



## Laboratory Emergency Response to Natural Disasters

(Hurricanes, Blizzards, Tornadoes, Etc)



It is important that laboratories using hazardous materials plan accordingly prior to any type of potential natural disaster. This is not always possible in cases such as earthquakes. Laboratories should pay attention to alerts and advisories sent out by EHS. This procedure outlines basic precautions that labs should take prior, during, and after a natural disaster.

### **Laboratory Experiments:**

- Complete all running experiments and do not begin any new experiments that would require attention during an evacuation period or while a warning is in place.

**Important** Researchers should protect all of their work prior to a natural disaster. Even with emergency generators, there is the chance of a failure in long term events. Other than electricity there is also the chance of other utility failures such as HVAC, potable water, sanitary sewer, etc.

### **Hazardous Materials (chemical, biological, radiological):**

- Ensure all hazardous material and waste containers are clearly labeled and tightly closed. Hazard warning labels may be critical during post disaster response.
- Materials that are volatile, toxic, infectious, or pose a respiratory hazard must be stored in tightly sealed impervious and impact-resistant containers which are secured.
- Move all chemicals to appropriate storage locations.
- Store water reactive chemicals in tightly sealed, waterproof containers.
- Place flammable materials in approved flammable cabinets.
- Remove chemicals from upper shelves and limit storage on bench tops.
- Ensure gas cylinders are capped and secured to a permanent fixture using a cylinder strap or chain.

- Do not store any hazardous materials on the floor due to the possibility of flooding.
- Secure research animals.
- Secure radioisotopes.

#### **Chemical Fume Hoods and Biosafety Cabinets:**

- Remove all hazardous materials from fume hoods and BSCs and secure in appropriate storage areas.
- Close sashes completely. If the building experiences a complete loss of power, fume hoods and BSCs will become inoperable.

#### **Other Laboratory Equipment**

- Unplug all non-essential equipment
- Consider protecting sensitive equipment in the event of a power surge.
- Move equipment as far from windows as possible.
- Ensure essential equipment is plugged into emergency power (red outlets)

#### **Data**

- Backup important computer files
- Store important documents in water impenetrable containers, and store away from possible flooding areas

#### **Laboratory Security:**

- Close and lock all laboratory doors.
- Avoid obstructing egresses and hallways.
- Ensure you have an up to date phone tree of all lab personnel.
- Ensure emergency contact information is updated and posted on your laboratory door sign.

#### **Post Natural Disaster**

- Once notified by emergency responders you may enter the building, you should conduct an in depth walkthrough of all lab areas.
  - Report and unsafe findings to EHS

**NOTE: Similar steps should be taken to secure lab prior to vacations or anytime the lab will be vacant for extended periods of time**

**More information and additional resources can be found on the Emergency Response Planning Divisions website at**

**<http://www.bu.edu/ehs/plans/management-plans/emergency/>**