West Virginia University Robert C. Byrd Health Science Center Safety Office

**Earthquake Safety Guidelines**

**During an Earthquake**

1. Seek protection from falling debris under desks, heavy tables or in corners of rooms.  Watch out for swinging overhead lights--they can fall on you. Do not seek cover under laboratory benches or tables, as chemical spills are possible.
2. Drop, cover and hold on. Move as little as possible.
3. Stay away from windows to avoid being injured by shattered glass.
4. Stay indoors until the shaking stops and you are sure it is safe to exit. If you must leave the building after the shaking stops. Do not use elevator, in case there are aftershocks, power outages or other damage.
5. Be aware that fire alarms and sprinkler systems frequently go off in buildings during an earthquake, even if there is no fire.
6. If outside, move away from buildings, power lines and trees.  Seek open areas.
7. If you are in a vehicle, pull over to a clear location and stop. Avoid bridges, overpasses and power lines if possible. Stay inside with your seatbelt fastened until the shaking stops.

**After an Earthquake**

1. Collect personal belongings (coat, purse, cell phone), leave the building quickly and gather at your department’s designated meeting area.
2. If persons are injured, missing or known to be trapped inside the building, call 911 or University Police at 304-293-3136. (Put the DPS number into your phone now.)
3. Provide assistance to those who have mobility impairments.
4. Check for injuries, but do not attempt to move a seriously injured person unless there is a greater danger by not doing so.  Call 911 or University Police at 304-293-3136 for assistance.
5. Use telephones only to report emergencies (i.e. gas leaks, fire or injuries).
6. Only HSC Facilities Management or other trained individuals should attempt to turn utilities on or off.
7. Never touch downed utility poles or lines. Do not approach damaged building equipment.
8. Avoid open flames due to potential gas leaks.
9. Do not drive a vehicle unless warranted by an emergency. Streets should be kept clear for emergency vehicles.
10. Be prepared for aftershocks.  Aftershocks are usually smaller than the initial earthquake, but they may be strong enough to topple already damaged buildings.

Remember, a significant earthquake will affect an entire community.  Rescues and/or assistance may not be immediate.  During emergencies that render broad, citywide impacts, it may be necessary to assume responsibility for the safety of oneself and if possible, others in the vicinity who need aid.

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**Earth Quake Safety Guidelines for Laboratories**

**During an Earthquake:**

1. Chemicals are segregated and stored by class/reactive groups. Non-compatible chemicals are stored properly and separately.
2. Chemicals are recapped and returned to their storage cabinets immediately after use.
3. Chemicals storage cabinets are closed and latched.
4. Chemicals are stored in secondary containment trays or tubs.
5. Hazardous waste containers are capped and placed out ready for pick-up when 80% full or less.
6. Hazardous and biohazardous wastes are removed regularly.
7. Fume hood sashes are closed as far as possible to contain spills while still maintaining adequate ventilation rates.
8. Gas cylinders are double chained/strapped to the wall.
9. Small gas cylinders should be clamped to laboratory benches.
10. Safety caps are kept in place on gas cylinders when cylinders are not in use.
11. Exits and aisle ways are maintained free and clear of obstructions.
12. All stored items must maintain a clearance of at least 18” from the ceiling to allow proper functioning of the sprinkler system.
13. Avoid storing materials and equipment on top of cabinets. Store heavy items on lower shelves or in lower cabinets.

**Planning & Preparedness**

Depending on the time and circumstances of the earthquake, you may be asked to stay out of the building for a few minutes to a few days--or indefinitely.

* Have a short-term evacuation checklist posted near the exit of your lab. This is a check list of essential steps to take before leaving the building. These include, but are not limited to:
  + Turn off gas burners
  + Check quickly for fires, fire hazards, or spilled chemicals
  + Check for injured or physically limited people who might have trouble evacuating the building
  + Close the lab door as you leave
  + Report crucial items or hazards to the appropriate official at the emergency assembly point
  + Have emergency contact information for all staff accessible to you.
* Have a long-term plan in case you could not get back into your lab for at least a week?
  + Which cell lines/experiments/data are your first priorities?
  + Are provisions made with OLAR for taking care of lab animals?
  + Do you have backup copies of important data (both disk and hard copies)?

**Contingency Planning:**

* Does your laboratory have equipment and/or processes that could be damaged or pose a fire or health hazard if power was suddenly lost? What contingencies have been made to provide backup or emergency power to maintain critical system? Ensure that Facilities Management is aware of critical operation needs.
* Ensure safety systems (i.e., fire extinguishers, safety showers, eye washes) in your laboratory are accessible and in proper operating condition. Ensure every one in the lab knows how to operate them? Document this training per your Chemical Hygiene Plan.
* Ensure spill response kits are available and staff has been trained in small spill response.  *(Guidelines adapted from Stanford University's guide to department disaster planning and the University of Washington’s Earthquake Preparedness Plan.*