

Be Prepared for Every Emergency

Emergency preparedness is everyone's responsibility – every individual, family, employer, organization or agency, educational institute, health provider, and every level of government. We can't prevent emergency events such as earthquakes, floods, epidemics and terrorism attacks, but we can plan to be safer and we can prepare to lessen the devastating impacts of such events.

If you're prepared for one emergency situation, you're basically prepared for any disaster. Most of the readily available emergency preparedness information focuses on natural hazards and disasters, this material will provide basic preparedness and safety information for potential terrorism attacks.

(This information is written in the family context, but the same actions are applicable to organizations, businesses, schools, etc., so wherever the word "family" is used, substitute a word more applicable to your circumstance, such as "organization", "school", etc.)

Here is what experts recommend that you can do to be better prepared for emergencies, including information specific to radiological, chemical or biological attacks:

PREPARING FOR AN EMERGENCY

Develop an emergency plan that suites your family's individual needs and limitations.

Assign specific safety tasks to family members.

Practice your emergency plan until everyone is sure of their role and keep it current by practicing every six months.

Prepare an emergency supply kit to keep your family self sufficient for a minimum of 72 hours. Be sure to include any special needs items you may require. Your emergency supply kit should include food, water, first aid supplies, personal hygiene supplies, including coarse/strong soap, extra medications, intrinsically-safe (sparkless) flashlight, extra batteries and spare bulbs, battery operated radio, copies of important papers, identification for all family members, money, clothing, and shelter.

As well as having an emergency supply kit at home, you should have one in your vehicle and at school or work.

Plan a family meeting place that's central to most of your regular away-from-home spots, so family members can meet there if you're not together when disaster strikes.

In some emergency situations, local phone service may be limited. Plan to have an out-of-area telephone contact where all family members can check in, in case you are separated.

Take first aid classes and keep your training current.

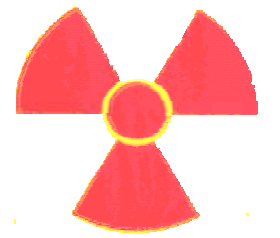
Keep your vehicle in good repair and keep your gas tank at least half full.

Stay in touch with the world around. This will keep you informed of any impending dangers to your community. When warnings occur, do a quick run through of your emergency plan and stay tuned to the radio or TV for more information as it becomes available.

TYPES OF POTENTIAL TERRORISM ACTIVITIES

"Dirty Bomb" Attack – Radiological Dispersal Device (RDD)

- **WHAT IS IT?** A "dirty bomb" is a crude method for spreading radiation over a substantial area -- a dirty bomb does not create a nuclear blast. It is made by packing dynamite or some other conventional explosive with virtually any type of radioactive material -- isotopes used in X-ray machines and radiological medicine, elements used in food irradiation plants, waste from a nuclear power station, etc. When the explosive is detonated, it spews the radioactive material over the surrounding area.



- **DAMAGE:** Immediate casualties would be minimal. Depending on the type and amount of explosive used in the weapon, it might be powerful enough to level a small office building, causing a few hundred deaths or injuries. The big fear is long-term. Depending on the type of radioactive material used in a bomb, the blast could spread significant amounts of radiation over a square mile or more. In a crowded city, thousands of people could be contaminated, raising their long-term risks for cancer. Entire neighbourhoods could be fouled with radiation and left

uninhabitable. The length of time an area would remain contaminated could range from days to decades depending on the type of radioactive material used.

- **WHAT TO DO DURING AN ATTACK:** Stay inside or get inside quickly, preferably below ground until alerted that you can leave safely. If you're not in the immediate vicinity of the blast, stay away and, if possible, stay upwind because radioactive particles travel on air currents. If you believe you've been exposed, and you can't get to a hospital, shed all your clothes as quickly as possible. Don't bring the clothes inside because you may spread contamination. Go straight to the shower and thoroughly wash all body parts with coarse soap. Certain types of radiation cannot penetrate solid walls -- or even skin -- so staying indoors can offer some protection if evacuation is not an option. It's important not to ingest radiation by eating contaminated food, chewing on contaminated fingernails, etc. Certain types of radioactivity can be flushed from the body by drinking large amounts of water.

- **WHAT TO DO AFTER AN ATTACK:** Don't travel through a heavily contaminated area. If you can get out of the general area through an uncontaminated route, do that -- otherwise, stay indoors.

Chemical Attack

- **WHAT IS IT?:** Chemical attacks involve poisonous vapours, aerosols, liquids or compounds. Effects can be immediate or last over several days. For example, sarin gas, a nerve agent, acts immediately to paralyze the central nervous system. The effects of mustard gas, which causes blistering on exposed skin, can last over days.



- **DAMAGE:** A terrorist might spread harmful chemicals with a bomb, with a spray from aircraft, boats, or vehicles; pour chemicals into water or onto food; or simply leave a container of them in a confined public space. A chemical attack would last from seconds to a few hours, affecting thousands of people, such as occurred at Bhopal, India, in 1984 when a massive leak of methyl isocyanate gas killed more than 2,000 people. Outdoors, chemicals often dissipate quickly, dispersed by wind or sunlight.

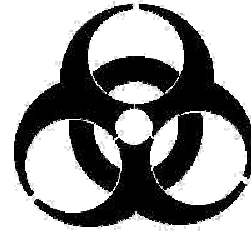
- **WHAT TO DO DURING AN ATTACK:** Listen to the radio for instruction from authorities on whether to evacuate or stay put. If told to stay inside, turn off all ventilation and seal all windows, doors and vents of an internal room with plastic sheeting and duct tape, and keep listening to the radio or TV. Ten square feet of a sealed room holds air for one person for five hours. If outside, move upwind and seek shelter. You can provide a minimal amount of protection by breathing

through a damp cloth. Do not go outside to help someone injured in the attack unless authorities say it is safe.

- **WHAT TO DO AFTER AN ATTACK:** Symptoms of a chemical attack include blurred vision or eye irritation, difficulty breathing and nausea. If you cannot get to immediate medical help, begin decontamination by removing all clothing, glasses and contact lenses. Cut clothing rather than pull it over your head, and leave it outside or place it into a plastic bag. Flush eyes with lots of water. Gently wash exposed areas with soap and water and then rinse. Change clothing. Find medical help.

Biological Attack

- **WHAT IS IT?:** Biological attacks involve bacteria, viruses or natural toxins that injure or kill. Effects of toxins can be immediate. Effects of bacteria and viruses may not be apparent for weeks.



- **DAMAGE:** A bio-terrorist may attack by infecting animals, contaminating food and water or spraying bacteria or viruses into the air. Infected people can further spread some diseases, such as smallpox and plague. An attack could also come through building ventilation, the mail or through exposure to an infected terrorist seeking to spread disease during an infectious stage.

- **WHAT TO DO DURING AN ATTACK:** Listen to the radio for instruction from authorities on whether to evacuate or stay put. If told to stay inside, turn off all ventilation, seal all windows, doors and vents of an internal room with plastic and duct tape and keep listening to the radio or TV. Ten square feet of a sealed room holds air for one person for five hours. If outside, move upwind and seek shelter.

- **WHAT TO DO AFTER AN ATTACK:** In many cases, people would not know they have been exposed to a biological attack until they develop disease symptoms and seek medical attention. Symptoms of various diseases include:

- Smallpox: fever, fatigue and a rash.
- Anthrax: flu-like symptoms, internal haemorrhage and reddish-brown skin lesions.
- Plague: a rapid onset of pneumonia, chills, fever, rapid pulse and painful enlarged lymph nodes.

Some biological attacks may be more immediately apparent. In such cases, public health officials will direct how medical attention should be delivered to exposed individuals via radio, television or emergency alert. If you contact a visible, potentially infectious substance, you should remove and bag your clothes and personal items and wash yourself with warm soapy water immediately. Seek medical assistance.

ADDITIONAL INFORMATION

Additional safety and preparedness information is available on the Provincial Emergency Program Web site: www.pep.bc.ca.