

Laboratory Emergency Response & Incident Reporting Guide

Occupational & Environmental Safety Office
Duke University and Health System



For Mobile Emergency Info:

bit.ly/duke_emergency

Revised 2022

Quick Reference

Employee Exposure Hotline (Biological, Chemical, Radiological)	
Campus phones	115
Non-Campus phones	919-684-8115
Duke Police/Security	
Campus phones	911
Non-Campus phones	919-684-2444
Employee Occupational Health & Wellness	919-684-3136
Poison Control	800-222-1222
Corporate Risk Management	919-684-6226
Workers' Compensation	919-684-6693
Report work-related injuries & illnesses	forms.hr.duke.edu/workcomp/

EMERGENCY 911

Biological Spill on Body

- Remove contaminated clothing.
- Wash area with soap and water for 1 minute. For eye exposures, flood eyes with water from eyewash station.
- Obtain medical attention, if necessary.
- Employees call the Employee Exposure Hotline (115 or 919-684-8115) to report exposure.
- Report incident to supervisor and complete HR work-related injury/illness report or appropriate incident report.

Minor Spill Involving Blood or Body Fluids

- Wear disposable gloves, lab coat, and face protection (surgical mask with safety glasses or a face shield).
- Cover spill with paper towel or other absorbent materials.
- Decontaminate area with 1:10 dilution of bleach:water. Allow a 20 minute contact time.
- Use forceps or other mechanical devices to pick-up any sharps. DO NOT USE YOUR HANDS TO CLEAN UP SHARPS! Contaminated sharps must be disposed in a sharps container.
- Place all disposable materials (non-sharps) into a plastic leak-proof bag or medical waste container and dispose appropriately.

Spill Involving Microorganisms Requiring Biosafety Level 1 or 2 (BSL1 or BSL2) Containment (e.g., *E. coli*, *Staphylococcus*, bloodborne pathogens, adenoviruses, recombinant DNA, biologically derived toxins)

- Alert people in immediate area of spill.
- Put on PPE (lab coat, gloves, and face protection: surgical mask and safety glasses or a face shield).
- Cover spill with paper towel or other absorbent materials.
- Pour a freshly prepared 1:10 dilution of bleach:water (at least 0.525% sodium hypochlorite final concentration) or appropriate disinfectant around the edges of the spill and then into the spill. Avoid splashing, spraying or squirting the disinfectant. Allow a 20 minute contact time.
- Wipe up the spill using paper towels. Work from the outer edges into the center.
- Use forceps or other mechanical devices to pick-up any sharps. DO NOT USE YOUR HANDS TO CLEAN UP SHARPS! Contaminated sharps must be disposed in a sharps container.
- Clean spill area with fresh towels soaked in 1:10 bleach or appropriate disinfectant.
- Place towels in a leak-proof bag and dispose using the approved biohazardous waste processing method.

Spill Involving Microorganisms Requiring Biosafety Level 3 (BSL3) Containment Outside the BSC (e.g., *Mycobacterium tuberculosis* (TB) cultures)

- Follow location- and agent-specific SOP. At minimum:
- Attend to injured or contaminated persons and remove them from exposure.
- Alert people in immediate area to evacuate.
- Close doors to affected area and do not enter area for at least 1 hour.
- Wearing facility-specific PPE (e.g., gowns, gloves, appropriate respirator (N95 or PAPR with HEPA filters) and shoe covers) clean up spills as indicated above for Biosafety Level 1 or 2, using appropriate disinfectant.

Always practice "Universal Precautions" when handling human blood or body fluids.

Employee Exposure Hotline919-684-8115

OESO Biological Safety Division919-684-8822

BIOLOGICAL

Chemical Spill on Body

- Flood exposed area with running water from faucet, drench hose, or safety shower for at least 15 minutes.
- Remove all contaminated clothing and shoes.
- **Obtain medical attention**, if necessary.
- Employees may call the Employee Exposure Hotline (919-684-8115) for medical advice.
- Report incident to supervisor and complete HR work-related injury/illness report or other appropriate incident report.

Hazardous Material Splashed in the Eye

- Immediately rinse eyeball and inner surface of eyelid with water continuously for 15 minutes.
- Forcibly hold eyes open to effectively wash behind eyelids.
- **Obtain medical attention.**
- Employees may call the Employee Exposure Hotline (919-684-8115) for medical advice.
- Report incident to supervisor and complete HR work-related injury/illness report or other appropriate incident report.

Major Chemical Spills

- Alert people in the area to evacuate.
- Turn off ignition and heat sources if spilled material is flammable.
- On-Campus: Call 911 from a campus phone or 919-684-2444 from a cell phone.
- Off-campus: Follow site-specific chemical spill procedures or call 911.
- Attend to injured or contaminated persons and remove them from exposure.
- Have person knowledgeable of area assist emergency personnel.

Minor Chemical Spills

- Alert people in the immediate area of spill.
- Avoid breathing vapors from spill.
- Turn off ignition and heat sources if spilled material is flammable.
- Put on appropriate personal protective equipment, such as safety goggles/face shield, suitable gloves, and gown/coveralls/long-sleeved lab coat.
- Confine spill to small area.
- Use appropriate kit to neutralize and absorb acids or bases.
- Use appropriate kit or spill pads.
- Collect residue, place in appropriate container and dispose as chemical waste (call 919-684-2794 for waste collection).
- Clean spill area with water.

Hazardous Drug Spills

- Follow the instructions on the OESO website at this shortcut: bit.ly/duke_spill

OESO Environmental Programs919-684-2794

OESO Occupational Hygiene & Safety919-684-5996

OESO Laboratory Safety919-684-8822

CHEMICAL

Fire Procedures

Use the **RACE** procedure:

- R**emove persons in danger. Exit through stairwell, **do not use elevator**.
- A**ctivate alarm (Code Red) & dial 911.
- C**lose doors and windows.
- E**xtinguish fire. Have person knowledgeable of incident and area assist emergency personnel.

To extinguish the fire, use the correct fire extinguisher and the **PASS** procedure:

- P**ull the pin
- A**im at the base of the fire
- S**queeze the handle
- S**weep from side to side

Always maintain accessible exit.
Avoid smoke or fumes.

Pull the Pin, Call it In.

Clothing on Fire

- **STOP, DROP and ROLL** around on the floor to smother flames or drench with water if safety shower is immediately available.
- Report incident to supervisor.

Location of evacuation route map _____

Location of a safe area _____

Location of exit stairwell _____

Location of fire extinguisher _____

Fire Emergency..... 911

Advise the Durham dispatcher that you are calling from Duke so they can coordinate the response with Duke Police.

After any fire (no matter the size or location), or when evidence of a fire is discovered, report to Duke Police..... 919-684-2444

FIRE - CODE RED

Musculoskeletal Disorders (MSDs)

- Develop over time and can take a long time to heal
- Can be quite painful and reduce overall effectiveness and efficiency
- Occur in any part of the body
- A variety of risk factors (personal and work-related) can increase the risk of developing a MSD
- Reducing exposure to these risk factors may reduce the likelihood of developing injury
- The sooner a MSD is identified, the better the chances of quickly recovering or preventing possible progression of the problem

MSD Signs and Symptoms

- Inflammation
- Pain
- Redness
- Swelling
- Heat
- Numbness
- Tingling
- Loss of Function
- Deformity

Seek medical treatment if you experience any of these MSD signs or symptoms. For an ergonomic assessment of your work area, contact the Ergonomics Division.

Ergonomics:

- Increases comfort and safety
- Increases productivity and job satisfaction
- Prevents/reduces the risk of MSDs

OESO Ergonomics Division919-668-ERGO(3746)

Visitor Injuries/Illnesses

- Respond to injured.
- Report incident to Duke Police (911 from a campus phone or 919-684-2444 from a cell phone) and Corporate Risk Management.

Duke Police.....919-684-2444

Corporate Risk Management919-684-6226

Employee Work-Related Injuries/Illnesses

- If emergency care is needed, go to a DUHS Emergency Department or call 911.
- All work-related exposures to blood, body fluids or other biological materials are to be reported immediately through the **Employee Exposure Hotline — 919-684-8115**.
- Obtain care for non-life threatening injuries through Employee Occupational Health & Wellness (EOHW). When EOHW is closed, employees may seek treatment at Duke Urgent Care or DUHS Emergency Room.
Warning: Needle sticks and cuts can introduce contaminants into the body; even cuts or punctures with clean objects can become infected. Wash with soap and water, cover with a bandage, then report. For cuts or punctures with contaminated sharps, promptly call **919-684-8115**
- All work-related injuries/illnesses, regardless of the severity, must be reported to your supervisor.
- Fill out a Report of Occupational Injury/Illness Form within 24 hours. You can find this form on the Duke Human Resources Website.

Employee Exposure Hotline919-684-8115

Employee Occupational Health & Wellness919-684-3136

Workers' Compensation919-684-6693

Animal Bites/Scratches

- Wash affected area thoroughly with soap and water 3-5 minutes and then cover with a bandage or sterile dressing. Flush eyes as appropriate.
- Report injury to supervisor immediately.
- Fill out a Report of Occupational Injury/Illness Form within 24 hours.

Warning: Bites, scratches or exposure to body fluids received from non-human primates can be extremely serious. Utilize the non-human primate exposure kit and then seek immediate attention from Employee Occupational Health & Wellness.

If animal bites/scratches or exposure to body fluids occurs from any non-rodent species, please notify the Division of Laboratory Animal Resources.

Division of Laboratory Animal Resources919-970-9410

PERSONAL INJURY

Radiological Spill on Body

- Remove contaminated clothing.
- Rinse exposed area thoroughly with water.
- **Obtain medical attention, if necessary.** Employees may contact the Employee Exposure Hotline, (919-684-8115) for medical advice.
- Call Duke Police (911 from a campus phone or 919-684-2444 from a cell phone) and ask for Radiation Safety assistance.
- Report incident to supervisor and Radiation Safety Office and complete a work-related injury/illness report as indicated under Personal Injury.

Minor Radiological Spills

- Prevent access to the spill to prevent personnel exposure and the spread of radioactive contamination. Cordon off the area.
- Call Duke Police (911 from a campus phone or 919-684-2444 from a cell phone) and ask for Radiation Safety assistance.
- Wear personal protective equipment, including safety goggles, disposable gloves, shoe covers and long sleeved lab coat.
- Place absorbent paper towels over liquid spills. Place towels dampened with water over solid materials.
- Use forceps to place towels in plastic bag. Dispose of in a low-level, radioactive waste container.
- Monitor area, hands and shoes for any contamination with an appropriate survey meter or method.
- Repeat clean-up until contamination is no longer detected.

Major Radiological Spills

- Attend to injured or contaminated persons and remove them from spill area.
- **Seek medical attention for the injured persons immediately** — this takes precedence over any radiation concerns.
- Have other potentially contaminated personnel stay in one area until they have been monitored and shown free of contamination.
- Prevent access to the spill to prevent personnel exposure and the spread of radioactive contamination. Cordon off the area.
- Call Duke Police (911 from a campus phone or 919-684-2444 from a cell phone) and ask for Radiation Safety assistance.
- Have person knowledgeable of incident and area assist emergency personnel.

Laser Exposure

- **Seek medical attention immediately.**
- Call Duke Police (911 from a campus phone or 919-684-2444 from a cell phone) and ask for Radiation Safety assistance.
- Notify your supervisor and complete a work related injury/illness report within 24 hours.

OESO Radiation Safety Division

Non-emergency 919-684-2194

Emergency, call Duke Police 919-684-2444

RADIOLOGICAL

Unsafe Work Conditions

Report unsafe work conditions to your supervisor or manager. If input from the Occupational and Environmental Safety Office (OESO) is needed, call **919-684-2794**.

For all incidents, on and off campus- contact Duke Police **919-684-2444**.

Alternately, use the **LiveSafe App** to contact Duke Police.

Security Incidents To Report

- Theft
- Harassing telephone calls
- Assault
- Personal threats, including threats via social media
- Suspicious activity
- Weapon possession
- Disorderly conduct
- Any crime against person or property

Requests for **Protective Escorts** on-campus should be made through Duke Police at **919-684-2444**. **Request a Duke Van** using the LiveSafe App.

Off campus locations: note security contact information here:

Get the LiveSafe App here:

bit.ly/duke_livesafe

Gas Leak

Before

- Identify your escape routes should you need to evacuate your place of work or study. Also identify your Emergency Assembly Points.
- Identify natural gas shutoff valves for your building, especially for research laboratories.

During

If you smell natural gas odors:

- Turn off all stoves, open flames, and other potential ignition sources.
- Call 911.
- Move people out of the areas in which a gas odor can be detected and open doors and windows on your way out.

If you have been told to evacuate an area due to a natural gas odor:

- Turn off all ovens, open flames, and other potential ignition sources.
- Open windows and doors as you evacuate the area.
- Convene at the designated Emergency Assembly Points. If you can still smell a gas odor, continue moving farther.

After

- Understand that it may take the fire department or the fire marshal some time to clear a building and determine that there is no remaining natural gas danger.
- Do not re-enter the building until cleared to do so by the fire department or Duke Police.

Building Utility/Maintenance Problems or Failures

The Duke University Facilities Management Department (FMD) and Medical Center Engineering and Operations (E&O) Department are service departments with the responsibility to provide systems and building support for Duke-owned buildings including:

- Electrical Problems
- Fire and other Alarm Systems
- Heating / Air Conditioning
- General / Carpentry
- Plumbing Problems
- Elevator Problems

Medical Center Engineering and Operations.....919-684-3232

24 hours a day / 7 days a week

University Facilities Management919-684-2122

Leased properties maintenance instructions: _____

