INJURIES

For any life-threatening injury dial 9-1-1. This includes any injury that needs URGENT medical attention for example: a deep laceration, electrical shock, respiratory issues, or injury resulting in reduced or abnormal cognitive ability (slurred speech, loss of consciousness, vision problems, personality changes, etc.).

To report an incident or unsafe condition (non-emergency) call:

- **x6999**, cell or off site: (510) 486-6999

For injuries that are not life-threatening:

- **During Health Services business hours (7 a.m. to 4:30 p.m.):**
  - Call Health Services at x6266 to report the injury.
  - If capable to safely do so under your own power, proceed to Building 26 for an evaluation and medical care.
  - If incapable to safely do so, request assistance from a colleague or dial x6999.

- **After business hours call x6999** and an LBNL Duty Officer will coordinate support on your behalf.
  - Report the incident to Health Services the next business day directly, or through your supervisor.

Please report to Health Services prior to returning to work from any injury that required hospitalization or resulted in five or more consecutive days away from work.
ILLNESSES

For any life-threatening illness related symptoms call **9-1-1**. For example: chest tightness or pain, breathing difficulties, heat-related illness, or reduced or abnormal cognitive ability (slurred or unintelligible speech, loss of consciousness, seizure, personality changes, etc.).

For illness symptoms that are not life-threatening:

- **During Health Service business hours (7 a.m. to 4:30 p.m.):**
  - Call Health Services at x6266 to report an illness that may have a work-related cause.
  - Employees may call Health Services to speak with a nurse for advice on personal health issues.

- **After business hours call x6999 for an illness that may have a work-related cause and an LBNL Duty Officer will coordinate support on your behalf.**
  - Work-related illness must be reported to Health Services the next business day.

- **Employees with a suspected contagious illness:**
  - Do not return to work until you are fever-free for 24 hours without the use of a fever reducing medication (i.e., Tylenol).
  - Report to Health Services for return-to-work clearance if absent five days or more.

Please report to Health Services prior to returning to work from any illness that required hospitalization or resulted in five or more consecutive days away from work.
FIRE ALARMS

Fire Response Actions

A fire alarm in a building will provide an audible signal via bells or horns and may provide a visual signal via strobe lights. The fire alarm system may be activated by detection of smoke, heat, or sprinkler water flow or by a manual fire alarm pull station.

If your fire alarm sounds:

- Evacuate the building immediately and proceed to the designated Emergency Assembly Area (EAA).
  - DO NOT use elevators.
  - Follow the direction of your Building Emergency Team (BET) and emergency responders.
- Before opening any door, check the temperature of the door and the door’s handle with the back of your hand.
- Never open doors that are warm to the touch. If a door handle is warm, then use an alternate exit route.
- If smoke, heat, or flames block your exit routes:
  - Stay in the room with doors closed.
  - Place a wet towel under the door, if available.
  - Call 9-1-1 and report your exact location in the building.
  - Open a window and wave a brightly colored cloth or flashlight to signal for help.
- Avoid smoke or fumes. If unavoidable, crawl low under smoke.
- Once outside, follow the instruction of your BET.

In an emergency dial:
911

To report an incident or unsafe condition (non-emergency) call:
x6999, cell or off site:
(510) 486-6999
If there is a fire in your workspace:

- Activate the nearest fire alarm pull station and alert others in the immediate area.
- Use a fire extinguisher only if trained, comfortable in the effort, and confident that it is safe to fight the fire.
- Always maintain access to an exit. Do not let fire get between you and the exit.
- Avoid smoke or fumes.
- Close doors behind you as you exit.
- DO NOT use elevators.
- Evacuate and proceed to the designated EAA.
- DO NOT reenter the building until instructed to do so by Protective Services.

FIRE ALARM PULL STATIONS

Fire alarm pull stations are designed to summon a response force capable of eliminating a fire related hazard. Fire alarm pull stations should therefore only be activated due to presence of fire and/or smoke. If possible, fire alarm pull stations should not be used for:

- Hazardous material spills or odors.
- Natural gas smells.
- Security events.

Dial 9-1-1 to summon the appropriate response to these situations and alert others in the area of the potential hazard.
WILDLAND FIRE RESPONSE

If a wildland fire is going to, or is expected to, impact the laboratory during business hours you will receive emergency notification of Protective Action implementation. The Protective Action will either be to evacuate or to shelter-in-place. All personnel must strictly adhere to Protective Actions in order to ensure everyone’s safety, particularly if the site is to be evacuated. Remember evacuating the main site includes the need for you to:

- Be aware of multiple routes to exit the LBNL main site, you may need to use one in an emergency that you may otherwise not use frequently.
- Be aware of multiple routes home from the main site.
- Offer rides to others. There are three times as many people on the LBNL main site as there are parking spots. Many employees use public transport that may not be available in an emergency.
- Leave only when your building is instructed to do so. This prevents traffic congestion that can trap people in a fire’s path.

In an emergency dial: 911

To report an incident or unsafe condition (non-emergency) call: x6999, cell or off site: (510) 486-6999
The National Weather Service issues Red Flag Warnings & Fire Weather Watches to alert fire departments of the onset, or possible onset, of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity. At LBNL a Red Flag Warning will be issued by Protective Services.

A Red Flag Warning is issued for weather events that will occur within 24 hours, and may result in extreme fire behavior. A Red Flag Warning is the highest alert. A Fire Weather Watch is issued when Red Flag weather conditions could exist within a 72-hour period. During these times, all personnel are urged to use extreme caution when going about daily tasks, because a simple spark can cause a major wildfire.

Reduce the risk of wildfires by taking steps to limit sparks and other ignition sources by:

- Ensuring you have a hot work permit (may be suspended during a Red Flag Warning) before conducting any process that may generate heat or sparks.
- On Red Flag Warning days, suspend all outdoor hot work activities and eliminate activities that could generate sparks such as:
  - Lawn mowing
  - Mechanical weed-eating
  - Outdoor welding
  - Landscaping activities that may place a hot engine near dry vegetation.
- Make sure cigarette butts are properly extinguished and only smoke in pre-designated areas.
SEVERE WEATHER

In an emergency dial:
911

To report an incident or unsafe condition (non-emergency) call:
x6999, cell or off site:
(510) 486-6999

Protective Services monitors severe weather systems and conditions, and makes notification to the Lab population when appropriate.

FIRE WEATHER & RED FLAG WARNINGS

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  - Outdoor welding
  - Landscaping activities that may place a hot engine near dry vegetation.

- Make sure cigarette butts are properly extinguished and only smoke in pre-designated areas.
HEAVY WIND AND RAIN

High winds can pose a variety of hazards. When high winds are present, please be aware of the potential for sudden power failures and plan accordingly. High winds and rain can also make travel difficult due to debris, standing water on roadways, and decreased visibility. Travel should be avoided when possible, but if travel is necessary use caution and go slow in these types of conditions.

LIGHTNING SAFETY

Lightning: What You Need to Know

• NO PLACE outside is safe when thunderstorms are in the area!!
• If you hear thunder, lightning is close enough to strike you.
• When you hear thunder, immediately move to safe shelter: a substantial building with electricity or plumbing or an enclosed, metal-topped vehicle with windows up.
• Stay in safe shelter at least 30 minutes after you hear the last sound of thunder.

Indoor Lightning Safety

• Stay off corded phones, computers and other electrical equipment that put you in direct contact with electricity.
• Avoid plumbing, including sinks, baths and faucets.
• Stay away from windows and doors, and stay off porches.
• Do not lie on concrete floors, and do not lean against concrete walls.

Last Resort Outdoor Risk Reduction Tips for if you are caught outside with no safe shelter anywhere nearby the following actions may reduce your risk.

• Immediately get off elevated areas such as hills, mountain ridges or peaks
• Never lie flat on the ground
• Never shelter under an isolated tree
• Never use a cliff or rocky overhang for shelter
• Immediately get out and away from ponds, lakes and other bodies of water
• Stay away from objects that conduct electricity (barbed wire fences, power lines, windmills, etc.)

Next Topic:
LBNL has a variety of wildlife that calls the site home. This includes species that are known to pose threats to humans (e.g., mountain lions or rattlesnakes), as well as those that may cause accidental physical harm to people or equipment when threatened or injured (e.g., deer or turkeys).

**WILDLIFE TYPES**

These animals can sometimes be found on site, some with higher frequency than others. Though they are not always present, it is important to be aware of the potential for an encounter with any of these animals.

**Hazardous Wildlife**

- Mountain Lions
- Black or Brown Widow Spiders
- Rattlesnakes
- Bees and Wasps

**Potentially Hazardous Wildlife**

- Foxes
- Coyotes
- Raccoons
- Opossums
- Non-venomous snakes
- Turkeys
- Deer

Other than insects (spiders, bees, and wasps), all of these animals will normally attempt to flee the area when a human presence is detected. If you see wildlife maintain your distance from them if at all possible to prevent any aggressive responses.
Hazardous Wildlife

What should I do if I am attacked or threatened by any animal?
If you are attacked or threatened by any animal, dial 9-1-1.

What should I do if I see a Hazardous Wildlife species?
If you see any hazardous wildlife species:
• Maintain and increase your distance.

If you see a mountain lion near or within the site’s fence line, dial 9-1-1.
If you accidently come into close proximity of a mountain lion:
• Do not run from a mountain lion.
• Do not come between a mountain lion and any cubs.
• Do not crouch down or bend over.
• Do try to make yourself look larger.
• Do fight back if you are attacked and try to remain standing.

If you see any of the other hazardous wildlife species in any area where other employees are likely to be:
Rattlesnakes
• Dial x6999 and report the sighting and location.
• Warn others who may approach the hazard.

Bee or Wasp nests
• Dial x6999 and report the sighting and location.
• Warn others who may approach the hazard.

Potentially Hazardous Wildlife

What should I do if I see a Potentially Hazardous Wildlife species?
If you see any potentially hazardous wildlife species:
• Maintain your distance.
• Do not feed or entice the animal.

If you see any animal that appears sick or is acting strangely (injured, staggering, heavy breathing, displaying aggression) dial x6999.
EARTHQUAKE RESPONSE: DROP, COVER, HOLD ON, AND EVACUATE AFTER SHAKING HAS STOPPED

In an earthquake, the greatest danger is from falling and flying objects. Follow these measures to best protect yourself from these hazards.

1. **Drop** onto your hands and knees.
2. **Cover** your head and neck.
   a. Get under a sturdy table or desk, if possible. DO NOT get into a doorway.
   b. If no shelter is available, get down near an interior wall or next to a low-lying piece of furniture that cannot fall on you.
   c. Cover your head and neck with your arms and hands.
   d. If you are outside watch out for overhead hazards (i.e., trees or power lines) and get down on the ground.
3. **Hold on** to your shelter.
   a. Intense shaking may move you and/or your shelter around. Continue to hold onto it.
4. **Evacuate** after the shaking has stopped.
   a. Be aware of changes to your environment. Furniture and equipment movement coupled with debris will make the environment unfamiliar and hazardous.
   b. Watch out for fire, electrical, and hazardous material hazards as you evacuate. Make note of these hazards and report them to your Building Emergency Team (BET).
   c. Make note of the locations of any injured or trapped individuals and report this to your BET.
   d. Report to, and follow the guidelines for your Emergency Assembly Area (EAA).

Post-Earthquake Safety

Earthquakes are regional events, and so their impacts are not localized to the LBNL main site or any one off-site location. It is extremely important to follow emergency responder and BET instruction after an earthquake. Post-earthquake activities should include:

1. Stay away from debris, fires, or downed electrical wires. Bring any potential hazard to the attention of your BET. DO NOT reenter any structure after an earthquake unless permitted by professional first responders.
2. Stay put in your EAA.
   a. There are materials at LBNL that can pose a threat to you, the public, and to those at home if you are contaminated with them and subsequently leave one of the sites.
   b. Travel is extremely dangerous and will be very difficult after an earthquake so staying put is essential. Emergency responders will be working to move you to a safe location where you can be picked up or transported to a shelter. This will take time to complete so be patient.
3. Help out.
   a. First responders may ask for help with a variety of tasks after such a major disaster. If you feel safe and comfortable to do so, it will help out greatly.

In an emergency dial: 911

To report an incident, damage, or unsafe condition (non-emergency) call: x6999, cell or off site: (510) 486-6999
What to do if a landslide is occurring or likely to occur?

There are several preemptive steps to take to reduce your risk of harm from a landslide:

- During heavy rains or after an earthquake evacuate areas that are prone to landslides.
- Listen for unusual sounds such as cracking trees or rocks banging together.
- Be alert when driving, especially alongside or above steep canyon walls.
- Consider a precautionary evacuation if imminent danger is suspected.
- Stay far away from any landslide.

What should I do after a landslide?

Staying away from the slide area is the key to safety after a landslide. The area may still be unstable, though it may look otherwise. Contact emergency responders if you witness any major landslide that poses a risk to life safety by dialing 9-1-1. Report minor slides by dialing x6999.
It is critical that all electrical shocks, however minor, be immediately reported to the line manager. All persons experiencing an electrical shock are to receive appropriate medical evaluation.

Incident response for an electrical shock:

- If you believe this is a minor electrical shock, call Health Services at x6266 (7:30 a.m. to 4:30 p.m.). After hours, call x6999.
- If this is not a minor electrical shock, or if you are unsure whether or not the shock is minor, call 9-1-1.
- Turn off the electrical power. Do not approach the victim until all electrical power to the area has been disconnected. Alternately, use an insulated rescue hook to move the victim away from the electrical equipment. Do not become a second victim!
- Designate someone to retrieve an automated external defibrillator (AED). Administer AED until emergency responders arrive.

For additional information, see the LBNL Electrical Safety website: electricalsafety.lbl.gov

If you see an unsafe electrical condition, such as sparking equipment, excessive heat, or exposed wires:

- Dial 9-1-1 if the situation appears to be life-threatening.
- Dial x6999 to report a non-life threatening situation.
- Do not touch the equipment. Remain calm and secure or cordon off the area. Alert others in the area of the hazard.

The LBNL Duty Officer will coordinate the appropriate response with Protective Services, Facilities, and Environment/Health/Safety Divisions. Wait for contact from response personnel while ensuring the hazard does not come in contact with anyone or worsen into an emergency.

If an unsafe condition is created in the process of your or someone else’s work process, remember to use your Stop Work Authority if appropriate before dialing x6999.
POWER OUTAGES

Power outages can occur as a result of equipment failures, maintenance, accidents, severe weather, or other major events. Power outages fall into two categories: planned and unplanned. Planned outages are associated with maintenance activities on systems, buildings, or infrastructure. Unplanned outages are the result of accidents, malfunctions, and disasters.

During an unplanned power outage:
- Remain calm and take time to acclimate to your environment.
- If safe to do so:
  - Shut down experiments and machines safely.
  - Appropriately cover or contain volatile chemicals to prevent their release into the environment.
  - Close fume hood sashes.
  - Turn off or unplug powered equipment that may come back on when power is restored.
- Follow the instructions of emergency responders (if applicable).
- Proceed to a “safe” area such as a main corridor or lobby that is away from laboratories, and await further instruction.

The conditions that may lead to an unplanned power outage can sometimes be forecasted, such as severe weather. In other cases, scheduled maintenance must be completed on systems, buildings, and infrastructure that may require power (or other system) shutdowns. In either case, you will receive advanced notice from LBNL management if these conditions are expected at the lab or off-site locations.

When notified of a potential unplanned power outage:
- Delay critical experiments and processes until the forecasted hazard has passed.
- Save your work often.
- Have a flashlight in your immediate work area.
- Avoid the use of elevators.

You should report any power outage by calling x6999.

If an emergency occurs during a power outage, or as a result of the outage, call 9-1-1. Should any hazardous conditions or non-emergency incidents arise as a result of the outage, you can call x6999.

It is not permissible to work without proper lighting and electrically powered safety devices, including fume hoods.

For more information, contact the LBNL Electrical Safety website: electricalsafety.lbl.gov

Next Topic:
EXPOSURES

If you suffer a hazardous material exposure:

• Remain calm.
• Call 9-1-1 if the event is in any way life threatening or if there is a potential for serious injury. Call x6999 for exposures that are not life-threatening.
• Remove any contaminated clothing or Personal Protective Equipment (PPE).

Exposures include, but are not limited to:

• Physical contact (e.g., splashes) of a hazardous material with the body (e.g., skin, eye, or mucous membranes);
• Introduction of a hazardous material into the body (i.e., injection, ingestion, absorption, or inhalation); or
• Unprotected or under-protected exposure to a physical hazard (e.g., lasers, ultraviolet light, etc.)

Exposures often result in injuries or illnesses, but can also require specialized treatment procedures that differentiate exposures from these other health impacts.

FOR RADIOLOGICAL EXPOSURES

• Minimize your movements.
  - Do not put your hands in contact with or near your face (i.e., do not use a phone earpiece unless unavoidable).
  - Try not to touch objects in the room or other parts of your body with contaminated material or body surfaces, unless unavoidable for rescue.
• Put distance between yourself and the source of the exposure without leaving the room/area.
• Ask others to secure the room and to keep doors closed until emergency response personnel arrive.

FOR BIOLOGICAL EXPOSURES

• Flush the eyes at the nearest emergency eyewash unit for at least 15 minutes.
• Wash the affected skin area(s) with soap and water from nearest sink or emergency shower for at least 15 minutes, especially the injection site (as applicable).
• Dial 9-1-1 for any life threatening impacts or complications associated with the exposure event.
• For non-life threatening situations call x6999.
  - Report exposures to Health Services (x6266) and the Biosafety Officer (x6949) during business hours, as soon as possible.

If the event is in any way life threatening or if there is a potential for serious injury, dial: 911

For exposures that are not life-threatening or to report an incident or unsafe condition (non-emergency) call:

x6999, cell or off site: (510) 486-6999
FOR CHEMICAL EXPOSURES

For water reactive/activated chemicals:
- For eye exposures, flush the eyes at the nearest emergency eyewash unit for at least 15 minutes.
- For limited skin exposure, mechanically remove (i.e., with a brush, tweezers, or other appropriate item) as much of the material as possible and wash the area with mineral oil.
- For widespread skin exposure, if the material is already causing a burning sensation, rinse under an emergency shower until emergency help arrives. If the material is not causing a burning sensation, remove the material by wiping with mineral oil.
- Wait for emergency responder assistance.

For hydrofluoric acid exposure:
- Flush eyes or skin at the nearest emergency eyewash/shower unit for at least 15 minutes.
- For skin exposure, follow rinsing with application of calcium gluconate gel as provided in the appropriate first aid kit provided by Environment/Health/Safety.
- Wait for emergency responder assistance.

For phenol and phenol-like compound exposure:
- For eye exposure, flush the eyes at the nearest emergency eyewash unit for at least 15 minutes.
- For skin exposure, follow the instructions in the appropriate first aid kit provided by EHS.
- Wait for emergency responder assistance.

For all other chemical exposures:
- Flush the affected area(s) with water from nearest emergency eyewash/safety shower for at least 15 minutes.
- Follow emergency responder instruction.

IF YOU SUFFER A LASER EXPOSURE OR A SUSPECTED LASER EXPOSURE

- Remain calm.
- Get medical attention as soon as possible. Call 9-1-1 if the event is in any way life threatening. Call x6999 for exposures that are not life-threatening.
- Notify others in the area if a hazard still exists.
- Stop work and turn off laser.
- Do not alter the laser setup (this allows analysis of the cause of the accident).
- Transport exposed individuals to Health Services (Building 26) for evaluation, if during business hours. Otherwise, call 9-1-1 or x6999 for guidance.
  - Notify the laser user’s work lead or supervisor and the Berkeley Lab Laser Safety Officer (x2544).

IF YOU SUFFER AN EXPOSURE OR A SUSPECTED EXPOSURE TO NON-IONIZING RADIATION (NON-LASER)

- Remain calm.
- Report to Health Services (Building 26), if during business hours; otherwise, call x6999 to report the exposure.
SPILLS AND RELEASES

Chemical spills and releases of hazardous materials are infrequent laboratory events. What is important to distinguish is when to make incident notifications or to summon an emergency response.

Dial 9-1-1 when a spill or uncontrolled release occurs:
- That involves any gaseous material with a health hazard (e.g., toxic, corrosive, asphyxiating).
- That results in a medical emergency or direct hazard to life safety.
- Where you are unsure of chemical hazard and/or what to do.

If you have ANY doubt in your ability to clean up a spill safely and effectively OR if ANY of the spill cleanup criteria below are NOT MET, take the following actions:
- Leave the immediate area.
- Close the door.
- Control access to the area.
- Call x6999 for assistance.

You must meet ALL of the following criteria in order to clean up a spill safely and effectively:
- You are not a high school student or a guest participating in an internship program.
- There is no potential for release to the environment. **Note:** Care must be taken to avoid spreading or tracking chemical contamination to other areas.
- There are no personal injuries resulting from the spill, and no potential for injuries.
- You know what the chemical hazards are.
- The cleanup procedures are known and you have the proper spill-cleanup materials.
- You have the proper Personal Protective Equipment (PPE) to protect yourself during the cleanup.
- Two people can clean the spill up thoroughly within an hour.
- The spill does not involve beryllium or elemental mercury. Special cleanup and monitoring procedures are required for beryllium and mercury spills. Moreover, mercury contamination is easily tracked to other areas.

For mixed (i.e., radiological and chemical) spills where the chemical is not the primary hazard, follow the guidelines in the Radiological Incident section.
SPILL CLEANUP PREPARATION

- Understand the hazards of the chemicals you use. Consult resources such as the Safety Data Sheet(s) and review the Work Planning and Control activity for your work.
- Stage the appropriate spill response kit.
  - It is important to note that absorbents and other materials used for spill cleanup need to be “inert” to the spilled material. For this reason, combustible materials such as paper towels are generally inappropriate substitutes for the materials contained in spill kits.
MAJOR SPILL OF RADIOACTIVE MATERIAL

In the event of a major spill, the Radiation Protection Group will be contacted by Protective Services to assist with the spill cleanup.

Always assume the spill is major when in doubt. A major spill is a loss of material control that meets one of the items below:

- Contaminates skin, hair, personal (excluding anti-contamination clothing) clothing or shoes.
- Is outside of an area posted and controlled for contamination (e.g., Radiological Buffer Area, Contamination Area).
- Involves highly dispersible material (e.g., powder or volatile liquid).
- Involves an amount that would normally require engineered control (e.g., be handled in a fume hood or glove box).
MINOR SPILL OF RADIOLOGICAL MATERIAL

A minor spill is one that is not a major spill, as defined above. Laboratory staff can initiate cleanup prior to contacting the Radiation Protection Group.

If a radiological spill occurs, follow the S.W.I.M.S. principle:

Stop the spill, if safe to do so.
• Assess the situation.
• If there is a medical emergency or danger to life, health, or the environment dial 9-1-1.
• Check yourself for any chemical contamination or reactions (wet or discolored clothing, skin reactions, or respiratory irritation). Call, or ask someone to dial 9-1-1 if the reaction is severe, or x6999 for non-life-threatening reactions.
• Determine the extent of the spill. Has it made contact with your skin, personal clothing, or has it spread outside the posted contamination control area? If so call, or ask someone to call x6999.

Warn others.
• Alert people nearby.
• If there is no medical emergency or danger to life, health, or the environment, call or ask someone to call x6999.

Isolate the area.
• Restrict access.
• Keep doors closed if possible.
• Tape or rope off the area.

Minimize personal exposure.
• Minimize your movements.
• Keep your hands and clothing away from your face.
• Try not to touch any objects as this may spread contamination.

Stay near the area, from a point of safety.
• Have a person knowledgeable of the incident assist emergency response personnel.
• Notify your supervisor, or ask someone to do so on your behalf.

Next Topic:
BIOLOGICAL EXPOSURES OF CONCERN

Biological materials of concern related to exposures include materials or animals that may contain agents or properties that have known, potential, or unknown health risks. Examples of materials include all recombinant genetic materials, viable biological microbes in research, or Risk Group 2 or higher agents or materials. Examples of worker exposures to such biological materials of concern include:

- Biological materials in contact with mucous membranes such as the eyes, nose, or mouth.
- Biological materials in contact with an open area of skin (e.g., cut or abrasion).
- Cuts or punctures with sharp objects that may be contaminated with biological materials.
- Exposures to humans or animals in research in a manner that is known to transmit disease.
- Exposure to the blood of other people.

In the event of an exposure:

- Remove any contaminated clothing.
- Exposed skin should be washed thoroughly with soap and water.
- Skin puncture sites should be washed thoroughly with soap and water.
- Exposed eyes or mucous membranes should be flushed with running water for a minimum of 15 minutes, preferably through the use of an emergency eyewash.
- Dial 9-1-1 for any life threatening impacts or complications associated with the exposure event.
- For non-life threatening situations, contact x6999.
  - Report exposures to Health Services (x6266) and the Biosafety Officer (x6949) during business hours as soon as possible.

Additional Biological Spill or Release Reporting

Report the following biosafety-related incidents to line management and an LBNL Duty Officer at x6999:

- Release occurring outside of primary and secondary biosafety containment of medical/biohazardous waste, biohazardous materials, recombinant genetic materials, or other regulated biological materials that have not been inactivated.
- Environmental release of a viable agent, animal, plant, or pest material that is regulated against release or may cause damage to humans, plants, animals, or the environment.
- Biosafety-related inspections or findings.

In an emergency dial: 911

To report an incident or unsafe condition (non-emergency) call:

x6999, cell or off site: (510) 486-6999
You can cleanup a biological spill if:

- You understand the biological and other hazards and cleanup procedures.
- Your work authorization and training sufficiently covers the work to be completed.
- There is no potential for personal exposure, injury, or environmental damage.
- The appropriate spill cleanup materials and equipment are available.
- Two people can clean up the spill thoroughly within an hour.

Spill Cleanup Procedure

Use the procedural guidelines noted below for biological spills outside of a biosafety cabinet. Consult the online Biosafety Manual for spills inside a biosafety cabinet or involving centrifuges, radiation, chemicals, or animals.

1. If you spilled a Risk Group 1 (RG1) material, or a small dilute amount of a RG2 material, remove any contaminated clothing, wash contaminated body areas with soap and water, and proceed to Step 6.

2. If you spilled a significant amount (e.g., 100 ml or more) of a RG2 or higher material, avoid breathing, leave the room immediately, and close the door.

3. Warn others not to enter the contaminated area. Get help as needed: Call 9-1-1 (Emergency) or x6999 (Non-life-threatening emergency). If you leave the area, post a sign warning others to not enter the area.

4. Remove and put contaminated clothing into a container for biohazardous waste disposal or autoclaving, and thoroughly wash hands and face.

5. Wait 30 minutes before re-entering the area to allow dissipation of airborne biological materials (aerosols) created by the spill. Put on personal protective equipment (PPE) before re-entering the room.

6. Put on the following PPE: lab coat or gown, safety glasses, and double gloves. If the risk of the material or contamination is high, wear additional appropriate PPE such as a respirator, protective suit with tight-fitting wrists, or shoe covers.

7. Cover the spill with paper towels or other absorbent material to prevent liquid migration and aerosol production.

8. Gently pour or squirt a freshly prepared solution of 10% household bleach or other appropriate disinfectant around the edges and then into the center of the spill area until the towels are soaked with the disinfectant.

9. Let the disinfectant stay in contact with the spilled material for at least 10 minutes, and up to 20 minutes for larger volumes or RG2 materials.

10. Use paper towels to wipe up the spill working from the edges into the center of the spill. If sharps or sharp fragments such as glass might be in the spill do not touch the spill materials with gloved hands. In this case, use a dustpan and squeegee or disposable cardboard to scoop up the spill materials and sharps.

11. Clean the spill areas with paper towels soaked with disinfectant, and then with paper towels wetted with water.

12. Dispose of or autoclave contaminated items. Dispose of contaminated items using biohazardous waste containers, biohazard bags, sharps containers, and other means specified in the Medical and Biohazardous Waste Generator’s Guide (PUB-3095). Reusable and autoclavable items may be decontaminated using an autoclave bag and pan in an on-site autoclave.

13. Remove and dispose of PPE, or place coats in a lab coat laundry bin. Wash hands with soap and water.

Report all spill exposures and injury incidents to x6999.
**THREATENING BEHAVIOR**

If you feel threatened or harassed by a coworker, supervisor, or contractor in the workplace:

- If experiencing an immediate threat dial **9-1-1**.
- Otherwise, call the Employee Labor Relations Manager at x4709, the Diversity and Inclusion Office at x7635, or any supervisor.

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**ACTIVE SHOOTER RESPONSE**

If there is an active shooter in the building, your options are to:

1. **RUN.**
   - a. Evacuate the building.
   - b. Move away from the sounds of gunfire, and check your route for safety before you move.
   - c. Encourage others to move out of the building with you.
   - d. Keep low to the ground and away from building windows.
   - e. Move away from the building with your hands raised to a safer area.
   - i. **NOTE:** A “safer area” does not necessarily mean the Emergency Assembly Area as this may still be in an unsafe area relative to the event. Use your best judgment to determine a safe location.
   - f. Dial **9-1-1** when in a safe place to do so, if police are not already at the scene.

2. **HIDE.**
   - a. Lock the door to the room you are in.
   - b. Barricade the door with heavy furniture.
   - c. Turn off the lights.
   - d. Turn off your cell phone, or silence your cell phone (turn vibrations off as well).
   - e. Remain absolutely silent.
   - f. If police identify themselves at the door, call **9-1-1** and quietly ask for confirmation that officers have control of the scene.

3. **FIGHT.**
   - a. Arm yourself with a sharp (e.g., letter opener, scissors, etc.) or heavy blunt object (e.g., fire extinguisher, large flashlight, lamp, etc.).
   - b. Hide in a position to ambush (surprise) the attacker when they enter the area you are in.
   - c. Attack with all of your strength and do not stop until the attacker is no longer a threat.
   - d. **DO NOT** pick up any of the attacker’s firearms. You may be perceived as the shooter by responding police officers.
   - e. After ensuring the attacker is no longer a threat and that there are no others present, evacuate the building and tell any police officers of the assailant’s status and location.

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To report an incident or unsafe condition (non-emergency) call: **x6999**, cell or off site: *(510) 486-6999*.
BOMB AND OTHER THREATS

Bomb threats or threats of malicious events (shootings, sabotage, etc.) should all be taken seriously. If you receive a threat via telephone, letter, note, or other means report it immediately by dialing 9-1-1. If it is a phone threat try to gather as much information from the individual if possible, including:

- When is the bomb (or other event) going to detonate (or take place)?
- What is the specific location of the bomb/event?
- Why are they planning such an event?
- Who are they?
- Make note of their voice.
  - Are they male or female?
  - Do they sound older or younger?
  - Do they have any kind of an accent or distinguishing speech characteristic?
- Make note of any background noise such as train horns, air traffic, other voices, etc.
- Make note of the phone number from the caller ID, if possible.

SUSPICIOUS “PACKAGES”

The term “suspicious package” was meant originally to refer to parcels and letters received through mail delivery services. The term is now used to also describe unattended bags, backpacks, objects resembling a pipe bomb, and more. A suspicious package (parcel or letter) is one that has any combination of the following:

- The package was not expected by the recipient.
- No return address.
- Restrictive markings such as: Personal, or Do Not X-ray, or Confidential.
- Letter sealed with tape or a box with excessive tape.
- Misspelled words, bad grammar, or poor handwriting on the outside of the package.
- Suspicious powder or substance leaking from the package.
- Excessive postage stamps.
- Originating in a foreign country.
- Strange odor.
- Addressed to the title only, not an individual name.
- Stains from liquids.
- Lopsided or uneven.
- Protruding wires.

If you receive or see a letter or package that displays any combination of these criteria, especially if the package was not expected, or if you identify another type of suspicious package (unattended bags or backpacks, objects resembling a pipe bomb, or bags placed near dangerous chemicals or expensive equipment), follow these instructions:

- If you picked up the item, gently set it down.
- Back away from the package.
- Warn others of the potential hazard.
- If possible, wash your hands with soap and warm water for at least 2 minutes.
- Dial 9-1-1.
- Prevent anyone from approaching the object (this includes yourself).

SUSPICIOUS BEHAVIOR

The suspicious behaviors associated with malicious individuals can range from the very obvious to very subtle depending on the intent of that individual. Suspicious behaviors can include, but are not limited to:

- Climbing any security fence or barrier.
- Dressing inappropriately for the weather and site activities, such as wearing full camouflage, a mask, or dressing in all-black tactical clothing.
- Being in an area where an individual should not be.
- Attempting to gain access to an area where an individual should not be.
- Looking over one’s shoulder while working as if to ensure no one is watching.
- Evasive behavior when questioned (i.e., they try to leave quickly or will not respond).

What should you do if you feel someone is acting suspiciously?

- Dial 9-1-1 if:
  - Anyone is climbing a security fence or barrier.
  - Anyone acting in a threatening or aggressive nature.
  - Any individual flees when questioned.
- Dial x6999 for any other suspicious person situation.

PROTECTIVE ACTIONS
Protective actions are the responses used by emergency officials to protect lab personnel and the public during and after emergency events. Protective actions are considered mandatory for all lab employees, visitors, and contractors. When notified of a protective action implementation, follow the instructions of first responders and Building Emergency Team personnel. The lab has three predefined protective actions: evacuation, shelter-in-place, and lockdown.

**HOW WILL I KNOW ABOUT A PROTECTIVE ACTION IS BEING PUT IN PLACE?**

All protective actions will be initiated using one or more of the following:
- Public address system
- The LBNL notification system, LabAlert
- Local fire alarms
- Self-initiated response to an event (e.g., earthquakes).

When used, LabAlert can send text messages or emails to anyone in the system. It is very IMPORTANT to ensure your information is in the system and is accurate. You can check this by accessing the registration page in the A–Z index under LabAlert.

It is important to note that this system is used for EMERGENCY purposes only, so please provide as many forms of contact as possible. This will ensure you can be reached during an emergency event.

Protective Services will also use the public address system and emergency radio systems to reach additional employees.

**SHELTER-IN-PLACE: WHAT SHOULD I DO?**

Shelter-in-place is used to protect populations from an airborne health hazard. This could be chemicals, radiological materials, or smoke from a structure fire or wildland fire. When a shelter-in-place is issued:
- Remain calm.
- QUICKLY gather your car keys and cell phone, if possible (do not search for these items).
- Alert others to the shelter-in-place order in case they may not have received/heard the notification.
- Move to an interior part of the building, closing windows and doors behind you.
- Lock or barricade the doors of the room you are in.
- Do not eat, drink, take medications or apply cosmetics unless medically necessary.
- Seal off doorways with clothing, towels, or plastic sheeting if possible.
- Wait for further instruction from your Building Emergency Team or emergency responders.

**LOCKDOWN: WHAT SHOULD I DO?**

Lockdown is used to protect populations from threats external to their building, or to maintain control of an area. This could be a result of a bomb threat, active shooter in another building, mountain lion sighting, or lost/stolen asset.
- Remain calm.
- As instructed:
  - Move away from windows or get down on the floor.
  - Protect yourself from any possible debris.
  - Lock or barricade the doors of the room you are in.
- Wait for further instruction from emergency responders.

In an emergency dial: 911
To report an incident or unsafe condition (non-emergency) call:
- x6999, cell or off site:
- (510) 486-6999
**EVACUATION: WHAT SHOULD I DO?**

In any scenario where a building evacuation is necessary:

- Remain calm.
- QUICKLY gather your car keys and cell phone, if possible (do not search for these items).
- Alert others of the evacuation in case they have not received/heard the notification.
- Exit the building using the shortest and safest route.
- Make note of any injured or otherwise incapacitated people and report this to your Building Emergency Team (BET) (do not stop to help).
- Be aware of your surroundings and the hazards that may be present inside and outside the building.
- Proceed to the Emergency Assembly Area (EAA).
- Report any life threatening injuries (yours or that of others) or major safety concerns (fires, releases, etc.) to your BET.
- Follow the EAA guidelines.

It is important to follow BET personnel instructions and that of first responders explicitly during an evacuation and when staged at an EAA. At an EAA please remember to:

- Remain quiet and attentive.
- Assist the BET with conducting personnel accountability (i.e., who is missing).
- Stay in one place. This will help during accountability.
- Stay out of roads and out of the way of first responders.
- Stay at the EAA until cleared to leave (back into the building or to go home) by Protective Services.
- It is important to stay with your group at the EAA and not attempt to go back inside or to go home for several safety reasons:
  - The building is still unsafe unless first responders verbally tell you to do so.
  - For fire alarms, the cessation of fire alarm bells or sirens DOES NOT mean the building is cleared for reentry. Emergency responders will instruct you when it is safe to reenter the building.
  - During a large-scale event (e.g., earthquake) a seismic assessment of your building must be completed before reentry even if the building seems safe. You may be directed to another area in the meantime.
  - During a large-scale event, the way home may not be safe. You will be instructed to go home when first responders can determine this is possible, and you will be provided specific directions for a safe route out of the area.
  - During a large-scale event at LBNL, there are other concerns that you do not want to take home with you such as chemical, radiological, and biological materials that may have been released during the event. You will be instructed to go home when first responders can determine this has not occurred or that it has not impacted you.
  - Be patient. Responders will clear your groups for reentry or for dismissal home as soon as possible.

In any scenario where a site-wide evacuation is necessary:

- Explicitly follow instructions from emergency personnel.
- Gather your car keys, cell phone, medications and other personal effects if possible.
- Look at a site map for road names and directions to the exits of the LBNL main site. You may need to use a route that you do not normally use.
- Offer rides to others. There are three times as many people on the LBNL main site as there are parking spots. Many employees use public transportation that may not be available in an emergency.
- Leave only when your building is instructed to do so. This prevents traffic congestion that can trap people in the path of the hazard.
- If instructed, go to an off-site relocation area.

**SITE MAP**

Next Topic: EAAs are locations where building occupants assemble after an emergency evacuation of their building. The evacuation may be triggered due to a fire alarm, earthquake, or other event. Consult the evacuation maps of your building for directions to the EAA, or ask your Building Emergency Team (BET).
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