# Additional Preparedness and Response Protocols for Specific Hazards

The following guidelines recommend additional emergency response actions to take for specific types of hazards:

- **Fire**
- **Explosion**
- **Hazardous Chemicals Spill/Release**
- **Biological Event Response**
- **Radiological/Nuclear Event Response**

In case of such incidents, situations may arise that require immediate and decisive actions to safeguard personnel within a structure or area. It is imperative that all available information be utilized to impel a decision that can be implemented quickly. These protective actions are based on the fundamentals of scene assessment, time, distance, shielding and decontamination.

### Time

It is imperative that personnel reduce the amount of time they are exposed to a hazard. Since many hazards inflict injury based on time-dose factors, the ability to reduce this exposure will minimize overall risk.

### Distance

Creating distance between an individual and the source of the hazard is another important step in mitigating and reducing the effects of hazards. This is particularly important when dealing with radioactive materials, as some radioactive emissions are unable to travel long distances.

### Shielding

Through the use of protective measures, building structures and other objects, the harmful effects of many hazards can also be reduced. Closing doors or windows and moving to another floor or room are all examples of shield principles.

### Decontamination

Since the mechanisms of injury for all agents are time-dose dependent, the expeditious removal of these contaminants is recommended. For most hazards, water or a combination of water and soap should be used as quickly as possible to reduce the harmful effects.

# Fire

## Preparation for fire prevention

- ✓ Ensure property compliance with your country's fire and building codes
- ✓ Fire exits/ escape routes need to be clearly identified, unlocked and free from physical obstructions
- ✓ Fire alarms and fire sprinkler/suppression systems need to be installed in hotel
- ✓ Guest rooms should be equipped with smoke detectors
- ✓ Fire prevention and fire protection plans should be established. These plans should incorporate periodical formal inspections of floors, fire exits/ escape routes, smoke detectors and other equipment and housekeeping
- ✓ Create evacuation plan for guests and staff
- ✓ Staff need to be properly trained in executing evacuation plan and regular fire drills need to be conducted
- ✓ A fire evacuation plan should be posted in guest rooms and accessible to all guests
- ✓ Identify fire marshal and nearest fire station, have contact information for fire station and fire marshal easily accessible to staff
- ✓ If possible, fireproofing measures should be taken to protect buildings. These measures can include the construction of foundations, floors, roofs, walls, stairways, stairs, elevator shafts, and dumbwaiter shafts from materials such as concrete, brick, terra cotta blocks, or steel.

## Fire Response

Any detection of fire or smoke should be taken seriously and fire services should be notified immediately. Fire and smoke can overwhelm people in a very short period, and decisive response is required. Asphyxiation is the leading cause of death from fire or smoke, followed by burns and thermal related injury.

- ✓ **If you are on fire: STOP, DROP and ROLL to extinguish the flames.**
- ✓ **Before opening a door, check it by placing the back of your hand against the door to test for heat.**
- ✓ **In the event that individuals are trapped in their rooms, they should be instructed to stay away from the main door and use wet towels to prohibit smoke from entering underneath door.**
- ✓ Notify affected personnel of fire and advise on location of the fire.
- ✓ Coordinate evacuation efforts with Evacuation Leaders.
- ✓ Activate fire alarm and fire suppression system.
- ✓ Notify local emergency responders (fire, police).

- ✓ Advise personnel on evacuation routes and rally points.
- ✓ Locate fire extinguisher and deploy as needed, <u>but do not compromise your safety or the safety of others to extinguish the fire.</u>
- ✓ Evacuate the building using stairwells beyond primary assembly areas and away from threat of fire.
- ✓ Leave personal possessions.
- ✓ Do not use elevators; elevators should be programmed to return to ground floor.
- ✓ Remain low to the floor if possible.
- ✓ At rally point, conduct a roll call of all employees and where applicable, guests.
- ✓ Notify off-site personnel.
- ✓ Seek medical attention for injuries.
- ✓ ***Do not re-enter the area until deemed safe by emergency responders.***

## Use of a Fire Extinguisher

In case of small fires, a fire extinguisher can be used to assist in extinguishing the flames. Employees should be trained in how to use a fire extinguisher and take the time to locate the extinguisher closest to their work area before a fire emergency occurs.

Each fire extinguisher is rated based on its ability to be effective against certain types of fires. These ratings are:

- Type A: Wood or paper fires only.
- Type B: Flammable liquids or grease fires
- Type C: Electrical fires
- Type ABC: Rated for all types of fires

A simple acronym can help you remember how to use a fire extinguisher:

PASS
P- Pull the safety pin
A- Aim at the base of the fire (approach no closer than 8 feet)
S- Squeeze the activation handle while holding extinguisher upright
S- Sweep back and forth, covering the area of the fire

If you are unable to extinguish a fire in 15 seconds using a portable fire extinguisher, leave the area. If possible, close off the area.

# Explosions

In the event of an explosion, evacuate all employees, customers and visitors from the affected area(s) immediately. Injury from an explosion can result from the blast overpressure, debris and thermal effects. In addition, the explosion may cause structural damage that can result in a collapse or cause mass panic.

From a safe location:

- ✓ Conduct a scene assessment and take photos if possible.
- ✓ Contact local emergency responders (fire, police).
- ✓ Immediately notify others, such as your Cluster, of the location of the explosion.
- ✓ Collect and provide information on:
    - Location of explosion;
    - Size of area affected;
    - Impact to personnel and property; and
    - Status of employees and customers on-site.
- ✓ Conduct a roll call of all employees, and where applicable, guests.
- ✓ ***Do not re-enter the area until deemed safe by emergency responders.***

# Hazardous Chemicals Spill/Release

A chemical spill or hazardous material can quickly cause injury if not properly addressed. If used by terrorists, most chemical agents have fast-acting properties and pose an increased inhalation risk to personnel in the immediate area. Implementing the fundamentals of Time, Distance, Shielding and Decontamination should always be followed when determining your response to such a situation.

In the event of an **outdoor release/spill**, the following procedures should be implemented:

- ✓ Conduct scene assessment (conducted during Stage 0).
- ✓ Notify all employees and customers to stay away from the affected area and to seek shelter indoors, if possible.
- ✓ Close all windows and doors.
- ✓ Turn off the heating, ventilation and cooling (HVAC) systems
- ✓ Secure and don protective equipment if available. If not available, soak cloth in water and cover mouth and nose.
- ✓ Move to interior rooms within the facility.
- ✓ Monitor personnel within office for symptoms of exposure.
- ✓ Any exposed person should be immediately decontaminated using water and seek medical attention.
- ✓ Notify others of the presence of an agent.

In the event of an **indoor release/spill**, the following procedures should be implemented:

- ✓ Conduct scene assessment (conducted during Stage 0).
- ✓ Notify all employees and customers to stay away from the affected area, remain calm and evacuate the affected area immediately.
- ✓ Attempt to control breathing, cover mouth and nose from harmful fumes and evacuate.
- ✓ DO NOT USE ELEVATORS.
- ✓ Monitor personnel for symptoms of illness.
- ✓ Any exposed person should be immediately decontaminated using water and seek medical attention.

## Decontamination

- ✓ If you believe that you may have been exposed to the toxic substance, you should immediately attempt to remove the contaminant as quickly as possible. This may include:
  - Removal of clothing;
  - Washing hands with soap and water; and
  - Using water to flush contaminated areas.
- ✓ Advise emergency responders of the suspected location and attempt to control access to the site.
- ✓ Anyone in the immediate vicinity of the affected area should evacuate. If possible, and if it can be determined, evacuation should be conducted *uphill* and *upwind* from the affected area.
- ✓ Emergency responders will establish decontamination areas to remove the chemicals with water and other decontamination solutions.
- ✓ Seek medical attention if you are experiencing any of the following:
  - Blurry vision or headaches;
  - Nausea, stomach cramps or vomiting;
  - Difficulty breathing;
  - Twitching skin;
  - Runny nose; or

- Burning sensation on skin or eyes.

### Sheltering in Place During a Chemical or Biological Threat

Although remote, the possibility exists for a sudden release of a dangerous, airborne contaminant that is immediately hazardous to the general public. An emergency of this nature could occur so rapidly that it might be impossible to safely evacuate the zone of contamination, or emergency management agencies may not be able to respond effectively to control the event or be able to advise the general public in a timely manner. In such cases, it may be necessary to stay where you are and seal a building or room so that contaminants cannot enter, or shelter in place. To do so, you should:

- ✓ Turn off air conditioners and ventilation systems.
- ✓ Close and lock windows and doors.
- ✓ Seal gaps under doorways and windows with wet towels and duct tape.
- ✓ Seal gaps around window and air conditioning units, bathroom and exhaust fans and vents with duct tape and plastic sheeting, wax paper or aluminum wrap.
- ✓ Choose a centralized location and close off nonessential rooms.
- ✓ Make sure you choose an area that has a telephone, water, and a toilet, and can be sealed easily.
- ✓ Develop a checklist of items necessary to implement this procedure. These items would include (but are not exclusively limited to) the following:
  - Supply of bottled water (a gallon a day per person).
  - Battery-operated radio and spare batteries.
  - Flashlight(s) and spare batteries.
  - First-aid kit with scissors.
  - Duct tape, plastic sheeting and towels (for sealing windows and doors).
  - Nonperishable food (and a non-electric can opener).
  - Essential medicines/prescriptions.

IMPORTANT: Shelter-in-place materials must be assembled and ready for use before the need arises.

# Biological Event Response

Due to the unique characteristics of biological agents, it is often difficult to determine that a biological threat or event has occurred. The associated incubation periods of many biological agents often increase the damage to human health because of delays in obtaining proper medical attention. In case of a suspected biological release or attack:

- ✓ Conduct scene assessment.
- ✓ Obtain and monitor specific information from public health authorities or local hospitals to determine recommended courses of action and protective measures.
- ✓ Communicate information to employees and customers.
- ✓ Monitor news and information from public agencies.

For individuals who are exposed or suspect exposure, the following protective actions should be implemented:

- ✓ Monitor public health advisories.
- ✓ Protect your airway in areas where a biological agent is suspected. Use respiratory masks only as advised by public health agencies.
- ✓ Stay away from highly congested areas and enclosed areas only as advised by public health agencies.
- ✓ Maintain sound personal hygiene practices (washing hands, clean workspaces).
- ✓ If you experience any symptoms such as high fever, vomiting or difficultly breathing, you should seek medical attention immediately.

For a suspected overt release of a biological agent, such as an "anthrax letter," the same procedures as for a suspicious package should be followed.

# Radiological or Nuclear Event Response

While the risk of radiological or nuclear threat is relatively low in the Caribbean, the response information is included in this manual in an effort to address all hazards.

## Nuclear Response Procedures

Nuclear explosions can cause deadly effects: blinding light, intense heat (thermal radiation), initial nuclear radiation, blast, fires started by the heat pulse, and secondary fires caused by the destruction. They also produce radioactive particles called fallout that can be carried by wind for hundreds of miles.

- ✓ Identify the threat and monitor instructions by local police, fire and emergency responders.
- ✓ If a public announcement is made:
  - Notify all personnel to seek cover and shelter immediately. Remain sheltered until advised otherwise.
  - Do not look at the flash or fireball.
  - A nuclear detonation will yield a delay in the initial blast shock wave and fallout. A minimum time of 30 seconds or more is required to the blast wave and 20 minutes or more for the fallout.
- ✓ Monitor public information and media to get information on further actions.
- ✓ If the explosion is some distance away, it could take 30 seconds or more for the blast wave to hit.
- ✓ Shelter in place and move to interior rooms. Specific activities will include:
  - Shutting down heating, ventilation and cooling systems;
  - Shutting down all electronic devices and computers; and
  - Closing all windows and doors.

## Suspected Radiological Release of Radiological Dispersion Device Procedures

Terrorist use of a radiological dispersion device (RDD) – often called a "dirty bomb" – is considered far more likely than the use of a nuclear device. These radiological weapons are a combination of conventional explosives and radioactive material designed to scatter dangerous and sub-lethal amounts of radioactive material over a general area. Such radiological weapons appeal to terrorists because they require very little technical knowledge to build and deploy, compared to that of a nuclear device. Also, these radioactive materials, used widely in medicine, agriculture, industry and research, are much more readily available and easy to obtain compared to weapons-grade uranium or plutonium.

- ✓ Identify the threat and monitor instructions by local police, fire and emergency responders.
- ✓ Notify all field personnel to seek shelter from the suspected area.
- ✓ Conduct shelter-in-place procedures:
  - Close any windows or openings that permit external air to enter the building.
  - Shut down heating, ventilation and cooling (HVAC) system.
  - Monitor all radio traffic and other information channels.
  - Monitor interior personnel for health-related injuries.
- ✓ Initiate evacuation procedures.
- ✓ Keep account of personnel by conducting periodic roll calls.
- ✓ Advise police and fire department officials of status and location.
- ✓ Maintain sheltering in place posture until "all clear" notification is given.