



# Security, Safety & Emergency Preparedness Guide

Housing Provider Kit

## SECURITY, SAFETY AND EMERGENCY PREPAREDNESS GUIDE

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CHAPTER

# **EMERGENCY PREPAREDNESS**

Preparing for an emergency will help reduce its impact and strengthen the ability of residents and communities to recover. The information in this guide will help you develop emergency preparedness plans for your organization's key services and properties, including a Business Continuity Plan, Fire Safety Plan, and Pandemic Continuity Plan.

## **Business Continuity**

A business continuity plan provides a roadmap for continuing critical operations during a disaster or incident like a fire, flood, power outage, earthquake or pandemic. You can start planning by identifying which services, functions, processes or assets are essential to the operation of your organization, such as:

- > Shelter
- > Essential services
- > The security, safety, health and well-being of residents or clients
- > Vital information, systems or infrastructure
- > Revenues
- > Contractual, legal and regulatory commitments
- > Your reputation

Your plan should focus on minimizing the extent and impact of disruptions on these critical functions; specify the order of priority for continuing or restoring business functions through any interruption, and begin with the most critical functions.

Business continuity plans need to:

- > Be clear, concise, and tailored to your specific business recovery requirements.
- Be reviewed and updated annually, or more frequently if there is a significant change in your operations.

For more information on business continuity planning resources visit the:

- > Public Health Agency of Canada
- > Public Safety Canada

All websites referenced in this guide are listed as an Appendix at the end of the guide, with additional websites of interest.

## **Emergency Preparedness Programs in Your Community**

Various programs and support networks in B.C. assist communities in emergency situations. For information, contact your municipal or regional emergency management/emergency preparedness coordinator, or visit Emergency Management BC's website.

Emergency Social Services (ESS) teams provide essential services for large groups of people forced from their homes by disasters, such as fire or flooding. Typically, the fire department or police call the ESS personnel to work with evacuees. Teams of trained personnel register evacuees at designated reception centres, and help people with food, emergency lodging, clothing, and re-uniting families.

ESS usually provides emergency lodging and food services for up to 72 hours, through commercial facilities like hotels, restaurants, and local merchants. Specialized services such as emotional support, first aid, child minding, pet care and transportation are funded by Emergency Management BC, and delivered by community partners like the Canadian Red Cross, the Salvation Army, Victim Services, the ESS team, or local fire department.

Contact the Emergency Social Services coordinator in your area to find out the locations of designated ESS reception centres, in case you need to evacuate due to an emergency or disaster.

## Training

To be prepared in case of an emergency, your staff and/or directors are encouraged to take Personal Preparedness, Rapid Damage Assessment, First Aid/CPR and other safety related training.

BC Housing's Security and Emergency Services staff can provide or recommend safety related training, some at no cost to housing societies and co-ops. Call your Non-Profit Portfolio Manager (NPPM) for more information.

## **Emergency Supplies Cabinet**

Install an emergency supplies cabinet at each of your buildings in a secure public area or storeroom that's easily accessible. The cabinet should contain food, water, tools, flashlights, and hard hats. (See Appendix B for a complete list of what to include.) Keep the key in a break-glass box on the door so it's easy to find when needed.

Check the cabinet annually and replace any items with a limited shelf life.

## **Grab and Go Kits**

Encourage residents to prepare a "Grab and Go" Kit that contains essential items they may need, such as water, food and prescription medications, if they have to evacuate their home quickly due to an emergency. See Appendix B: Grab and Go Kits for a complete list of items to include.

## **Emergency Accommodation and Transportation**

Keep a list on hand of people or services to contact in an emergency, with the following information:

- > The local Emergency Social Services coordinator
- Hotels and motels that could be used in an emergency, with location, phone numbers, types and number of rooms, whether there are any accessibility issues, and whether the facility provides meals and accepts pets
- Taxi companies and local school bus and transit services, in case you have to move large groups of people

Following a disaster, encourage evacuees to seek accommodation with family or friends, and to take enough clothes and personal items/medication with them for the length of the expected evacuation. Make arrangements for family members to pick residents up whenever possible.

## **Disaster Financial Assistance**

Emergency Management BC administers the Disaster Financial Assistance program to help disaster victims cope with "uninsurable" repairs, providing:

- > Funds to replace or restore items essential to a home, livelihood or community service
- Alternative accommodation for three nights during an emergency, with longer-term support based on need

The program does not include loss or damage to items that could easily have been insured. If a disaster occurs, radio, TV and online announcements will advise where to register a claim, and an adjuster will review the program and damage with housing providers.

## **Disaster Restoration Services**

It is important to maintain a list of agencies and contractors that can make repairs and provide services following a disaster. In larger communities, restoration companies specialize in responding to emergencies and have the equipment and personnel to repair damage resulting from a disaster. In addition, the companies you normally use for repair work may also be able to assist with repairs from a disaster.

Following a disaster, call the utility company to check whether utility services are still being provided, and only use qualified trades people to check utilities.

## Talking to the Media

If the development is damaged by a fire, flood, earthquake, or other disaster, it's likely the local media will approach your organization for information on the extent of the damage, any injuries or fatalities, and the way you have responded to the situation.

The media can be referred to police and fire personnel for information on the nature and extent of the emergency and to find out about any deaths or injuries.

However, you may still be asked to comment on the organization's response and responsibilities

following the emergency situation. Appointing one or two members of the board as designated spokespeople will enable your organization to provide information that can be shared with the media, while protecting residents' privacy and confidentiality. Designated spokespeople need to be familiar with your disaster response plans; instruct other staff to refer media to these spokespeople.

If you are asked to expose personal information, explain that you must respect the residents' right to confidentiality.



Crime prevention can help create a stable, secure environment for occupants and protect their property. A variety of programs, resources and activities can help prevent crime and nuisance activity, reduce fear of crime, and improve the sense of safety and well-being within the community.

## **Secure Access**

Break-ins are usually a crime of opportunity. Basic precautions can create an unfavourable environment for a would-be burglar. This section lists a number of measures you can use to control and limit how people access your property and building.

When securing access points, ensure residents can easily and quickly exit the building in an emergency. Meet building codes and regulations when altering or installing additional locks on entrances and windows. To comply with fire regulations, you must be able to open all locks from the inside without a key.

## **Exterior Areas**

- Display address numbers prominently with reflective numbers that are easily visible from the street. This will ensure your property is easy for visitors to find, as well as emergency personnel responding to a call.
- > Post signage that advises people security measures are in place, and identify locations such as the security phone, panic alarm or intercom system.
- > Have buzzer numbers unrelated to suite numbers to protect the privacy of residents.
- > Maintain landscaping to give an impression of ownership, care, and security.
- Cut back trees and shrubs so lighting is not obstructed and blind spots and hiding places are eliminated, especially near footpaths, doors and windows. Ornamental walls and hedges should not exceed one metre in height.
- > Control access points to the rear of buildings; for example, with lockable gates.
- > Ensure the following areas are well lit: main site access, doorways, garages, car park areas, footpaths, garbage areas, secluded areas and locations intended for use at night.
- > Use motion sensor lighting in areas of risk and/or to discourage movement at night.
- > Install convex mirrors to allow people to see around corners.

## **Parking Areas**

- > Ensure as much of the parking area is as visible as possible. Wherever possible, surrounding walls or landscaping should not interrupt sight lines.
- Include well lit walls, posts, ceilings, and way-finding signage in underground parking, with lighting, paint, and white concrete stain. Additional security features like cameras may be necessary in the parking area.
- Ensure access to elevators, stairwells and pedestrian pathways is clearly visible and all doors are secured.

Refer to the Safer Parking Initiative website for tips on reducing crime in parking areas.

## Entrances

- > Ensure entrances, common areas, staircases and elevator lobbies are well lit.
- > Ensure doors are well lit, easily visible and not recessed behind sight line obstructions.
- Install full length, interlocking astragals<sup>1</sup> on exterior doors to prevent the prying of door jambs, a common break and enter tactic.
- > Use a dead bolt lock with at least a one-inch throw on exterior doors, along with a reinforced strike plate anchored in the wall with three to four-inch screws.
- Anchor external door hinges using three to four-inch screws, as the side of the door opposite the locks can also be vulnerable. Exterior mounted door hinges should have non-removable pins to prevent the door from being lifted out of the frame.
- > Ensure suite doors have a wide angle 180-degree door viewer.
- > Fit main entrances, landings and elevators in larger developments with a digital access control system, a door entry phone system, an electrical lock release, or a combination of these systems.
- > Use burglar alarm systems as an effective deterrent in locations where access is limited to particular people, such as offices and storage rooms.

## Windows

- Consider alternatives in place of security bars, such as laminated glass, security film, wired glass, alarmed spaces, and barriers to the glassed area, including landscaping, sharp/thorny plants, fences, bollards and planters. Security bars are commonly used on windows; however, they are not risk free. Bars can be a barrier to exiting the building during an emergency. The presence of security bars can also create a perception that the area is unsafe, and may actually encourage criminal activity. Consequently, carefully consider installing security bars and, if you proceed, ensure they meet building codes and regulations.
- > Ensure the area outside of the window is visible and open to natural surveillance.
- > Ensure sliding windows and sliding glass doors cannot be lifted out of the track and removed.
- > Use devices to detect persons outside the window, such as motion sensor lighting, river rock gravel, or an alarm that sounds upon opening.
- > Plant sharp or thorny plants to keep people away from outside window areas.

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<sup>1</sup> Astragals cover the gap where the door meets the jamb, reinforcing the door at its weakest point.

## Video Surveillance

Before considering the use of video surveillance as a security measure, first consider alternative strategies to improve the safety and security of residents and staff. Although Closed Circuit TV (CCTV) systems capture what is occurring or has already occurred, there may be other measures that are more effective than CCTV in resolving some issues. Also review the Office of the Information and Privacy Commissioner for BC's Guidelines for Video Surveillance.

Conducting a Security Threat and Risk Assessment can help you decide if a video system or specific camera placement is warranted, or whether other measures listed in this chapter will be more effective. (See BC Housing's guide on Crime Prevention Through Environmental Design which can identify effective alternatives.) In addition, CCTV coverage must be limited to uses that do not violate people's "reasonable expectation of privacy," as defined by law.

A Security Threat and Risk Assessment should review the following questions:

- > What are the potential risks for the area? What are the potential consequences of those risks?
- > What is the likelihood of the risk occurring? What other conventional means, if any, would be effective in achieving the same level of security?
- > Is there an inherent expectation of privacy in the area(s) proposed for video monitoring?
- > What usage is being proposed: temporary, permanent, covert, overt, employee monitored or resident viewed (these terms are defined in the Privacy Commissioner's guidelines for video surveillance)?
- Could specific incidents have been mitigated or prevented through the use of security camera technology?
- > What is the frequency of incidents and their impact on property and/or personal safety?

#### Camera placement and usage

Residents have a reasonable and legal expectation of privacy in, and immediately around, their homes. Therefore, the use of surveillance cameras must be confined to public/common areas, and appropriate signs must indicate that video surveillance is in use.

Cameras must not be directed to look through windows or doors of adjacent buildings, or through the windows or doors of private residences. Using security cameras to monitor people entering a private home/unit is generally not permitted, while using cameras around public entrances/exits, parking areas and storage areas is generally acceptable, including:

- Building perimeters, entrances, exits, lobbies, corridors, receiving areas/docks, storage areas, cash handling locations, elevators, laundry rooms, etc.
- > Areas at risk of robbery, burglary, arson, assault and theft, etc.

For information on BC Housing's requirements for installing video surveillance systems, please contact your NPPM.

## **Safe Practices**

Residents and visitors play an integral part in crime prevention. As a housing provider, you can help improve safety and security by communicating with residents about issues proactively and engaging them in generating solutions.

#### **Resident Engagement**

Meeting with residents periodically throughout the year can be a good way to promote safe activities such as:

- > Keeping all keys secure.
- > Discouraging residents from allowing people they don't know into the building.
- Ensuring all salespeople, solicitors, and utility workers coming onto the property display proper identification and credentials.
- Reminding residents to bring tools, ladders, bicycles, and toys inside at night or when they're are not home; burglars will often use items found in the yard as tools to gain entry to a home.
- > Using timers and light sensors inside the home when away in the evenings.
- Notifying a reliable neighbour when going on vacation, and having someone pick up their mail and newspapers while they're away.

#### **Block Watch**

Block Watch supports safer neighbourhoods, encouraging residents to take responsibility for safety by reducing opportunities for crime. Block Watch provides education on controlling access points, marking personal property, and reporting suspicious activity. For more information, contact your local police department or visit the Block Watch website.

#### **Graffiti Management**

Writing and drawing on surfaces without owner permission is illegal. You should always report new incidents of graffiti to the police. Effective measures for preventing graffiti include:

- > **Quick Removal**: Removal should be immediate and thorough. Graffiti attracts other graffiti, so quick removal is the most cost-effective way to reduce the chance of graffiti-growth. Studies have shown that removal within 24 to 48 hours results in a nearly zero rate of reoccurrence.
- > Textured Wall Surfaces and Coatings: Avoid flat or porous finishes in areas where graffiti is likely. Instead, textured surfaces can deter or limit the impact of graffiti. Consider using strong, wear resistant laminate, impervious glazed ceramics, treated masonry products, stainless steel materials, anti-graffiti paints, and clear over sprays to reduce opportunities for vandalism. While these applications won't stop graffiti, they make removal easier. Laminated surfaces can also be applied to service boxes (telephone, electricity and cablevision, etc.). Contact your local service provider regarding issues with graffiti on service boxes.
- Landscaping: Low dense shrubbery, preferably with thorns, placed around the base of walls can help deter graffiti.
- > Murals: Murals have proven to be an effective graffiti deterrent.

- > Lighting: Security lighting in dark areas can help prevent graffiti.
- Anti-Graffiti Policing Teams: Many police organizations have established specialized teams to combat graffiti in their area. These teams will photograph the graffiti and compare it to their database of offenders. If the offender is caught, s/he is often held them responsible for cleaning up the damage.

#### **Crime Free Multi-Housing Program**

This program is designed to help apartment owners, managers, residents, police and other agencies work together to keep illegal and nuisance activity off rental properties. The police present a one-day seminar, in partnership with the BC Crime Prevention Association. In addition, a representative from the police department can conduct a security evaluation of the property and make recommendations. You can engage residents in the program through a Safety Social with a demonstration from crime prevention officers on techniques to maintain a safe and secure home.

Visit the BC Crime Prevention Association's website for more information on the Crime Free Multi-Housing Program.

#### Crime Prevention through Environmental Design (CPTED)

CPTED is the proper design and effective use of the built environment to reduce fear and the incidence of crime and improve quality of life. It has proven to be an effective measure in preventing and, in some cases, eliminating criminal and nuisance behaviours at properties.

Some community police organizations offer free assistance in developing a CPTED analysis for a property. Assistance is also available through your Non-Profit Property Portfolio Manager or by visiting BC Housing's guidelines for CPTED.

#### Personal Safety When Showing Suites

When showing suites to prospective renters, it's important to ensure you and your staff are safe. These actions can enhance safety when showing suites to the public:

- > Make sure someone else knows you are showing a display or occupied suite.
- Try to have two staff or volunteers in the unit when more than one group of people is viewing the suite.
- > Try to have visitors book an appointment before viewing.
- > Keep a logbook in the office and have visitors sign-in.
- > Check identification and note the visitor's name and phone number before showing the unit.



## **Fire Safety Procedures**

Ensure fire safety procedures are in place in all buildings. Provide residents with the following fire safety information to help protect their homes and family, when they sign a tenancy or occupancy agreement:

- > Test and clean alarms periodically; never tamper with them.
- Call the Caretaker/Building Manager if the smoke alarm in the suite malfunctions or is too easily triggered. To help prevent setting off the alarm, keep the stove, oven, and toaster clean so they don't smoke, and vacuum the alarm periodically.
- Store flammable liquids such as paint thinner, solvents, or gasoline outside in a ventilated area, not in a basement or storage locker.
- > Clean lint from clothes dryers before and after each use.
- > Do not accumulate old newspapers, which become a fire hazard when stored.
- > Do not leave food cooking on stoves/ovens unattended.
- > Do not leave open flames (such as lit candles) unattended.
- > Do not overload electrical circuits.
- > Keep matches and lighters out of reach of children.
- > Be familiar with the building's fire safety plan and procedures.
- > Know the designated evacuation meeting place (assembly area).
- > Know at least two ways out of the building, in case one escape route is blocked by fire.
- > Draw a floor plan of the suite and plot at least two escape routes.
- > Leave the building right away if the fire alarm sounds. Follow the fire escape plan.
- > Call the fire department immediately if there is a fire anywhere in the building.
- > Leave firefighting to the local fire department. Use a fire extinguisher only if trained.
- > A sample Fire Safety Procedure template is available on BC Housing's website.

## **Fire Safety Plans**

#### A Fire Safety Plan has three primary objectives:

- > Outline measures/procedures to control fire hazards
- > Provide direction to staff on maintaining fire protection systems
- > Give occupants direction on emergency evacuation procedures

#### Many buildings are required to have a Fire Safety Plan, including buildings that:

- > Have a fire alarm system
- > Are four or more stories high
- > Have five or more suites sharing an exit
- > Have locks to keep residents indoors, such as care homes or institutions

As well, many municipalities require a completed Fire Safety Plan before issuing an occupancy permit for a new development.

You are required to designate supervisory staff to carry out fire safety duties, typically referred to as a Fire Safety Director and a Deputy Fire Safety Director, as part of the plan. Typically, the Fire Safety Director is a staff or Board member responsible for the development, but does not have to reside there. These fire safety directors are responsible for ensuring building staff get adequate fire prevention and evacuation training, and that fire safety and firefighting equipment are properly maintained. The Fire Safety Director or designate ensures the fire department is contacted and acts a resource person to fire department personnel during an emergency.

The plan must include:

- > Training of staff and other occupants in their fire safety responsibilities
- Documents, including diagrams, showing the type, location and operation of the building fire emergency systems
- > Plans for holding fire drills
- > Measures to control of fire hazards in the building
- > Inspection and maintenance of building facilities
- A description of the physical components of the building, including detection, extinguishing and exit systems
- Information on maintenance requirements, elevators, emergency power and lighting, electrical service, and garbage disposal at the development
- > Floor plans for each level of the building and a site plan of the full development

The Fire Safety Plan must also include the following emergency procedures:

- > Sounding the alarm
- > Notifying the fire department
- > Instructing occupants on procedures to follow when the fire alarm sounds
- > Evacuating occupants, including special provisions for persons requiring assistance
- > Confining, controlling and extinguishing the fire

In addition, the Fire Safety Plan should contain a list of any suite numbers with occupants who need assistance evacuating in the event of a fire and should be stored in a secure area only accessible to staff. The suite numbers must be available to the local fire department during an emergency.

Proper maintenance of fire systems and equipment is also essential. Your Fire Safety Plan must outline periodic requirements for inspections and tests to ensure the equipment, systems and exits are functioning properly.

A number of these checks can be carried out by the Fire Safety Director or designate. For example, the housing provider should check smoke alarms in individual units at least once a year, and whenever occupancy changes. Replace batteries in any battery-powered smoke alarms annually. Also replace any smoke alarms older than ten years; the date stamp on the back of the alarm indicates the manufacture date.

However, a professional fire protection company must conduct the annual inspection of your fire alarm system, extinguishers, hoses, back flow preventers, sprinklers, and heat and smoke detectors.

Fire safety equipment must function properly to pass an inspection. If any equipment doesn't work, it must be repaired or replaced immediately.

The local fire department will review and approve your Fire Safety Plan. A copy must be kept on site and available for the fire department. Review the plan annually, and immediately inform the local fire department of any changes. If you do not have a Fire Safety Plan and one is required, contact your NPPM, local fire department, or a Fire Protection Consultant for assistance developing one.

## **Fire Awareness and Training**

The Fire Safety Plan describes staff responsibilities, as well as steps residents should take to vacate the building when the fire alarm sounds, and what to do if a fire starts in their unit. To ensure people are familiar with the Fire Safety Plan:

- > Provide staff with fire safety training as soon as they begin working for you.
- Include a section on fire safety and evacuation procedures in a resident handbook and/or hand out fire safety brochures from your local fire department.
- > Invite residents to an annual meeting to explain these procedures and provide handouts. Involve your local fire department, and inform residents of other emergency preparedness information.
- Schedule a regular time to conduct a monthly fire alarm test, and conduct a fire drill and evacuation exercise annually. Everyone in the building should be aware of the drill time. Some buildings require you to go to a safe refuge area, instead of evacuating during a fire. Check with your local fire department to confirm the process for your buildings.
- Post notices in hallways and entrances informing people what to do and whom to call in the event of a fire. Clearly mark escape routes.
- Encourage residents to practice evacuating the building and assisting one another during an alarm. Some parents with young children, senior citizens, or people with disabilities may not be able to evacuate quickly. Advise people to offer assistance only if it will not endanger their own lives.

Ensure formal fire safety training is conducted for any staff members that work onsite regularly. Your Fire Safety Plan outlines the areas of responsibility for designated staff and procedures they need to be aware of for:

- > Inspecting and testing fire safety equipment and preventing fires
- > Sounding the alarm and notifying the fire department
- > Using the fire alarm and voice communication system, if applicable
- > Evacuating the building or going to a safe refuge area as appropriate
- > Assisting residents with disabilities

> Operating fire extinguishers and water standpipe hoses to fight minor fires

In addition, familiarize residents with the location and operation of safety equipment in their units, such as smoke alarms, breaker panels, fire extinguishers, and shut off switches for the water, gas, electricity and furnace. Ensure all shut off switches in units and common areas are labelled.

Your local fire department should be able to assist with some of this training.

## **Fire Safety Records**

The following records must be regularly maintained and kept on the premises for at least seven years:

- Records of all fires, drills and false alarms in the building, including the date, location, and a description of each incident
- > Monthly fire protection system tests and annual smoke alarm tests
- > Annual fire protection system inspections

## What To Do During a Fire

#### Activate the alarm

If someone discovers a fire at the development, the first step is to alert occupants by activating the nearest pull station.

#### Call the fire department

As soon as the alarm has been activated and you are in a safe location, phone the fire department. Be prepared to give the exact address and cross street, your name, and any additional information that is requested.

#### Evacuate the building

Ensure all residents know they must leave the building immediately if they hear the fire alarm. Residents should know at least two exit routes to use, in advance. These routes should already be posted and explained in previous fire drills and emergency evacuation procedures. Your staff should also be adequately trained in evacuation procedures.

Follow fire, police and ambulance personnel instructions. Do not use the elevators. Quickly move people away from the building to the designated evacuation meeting place (assembly areas). Emergency response personnel will notify you if it is safe to go back in the building.

#### Help people with disabilities

If the fire or smoke affects residents who are unable to go down the stairs on their own, staff or other occupants may need to help them move to a safer area of the building like a refuge area or outside. Remember never to put yourself in danger when assisting another person.

If you cannot evacuate residents with disabilities to a stairwell because of the fire and/or smoke, advise them to remain in their units with the doors and windows closed. Call the fire department and inform them that residents are trapped.

When fire department personnel arrive, give them a current list of residents who need assistance evacuating the building to help firefighters check on people unable to get out on their own. The list

should be stored with the Fire Safety Plan and should be updated as needed.

#### People caught in smoke

During fire drills, fire safety meetings, and training sessions, advise residents and staff to:

- Drop to their hands and knees and crawl if they are caught in smoke during a fire, because the air is freshest near the floor
- > Hold their breath as much as possible
- > Breathe slowly through the nose, using a blouse, shirt or jacket as a filter
- Stay in the unit and call the fire department if they are unable to evacuate, and make sure the doors and windows are closed
- > Place wet towels around the door to seal it
- > Attract the attention of the fire department by waving a towel at the window

CHAPTER 4 EARTHQUAKE SAFETY

## What Happens During an Earthquake?

Objects such as bookcases, ceiling tiles, filing cabinets and computers that are not anchored to the floor or walls will shake and rattle, and may fall, break, or shift. Windows may break creating shattered glass and strong drafts. The motion can be severe enough to topple people off their feet. Electricity, telephones, traffic lights, water and sewer systems may stop working in areas hit by a large earthquake. Often there's a lot of noise during a major earthquake. The shaking may last just seconds, but in strong earthquakes may continue for several minutes. Aftershocks may continue over the next few days, weeks or months.

## How Residents Can Prepare For an Earthquake

Earthquakes can occur in British Columbia, so people need to prepare ahead of time. Advise residents to check the information available from the Emergency Management BC, their local emergency coordinator, and the Shake Out BC website on how to prepare for an earthquake. Here are some measures residents can take:

- > Identify safe places at home. People are safest against an inside wall, under a strong table or desk.
- Be familiar with and avoid dangerous areas such as windows, mirrors, hanging pictures or plants, swinging doors, tall furniture, and overhead objects, such as light fixtures.
- Secure heavy pictures and mirrors, hanging plants and tall heavy furniture that could topple in an earthquake. Put latches on cabinet doors so they will stay closed during the shaking, and store heavy objects and breakables on lower shelves.
- > Practice earthquake drills, so adults and children learn to place themselves in safe spots.
- > Prepare a Grab and Go Kit (see Appendix B) containing essential items.
- > Learn first aid and CPR (Cardiovascular Pulmonary Resuscitation).

## How Staff Can Prepare For an Earthquake

- Learn how to perform a Rapid Damage Assessment of the building through your NPPM. You will have to conduct an assessment if an earthquake occurs. Consequently, all housing provider staff should have this training, which explains how to determine whether a building is unsafe following an earthquake.
- Know how/where to shut off gas, water, and electricity. (Gas should be turned off only if there is some indication of a leak; for example, you can smell gas or there is a hissing noise or rapid movement of the gas meter.)
- > Secure water heaters and other appliances that could shift and rupture gas or electricity lines.
- > Store flammable or hazardous liquids such as paint and cleaning products in an outdoor shed.

Advise residents that they can install latches on cupboards and secure water tanks, top heavy furniture, appliances or computers and other items from movement. Visit Shake Out BC's website for tips on securing furnishings and home structures.

## What To Do During an Earthquake

Instruct staff and residents to take the following steps:

- If indoors, stay there. Try not to panic. DROP, COVER and HOLD. Take cover under a desk or table and hang on. Alternatively crouch against an inside wall, or hallway. Hold this position.
- Stay away from windows, swinging doors, tall bookcases, filing cabinets, and other furniture that could fall over.
- Watch for falling objects and debris such as light fixtures, glass or tiles, and protect your head with a coat, handbag or book.
- > Do not use elevators.
- > If outside, get into an open area. Move away from trees, buildings, walls, and power lines.

If you are in an elevator, push all the floor buttons and get off at the first stop. If the elevator stops between floors, press the emergency button, and call for help on the intercom.

If you are in an underground parking garage, crouch against a pillar or solid wall, and cover your head with a jacket, bag or briefcase. Do not run. If you are in a car, stay in the car and get down on the floor. Do not try to drive away.

After the shaking stops, wait at least 60 seconds before moving, check for falling hazards, and then check yourself, your family and others for injuries.

## What to Do After an Earthquake

In the event of a major earthquake, it could be three to five days before professional disaster personnel are available. A building that is not damaged may still offer a preferred choice for shelter, even though it lacks some essential utilities such as water, sewer and electricity, given the increase in demand for emergency accommodation during a disaster.

Only use the telephone in an emergency. The phone system will be overloaded and emergency calls may not get through. Check phones with cords and replace receivers if they are off the hook.

#### **Preliminary Damage Assessment**

As soon as the earthquake is over, onsite staff will have to conduct a Rapid Damage Assessment to determine whether the building poses any significant hazards to people remaining or re-entering; evacuate buildings that are unsafe; and provide assistance to injured residents. At least two people, preferably more, are needed to conduct the damage assessment; you may call on residents physically able to assist, if necessary. In addition, some residents may be able to help people with injuries or an evacuation. Evacuate the building only if it is hazardous to remain.

Check for obvious damage and threats to the building's safety.

Examine the entire outside of the building and the ground and area around the building to make sure

nothing is unsafe. Then enter the building to perform a quick floor-by-floor survey and check the exit routes.

Contact your NPPM for information on BC Housing's Rapid Damage Assessment training, which teaches the skills required for identifying unsafe buildings following an earthquake, flood or windstorm.

#### Do not enter a building that is obviously unsafe!

Conduct additional damage assessments following all aftershocks. If the building is unsafe, post red UNSAFE placards so they are clearly visible outside of the entrances. Use yellow or red Do Not Cross tape to cordon off access to an unsafe building and locations, including areas within striking distance of falling hazards, or within the danger zone of other hazards, such as a chemical spill or ruptured gas tank.

If the elevator system is damaged, post "UNSAFE - DO NOT USE" signs on the doors, until an elevator engineer or safety inspector can check the system.

#### **Evacuation Procedures**

If staff members determine the building is unsafe during the preliminary or subsequent assessments, begin evacuating people immediately. It may be necessary to evacuate up to two or three days after the earthquake, if damage worsens during an aftershock.

In multi-storey buildings, stairways are the primary emergency exit routes, so you must inspect them before evacuating people. Determine which exit routes are the least hazardous, and decide where you want residents to assemble away from the building.

People may be distraught, dazed and in shock. Try to maintain a sense of calm and order during the evacuation to lessen anxiety. Some residents will probably be reluctant to leave their homes. Explain patiently and firmly what is happening to alleviate concerns and expedite the evacuation. Assure people they can post a message at the front entrance to notify relatives and friends where they will be staying. Follow these steps when evacuating the development:

- > Notify all residents that the building must be evacuated because it is unsafe. Ensure someone assists children, seniors, people with disabilities, and any other people needing help.
- > Direct people to exit the building by the least hazardous routes.
- > Direct residents to meet at the predetermined outdoor location.
- Post the correct safety notices at all entrances, elevators, unsafe stairwells and hazardous exterior areas.
- > Check the building to ensure all residents have been evacuated.
- > Secure the building to prevent further damage or looting.
- Listen to the radio to determine where reception centres are located; then send evacuated residents to designated reception centres in the area, or other available accommodation.



B.C. residents are actually more likely to encounter floods, fires and power failures than an earthquake. Each year, thousands of people throughout the province deal with flooding and extensive power outages. Residents may also face other emergencies like tsunamis, wind storms, forest fires and hazardous material spills. For more information on how to prepare for these hazards, contact Emergency Management BC or your local emergency coordinator.

## **Floods**

If your development is located in an area that's prone to flooding, plan an evacuation route in advance and make provisions for evacuating people with disabilities. Advise residents to keep sufficient gas in their vehicles to drive to a safe location, and store a supply of food and water in watertight containers. See Appendix B: Grab and Go Kits.

If a flood warning is issued for your area due to heavy rains, dam failure, or an ice jam that causes a sudden release of water, you may have little warning for an evacuation. In this case:

- > Be prepared to evacuate the lower floors of the building immediately
- > Turn off the gas, electricity, and water before leaving
- > Follow instructions from local authorities
- > Climb to higher ground
- > Listen to the local radio station for flood bulletins; these updates will tell you when it's safe to return
- > Avoid flooded areas
- > Do not try to drive through water if you don't know how deep it is
- > Do not walk through water higher than knee level, or try to cross flooded bridges

Have residents advise families or friends of your plans, and contact them again when you reach a safe location. Your local Emergency Social Services team can help with emergency lodging, food, clothing and counselling.

When flooding is caused by a burst pipe, there is often sufficient time to move belongings to a higher level. Shut off the water to the building or to the flooded unit, and assess whether any part of the building needs to be evacuated until repairs are completed.

After a flood, do not enter the basement if the water is high enough to reach electrical equipment or motors, which can give off a fatal current when immersed. Call the electrical authority and wait until the power is shut off.

Once the water level subsides, have the local electrical and gas authorities check these services, if they have been in contact with water. Your local health authority will inform you if the water is contaminated and whether people need to drink bottled or boiled water.

Find out if residents have contents insurance, and have their adjusters review the property damage. If the flood was major, have your insurance adjuster assess the damage and start repairs as soon as possible.

BC Housing may be able to provide funding for emergency repairs. Contact your NPPM immediately. In serious flood conditions where your insurance will not cover the costs, compensation may be available through Disaster Financial Assistance, administered by Emergency Management BC. Look for assistance information in your local newspaper, on the radio, or online.

## **Power Failures**

Some buildings may have built in emergency generators to provide power for public areas and elevators during a power failure, while other buildings may have emergency lighting only or no backup at all.

To prepare for a power failure, store emergency lighting like wind-up flashlights, bulbs, light sticks, lanterns, candles and matches in a handy location. Keep candles in a metal container away from combustible materials. Avoid food spoilage by not opening the fridge or freezer door unnecessarily. To stay informed during an outage, use a portable radio to listen to your local radio station for updates on the weather and power supply. And use the supplies in your emergency supplies cabinet during a power failure, if needed.

If the power goes out during the day, the drapes and blinds can be opened or closed to control light and heat into the suite. Movement between floors should be limited, and always take emergency lighting supplies with you. Protect electronic equipment such as computers, televisions, and stereos from power surges by shutting off power bars or unplugging the equipment.

## **Pandemics**

A pandemic is a worldwide outbreak of a specific disease that affects a large proportion of the population, such as influenza. A pandemic may affect a significant number of employees simultaneously, removing them from the workforce. Those who become ill may be incapacitated for days or weeks. Other employees will choose to stay home to care for sick family members, or may have difficulty with childcare due to school and daycare closures. As a result, your organization's essential services could be placed at significant risk.

To manage the risk, a Pandemic Continuity Plan:

- > Identifies the impact of a pandemic on critical business functions
- Describes how your organization will continue the provision of essential services and functions during a pandemic emergency
- > Considers the specific situation of individual employees

Develop a plan for each staff or board member who performs a critical business function, by considering the following questions:

- > Does the employee have school aged children and/or responsibility for elderly parents?
- Can the critical business function be performed from home, or can the employee be based from home rather than the office?
- If the employee must perform their duties in the office, do they take transit to work? (There may be transit interruptions and taking transit will expose the employee to more people.)

In addition, identify the need for alternate practices in the plan, such as:

- > Allowing more flexibility for staff to cope with health, family and other pandemic related challenges.
- > Asking staff to discontinue sharing items such as cutlery, plates, cups, magazines, etc.
- > Encouraging staff to bring their own lunch, stagger lunch hours, or eat at their desk away from others.
- > Minimizing or avoiding face-to-face meetings, and avoiding shaking hands or hugging.
- Encouraging staff to avoid recreational or other leisure classes/meetings, etc., where they might come into contact with infectious people.
- > Encouraging people to use online services or the telephone to conduct their business where possible.
- Monitoring the health status of employees. The supervisor should send any employees exhibiting signs of illness home and arrange for the work area to be disinfected.
- > Where possible, reducing exposure between staff and the public.

Visit BC Housing's website for a Pandemic Continuity Plan template you can use to create your own, or contact your NPPM for more details.

## **Tsunamis**

A tsunami occurs when a disturbance like an earthquake occurs in the ocean sending waves towards the coastline at high speed, sometimes with devastating effect. An inland version of a tsunami (called a seiche) can also occur on lakes, and is typically caused by landslides or rock fall. Although tsunamis are infrequent, the threat is real because the Pacific coast is located in an earthquake zone, and B.C. has many lakes that could experience a landslide or rock fall. If your development is in an exposed coastal area, you will need to prepare for a potential emergency.

#### How Residents Can Prepare for a Tsunami

Residents need to:

- > Assemble emergency supplies for home, car and work (See Appendix B: Grab and Go Kits)
- Know the community's emergency and evacuation plans
- Know the location of the gas shut off, electricity panel and water valves
- Know ahead of time where the safest spots are at home, school and work, and how to get to higher ground
- > Decide in advance on a family meeting place, in case family members get separated
- > Identify an out-of-area contact person to phone

## What to Do in the Event of a Tsunami

In B.C., Tsunami Advisory Bulletins are issued to alert people of pending or imminent threats. Move to higher ground until the all-clear bulletin is given. If you live in a coastal area and feel strong shaking from an earthquake, immediately move inland and to higher ground. Do not wait for an official warning.

#### If you receive notice of a Tsunami Watch, this means:

- > At the time the watch is issued, the tsunami is not anticipated to reach the coast of B.C. within three hours, so you have time to prepare to leave for higher ground
- Move valuable furniture to upper floors, and take important papers and valuables along with your emergency supplies kit
- > Relocate pesticides and other dangerous goods from low-lying areas

#### If you receive a Tsunami Warning or an evacuation order to leave, this means:

- > A tsunami may, or will, travel to the coast of B.C. within three hours
- > Move immediately to safe ground inland, above the height of the tsunami risk

#### If time permits:

- > Turn off the gas, electricity and water
- Lock doors
- Grab your emergency supply kit (including water, toiletries, medicines, extra clothing, first aid kit and food for you, your dependents and pets)
- Take a wind-up radio with you and stay tuned to emergency broadcasts
- > Do not use the telephone for 24 hours except to report life threatening emergencies

## **Forest Fires**

Forest fires are a regular occurrence throughout the province during warm, dry months. Occasionally homes and communities are threatened by fires, and are evacuated to protect residents. If an evacuation is necessary, you will usually be given enough warning to allow residents to gather important papers, belongings and pets.

Securely lock the building before evacuating. Follow the authorities' instructions, and keep listening to your radio for updated bulletins on the fire. You will be advised when it's safe to return home.

To reduce the risk to buildings and occupants, implement the B.C. "Fire Smart" initiatives, which include keeping trees and shrubs trimmed away from buildings, and not storing combustible or flammable materials too near to buildings. Water extremely dry areas around the building regularly, and do not allow open fires, including barbecues, during prolonged dry periods. Inform residents to properly extinguish and dispose of cigarettes and matches.

# APPENDIX

## A. Online Links

## **BC Building and Fire Codes**

## **BC Crime Prevention Association**

> Crime Free Multi-Housing Program

## **BC Housing**

- > Additional Housing Provider Kit Guides
  - Administration Guide
  - Financial Management Guide
  - Program Guide
  - Rent Calculation Guide
  - Resident Management Guide
  - Security, Safety & Emergency Preparedness Guide
  - Maintenance Guide
- Rapid Damage Assessment
- > Crime Prevention Through Environmental Design (CPTED) Guidelines
- > Pandemic Continuity Plan Template

## Sample Fire Safety Procedure Template

#### **BC Hydro**

Electrical Safety Tips

## **BC Wildfire Management Branch**

- Homeowner's Fire Smart Manual (PDF)
- > Fire Smart Manual Prepare for Wildfires

## **Block Watch**

## Canada Mortgage and Housing Corporation

## **Emergency Social Services**

## First Aid and CPR

> St. John Ambulance's First Aid for Emergency Poster (PDF)

## **Fortis BC**

- > Shakedown Earthquake preparedness tips for family and home (PDF)
- Natural Gas Safety Tips

## **Office of the Fire Commissioner**

## Office of the Information and Privacy Commissioner for BC

Guidelines for Video Surveillance (PDF)

## **Emergency Management BC**

- > Disaster Financial Assistance program
- > Earthquake and Tsunami Smart Manual (PDF)
- > Earthquake Preparedness Information
- > Flood Preparedness and Prevention

## Public Health Agency of Canada

> Business Continuity Planning Resources and Checklists

## **Public Safety Canada**

- > Business Continuity Planning Guide
- > Get Prepared for at Least 72 Hours

## **Safer Parking Initiatives**

## Shake Out BC

> Tips for Securing Furnishings and Home Structure (PDF)

## **B.** Forms

## 1. Earthquake Cabinet

For larger buildings (75 or more occupants), we recommend you obtain a sturdy, 14-guage steel cabinet that is about 48" x 42" x 23". Ensure the cabinet has a secure key-locking device and the key is readily available.

Food and Water Supplies		
Quantity	Description	Uses
60	Food bar packs, minimum of five-year shelf life	High-calorie food supply
720	Single-serving water packets, minimum five-year shelf life	Clean drinking water

Search and Rescue Supplies		
Quantity	Description	Uses
30	Light sticks, yellow, 12-hour endurance	Emergency lighting
4	Hard hats with chin straps	Protection from falling material in earthquake
4	High visibility vests	Reflectors while wearing or placing items in strategic positions
2	Flashlights (wind-up)	Convenient portable lights
4	Safety goggles or glasses	Eye protection in hazardous conditions
4	Whistles	Signalling for help/identifying location
20	Dust masks	Protects mouth and nose from dust/ helps in smoke conditions
4 pairs	Leather work gloves	Protect hands when handling debris
2 rolls	"Caution Do Not Enter" tape - yellow	Advises of danger areas and defines areas to avoid
20 pairs	Latex gloves - medium/large	Protect hands from infection

Tool Kit - Large enough to hold the following:		
Quantity	Description	Uses
1	20 oz claw hammer, steel shaft and claws	Pulling nails/building temporary shelters
1	4 lb sledge hammer, double-faced, 16'' handle	Knocking down unsafe sheds/breaking unsafe concrete
1	10" crescent wrench	Adjustable tool for loosening bolts
1	8" crescent wrench	Adjustable tool for loosening bolts
2	Pipe wrenches (14")	For use when smaller crescent wrenches are ineffective
1	Water pump pliers	Useful for misshapen or awkward bolts or flanges
1	Unidriver screwdriver (12 insertable bits)	Portable, convenient set of screwdrivers in one tool
1	Hatchet axe	Cutting firewood/trimming tent pegs/ replacement hammer
1	Utility knife, retractable	Emergency can opener/multiple uses
2	Wrecking bars (24")	Heavy duty lifting and prying
2 rolls	Duct tape	Heavy duty taping and securing objects

First Aid Kit		
Quantity	Description	Uses
1	First aid booklet	Basic instructions for administering first aid
4	* Large disposable blankets	Wrapping injured and bleeding people
100	Antiseptic disposable towelettes (benzalkonium chloride)	Cleaning wounds and other body parts
100	Hand-cleansing towelettes	Cleaning hands before dealing with injuries or eating
100	Fabric strips (2cm x 7.5cm)	Wrapping injured areas/securing bandages
1 pair	Universal scissors (heavy duty)	Cutting material not appropriate for smaller scissors
1 pair	Bandage scissors, stainless steel (14cm)	Cutting bandage material
12	Triangular bandages, cotton	Useful as slings, large bandage wraps

12	Pressure dressings, sterile (10cm x 16.5cm)	Stop bleeding
6	Crepe roller bandages (7.5 x 4.5cm)	Self-adhesive wrap
12	ABD dressings, sterile	For cuts and other wounds
8	* Emergency foil blankets	Protect against cold/easily portable
2	* Flashlights (wind-up), with extra bulbs	Portable emergency light
2 rolls	Adhesive tape (5cm x 4.5cm)	Securing dressings and bandages
2 rolls	Adhesive tape (2.5cm x 4.5cm)	Securing dressings and bandages
4	Pens and pencils (2 of each)	Writing instructions or messages
1	Savlon soap (500ml)	Anti-bacterial soap
10	Patient Assessment Forms from WorkSafeBC	Assist medical and emergency personnel
4	Gauze dressings, sterile (4-ply, 43cm x 43cm)	For dressing wounds
50	Gauze pads, sterile (10cm x 10cm)	For dressing wounds
100	Gauze sponges, non-sterile (10cm x 10cm)	For cleaning wounds
1 pair	Sliver forceps, stainless (11.5cm)	Removing slivers
50 pairs	Latex gloves, large and medium	Avoid infection when treating injuries
1	* Survival booklet	Basic information on survival techniques
6 rolls	* Toilet tissue	Explanation unnecessary
1	* Portable AM/FM radio (wind-up)	Receiving important information about disaster situations

**NOTE** - If you decide to purchase a WorkSafeBC Level 1 Occupational First Aid Kit, the items preceded by a \* are not included. Please make sure that your First Aid Kit contains all of the above items.

Other Supplies		
Quantity	Description	Uses
1 roll	Polyethylene sheathing	Shelter/protection from roof leaks
250	Heavy-duty garbage bags	Storing garbage/emergency raincoats/ emergency toilet
1	Extra large tarp	Shelter/makeshift tent/ground cover
1	Polyethylene rope, at least ¼" x 100'	Multiple uses

## 2. Grab and Go Kit

Encourage residents to have a Grab and Go Kit that contains personal and other items they may need, if they have to evacuate their home quickly due to an emergency. The best recommendation is to maintain a five to seven day supply, or, at a minimum, a three day supply. The kit should include:

- Water two litres of water per person per day (small bottles that can be carried easily in case of an evacuation order)
- Food that won't spoil, such as canned food, energy bars and dried foods (replace the food and water as needed)
- Important documents originals or photocopies of government identification, insurance, passports, etc.
- Special needs items prescription medications, eyeglasses, infant formula, equipment for people with disabilities, eye glasses, etc.
- Emergency contact phone numbers include a family member or friend who lives outside of your area code, preferably out of province
- > First aid kit
- > Manual can opener if canned food has been included
- > Wind-up radio and flashlight
- > **Personal toiletries** soap, toothbrush, toothpaste, deodorant, feminine hygiene, etc.
- > Spare batteries if a battery operated radio or flashlight has been included
- > Extra keys for your car and house
- Cash include smaller bills, such as \$10 bills (traveller's cheques are also useful) and change for payphones
- Pet items households with pets should include pet food, leash, copies of vaccinations, medication, pet photo, and list of tattoo or markings