

British Columbia is located in a seismically active region where a few thousand earthquakes occur each year. Although only a small number of these earthquakes are large enough to cause damage, the threat of a major earthquake in the province is real. On October 20, 2011 at 10:20 am – a locally-driven, province wide “Drop, Cover, and Hold On” drill will take place called the Great British Columbia ShakeOut. All residents, agencies, businesses, and organizations across British Columbia are encouraged to take part in the largest earthquake drill in Canadian history!

In particular, groups of all sizes can use the drill to get involved and prepare for a big earthquake. Furthermore, each individual’s level of personal and family preparedness is key to their availability to respond and recover after a disaster. Thank you for being a part in making British Columbia safer and better prepared.

All organizations/agencies are requested to register at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).

The instructions on the following pages can be used or adapted for earthquake drills *anywhere* and *anytime*. It can assist those wishing to coordinate a drill for their respective agency, business, organization and/or group. The following pages provide four options for drill designs ranging from very simple (Level 1) to advanced (Level 4), each with steps to be taken before, during, and after the drill. Going forward, you can customize and build a drill that suits your specific needs.



**Level 1 – Simple: Drop, Cover, and Hold On Drill** .....Page 2

This drill uses simple steps to inform individuals how to perform *Drop, Cover, and Hold On* – a quake-safe action designed to protect people from falling furniture and flying objects that can become projectiles during ground shaking.

**Level 2 – Basic: Life Safety Drill** .....Page 3

This life safety drill is designed to engage people to think through their own emergency response actions during the drill, then afterwards to review and discuss what worked or what did not, in order to make improvements for the next drill or actual earthquake.

**Level 3 – Intermediate: Decision-Making Table Top Drill** .....Page 5

This decision-making drill is designed to have leaders think through more complex issues related to operations in the immediate aftermath of this earthquake, then afterwards to review and discuss what worked or what did not, in order to make changes for the next drill or actual earthquake.

**Level 4 – Advanced: Operations Simulation Drill** .....Page 8

This operations drill focuses on crisis team personnel who are trained and have emergency response and/or recovery duties in their disaster plan. The drill incorporates simulated incidents, decision-making, response, life safety aspects, and then a review afterwards to discuss what worked or what did not in order to make changes for the next earthquake or drill.



### **Level 1 – Simple: Drop, Cover, and Hold On Drill**

This drill uses simple steps to inform individuals how to perform *Drop, Cover, and Hold On* – a quake-safe action designed to protect people from falling furniture and flying objects that can become projectiles during ground shaking.

#### **BEFORE the Drill**

1. Register as an official participant at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
2. Inform your team:
  - The date and time of your drill.
  - How to correctly perform *Drop, Cover, and Hold On*, wherever they are.
  - Your expectations for their participation (i.e. *Drop/Cover/Hold On*, gather at a central location for a head count, post-drill discussions).
  - Encourage everyone to invite friends, families, and neighbors to register as individuals, businesses, agencies or organizations at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca), so they participate too and receive information directly on how to be safe during an earthquake.
3. (Optional) Download realistic sound effects and safety information to play during your drill by downloading recordings from <http://www.ShakeOutBC.ca>

#### **DURING the Drill**

1. Announce that the earthquake drill has begun or begin playing downloaded recording from <http://www.ShakeOutBC.ca/soundeffects> and direct participants to *Drop, Cover, and Hold On*.
  - Count seconds out loud for the duration of the quake. This will help keep people focused and calm and will help you identify how long the earthquake lasts. The longer it lasts, the more cautious everyone will need to be.
  - When the shaking stops (or when the all clear sounds) count to 60 to give things a chance to settle. Suggest that while under a sturdy desk or table they look around at what might fall on them in a real earthquake. These should be secured or moved after the drill.
2. After at least one minute or once the sound effects recording has ended, announce that the shaking is over and that everyone can stand up again. Thank them for participating.
3. Encourage everyone to discuss their experiences with one another.

#### **AFTER the Drill**

1. Ask for feedback on how the drill went.
2. Schedule the next drill for one year later (or sooner).
3. Share photos and stories at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
4. Encourage all to prepare at home using BC's "[\*Individual and Neighbourhood All Hazards Emergency Preparedness Workbook\*](#)."



## **Level 2 – Basic: Life Safety Drill**

This drill focuses on immediate life safety and engages participants to think through their emergency response actions during an earthquake. *It can be used whether or not your agency, organization, group, or business has developed a disaster plan*

### **BEFORE the Drill**

1. Register as an official participant at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
2. If your facility serves the general public, determine how or whether you will involve them in the drill.
3. Follow the instructions for the Level 1 - Before the Drill Instructions.
4. Steps or Questions to consider:
  - How will you direct participants during and immediately following the shaking?
    - Safety must be the first priority, so carefully assess the environment inside and outside of your facility before deciding. Consider factors (your location, building type, damage impacts) that will influence your decisions after the earthquake (i.e. evacuating vs. staying put).
5. Create a brief written description of the earthquake's potential impacts, along with questions for participants to ponder during the drill. For ideas, review the earthquake information at <http://www.getprepared.gc.ca/knw/ris/eq-eng.aspx>.
  - Tape the description under desks/conference tables, or provide sealed envelopes to be opened during the drill. Email is last option, as info is more effective when read during drill.
  - To increase participation, also include a surprise under the desk (candy, light stick, etc.).
6. (Optional) Download realistic sound effects and safety information to play during your drill by downloading recordings from <http://www.ShakeOutBC.ca/soundeffects>
7. Distribute ShakeOut posters/flyers to encourage everyone to participate.
8. Determine the addition of post-shaking evacuation procedures to the drill, if needed:
  - Post-Shaking: Based on the age and type of your building, and the environment inside/outside the building, etc., determine whether your facility would evacuate after a real earthquake, or whether you would first *assess the building's damage* before directing participants to either stay put or evacuate. Consider new safety hazards such as damaged power lines outside of your facility caused by the shaking.
  - Post-Earthquake Tsunami Threat: If your facility is in a coastal area, consider whether or not you will need to have plans to evacuate to higher ground.

### **DURING the Drill**

1. Follow the instructions for the Level 1 - During the Drill Instructions.
2. Automatically evacuating after an earthquake may not be a safe action. If your drill includes additional steps or activities such as evacuation to another location, initiate this part of your drill but consider new hazards from fallen or broken objects.
3. Encourage participants to discuss their experiences and observations with one another.

### **AFTER the Drill**

1. Hold meetings as soon as possible after the drill. Ask for feedback on how the drill went, how it could be improved, and how your facility can be better prepared.

Discuss preparedness at work and home.

- Discuss disaster responsibilities and priorities for your agency, group, business or organization



## The Great British Columbia ShakeOut Participant Guide



to begin operating again..

- Share the unfortunate reality that after a major earthquake, it may take considerable time before local emergency resources will be available to assist with life safety issues.
- 2. Schedule your next drill one year from now (or sooner) so participants can practice life safety procedures.
- 3. Share your stories and photos at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
- 4. Encourage participants to prepare at home using BC's "[\*Individual and Neighbourhood All Hazards Emergency Preparedness Workbook\*](#)".



## **Level 3 – Intermediate: Decision-Making Drill**

This drill includes all aspects of the Level 2 drill in terms of participation in a *Drop, Cover, Hold On* drill, and adds a “table top” exercise for decision-makers to consider how the earthquake would impact your organization, agency, business or group.

### **BEFORE the Drill**

1. Register as an official participant at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
2. Bring together a team of individuals to design the drill.
  - Determine or review your emergency procedures for an earthquake.
3. Determine the length of your drill and its objectives.
  - If you have a disaster plan, the objectives and resulting drill can test a specific part of your plan.
  - What would you like your drill to test?
4. Learn about potential earthquakes for your area and use your team to develop your own “disaster scenario” with specific details of how you might expect the shaking to impact your organization. For ideas, review the earthquake information at <http://www.getprepared.gc.ca/knw/ris/eq-eng.aspx>. Consider the following:
  - Would the power be out? Phone communications down?
  - How will you direct participants during and immediately following the shaking?
    - Consider that certain factors (your location, building type, damage impacts) will influence your decisions regarding what to do immediately after the earthquake (i.e., evacuating vs. staying put) and in the longer term).
    - Identify who is authorized to make and communicate post-earthquake decisions.
  - Make sure the impacts you determine for your “disaster scenario” support your drill objectives.  
Note: Do not “wipe-out” the whole community and eliminate your reason to drill.
5. Write up the final version of your “disaster scenario.”
6. Invite key decision-makers to participate in your drill. If you already have a plan, have them review it prior to the drill.
7. Follow the Level 2 - Before the Drill Instructions.

### **DURING the Drill**

1. Invite your decision-makers to assemble in a pre-determined room a few minutes before your drill and share your drill objectives. When the drill is announced, tell all participants in this group to also *Drop, Cover, and Hold On*.
2. Follow the instructions for the Level 1 - During the Drill Instructions.
3. In the room with the decision-makers:
  - Read your “disaster scenario” with details of the earthquake impacts.
  - To make the potential impact more vivid, you can show the downloadable audio/video of expected shaking. This can be found at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
4. As soon as the shaking scenario is completed go around the table to discuss what you can expect to happen and decisions that will be made based on the scenario.
  - Discuss things according to chronological order of the expected activities and priorities in the first minutes, hours, days, etc. following the details of the “disaster scenario”.

- If all issues are solved within a particular timeframe, move the scenario timeline forward to day/week/month later and begin the discussion again to address new issues.

5. Document the chronology of the drill events, decisions, issues, and proposed solutions. Which policy decisions need to be made in advance? What changes in practice are required?

### **AFTER the Drill**

1. Hold meetings as soon as possible after the drill to discuss what happened, people's experiences during the drill, what they were thinking about, what caused concern, what worked well and what did not work well. Take this opportunity to:
  - Review post-disaster responsibilities.
  - Update emergency contact lists and go over phone tree procedures.
  - Discuss your safety priorities.
  - Discuss emergency responsibilities.
  - Share lessons learned from the drill or real experiences.
  - Listen attentively to suggestions.
2. For the decision-makers in the room, verify whether you met your drill objectives or not. Discuss what happened regarding people's experience, areas of concern, and what worked well or did not, and then document all comments to officially end the drill.
3. Determine your next steps and assign people to those tasks to follow-up.
  - Assign a team to begin developing or enhancing your disaster plan based on experiences from this drill.
  - Discuss the importance or preparedness at work and at home encouraging participation.
4. Share your stories and photos at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
5. Encourage participants to prepare at home using BC's "[\*Individual and Neighbourhood All Hazards Emergency Preparedness Workbook\*](#)".

## **Level 4 – Advanced: Business Operations Drill**

This drill includes all aspects of the Level 2 drill in terms of participation in a *Drop, Cover, and Hold On* drill, and is an exercise for crisis team personnel. Whereas Level 3 is a “tabletop” exercise for decision-makers to imagine potential consequences and solutions, this level involves simulated incidents that test your organization’s ability to respond and recover.

### **BEFORE the Drill**

1. Register an official participant at [www.ShakeOutBC.ca](http://www.ShakeOutBC.ca).
2. Bring together a team of individuals to design the drill.
3. Determine the length, scope and objectives of your drill.
  - For example, test a specific part of your organization’s emergency plan for an hour.
  - If your facility serves the general public, determine whether you will involve them in the drill, treating this similar to a fire alarm during hours of public operation. You can also hold your drill before or after public hours, however, this limits opportunity to practice quake-safe actions.
4. Learn about potential earthquakes from your area and use your team to develop a tailored “disaster scenario” with specific details of how the shaking might impact your organization. For ideas, review the earthquake information at <http://www.getprepared.qc.ca/knw/ris/eq-eng.aspx>.
  - Would the power be out? Are roads open or closed? Is the phone system down? Cell phones? What structural damage has occurred to your building? What non-structural damage has occurred inside to your computers, equipment, machinery, furniture, lights, filing, inventory, windows, systems?
  - How will you direct people during and immediately following the shaking?
    - Consider that certain factors (your location, building type, damage impacts) will influence your decisions regarding what to do after the earthquake (i.e., evacuating vs. staying put). Safety must be the first priority, so carefully assess the environment inside and outside of your facility before deciding.
    - Make sure your plan identifies the personnel authorized to determine and communicate post-earthquake decisions.
  - Make sure the impacts you determine for your “disaster scenario” make it possible to support your drill objectives.
    - Note: Do not “wipe-out” the whole community and eliminate your reason to drill.
5. Invite your key decision-makers and leaders (Crisis Management Team) to your drill. Have them review your plan prior to the drill.
6. Select a facilitator to run the drill. Determine other role requirements such as assigning personnel as evaluators to document all drill activities in chronological order.
7. Write up a final version of your “disaster scenario.”
8. Conducting training for all drill participants (and their would-be back-ups) who are assigned emergency positions so they are fully aware of their roles and responsibilities. All participants, back-ups, evaluators and decision-makers should review the disaster plan.
  - Create a timeline for your drill.
9. Separately from the timeline, create a list of “injected events”. “Injects” are surprise events that could reasonably occur during the drill (e.g., aftershocks, specific problems related to your organization, etc.). These events can be “injected” (or provided to the participants in the form of a note, a person acting out a role in the drill, etc.) periodically during the drill to get participants



thinking of issues and solutions without overwhelming them.

10. (Optional) Download realistic sound effects and safety information to play during the drill by downloading recordings from [www.ShakeOutBC.ca/resources](http://www.ShakeOutBC.ca/resources).
11. Follow the Level 2 – Before the Drill Instructions.

## **DURING the Drill**

1. Follow the instructions for the Level 1 - During the Drill Instructions.
2. Announce the beginning of the Operations Drill and for participants to follow their emergency response procedures.
3. Provide the timeline of events to all participants with instructions to undertake their emergency roles. However, do not let them skip ahead of time.
4. As the drill progresses distribute individual “inject events” to specific participants. Have drill evaluators observe and document how these surprise issues are handled.
5. When the drill duration time is met, announce that the Operations Drill is over.

## **AFTER the Drill**

1. Assemble the facilitator and evaluators with their documentation to summarize activities, actions, decisions, and solutions from the drill.
  - Discuss whether you met your drill objectives or why not.
  - Document lessons learned, best practices and necessary actions to improve your Plan.
2. Hold meetings as soon as possible after the drill so all participants can discuss and document what happened during the exercise. Take this opportunity to:
  - Discuss preparedness at work and at home.
3. Next, assemble Operations Drill participants including your decision-makers and leaders.
  - Depending on the size of your organization, may need to have emergency or departmental teams meet separately, followed by a leadership meeting with reps from each team.
  - Discuss and document what happened during the exercise, what decisions were made, what worked, what didn't, etc.
  - Listen attentively to suggestions.
  - Encourage the sharing of lessons learned from the drill or real experiences.
  - Review pre and post-disaster responsibilities.
  - Discuss need to update emergency contact lists and any other critical documents in plan.
  - Discuss any changes to your safety priorities.
  - Discuss possible changes to emergency responsibilities.
  - Cover the importance of preparedness at work and at home, encouraging participation.
  - Document and accept all comments then thank all the participants to officially end the drill.