

**OSU - CENTER FOR HEALTH SCIENCES**  
**LABORATORY EMERGENCY RESPONSE PROCEDURES**  
**---POST CONTACT INFORMATION NEAR PHONE---**

**Campus Security (CHS – 24hr.) ..... (918) 625-8592**  
**All Major Emergencies – Contact Immediately**

**ALL MAJOR EMERGENCIES - Chemical, Medical, Police or Fire..... 9-911**

Principal Investigator of Laboratory .....(see posting outside of door)

Director, Regulatory Compliance & Research Facilities ..(918) 561-1413, c.(918) 814-7431  
Amber Hood

Laboratory Safety Coordinator (LSC)(RSO).....(918) 561-1403, c.(918) 241-3656  
Laurie St. Clair

Human Resources .....(918) 594-8221

Office of Research .....(918) 561-1400

Oklahoma Poison Control Center..... 1-800-522-4611

Safety Manager.....(918) 561-8391, c.(918) 231-5825  
Patty White

**CHAPTER 1.0 - EMERGENCY RESPONSE**

During the course of normal laboratory operations, there is always the potential for an emergency situation to arise. These emergencies can be the result of a chemical spill, fire, or the need for medical assistance. In the event of an emergency, emergency response procedures should be implemented. These procedures may include evacuation of the facility if such action is deemed appropriate. If evacuation is necessary, stay together and move upwind from the facility at least 100 yards. Internal communication is very important during any emergency

situation. It is essential that all employees know how to act and react during the emergency. To accomplish this, it is necessary that people are familiar with the Emergency Response Procedures so that they can act responsibly and quickly. All

incidents, regardless of severity, should be reported and investigated.

---

**Oklahoma State University**  
**Center for Health Sciences-Laboratories**  
**EMERGENCY RESPONSE PROCEDURES**

---

## **Table of Contents**

<b>Section</b>	<b>Title</b>	<b>Page</b>
<b>1.0</b>	<b>EMERGENCY RESPONSE .....</b>	<b>1</b>
<b>1.1</b>	<b>CHEMICAL SPILLS .....</b>	<b>3</b>
<b>1.2</b>	<b>RADIATION SPILLS .....</b>	<b>7</b>
<b>1.3</b>	<b>BIOHAZARD SPILLS .....</b>	<b>9</b>
<b>1.4</b>	<b>LEAKING COMPRESSED GAS CYLINDERS .....</b>	<b>11</b>
<b>1.5</b>	<b>FIRES .....</b>	<b>12</b>
<b>1.6</b>	<b>MEDICAL EMERGENCIES .....</b>	<b>12</b>
<b>1.7</b>	<b>INCIDENT REPORTING .....</b>	<b>16</b>
<b>1.8</b>	<b>THREAT ASSESSMENT GROUP .....</b>	<b>16</b>

## SECTION 1.1 - CHEMICAL SPILLS

All spills of hazardous chemicals shall be reported verbally to the Lab Safety Coordinator (LSC), regardless of size and as soon as possible. A written report, '[Report of Laboratory Incident](#)', shall be prepared once the spill is remediated. The report shall include the date, time, location, chemical(s) and their volume, how the spill occurred, actions taken, names of all persons and their involvement, including any visitors who were exposed. A copy of this report shall be provided to the Lab Safety Coordinator and the Principle Investigator (PI) and/or department chair (if the spill is major).

- A. **Major Emergency Spills** (24 hr. Stericycle Environmental Solutions Inc., (1-877) 577-2669, option 1, will be engaged to clean-up a major spill)

A chemical spill is classified as a Major Emergency Spill whenever it:

1. Causes personal injury or chemical exposure that requires medical attention;
2. Causes fire or explosion hazard or uncontrollable volatility;
3. Requires a need for breathing apparatus of the supplied air, self-contained, or air purifying type to handle the material involved;
4. Involves or contaminates a public area;
5. Causes airborne contamination that requires local or building evacuation;
6. Causes a spill that cannot be controlled or isolated by laboratory personnel;
7. Causes damage to university property that will require repairs;
8. Involves any quantity of metallic mercury, beyond the small quantity in a liquid thermometer and the spill can be cleaned by a small mercury spill kit or procedures in section 1.1, C. 'Mercury Handling and Spill Clean-up';
9. Cannot be properly handled due to lack of local trained personnel and/or equipment to perform a safe, effective cleanup;
10. Requires prolonged or overnight cleanup;
11. Involves an unknown substance; or
12. Enters the land or water.

Although the following tactics are prioritized in terms of usual preferred action sequences, each spill incident is unique and involves persons with varying levels of spill expertise and experience. Thus, for any individual incident, isolation of the spill and/or securing the area might best occur prior to or simultaneously with contacting campus security.

1. Don't panic! Always send for help first, *if possible*. Obtain the safety data sheet for responders, if you can do so safely.
2. If the spill presents an immediate danger, leave the spill site and warn others, control entry to the spill site, and immediately contact 24-hour clean-up response from Stericycle Environmental Solutions Inc., 1-877-577-2669, option 1.

3. Remove contaminated clothing. Move to nearest water flushing facility. Gently flush skin/eyes with water at least 15 minutes; use soap for intermediate and final cleaning of skin areas.
4. Protect yourself. Remove injured person(s) to fresh air, if safe to do so. If a rescue is necessary, inform campus security when speaking to them of the incident.
5. Notify nearby persons and evacuate as necessary. Prevent entry, as necessary, by posting a guard in a safe area and/or shutting doors.
6. If flammable vapors are involved, do not operate electrical switches unless to turn off motorized equipment. Try to turn off or remove heat sources, where safe to do so.
7. If the substance involved is an unknown, then emergency spill response procedures are limited to self-protection, informing campus security when speaking to them of the incident, isolation of the chemical, and evacuating and securing the area involved.
8. Do not touch the spill without protective clothing. Only trained and fitted personnel can wear respiratory protection gear, if needed.
9. Where the spill does not present immediate personal danger, try to control the spread or volume of the spill. This could mean shutting a door while placing toweling or other material under the door, moving nearby equipment to prevent further contamination, repositioning an overturned container or one that has a hole in the bottom or side, creating a dike by putting an absorbent around a spill.
10. Never assume gases or vapors do not exist or are harmless because of lack of smell. Know what the Safety Data Sheet warning is regarding vapors.
11. Increase ventilation by opening closed fume hood sashes to the 12 inch or full open position. Exterior doors may be opened to ventilate non-toxic vapors.
12. Use absorbents to collect substances. Reduce vapor concentrations by covering the surface of a liquid spill with absorbent.
13. Use methods of liquid or solid cleanup below if appropriate.
14. Describe incident in detail in writing and send a copy to the LSC. Use the '[Report of Laboratory Incident](#)' form. If medical assistance is needed see Section 1.6.

**B. Minor Spills**

Minor spills are those spills which do not fit the requirements for Major Emergency Spills. They are small, incidental (confined to immediate work/activity area, not threatening to safety or health) spills or releases. If spill is from a hazardous material, contain all spill cleanup material, label, complete correct form and request removal by the LSC.

The following general procedures should be used for all minor spills:

1. Attend to any persons who may have been contaminated. If these persons require medical attention this is a Major Emergency Spill (See above).
2. Notify persons in the immediate area about the spill.

3. Identify the material and obtain the associated safety data sheet.
4. Evacuate all nonessential personnel from the spill area.
5. If the spilled material is flammable, turn off ignition and heat sources.
6. Use correct procedures if the spilled material is a respiratory hazard. If respiratory protection is necessary, only those trained appropriately are allowed to wear the appropriate gear.
7. Leave on or establish exhaust ventilation if it is safe to do so.
8. Secure supplies to effect cleanup.
9. Don appropriate personnel protective equipment.
10. Spilled Liquids
  - a. Confine or contain the spill to a small area using applicable absorbent materials.
  - b. For small quantities of inorganic acids or bases, use a neutralizing agent or an absorbent mixture (e.g., soda ash or diatomaceous earth). For small quantities of other materials, absorb the spill with a nonreactive material (such as vermiculite, clay, dry sand, or towels).
  - c. For small amount of nonreactive material, cover with absorbent and sweep (using non-sparking tools) into a collection container for hazardous waste disposal.
  - d. If compatible, finish by washing with detergent and water.
  - d. If nonhazardous, mop up the spill, wringing out the mop in a sink or a pail equipped with rollers.
  - e. Carefully pick up and clean any cartons or bottles that have been splashed or immersed.
11. Spilled Solids

Generally, sweep spilled solids of low toxicity into a dustpan and place the material into a container suitable for that chemical. If the material is an inhalation hazard use a method that will not create airborne material for moving the material into a waste container.

If needed, vacuum the area with a HEPA filtered vacuum cleaner approved and designed for the material involved.
12. Dispose of residues according to safe disposal procedures. Remembering that personal protective equipment, brooms, dustpans, and other items may require special disposal procedures. (See the Chemical Hygiene Plan, Section 6.7 - "Waste Disposal, Unwanted Chemicals and Effluent Control").
13. Use the '[Report of Laboratory Incident](#)' form to document the incident.

C. **Mercury Handling and Spill Clean Up**

## 1. Health Effects

The ACGIH has established a TLV of 0.05 mg/m<sup>3</sup>, based on an 8-hour day and 40-hour week. The TLV for mercury also carries a "skin" notation, which indicates that metallic mercury can be absorbed into the body as well as through inhalation and ingestion into the skin. Mercury vapors are odorless, colorless, and tasteless. A quantity as small as 1 milliliter can evaporate over time, and raise vapor levels in excess of allowable limits. Mercury poisoning from exposure by chronic inhalation can cause emotional disturbances, unsteadiness, inflammation of the mouth and gums, general fatigue, memory loss, and headaches. In most cases of exposure by chronic inhalation, the symptoms of poisoning gradually disappear when the source of exposure is removed. Improvement, however, may be slow and complete recovery may take years.

## 2. Storage and Handling

Because of the health effects of mercury, the extremely difficult and time-consuming procedures required to properly clean spills, every effort should be taken to prevent accidents involving mercury. Always store mercury in unbreakable containers and stored in a well-ventilated area. When breakage of instruments or apparatus containing mercury is a possibility, the equipment should be placed in an enameled or plastic tray or pan that can be cleaned easily and is large enough to contain the mercury. Transfers of mercury from one container to another should be carried out in a hood, over a tray or pan to confine any spills. If at all possible, the use of mercury thermometers should be avoided. If a mercury thermometer is required, many are now available with a Teflon<sup>®</sup> coating that will prevent shattering. Always wash hands after handling mercury to prevent skin absorption or irritation.

## 3. Air Monitoring

Any mercury spill has the potential to generate airborne concentrations in excess of regulated levels. Large spills or spills with elevated vapor levels may dictate cleanup by a qualified contractor.

## 4. Protective Clothing

For small spills, a laboratory coat, safety glasses, and gloves should be used. Gloves made of the following have been rated as excellent for protection against elemental mercury:

Chlorinated polyethylene (CPE)	Polyvinyl Chloride (PVC)
Polyurethane	Nitrile Rubber, (also known by
Viton	several brand names)
Butyl Rubber	Neoprene

If mercury has been spilled on the floor, the workers involved in cleanup and decontamination should wear plastic shoe covers. LSC should be called immediately if a spill is extensive enough to require workers to kneel or sit where mercury has been spilled since Tyvek<sup>®</sup> or similar impermeable clothing will be required.

## 5. Spill Kits

Special spill kits are available from a variety of sources. If a spill kit is purchased, follow the manufacturer's directions. Alternatively, a kit can be assembled with the following components:

- a. protective gloves,
- b. mercury suction pump or disposable pipettes to recover small droplets,
- c. elemental zinc powder (or commercial amalgam material),
- d. dilute sulfuric acid (5-10%) in spray bottle,
- e. sponge or tool to work amalgam,
- f. plastic trash bag,
- g. plastic container (for amalgam), and
- h. plastic sealed vial for recovered mercury.

#### 6. Clean Up Procedures

- a. Wearing protective clothing, pools and droplets of metallic mercury can be pushed together and then collected by a suction pump.
- b. After the gross contamination has been removed, sprinkler the entire area with zinc powder. Spray the zinc with the dilute sulfuric acid.
- c. Using the sponge, work the zinc powder/sulfuric acid into a paste consistency while scrubbing the contaminated surface and cracks or crevices.
- d. To minimize contamination of housekeeping items, stiff paper may be used to assist in cleaning up the amalgam.
- e. After the paste has dried, it can be swept up and placed into the plastic container for disposal.
- f. Rags, shoe covers, sponges, and anything used for the cleanup should be placed in the trash bag to be disposed of as contaminated material.

#### 7. Waste Disposal

Call LSC for removal of the mercury waste and contaminated items

## SECTION 1.2 - RADIATION SPILLS

See CHS "Radiation Safety Manual" section 7.0 for more information.

'Emergencies' will generally be in the nature of spills, fires, or explosions, as a result of which radioactive materials are spread around the installation. In the event of such DISSEMINATION OF RADIOACTIVE MATERIALS, the following general procedures are given as a guide to be adapted to the specific nature of the emergency. All spills involving radioactive material shall be reported to Radiological Safety Officer (RSO).

#### A. Minor Spills Involving No Radiation Hazard to Personnel

- 1. Notify all other persons in the room at once.

2. Permit only the minimum number of persons necessary to deal with the spill into the area.
3. Confine the spill immediately.

Liquid Spills:

- a. Don protective gloves
- b. Drop absorbent paper on the spill.

Dry Spills:

- a. Don protective gloves.
  - b. Dampen thoroughly, taking care not to spread the contamination.
4. Notify the Principal Investigator of the laboratory and the RSO as soon as possible.
  5. Monitor all persons involved in the spill and cleaning.
  6. Decontaminate the area
  7. Permit no person to resume work in the area until a survey is made, and approval of the RSO is secured.
  8. Prepare a complete history of the accident and subsequent activity related thereto for the records of the RSO. Use the '[Report of Laboratory Incident](#)' form.

**B. Major Spills Involving Radiation Hazard to Personnel**

1. Notify all persons not involved in the spill to vacate the room at once.
2. If the spill is a liquid, and the hands are protected, right the container.
3. If the spill is on the skin, flush thoroughly.
4. If the spill is on clothing, discard outer or protective clothing at once.
5. Shut off air conditioning units serving the laboratory.
6. Vacate the room.
7. Notify the Principal Investigator and the RSO as soon as possible.
8. Take immediate steps to decontaminate personnel involved, as necessary. Seek medical assistance.
9. Decontaminate the area per the recommendations of the RSO. (Personnel involved in decontamination must be adequately protected.)
10. Monitor all persons involved in the spill and cleaning to determine adequacy of decontamination.



11. Permit no person to resume work in the area until a survey is made and approval of the RSO is secured.
12. Prepare a complete history of the incident using the '[Report of Laboratory Incident](#)' form and subsequent activity related thereto for the records of the RSO.

C. **Accidents Involving Radioactive Dusts, Mists, Fumes, Organic Vapors, and Gases**

1. Notify all other persons to vacate the room immediately.
2. Hold breath and vacate room.
3. Shut off air conditioning by contacting Physical Plant or Security.
4. Notify the Principal Investigator and the RSO at once.
5. Ascertain that all doors giving access to the room are closed and post conspicuous warnings or guards to prevent accidental opening of doors.
6. Report at once all known or suspected inhalations of radioactive materials. Seek medical assistance.
7. The RSO shall evaluate the hazard and the necessary safety devices for safe re-entry.
8. Determine the cause of contamination and rectify the condition.
9. Decontaminate the area.
10. Perform air survey of the area before permitting work to be resumed.
11. Monitor all persons suspected of contamination.
12. Prepare a complete history of the incident using the '[Report of Laboratory Incident](#)' form and subsequent activity related thereto for the records of the RSO.

D. **Injuries to Personnel Involving Radiation Hazard**

1. Wash minor wounds immediately, under running water, while spreading the edges of the gash. Seek medical assistance 1.6 "Medical Emergencies".
2. Report all radiation accidents to personnel (wounds, overexposure, ingestion, and inhalation) to the Principal Investigator and the RSO as soon as possible.
3. Permit no person involved in a radiation injury to return to work without the approval of the RSO and attendant physician.
4. Prepare a complete history of the incident using the '[Report of Laboratory Incident](#)' form and subsequent activity related thereto for the records of the RSO.

## SECTION 1.3 - BIOHAZARD SPILLS

A. **Biological Spills**

Biological spills outside biological safety cabinets may generate aerosols that can be dispersed in the air throughout the laboratory. These spills can be serious if they involve microorganisms that require Biosafety Level 2 containment. To reduce the risk of inhalation exposure in such an accident, occupants should leave the laboratory immediately. The laboratory should not be reentered to decontaminate or clean up the spill for at least 30 minutes. During this time, the aerosol may be removed from the laboratory via the exhaust ventilation systems or chemical fume hood, if present.

1. Spills on the Body
  - a. Remove contaminated clothing.
  - b. Vigorously wash exposed area with soap and water for one minute.
  - c. Obtain medical attention (if necessary). See section 1.6 'Medical Emergencies'
  - d. Report the incident to the principal investigator.
2. Biosafety Level 1 Materials Spill
  - a. Wear disposable gloves.
  - b. Soak paper towels in disinfectant and place over spill.
  - c. Place towels in a plastic bag for disposal.
  - d. Clean up spill area with fresh towels soaked in disinfectant.
3. Biosafety Level 2 Materials Spill
  - a. Alert people in immediate area of spill.
  - b. Put on protective equipment. This may include a laboratory coat with long sleeves, back-fastening gown or jumpsuit, disposable gloves, disposable shoe covers, safety goggles, mask or full-face shield.
  - c. Cover spill with paper towels or other absorbent materials.
  - d. Carefully pour a freshly prepared 1 to 10 dilution of household bleach around the edges of the spill and then into the spill. Avoid splashing.
  - e. Allow a 20-minute contact period.
  - f. After the spill has been absorbed, clean up the spill area with fresh towels soaked in disinfectant.
  - g. Place towels in a plastic bag and decontaminate in an autoclave.

## **B. Blood Spills**

1. General Information
  - a. Universal precautions must be observed. Refer to the CHS "Bloodborne Pathogen Exposure Control Manual" for more information. Cleaning of blood spills should be limited to those persons who are trained for the task.

- b. If an untrained person encounters a spill, he/she should limit access to the area and immediately call the person(s) assigned to this duty.
- c. Only disposable towels should be used to avoid the difficulties involved in laundering.
- d. If a spill involves broken glassware, the glass should **never** be picked up directly with the hands. It must be cleaned up using mechanical means, such as a brush and dustpan, tongs, or forceps.

## 2. Personal Protective Equipment

- a. Persons who clean blood spills should wear disposable gloves of sufficient strength so they will not tear during cleaning activities. If the gloves develop holes, tears, or splits, remove them, wash hands immediately, and put on fresh gloves. Disposable gloves must never be washed or reused. Remove gloves one at a time by grasping the wrist opening on the outside of the glove and pulling toward the fingers so that the gloves come off as inside out. Double-bag gloves with other contaminated biomedical waste (such as towels).
- b. If enough blood has been spilled to expect splashing during cleaning, call LSC. Additional protective equipment may be required.

## 3. Disinfectants

Read and follow all manufacturers' handling instructions. All spills of blood and blood-contaminated fluids should be properly cleaned using any of these three disinfectants:

- a. EPA-registered "hospital disinfectant" chemical germicides that have a label claim for tuberculocidal activity. These are chemical germicides that are approved for use as hospital disinfectants and are tuberculocidal when used at recommended dilutions.
- b. Products registered by the Environmental Protection Agency as being effective against human immunodeficiency virus (HIV).
- c. A solution of 5.25 percent sodium hypochlorite (household bleach) diluted between 1:10 and 1:100 with water (a 1:100 dilution of common household bleach yields 500 parts per million free available chlorine - approximately ¼ cup of bleach per gallon of tap water).

## 4. Cleaning Blood Spills on Hard Surfaces

To assure the effectiveness of any sterilization or disinfection process, surfaces must first be thoroughly cleaned of all visible blood or soil before a germicidal chemical is applied for disinfection.

- a. Isolate the area, if possible.
- b. Wear gloves and other protective apparel as needed.
- c. Remove visible blood with disposable towels in a manner that will ensure against direct contact with the blood. For example, put towels over the spill to absorb the liquid.

- d. Place contaminated towels in a plastic waste disposal bag.
  - e. The area should then be decontaminated with an appropriate germicide applied according to manufacturer's directions.
  - f. All contaminated towels and gloves should be double-bagged for disposal and labeled with the biohazard symbol.
5. Cleaning Blood Spills on Carpeting
- Use only a registered germicide. Read and follow manufacturer's instructions. Do not use chlorine bleach solution on carpet.
- a. Isolate the area--if possible.
  - b. Wear gloves and other appropriate apparel.
  - c. Procedures for small spills on carpets (smaller than a quarter) are as follows.
    - (1) Soak the spill with enough disinfectant to cover the spot.
    - (2) Let dry at least overnight to ensure that the spot is disinfected.
    - (3) Shampoo carpet, if needed, or use 3% hydrogen peroxide to remove discoloration.
  - d. Procedures for larger spills are as follows.
    - (1) Pour disinfectant on the spot and let stand at least 30 minutes to allow some disinfection to take place. Blot up excess liquid with disposable towels.
    - (2) Soak the area with additional disinfectant. Allow to dry overnight. Shampoo carpet, if needed, or use 3% hydrogen peroxide to remove discoloration.
  - e. All contaminated towels and gloves should be double-bagged and labeled with the biohazard symbol.

C. Report incident by using "[Report of Laboratory Biosafety Incident](#)".

## **SECTION 1.4 - LEAKING COMPRESSED GAS CYLINDERS**

Occasionally, a cylinder or one of its component parts develops a leak. Most such leaks occur at the top of the cylinder in areas such as the valve threads, safety device, valve stem, and valve outlet.

If a leak is suspected, do not use a flame for detection; rather, a flammable-gas leak detector or soapy water or other suitable "snoop" solution should be used. If the leak cannot be remedied by tightening a valve gland or a packing nut, emergency action procedures should be affected. Laboratory workers should never attempt to repair a leak at the valve threads or safety device; rather, they should consult with the supplier for instructions.

If the substance in the compressed gas cylinder is not inert, or is hazardous, then use the procedures in Section 1.1 - "Chemical Spills".

If the substance in the compressed gas cylinder is inert, or non-hazardous, contact the supplier for instructions.

## **SECTION 1.5 - FIRES**

1. If clothing catches fire STOP, DROP, and ROLL to smother the flames
2. Pull fire alarm or provide verbal warning to leave the building
3. Leave the building by nearest safe exit, go to area upwind of the fire. Secure critical research operations, close ventilation hoods, shut down equipment, turn off ignition sources, and close doors and windows, if time permits
4. If there is smoke or heat in area while leaving the building, keep low, crawling if necessary
5. Contact Fire Department by dialing 9-911, ensure that address of location is provided
6. Contact Campus Security at (918) 625-8592
7. Contact LSC at (918) 561-1403/(918) 241-3656 or Research Office at (918) 561-1400
8. See Section 1.6 for procedures to obtain medical assistance if the fire causes serious injury
9. After warning other occupants to leave the building, an employee may choose to fight the fire, if the fire is small and can be extinguished using an available fire extinguisher, and where there is no danger to the employee
10. Occupants may go back into building only when someone in authority, such as the Fire Marshall, says it is safe to do so.

## **SECTION 1.6 - MEDICAL EMERGENCIES**

Personal injury is not uncommon in laboratories. These injuries are usually minor cuts or burns but can be as severe as acute effects of chemical exposure or incidents such as heart attacks or strokes. Prevention of injuries should be a major emphasis of any laboratory safety program. Proper training will help prevent injuries from glassware, toxic chemicals, burns and electrical shock.

The initial responsibility for first aid rests with the first person(s) at the scene, who should react quickly but in a calm and reassuring manner. If they choose not to supply first aid, they should immediately notify someone who will. If the injury appears to be severe, excessive bleeding, unconscious/unresponsive, not breathing, or asking to go to the ER, then the first person responding should call 9-911 (or 911 from a cell phone) and request an ambulance. When talking to the person who answers the 9-911 call be explicit in reporting suspected types of injury or illness, location of victim, and type of assistance required; stay on the line as long as the caller is asked to do so. In addition, they should immediately (or have another person) contact CHS Campus Security (918) 625-8592 to report the incident and ask for first aid assistance. Campus Security will also coordinate with the responding ambulance for the transport of the employee.

CHS Campus Security personnel are trained in first response to a medical emergency. and can provide life saving CPR (cardiopulmonary resuscitation) for someone who is not breathing and/or does not have a heartbeat and are also trained to utilize the AED's, used to assist in restarting the heart, on campus. If a judgment call needs to be made regarding the type of treatment or location for treatment, Campus Security will have emergency contact numbers for the HCC attending physician for medical consultation.

All first aid, chemical exposures, and medical emergencies shall be reported as required in Section 1.6, B, "Seeking Medical Care".

**A. General**

1. "First aid" is defined as any one-time treatment and any follow up visit for the purpose of observation, treatment of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require what is termed as a "medical" injury by workers compensation.
2. First aid equipment should be readily available in or near each laboratory. See Section 1.6 (D) "First Aid Kits," for additional information.
3. Following any first aid, a nurse or physician qualified to handle the type of emergency should provide further examination and treatment. The instructions and phone numbers associated with emergency care and the Oklahoma Poison Control Center (1-800-522-4611) should be clearly posted.
4. It is recommended that each laboratory have at least one person trained in basic first aid and cardiopulmonary resuscitation, where possible, and training arranged by the associated department.
5. Someone (the supervisor, where possible) knowledgeable about the accident should always accompany the injured person to the medical facility and a copy of any applicable Safety Data Sheet(s) shall accompany the victim.
6. Serious and minor injuries requiring medical assistance or first aid should always be reported to a supervisor and recorded on the "Employee Injury Report" (<https://www.osu-tulsa.okstate.edu/hr/downloads/EmployeeInjuryReportTulsa.pdf>) with a copy to the LSC and the Campus Safety Manager. Reasons for this are as follows.
  - a. A minor injury may indicate a hazardous situation which should be corrected to prevent a serious future injury.
  - b. It is important to document all injuries as having been "work related". Even a minor injury may later leads to serious complications, such as from an infected cut.

**B. Seeking Medical Care – Reporting Workers Compensation Claims**

**Overview of Procedure**

1. In case of an injury on the job, the first priority is treatment of the injury and notification of the Principal Investigator (PI), campus Safety Manager and LSC.
2. Unless the injury requires immediate response by dialing 9-911 for an ambulance and contacting CHS Security, all injuries on the CHS campus will be treated at the OSU Health Care Center (HCC), located at 2345 Southwest Boulevard. If possible,

before going directly to the HCC the PI shall call the Safety Manager at (918) 561-8391 or cell (918) 231-5825 and follow their instructions.

3. Campus Security personnel are trained in first response to a medical emergency and can provide life saving CPR and are trained to utilize the AED's on campus. Campus Security will have emergency contact numbers for the HCC and OSU Medical Center attending physician for medical consultation. It is critical that Security be aware of a medical situation; also, it will be necessary for Security to direct ambulance personnel responding to a 9-911 call to the correct location.
4. HCC is open from 8-5, Monday through Friday. If an injury occurs when the HCC is closed, the employee is to have Security call the Oklahoma State University Medical Center (918) 587-2561, and request the Family Medicine Resident On-Call. The Family Medicine Resident On-Call will contact the employee or other responder, as necessary, to determine if an emergency room visit is necessary or if the employee's injury can wait until the HCC is open or the victim can see their own physician.
5. Employees must report injuries immediately to their PI, the campus Manager of Safety and the LSC even if they do not require immediate medical attention.
6. If the employee cannot reach their PI, the employee is to contact another person in authority to assist in appropriate response and reporting.
7. Where possible, the PI and employee should complete the supervisor/employee portion of the "Employee Injury Report" (<https://www.osu-tulsa.okstate.edu/hr/downloads/EmployeeInjuryReportTulsa.pdf>) prior to the employee reporting to the HCC; send a copy to the LSC and fax the completed report to the campus Safety Manager at (918) 561-1261 and take the report with employee to the HCC.
8. Once treatment is complete, the employee is to return to their PI with a copy of their "Employee Injury Report and Certificate to Return to Work".
9. If the employee is medically unable to return to work, the employee will be required to make contact with their PI or supervisor each day pending return to work.
10. Failure of the employee to comply with these procedures, or medical treatment prescribed by the medical provider, may result in corrective action and delay or forfeiture of benefits.

#### **Health Care Center**

1. Upon arrival, employees will check in at the front desk on the north end of the HCC.
2. The physician will examine and treat the employee.
3. The physician will determine whether the claim is "first aid only" requiring first aid or a more serious injury requiring OSHA reporting and filing with Broadspire, the third party workers' compensation administrator.
4. The physician will complete the "Certificate to Return to Work" form and give it to the employee.
5. The physician will complete the medical portion [*To Be Completed By a Physician section*] of the Employee Injury Report form and indicate whether the injury is "first aid only" or "medical." The original of the completed Employee Injury Report will

remain in the Employee Workers Compensation file with copies being provided to the Safety Manager, employee and Human Resources.

6. HCC will bill the Safety Manager for "first aid only" claims and Broadspire for claims involving medical treatment that is more serious.

C. **Personal Protection During First Aid**

1. OSHA requires adherence to "[Universal Precautions](#)" when employees respond to emergencies which provide potential exposure to blood and other potentially infectious materials. "Universal Precautions" stresses that all patients should be assumed to be infectious for HIV and other bloodborne pathogens.
2. Persons responding to a medical emergency should be protected from exposure to blood and other potentially infectious materials. Protection can be achieved through adherence to work practices designed to minimize or eliminate exposure and through the use of personal protective equipment (i.e., gloves, safety glasses, masks, and protective clothing), which provide a barrier between the worker and the exposure source. For most situations in which first aid is given, the following guidelines should be adequate.
  - a. For bleeding control, with minimal bleeding and for handling and cleaning instruments with microbial contamination, disposable gloves alone should be sufficient.
  - b. For bleeding control with spurting blood, disposable gloves, a gown, a mask, and protective eyewear are recommended.
3. After emergency care has been administered, hands and other skin surfaces should be washed immediately and thoroughly with warm water and soap if contaminated with blood, other body fluids to which universal precautions apply, or potentially contaminated articles. Hands should always be washed after gloves are removed, even if the gloves appear to be intact.

D. **First Aid Kits**

Location: Many laboratories have kits and there is a first aid cabinet in each hallway attached to the wall in the Barson and Biomedical/Forensics buildings.

1. The lab management is responsible for monitoring and maintaining the first aid kit(s) in the labs. Expired, discolored or deteriorating items shall be removed and replaced.
2. First aid kit contents should include items such as sterile gauze pads, bandages, scissors, antiseptic wipes or ointments, and a first aid card. All kits should also contain examination gloves for response to emergencies in which blood or hazardous chemicals are present. Pocket masks for CPR procedures are also recommended.
3. The following items are **not** recommended for use in a first-aid kit:
  - a. Iodine - Tissue damage can be caused by improper use.



- b. Ammonia Inhalants - If an individual is unconscious, obtain help -- **do not use ammonia**.
  - c. Tourniquet - Not required for minor bleeding; use the pressure technique until medical assistance is available. Tourniquets may be used to help stabilize certain injured areas.
  - d. Medication should be removed from first aid kits. Personnel should bring any necessary medication from home.
- 4. Laboratories where **high-voltage** equipment is in use should have available an emergency electrical response board. This will contain an instruction card and a non-conductive stick to turn off the equipment and remove the shock victim from contact with the source. The PI is responsible to have available supplies and SOPs specific to work being performed.
  - 5. Laboratories using material for which the immediate administration of an antidote or neutralizing agent is needed (e.g. using calcium gluconate gel for exposure to hydrofluoric acid) should be considered. The PI is responsible to have available supplies and SOPs specific to work being performed.

## SECTION 1.7 - INCIDENT REPORTING

ALL injuries and incidents shall be reported to laboratory management and the LSC. Minor incidents many times are not reported because they are perceived to be embarrassing or that "careless actions" lead to the incident. However, at some later time minor injuries may lead to complications that become more serious. A "near miss" situation may become a serious incident the next time. Liability and insurance matters will be handled more effectively if initial incident documentation exists. In addition, all minor accidents or incidents should be investigated by safety and management personnel. Taking corrective action as a result of a minor incident may keep a major incident from happening. Without knowledge of all minor incidents, the desirable investigation is circumvented.

Employees should understand that the purpose of reporting and documenting incidents is not to affix blame, but instead to determine possible causes of the incident so that similar occurrences may be prevented in the future.

## SECTION 1.8 – THREAT ASSESSMENT GROUP (TAG)

A group of people from OSU-CHS has been assigned as the Threat Assessment Group. The Threat Assessment Group is charged with meeting to discuss and determine mitigation of possible threats to the safety, health and well-being of OSU-CHS personnel, faculty and students. They may also meet after a major incident to discuss after action response.