neighbours closest to you (about 10 homes) and ask if they want to become prepared for emergencies.
2. Call your Community Emergency Program (see pages i-ii) to ask for a presentation - can be done in someone's yard or home.
3. Invite your neighbours to attend (flyers provided).
4. Come and find out how to prepare and get your questions answered.
5. Challenge each other to get prepared and share great ideas and equipment sources.
6. Map important information about your neighbourhood and encourage everyone to check on your immediate neighbours during any type of event.
7. Sign up for the free training provided and continue developing your community spirit.

Remember - In an emergency or disaster, 80% of your help will come from your neighbours - learn how you can help each other effectively

Emergency Social Services (ESS)



Emergency Social Services (ESS) is a community-based provincial emergency response program that provides services to preserve the well-being of people affected by an emergency or disaster - ranging from single house fires to major disasters involving mass evacuations.

- The goal of the ESS Program is to help people begin to re-establish themselves as quickly as possible after an incident ranging from single house fires to calamities involving mass evacuations.
- ESS provides temporary relief to individuals and families so they can begin to plan their next steps after a disaster.
- Services may include providing accurate, up-to-date information, family reunification, emotional support and the coordination of food, clothing and lodging services.

What to Expect When You Arrive at an Emergency Reception Centre

Please note it may take many hours to establish a Reception Centre after an incident. Once the Reception Centre is operational:

- Volunteers will register you and your family and help assess your immediate needs.
- Registration helps us to reunite you with family and friends and ensure you receive important information updates regarding the emergency, so **(even if you do not require assistance, please register)**.
- If you have pets, please plan now for who will take care of them in the event that you are evacuated as pets are not permitted in Reception Centres or in most hotels.
- Emergency Assistance is only available for a short time after the incident so it is imperative that you have a plan to look after your own family's needs.

Emergency Communications Team (ECT)



Amateur Radio uses many different types of communication including: local voice radio conversations, voice and data conversations via satellite, and even by bouncing radio waves off the moon. In catastrophic events, telephone service may be lost and the amateur or ham radio operators in the area may be the only available method of communicating with the outside world.

- During widespread emergencies or disasters, normal means of communication such as telephone service may be unavailable.
- We have a network of Emergency Communications Teams trained and ready to respond and provide emergency communications during such an event.

Search and Rescue (SAR)

- Under the direction of the RCMP, Search and Rescue teams can be called out to search for and rescue individuals that have gone missing.
- They can also assist communities in evacuation notification.

Interested in helping your community with emergency preparedness and response? Call your local emergency program to find out how.

Information During an Emergency or Disaster

- Every effort will be made to provide prompt and accurate emergency information updates regarding the crisis, so please check local media or attend information sessions as they get posted.
- Information Resources include: Local Radio and Television, Internet, Social Media, local sign boards and Newsprint (keep a battery, wind-up and/or solar powered radio easily accessible).

Emergency Preparedness Glossary

Disaster:

A calamity that

- (a) is caused by accident, fire, explosion or technical failure or by the forces of nature, and
- (b) has resulted in serious harm to the health, safety or welfare of people, or in widespread damage to property.

Emergency:

A present or imminent event or circumstance that

- (a) is caused by accident, fire, explosion, technical failure or by the forces of nature, and
- (b) requires prompt coordination of action or special regulation of persons or property to protect the health, safety or welfare of a person or to limit damage to property.

Potable Water:

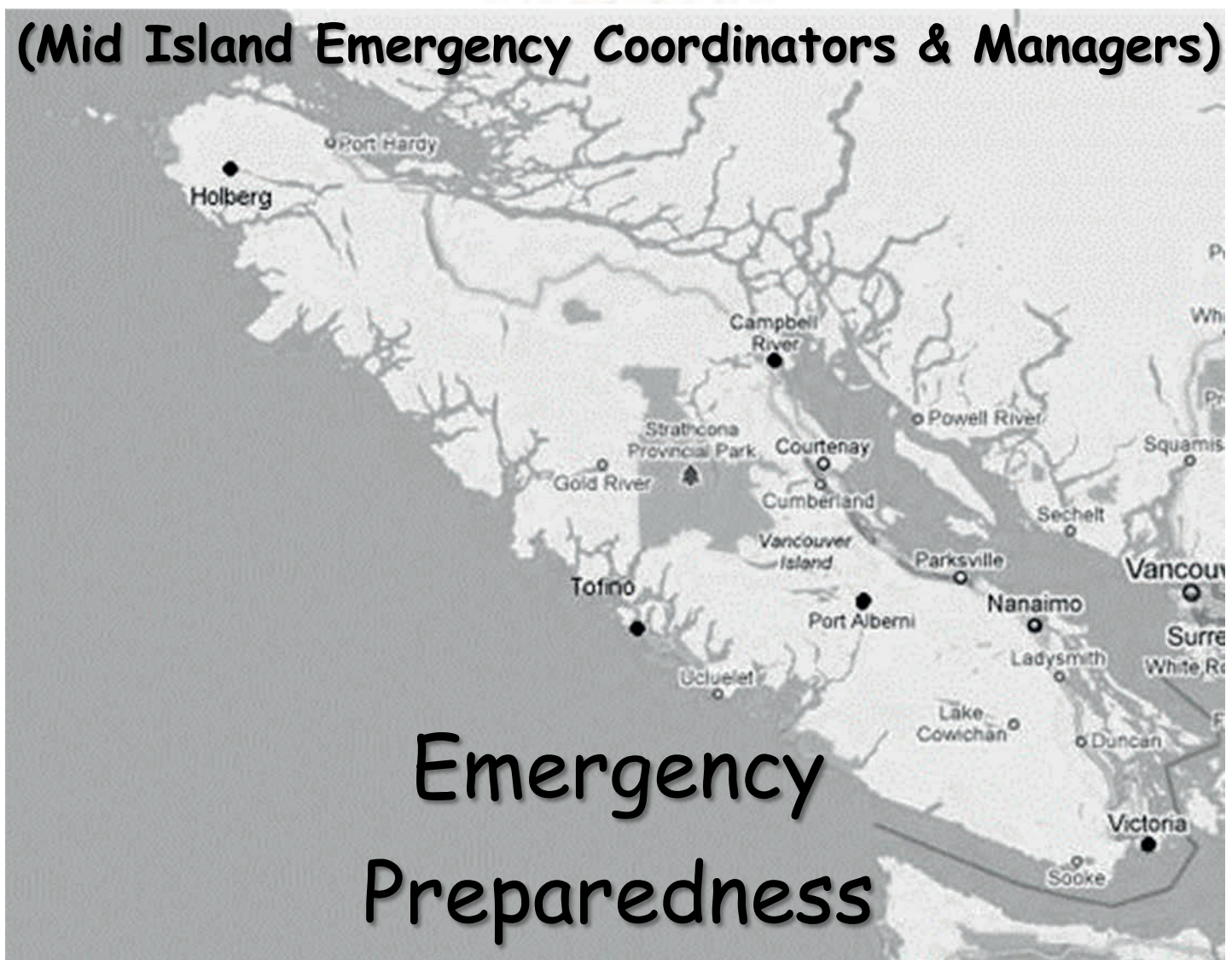
Potable water is water that is safe for humans and animals to drink without special precautions.

[illegible]

[illegible]



(Mid Island Emergency Coordinators & Managers)



Emergency Preparedness Workbook