Laboratory Safety Review

Link Index

LABORATORY EMERGENCY MANAGEMENT PLAN

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Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.73800	CAP
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Distribution
Safety Manual

LABORATORY EMERGENCY MANAGEMENT PLAN

PURPOSE
To provide emergency planning and training for potential internal and external incidents in support of the facility's emergency plans.

POLICY
This plan supplements the System Emergency Management Plan and is designed to provide concise, pre-established instructions to maintain efficiency during emergency situations.

ACCOUNTABILITY
Laboratory associates are responsible for understanding and complying with the department's supplemental plans in support of the facility's emergencies. Laboratory associates are responsible for prompt reporting of address and phone number changes to HR Department and their lead techs so that callback lists can be updated immediately.

PROCEDURES

1. Community Role. The hospital facility in coordination with city emergency managers develops mass casualty and other support plans. These developed general guidelines provide mutually agreed upon actions that are described in the city's emergency plan.

2. Command and Control. The facility's Emergency Operations Center (EOC) serves as an all purpose command and control center during a large medical emergency or other crisis situation such as a fire, evacuation, severe storm, flood, civil disturbance, etc. The EOC establishes and maintains communications with city/county emergency planners, police, fire, EMS, and other system/area hospital facilities as appropriate.

3. Emergency Plans

   A. Facility Plans. The facility prepares and develops plans to respond to various potential disaster and emergency situations. These contingency plans are based on factual studies of the potential or likely event that, if given situations intensified, the environment of care could be seriously affected. Each facility plan is developed to:
      (1) ensure a predetermined behavior pattern by the majority of the hospital's staff is carried out directly following an emergency situation;
      (2) minimize panic and confusion during an emergency situation

      (3) specific contingency plans are written to appropriately respond to emergency situations to include tasking of the facility's assigned departments.

B. LABORATORY EMERGENCY PLANS

Purpose

The laboratory develops supplemental plans in support of the facility's contingency plans. These supplemental plans prepare department associates by identifying the department's specific tasks, location of resources, and detailed instructions on how to perform the assigned tasks.

Procedure

The Emergency Codes Policy includes the color chart and phone numbers below.

CODE RED	Fire
CODE BLUE	Cardiac/Respiratory Arrest
CODE WHITE	Rapid Response Team
CODE GREEN	Patient Fall
CODE GRAY	Behavior/Violent Patient or Visitor
CODE ASSIST	Visitor or Associate Medical Assistance
CODE PINK	Infant/Child Abduction (who is a patient)
CODE YELLOW	Emergency Plan has been activated
CODE ORANGE INTERNAL	Hazardous Material Incident internally
CODE ORANGE EXTERNAL	Hazardous material Incident External
CODE 32	Person with a weapon
CODE PURPLE	Joint Commission Surveyors on Site

Emergency Extensions:			
Alice	18888	Memorial	24999
Beeville	42444	Shoreline	14000
Kleberg	59200	South	56000

Emergency Operations Center
The Laboratory Manger and Ancillary Service Director are designated members of the EOC. These associates (or their alternates) will report as ordered following activation of any emergency plan.

Sytem Hurricane Plan

In addition to the above linked System Hurricane Plane--

- Compile a list of lab services to be provided during hurricane warning. The Medical Director, Laboratory Manager and Lead Technologists will be consulted for approval of the list.

Hurricane Watch: When the facility's EOC is activated the Laboratory Manager or designee will

- Ensure that lab personnel and volunteers are notified that the EOC has been activated
- Provide the list of laboratory services to be available for the duration to medical staff and nursing personnel
- Receive approval from Hurricane Planning Team for lab staff to be housed within department.

Hurricane Warning: When a facility's EOC is activated the Laboratory Manager or designee will

- Call in volunteers
- Request Maintenance Department board windows and vulnerable areas.
- Ensure that each facility's Chemistry Section Lead Technologist or designee stores sufficient deionized water to supply the laboratory for at minimum five days
- The Shoreline Blood Bank Lead Technologist or designee will contact the Purchasing Department (13601) and request a second 180 liter LN2 storage tank with a 22psi valve for delivery as soon as possible. If necessary Air Gas will be contacted directly at 882-2531 to make the request. If flooding conditions are anticipated or if actual flooding conditions exist the Blood Bank Lead Technologist will contact the Maintenance Department for assistance in relocating the stem cell freezer from the laboratory to the second floor pharmacy. The Blood Bank Lead Technologist or designee will maintain constant vigilance to insure the continued operation of the freezer. See Blood Bank standard operating procedures.

Sytem Infant Abduction Procedure

In addition to the above linked System Infant Abduction Procedure--
Upon announcement of a Code Pink or a Code Red through the overhead paging system:

- All laboratory associates, especially those who are in or near public areas

of the hospital, will observe the immediate area and position themselves to block elevators and exits. Any suspicious person will be reported to security.

Shoreline—

- Associates assigned to the Blood Bank and Central Processing sections will block the Ayers street exits E26 and E27 (E27 is located south of the E26 People and Culture/Blood Bank entrance)
- Associates assigned to the Chemistry and Hematology sections will block the A wing (lab alley) exit E25
- Ideally two associates will block each exit

Memorial—

- On Saturdays and Sundays Laboratory associates assigned to all sections will block both the main entrance and the west wing entrances
- Ideally two associates will block each exit

South—

- Associates assigned to all sections will block the employee entrance
- Ideally two associates will block the exit

System Fire Response Plan
CSF020 Laboratory Fire Safety Management Plan
The Evacuation Plan is part of the Fire Safety Management Plan

System Mass Casualty Plan--Procedure
Upon announcement of a Code Yellow through the overhead paging system:

Code Yellow, Division One

- The laboratory transfusion service will take an inventory of red cell donor units
- The laboratory administrator, or in his absence, the Laboratory Clinical Coordinator or available Lead Technologist will report to the Emergency Operations Center to determine the need for blood products, based on EOC information.
- The laboratory administrator, or appropriate representative, will inform the transfusion service of expected blood product needs.
- Transfusion Service associates will immediately verify the adequacy of blood product stores or take steps to acquire from the Coastal Bend Blood Bank adequate blood products as deemed necessary by the EOC.

The laboratory administrator, or appropriate representative, will report to the EOC

- the current blood supply status and expected time of arrival for any products ordered, but not yet received in the laboratory
- All other laboratory associates will remain at their assigned workstations.

Code Yellow, Division Two

- Laboratory associates will remain at their assigned workstations to await instructions.

Code Yellow, Division Three

- Laboratory associates will remain at their assigned workstations to await instructions

Code Yellow, Division Four

- Laboratory Lead Technologists will initiate the callback of off duty associates to insure adequate staffing
- Laboratory associates will remain at their assigned workstations to await instructions

Code Yellow, Division Five

- Laboratory associates will remain at their assigned workstations to await instructions

LABORATORY FIRE SAFETY MANAGEMENT PLAN

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Distribution
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LABORATORY FIRE SAFETY MANAGEMENT PLAN

PURPOSE

To maintain and follow fire safety procedures that quickly detect and suppress a fire, notify occupants, and provide easy unobstructed exit to safety.

POLICY

System Fire Response Plan—Code Red
In addition to the above linked System Fire Response Plan, Laboratories maintain plans, eliminate hazards, and train associates to quickly and effectively react to fire emergencies.

ACCOUNTABILITY

All Associates are responsible for carrying out the roles and responsibilities of the department's fire safety plan. Laboratory lead techs are responsible for new associate/student orientation.

PROCEDURES

1. Background. Perhaps one of the most serious safety issues a hospital faces is the threat of fire. This threat is far more critical in the healthcare environment because patients are typically less capable or even incapable of responding to an emergency situation. Although the construction of the hospital's buildings provides some safety features, the associate is the key element in defending against a fire. **In almost every instance where a fire in a healthcare institution has caused death, appropriate staff intervention would have saved lives.**

2. Fire Safety Plan. the below elements make up the specific procedure that laboratory associates must follow to either prevent, or respond to a fire emergency.

   A. Prevent and Prepare

   Prevent. Department associates always follow good housekeeping measures to prevent fire conditions from forming. Routine prevention includes:
   - o avoid over-filled wastebaskets;
   - o store flammable liquids in the flammable cabinet
   - o correct persons smoking in "No Smoking" areas
   - o **memorize locations and types of fire extinguishers, pullboxes,**
   - o **exits and fire blankets**; and
   - o correct or report fire hazards, especially smoke compartment penetrations. NOTE: Unsealed holes or other types of wall,

ceiling, or floor penetrations are immediately reported to Plant Maintenance.

Prepare. Laboratory associates must always be prepared to respond to fire emergencies. Immediate actions by an associate responding to a fire can mean the difference between minor and serious damage and whether or not lives are saved or lost.

Memorize RACE –

R = Rescue. The first step in the fire response is to rescue individuals from the immediate fire area.

A = Alert. Sound the alarm by pulling the fire station alarm and call the operator (use the facility's emergency number).

C = Contain. The third step in a fire response is to contain the fire/smoke by closing all doors and windows.

E = Extinguish and/or Evacuate. After closing doors in the area of the fire, attempts are made to extinguish the fire if safe to do so. Be prepared to conduct partial or total evacuation of the department, if appropriate.

B. Detect and Notify

(1) Detect. Be observant at all times and alert for fires, the smell of smoke, or strange odors. Be alert for changes in lighting, sparks, or other unusual happenings. Monitor patients and visitors for smoking violations.

(2) Notify. Once a fire or fire conditions are detected, rescue anyone in immediate danger and then alert others. You notify others in two ways:

(3) Pullbox. Pull the nearest fire pullbox to sound the alarm hospital-wide.

(4) Call the Communications Operator. Call the Communications operator on the telephone by dialing the facility's emergency number . Provide the operator with the following information:

- Where – the fire is located (department and room number).
- What – kind of fire (electrical, oil, etc).
- Size – of fire (room, mattress, wastebasket, etc).
- Your Name – it is essential the operator obtains your identity to later assist in completing the fire report.
- Stay on the Line – to update the operator or answer questions until the fire response team arrives.

C. Contain

(1) Compartmentalization. A healthcare occupancy is constructed of multiple smoke compartments to isolate fires within small sections should they occur. Smoke compartment barrier doors work automatically to close and seal off the compartment when activated by either a pullbox, or heat and smoke detection equipment. The closed doors act to contain the fire within the compartment of origin and to prevent the spread of heat, smoke, or other toxic gases. The activated detection system will also shut off the compartment's HVAC air handler(s) to limit the spread of smoke.

(2) Staff Actions. Associates implement the containment process by:

(a) Activating the fire pull box to close fire doors and shut down the compartment's air handler.

(b) Close windows and hallway doors as a precaution.

(c) Shutdown or be prepared to shut down oxygen sources that may cause a substantial threat to the fire emergency situation. During fire emergencies a Cardiopulmonary Department associate responds as a member of the hospital's fire response team to shut off the oxygen system as appropriate. However, department members during life-threatening situations must be prepared to act on their own to shut off oxygen sources.

D. Evacuate

(1) Except in life-threatening situations, evacuations are at the direction of the Laboratory Manager or in his absence, a Department Lead Tech. In life-threatening situations, the decision to evacuate the Laboratory will be made by any associate after evaluating the threat against preventive measures. **The foremost consideration is saving lives**.

(2) Immediate Evacuations

Immediate evacuations are taken to counter life-threatening situations such as a fire or release of toxic fumes. This evacuation is normally horizontal on the same floor rather than vertical to another floor.

(a) Following the containment principle, the first priority is to move to a safe area protected from the hazard source by at least two sets of fire/smoke barrier doors or outside of building.

(b) Visitors and non-department members are escorted to the nearest exit as soon as possible and directed to leave the building.

- **Able-bodied persons are expected to search for, locate,**

and assist any handicapped/elderly person in the laboratory that they have knowledge of or encounter during evacuation.

- **Associates are expected to memorize evacuation routes posted in each laboratory work area; these routes are to be used for any drill or necessary evacuation.**

(c) Assembly areas: (assemble for head count)

- **Shoreline Main Laboratory: Associates will assemble on the corner of 2nd and Ayers in front of the Kieschnik House.**
- **Shoreline Cancer Center: Associates will assemble in the parking lot to the rear of the building.**
- **Shoreline Histology Lab: Associates will assemble in the covered physician parking area at the Pavilion and proceed to cross Elizabeth street to the parking lot.**
- **Shoreline ED phlebotomists: Associates will assemble outside the side ambulance entrance in the parking lot.**
- **Point of Care Dept: Associates will assemble outside the building between the covered doctor's parking area and the parking garage.**
- **Memorial: Associates will assemble across the street outside of the main hospital entrance.**
- **South: Associates will assemble in the back (north) parking lot.**

(3) Vertical Evacuations

(a) The need to evacuate from hospital floors may be necessary to move patients to a "safe area". Ambulatory patients are taken first as a group and then the remaining patients. Bedridden or seriously ill patients may need to be carried up or down stairwells when elevators are unavailable or deemed too dangerous. Evac chairs or stretchers are used to transport these patients between floors.

(4) Associate Roles. Normally during a fire emergency, the affected department will request assistance in comforting their patients and if necessary, help relocate them to areas of safety. All laboratory associates will be prepared to assist any department if such a request is received and approved.

E. Extinguish

Extinguish the fire whenever it is safe to do so. Fire extinguishers are strategically positioned throughout the department based on travel distance to potential fire hazards. The extinguisher's placement does not exceed the maximum travel distance to a potential fire source, or

actual walking distance to the extinguisher.

Fire Drills/Rehearsals

Fire drills/rehearsals are conducted for each Laboratory Associate at minimum once annually. These exercises include all aspects of the department's fire plan including evacuation. During the exercises, department members review fire prevention, detection, notification, containment, evacuation, and extinguishment.

Fire drills/rehearsals are documented on the *Code Red Code Pink Drill Form* to record both coverage and participation. Records are maintained by the Maintenance department for at least three (3) years.

Training. The Laboratory assures training for associates and visitors to prepare them for activation of the fire safety plan. Training includes web-based Healthstream education, department and section specific presentations, and fire extinguisher training and exercises provided by System Safety. All sites are encouraged to keep local records of fire drills.

LABORATORY BLOODBORNE PATHOGEN AND EXPOSURE CONTROL

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Distribution
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LABORATORY BLOODBORNE PATHOGEN AND EXPOSURE CONTROL

PURPOSE

This exposure control plan/infection control plan is to supplement the CHRISTUS Spohn System Policy:

Infection Control Precautions and Isolations

The plan:

a. sets forth procedures to protect associates of the laboratory from the health hazards linked with the exposure to bloodborne pathogens in the workplace.

b. identifies and reduces the risk of transmitting infections from patients to laboratory workers and from laboratory workers to patients.

GENERAL

This policy is based on the OSHA Bloodborne Pathogen Rule, 29CFR, and CDC concept of Standard Precautions. Standard Precautions apply to 1) blood; 2) all body fluids, secretions, and excretions except sweat, regardless of whether or not they contain visible blood; 3) non-intact skin; and 4) mucous membranes.

Standard Precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals. This supplemental plan is reviewed annually as minimum and is updated whenever job descriptions and/or procedures change.

PROCEDURES

1. Occupational Exposure Determination

The following department job descriptions were evaluated to determine their appropriate occupational exposure to bloodborne pathogens. Determination was made without regard to use of personal protective equipment (PPE).

A. Job descriptions in which ALL laboratory associates in this job description have
occupational exposure.

Job Description/Title Occupational Exposure

(1). Lead Technologist All
(2) Senior Medical Technologist All
(3) Medical Technologist All
(4) Medical Laboratory Technician All
(5) Senior Phlebotomist All
(6) Phlebotomist All
(6) Histologist All

(7) Data Entry Clerk All
(8) Clerk/Receptionist All
(10) Pathologist All
(11) Laboratory Aide All
B. Job descriptions in which NONE of the laboratory associates in this job description have occupational exposure.
(1) Laboratory Service Director None
(2) Laboratory Director None
(3) LIS Coordinator None
(10) PI Coordinator None
(11) Clinical Coordinator None

2. Guidelines related to work practice controls.
A. Personal Protective Equipment (PPE)

(1) Gloves
a. Gloves will be worn when there is the likelihood of touching blood, body fluids, mucous membranes, non-intact skin and articles soiled with body substances.
b. Gloves will be worn at all times when collecting blood specimens. **The use of gloves during the blood collection process is mandatory.**
c. Gloves will be changed and hands washed between patients to prevent patient and environmental contamination.
d. Gloves are to be replaced immediately when torn or contaminated.
e. Gloves will not be washed or disinfected for reuse (single use only).
f. Gloves contaminated with blood or body fluid are disposed of in biohazard trash.

(2) Labcoats
a. Laboratory personnel will wear hospital-provided lab coats at all times while handling potentially infectious material. Dependent on the task and degree of anticipated exposure, lab coats will be fluid resistant, semi-permeable, or covered with a plastic apron if splattering of blood or body fluid is likely.
b. Lab coats will be removed upon leaving the hospital or upon entering designated clean areas within the laboratory and hospital.
c. Lab coats will be stored in a designated area during use and deposited in designated containers for laundering, decontamination or disposal as needed.

Home laundering of lab coats is prohibited.

(3) Other PPE
a. Protective barriers (face shield, eye protection, masks) shall be worn whenever
splash, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and mucuous-membrane exposure can be reasonably anticipated.
b. Protective barrier items shall be kept readily available, clean and in good repair
for immediate use when needed.
B. General work practice controls
The following procedures/rules will be followed by all Laboratory associates for their protection, that of fellow associates, and where applicable, patients and their families:
1. General cleanliness and orderliness will be the responsibility of everyone.
2. Due to the possibility of exposure to hazardous material and infectious agents, **visitor entrance to the testing areas of the laboratory are restricted to those on official business** (i.e. instrument repairs, specimen transport, etc.).
3. Smoking, eating, drinking, application of cosmetics and contact lens manipulation are prohibited in the work areas of the laboratory.
4. Use only self-sticking labels or moisten labels/envelopes with water.
Never lick labels or envelopes.
5. Storage of food and drink is prohibited in all laboratory work-area refrigerators, freezer, and countertops. Food may be stored only in designated refrigerators such as in the employee lounge.
6. Mechanical pipetting devices are to be used for the manipulation of liquids in the laboratory. **No mouth pipetting is permitted.**
7. All specimens arrive at the laboratory in appropriate collection devices that have been transported in biohazard bags.
8. Specimens of blood or other potentially infectious materials are placed in leak proof containers and appropriately labeled for storage and handling.
9. If outside contamination of a primary specimen container occurs, recollection of the specimen is requested. If the specimen cannot be recollected, the container is disinfected with an approved hospital germicidal solution before handling.
10. Contaminated equipment is always inspected and decontaminated as necessary prior to either servicing, or shipping.

LABORATORY BLOODBORNE PATHOGEN AND EXPOSURE CONTROL

This section supplements the System **Hand Washing / Hand Hygiene / Artificial Nails - Policy** **and** **Procedure**

C. Handwashing

1. Frequent handwashing is recommended.

2. Associates must wash their hands immediately, or as soon as feasible, after removal of gloves or other personal protective equipment.

3. Following any contact with blood or other potentially infectious material, associates must wash their hands and any other exposed skin with soap and water as soon as possible.

Exposed mucous-membranes will be flushed with water immediately.

4. Gloves are changed and hands are washed before and after obtaining specimens from patients.

This section supplements the System **Bio-hazardous Waste Handling - PROCEDURE**

D. Disposal of Waste

1. All laboratory biohazardous waste is placed in designated containers with biohazard warning labels. These containers are sealed and taken to the site designated at each facility. Waste boxes are picked up by the Environmental Services department for transport and disposal.

2. All used blood tubes, blood tube tops, used biologic and bacteriologic media, blood donor bags, used pipette tips, testing cups, culturettes, and other contaminated items must be placed in bags marked with a biohazard designation. Bags are sealed with a rubber band and placed in either plastic or cardboard biohazardous boxes.

3. Used needles will not be clipped, recapped, bent, broken, removed from disposable syringes, or other manual manipulations unless:

a. It can be demonstrated that there is no reasonable alternative.

b. The action is required by specific medical practice.

c. In the two situations above, the recapping or needle removal is accomplished through the use of a medical re-capping device or approved one-handed technique. Used needles will be placed into plastic puncture-resistant containers. These containers will be placed into medical waste boxes when ¾ full for disposal. **Do not** discard needles into biohazard bags, or regular trash.

4. Personnel must use proper technique for skin preparation before performing Venipuncture. Pre-packed alcohol swabs or ChloraPrep are used for skin prep and sterile 2x2 gauze is used to cover wound when finished.

5. If a tourniquet has been used on or near an open wound or becomes contaminated with body fluids, the tourniquet is to be disposed of and a new tourniquet used on subsequent patients.
6. When dealing with patients who are in isolation precautions:
a. Follow Standard Precautions
b. Follow any additional instructions posted at the patient's room.
7. Pasteur pipettes, other glass tubing, glass slides and wood applicator sticks will be disposed of in designated containers. These containers are placed into medical waste boxes when ¾ full.
8. In the Microbiology Section, all syringes, needles, wet slides, pipette tips, pipettes, and cover–glasses are placed into puncture-resistant containers which are then placed into medical waste boxes. Stained slides are placed into glass-disposal boxes and discarded into the normal waste stream.
3. Engineering Controls
The department has adopted the following engineering controls as a positive means of minimizing associate exposure.
A. Safety eyewash
B. Disposable sharps containers that are leak-proof, puncture-resistant, and affixed with a biohazard warning label.
C. Specimen containers that are leak-proof.
D. Secondary containers for the transport of specimen containers (biohazardbags).
E. Pneumatic tube system
F. Hand washing facilities with hospital-approved germicidal hand cleaner.
G. Self-sheathing needles are used for venipuncture.
H. Mechanical pipetting devices
I. Absorbent counter-top pads
J. Biological safety cabinets with yearly inspection and certification
K. Fume hoods with yearly inspection and certification
4. Reusable sharps
The laboratory uses no reusable sharps.
5. PPE Use and Storage locations--Each laboratory section stores PPE items as appropriate in designated areas.
6. Work surface decontamination
A. All laboratory associates share in the responsibility to maintain clean and sanitary work areas. A continuous need exists to decontaminate work surfaces after completion of procedure involving potentially infectious materials. This act helps to ensure that employees are not unwittingly exposed to blood or other potentially infectious materials remaining on a

surface from previous procedures. Work surface decontamination examples are:
(1) After any procedure resulting in surface contamination.
(2) At the beginning and end of each shift.
(3) Periodically throughout the workday as a precaution against possible work surface exposure to contaminated specimens.
(4) Spills of blood, body fluid and other potentially infectious materials must be disinfected and cleaned up accordingly. Wear gloves during this process.
(a) absorb the spill by covering with paper towels or the components of a spill kit
(b) clean the spill site with hospital approved solution
(c) decontaminate the spill site using a hospital-approved disinfectant and allow to dry
(d) rinse the spill site with water to remove noxious chemicals or odors
(e) dry the spill site to prevent slipping
(f) place all disposable materials used to decontaminate the spill into a biohazard container. Very large spills may require the assistance of Environmental Services.
B. Hospital disinfectants
Chemical germicides that are approved as hospital disinfectants will be used to clean and decontaminate work surfaces. A 10% dilution of household bleach (5.25% sodium hypochlorite) prepared weekly may also be used as a disinfectant.

7. Exposure – Definition and Reporting Procedure
This section supplements the System **Occupational Event Reporting - Procedure**
A. An accidental occupational exposure is defined as a specific eye, mouth, or other mucous membrane, non-intact skin or parenteral (i.e. needle stick, puncture wound) contact with blood or other potentially infectious material.
B. Report the exposure incident immediately to the Lead Technologist, Manager, or Safety Officer who must report immediately to the Employee Health Nurse or the Shift Coordinator of the facility.
At their own discretion, the Employee Health Nurse or Shift Coordinator may refer the associate to the emergency room to be evaluated by a physician.
8. New Employee Training
A. All laboratory associates receive hospital required occupational exposure training during orientation. Associates are then retrained at least annually to keep their knowledge current. New employees, as well as employees

transferring from positions of no exposure to jobs with occupational exposure, received required training within 10 days of starting their new duties.

B. Training documentation

Training is documented in Healthstream (HLC) and/or the department maintains records to verify that new hire/transferred/veteran associates receive initial and refresher training as appropriate. This training includes:

Time Frame

(1) Hospital New Associate Orientation

(2) Exposure Control Plan Orientation

(3) Hepatitis B Vaccination Program(accept/decline)

(4) *N.meningitidis* Vaccination (microbiology only) (Accept/decline)

(5) Department's Supplemental Bloodborne Pathogens Exposure/Infection Control Plan

(6) Refresher Bloodborne Pathogens Training At least annually.

PERSONAL PROTECTIVE EQUIPMENT

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Distribution
Safety Manual

PERSONAL PROTECTIVE EQUIPMENT

I. Policy

CHRISTUS Spohn Hospital Corpus Christi will provide, at no cost to the associate all required and necessary personal protective equipment (PPE) for mandatory use whenever exposure can occur. PPE must not permit infectious materials or hazardous chemicals to pass through or reach the employee's work clothes, street clothes, skin, or mucous membranes under normal conditions of use.

II. Procedure

• Personal protective equipment (PPE) is readily accessible and available in appropriate sizes.
• CHRISTUS Spohn Hospital Corpus Christi cleans, launders and disposes of equipment at no cost to the employee.
• Laundry containers are readily available for disposal of contaminated or soiled PPE.
• If a personal garment is penetrated by blood or body fluids, it shall be removed immediately or as soon as feasible and placed in a laundry container. Contaminated garments may not be removed from the facility building.
• CHRISTUS Spohn Hospital Corpus Christi will repair or replace equipment as needed to maintain its effectiveness.
• The Lead Technologist in each section will ensure that employees use appropriate PPE.
• Employees who ignore safety precautions will be counseled by Laboratory Administration. Disciplinary action may be taken according to Hospital policy if non-compliance persists.

III. Clean Areas

Employer provided PPE is not to be worn outside the laboratory or in designated "CLEAN AREAS". Clean areas are those areas where there is not a risk of contamination from bloodborne pathogens. The wearing of PPE in these areas is not permitted. Eating and drinking are allowed in these areas.

IV. Clean Areas, Listed

• Employee Lounge
• All Offices
• Restrooms

V. Laboratory Coats

• Laboratory coats are provided to associates for use as PPE in order to prevent potentially biohazardous material and /or hazardous chemicals from passing through to the associate's clothes under normal conditions of use.
• Laboratory coats must be worn during blood collection or any procedure in which open containers of infectious materials or hazardous chemicals are handled.
• Laboratory coats must be fully buttoned while in use. Sleeves shall extend to the wrist.
• Laboratory coats must be removed before entering any designated "clean area" (see Clean Areas, listed above), or before leaving laboratory (i.e. lunch breaks, end of shift, etc.).
• Laboratory coats must be removed for laundering after one week of use or when visibly soiled, whichever is sooner.
• Clean laboratory coats are stored on hangers in designated locations
• Soiled or contaminated laboratory coats shall be placed in the laundry linen bag. If a laboratory coat is removed temporarily but is not ready for laundering, it shall be kept in a designated area until needed. Designated areas include clothes hooks or rods in designated locations in each department.

VI. Scrubs

• Hospital issue scrubs are available at no cost to the associate for emergency use.
• If personal clothing becomes contaminated, obtain a set of scrubs (Locations listed below). Place soiled personal clothing into laundry bag with biohazard label. Contaminated personal clothing may not leave the hospital.
Scrubs are located:
• OR
• ED
Soiled or contaminated scrubs are placed into the appropriate infectious linen bag.

VII. Gloves

• Disposable gloves are available for all Laboratory associates in varying sizes. (Powder Free Latex, Nitrile). Choose a glove that fits comfortably snug. If needed, glove liners are available.
• Disposable gloves must be worn when performing phlebotomies, handling

patient specimens not in a secondary container, and when performing tests and procedures that may cause biohazardous or chemical contamination of the hands. Gloves must also be worn when disposing of biohazardous materials and moving biohazardous trash from laboratory sections to autoclave storage room.

• Replace gloves immediately when torn or contaminated with body fluids. Do not wash or disinfect disposable gloves for reuse.

• Wash hands thoroughly upon removal of gloves.

• Used gloves are discarded into the regular waste stream. Gloves that are dripping or caked with blood or other potentially infectious material (i.e., working in Microbiology) must be disposed into red biohazard bags or boxes.

• Use oven mitts when transferring laboratory equipment and or glassware into or out of the drying oven.

• Use cryo-gloves when handling specimens in the General Laboratory Freezer (-70C).

VIII. Safety Glasses/ Goggles

• ANSI/NIOSH approved safety glasses shall be provided to employees for use as PPE in order to prevent potentially biohazardous material and/or hazardous chemicals from splashing into eyes.

• Safety glasses must be worn when manipulating potentially biohazardous materials outside of a safety hood if splashing is likely.

• Safety glasses must be worn when transporting hazardous chemicals from one area to another.

• Safety glasses must be worn when manipulating hazardous chemicals if the potential for splash exists.

• Safety glasses must fit so that eyes are protected all around. Prescription glasses may not be worn as safety glasses.

• Wash safety glasses in warm water and soap before storing in department drawer. **Do not store safety glasses (PPE) in personal lockers.**

IX. Barrier Shields

• Barrier shields shall be provided to the employees for use as PPE in order to prevent potentially biohazardous material and/or hazardous chemicals from splashing or spattering onto the face and mucous membranes.

• Bioshields are used to prevent contamination by aerosol when opening specimen tubes or lyophilized reagent vials.

• Plexiglas countertop shields may be used when performing a procedure that may produce aerosol, splashing or splattering (such as pouring,

mixing or pipetting) of a potentially biohazardous material or a hazardous chemical.
• Disposable face shields may be used when performing procedures that necessitate protection from splashing when moving or walking such as a clean up procedure of a potentially biohazardous material or a hazardous chemical.

Respirator Masks

• Respirator masks shall be provided to all associates who in the course of their routine duties or assignment to spill teams may be exposed to hazardous chemicals above the OSHA short-term exposure limits. Upon assignment to these duties, each associate will be fit-tested with an appropriate NIOSH approved mask.
• Associates that will in the course of their duties be required to enter TB isolation rooms must be evaluated and then fit-tested with masks through the Occupational Health Department. New associate orientation includes mask fitting by the Education Department; however, if an associate has not been fit-tested, his/her immediate supervisor will arrange for evaluation through the Occupational Health Department. If approved, fit testing will then be performed by the Occupational Health Department.

LABORATORY TUBERCULOSIS EXPOSURE CONTROL PLAN

SOP Number:	CSF050	**Creation Date:**	2/25/2013
Department:	Laboratory	**Effective Date:**	3/6/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.74900	CAP
Related Documents	

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01	3/6/2013	

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Distribution
Safety Manual

LABORATORY TUBERCULOSIS EXPOSURE CONTROL PLAN

PURPOSE

To minimize or eliminate the potential risk of exposure to laboratory associates from any patient specimens infected with Mycobacterium tuberculosis (MTB).

I. EXPOSURE DETERMINATION:

The laboratory safety officers, in conjunction with the Hospital Infection Control office has determined that the following specimens pose a risk of potential employee exposure from MTB.

1. Respiratory samples – This includes any sample obtained from the patient's respiratory tract. i.e.; sputum, bronchial washes, lavages, brushings, inductions, etc.
2. Unfixed tissue – This includes any unfixed tissue sample, regardless of source.(i.e.; amputated limbs, biopsies for culture, etc.)

Based on these sample types, the following laboratory sections have been identified as potential occupational exposure sites:

- Central Processing / Receptionist Area.
- Microbiology
- Draw stations
- Histology / Frozen section room

II. POLICY

1. Central Processing / Receptionist Area/Draw Stations
   - All respiratory specimens or unfixed tissues must be received in a secondary container such as a biohazard specimen bag.
2. Microbiology
   - All respiratory specimens or unfixed tissues must be processed in a bio-safety cabinet.
3. Lab areas
   - All respiratory specimens or unfixed tissues must be processed in a bio-safety cabinet.
4. Histology / Frozen section room
   - All respiratory specimens or unfixed tissues must be processed in a bio-safety cabinet.

III. WASTE DISPOSAL

- All specimens, culture media, and any other items known or suspected to be contaminated with MTB will be sterilized in the Memorial Laboratory autoclave before being placed into biohazardous waste containers for disposal.

LABORATORY EQUIPMENT MANAGEMENT PLAN

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Applicable Standards	
Standard	Organization
GEN.75900	CAP
Related Documents	

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Safety Manual

LABORATORY EQUIPMENT MANAGEMENT PLAN

PURPOSE

This plan supplements the System Initial Inspection of Equipment Procedure

POLICY

Equipment management encompasses training, monitoring, and repair to maintain safe equipment operations within the environment of care.

ACCOUNTABILITY

Laboratory associates are responsible for understanding this section to

properly use and maintain department assigned equipment.

PROCEDURES

1. Preoperational Inspections (electrical). Department equipment items are verified operationally safe prior to their use, after repair or modification, and when a problem is suspected. The following common electrical inspections are always performed prior to operating equipment.

   A. The equipment item is clean with all cords and wires properly attached.
   B. Power cords are not tangled, frayed, or worn.
   C. Electrical plugs and receptacles are intact and serviceable.
   D. The equipment item is tested to ensure proper functioning.
   NOTE: The operator's manual for a specific equipment item may require additional checks.

2. Notification: Repairs or inspections are requested by using either the hospital's MIS computer system, or telephoning Biomed. All electrical repairs and annual integrity testing are performed by Biomed department.

3. Operator's Manuals: All operator’s manuals are readily available for reference.

LABORATORY EQUIPMENT MANAGEMENT PLAN

BIO-SAFETY CABINETS AND FUME HOODS

1. All bio-safety cabinets and fume hoods located within the laboratory are routinely maintained according to their operating manuals.
2. All bio-safety cabinets and fume hoods are inspected and certified at least annually by an independent company to ensure proper function and performance. Certification documentation is kept on file in the General Maintenance manual (South) and Microbiology Lead Technologist's office (Shoreline and Memorial)

EYEWASH FOUNTAINS

All eyewash fountains will be inspected and their function documented at minimum weekly. Documentation of checks will be readily available for inspectors.

STERIZILING DEVICES

All sterilizing devices (the autoclave at Memorial) will be periodically verified as effective with a biological indicator under conditions that simulate actual use or during actual use of the device. The Microbiology Lead Technologist will monitor results of these verifications to assure that

- The procedure in the Microbiology SOP’s is followed
- Verification is performed at minimum weekly, or if used less than weekly, with each run of the device
- Conditions for verification duplicate normal operation of the device
- Device is functioning effectively
- Documentation is current and available for inspectors

OTHER PERSONAL PROTECTIVE EQUIPMENT

- All PPE used in the laboratory is visually inspected before each use.
- Any damaged or inferior items are discarded or taken out of use.
- Each associate is responsible for ensuring that the PPE they are using is in good working order.

Chemical Hygiene Plan

SOP Number:	CSF070	**Creation Date:**	03/02/2013
Department:	Laboratory	**Effective Date:**	3/22/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.76000	CAP
Related Documents	

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Distribution
Safety Manual

Chemical Hygiene Plan

Purpose

The purpose of the Chemical Hygiene Plan is to provide written guidelines and procedures which will protect associates from health hazards associated with hazardous chemicals used in the laboratory.

Responsibility

The Laboratory Director is responsible for authorizing the use of any hazardous chemical and approval of the Chemical Hygiene Plan.

Lead Technologists and Managers are responsible for insuring that

- Mandatory requirements of the Chemical Hygiene Plan are implemented
- Associates know and follow chemical hygiene rules
- Protective equipment is adequate, available and in working order
- Appropriate training has been provided each associate
- Regular housekeeping inspections are performed including emergency equipment

The Chemical Hygiene Officer is the Laboratory Coordinator. The Chemical Hygiene Officer is responsible for

- Working with Associates and Managers to develop and implement appropriate chemical hygiene policies and practices
- Monitoring procurement, use and disposal of chemicals used in the lab
- Maintaining audits and MSDS sheet access.
- Assisting project directors in developing precautions and adequate facilities
- Knowing the current legal requirements concerning regulated substances
- Seeking ways to improve the Chemical Hygiene Program

Laboratory Associates are responsible for

- Planning and conducting each operation in accordance with the Laboratory Chemical Hygiene Plan
- Developing good personal Chemical Hygiene habits

Handling of Hazardous Chemicals

Do not work with any chemical if unfamiliar with its hazardous characteristics and protective equipment needed.

Wear goggles, facemask, gloves, and impermeable coats or aprons. Take every available precaution to cover skin, face and eyes.

If handling a flammable chemical, never work near an open flame or near electrical equipment which could produce a spark. Do not heat the chemical to a temperature near or above the flash point of the chemical.

If working with a carcinogen, mutagen, teratogen, or allergen always work in a designated area or fume hood. Always rinse disposable equipment or glassware thoroughly after use and before placing in regular wash cycle.

No mouth pipetting.

Be familiar with the location of emergency and safety equipment.

Storage of Reagents

All containers for chemicals will be clearly, permanently and correctly labeled.

Caustics and Acid reagents will be stored separated and below countertop level**.**

Flammable materials are stored in the safety cabinet in original containers or safety metal cans in the flammable storage cabinets.

Acetone, isopropyl alcohol, methanol, xylene and ethanol are stored in flammable storage cabinets.

Use of Personal Protective Equipment and Control Measures

"NFPA" style labels shall be used to label all hazardous chemicals in the laboratory. Original product labels shall not be removed or obscured from view.

Material Safety Data Sheets (MSDS) will be obtained for all hazardous chemicals used in the laboratory. Before handling any hazardous chemical, associates shall be familiar with the hazards associated with that chemical.

Associates shall perform all work at a fume hood when handling hazardous chemicals which require respiratory protection.

Associates shall wear safety glasses and/or work behind a safety shield when handling hazardous chemicals which require eye protection.

Associates shall wear gloves, laboratory coats, and / or acid-resistant aprons as necessary when working with hazardous chemicals which require skin protection.

Exposure Monitoring

Exposure Monitoring is coordinated by System Safety as part of the Annual Industrial Hygiene Survey. The Annual Industrial Hygiene Survey reports any exceptions to standards set by the Occupational Safety and Health Administration (OSHA). If any Permissible Exposure Limit (PEL) is exceeded, the legal requirements and recommendations listed in the Survey summary will define the follow up actions for the affected location.

Chemical Evaluation

The Safety Officer or Laboratory Manager will maintain a list of all bulk chemicals used or stored in the laboratory and evaluate each chemical for carcinogenic potential, reproductive toxicity and acute toxicity.
Link to Chemical Inventory

Associate Training and Medical Consultations

Associates shall be trained on the laboratory's Chemical Hygiene Plan upon initial assignment and when new hazards are introduced. Training shall include:

- Each associate is responsible for familiarizing themselves with all laboratory policies and procedures.
- A description of relevant OSHA standards, MSDS sheets, permissible exposure limits (PELS), and their location.
- Methods and observations that may be used to detect the presence or release of hazardous chemicals such as unusual odor, dizziness, nausea, headache, shortness of breath and irritation of eyes, skin, mouth or throat.
- Any associate who has signs or symptoms of an exposure to a hazardous chemical may receive medical consultation at no charge. To obtain medical consultation, the associates will report to their Lead Technologist or Laboratory Manager. The associate will then be referred to the Occupational Health Office during business hours or the Emergency Department after hours. The Occupational Health Nurse or Emergency Dept. personnel will evaluate the exposure and ensure that the associate receives any necessary medical treatment.
- Methods of protection from hazardous chemicals and their accidental release.

OSHA Guidance and Regulations

OSHA Laboratory Safety Guidance
The Occupational Exposure to Hazardous Chemicals in Laboratories standard (29 CFR 1910.1450)
The Hazard Communication standard (29 CFR 1910.1200)
The Bloodborne Pathogens standard (29 CFR 1910.1030)
The Personal Protective Equipment (PPE) standard (29 CFR 1910.132)
The Eye and Face Protection standard (29 CFR 1910.133)
The Respiratory Protection standard (29 CFR 1910.134)
The Hand Protection standard (29 CFR 1910.138)
Air Contaminants standard (29 CFR 1910.1000)
Formaldehyde standard (29 CFR 1910.1048)

MATERIAL SAFETY DATA SHEETS

SOP Number:	CSF080	**Creation Date:**	3/1/2013
Department:	Laboratory	**Effective Date:**	3/7/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
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Related Documents	

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Distribution
Safety Manual

MATERIAL SAFETY DATA SHEETS

Purpose

To provide laboratory associates access to MSDS sheets.

Responsibility

It is the responsibility of the manufacturer of a material to determine what hazards are associated with the material, to prepare an MSDS for the material, and to provide the MSDS to any recipients of the material.

It is the responsibility of an employer to provide MSDSs and training in their interpretation to the employees.

It is the responsibility of the employees to read and understand the MSDSs of any chemicals used on the job.

Definitions

NFPA Hazard Identification system utilizes a four color diamond label and 0-4 numerical hazard rating. The Diamond has an area for health hazards (blue) and area for flammability hazards (red), an area for reactivity hazards (yellow), and an area for special hazard notations.

Health - Numerical Rating

0 Minimal hazard	Median Lethal Dose (LD50) • Rat, oral >2,000 mg/kg, or • Rabbit, skin >2,000 mg/kg, or • Rat LC50 inhalation of gas or vapor >10,000 ppm, or mist, fume, or dust >200,000 mg/m^3 for one hour.
1 Slightly hazardous; Mild Irritant	Median Lethal Dose (LD50) • Rat, oral >500 mg/kg, but ≤2,000 mg/kg, or • Rabbit, skin >1,000 mg/kg, but ≤2,000 mg/kg, or • Rat LC50 inhalation of gas or vapor >5,000 ppm, but ≤10,000 ppm, or mist, fume, or dust >10,000 mg/m^3, but ≤200,000 mg/m^3 for one hour.
2 Mild Toxic, or Strong Irritant	Median Lethal Dose (LD50) • Rat, oral >50 mg/kg, but ≤500 mg/kg, or • Rabbit, skin >200 mg/kg, but ≤1,000 mg/kg, or • Rat LC50 inhalation of gas or vapor >3,000 ppm, but ≤5,000 ppm, or mist, fume, or dust >2,000 mg/m^3, but ≤10,000 mg/m^3 for one hour.
3 Highly Toxic; or Cancer Causing; or Chronic Toxicity; or Corrosive	Median Lethal Dose (LD50) • Rat, oral >5 mg/kg, but ≤50 mg/kg, or • Rabbit, skin >50 mg/kg, but ≤200 mg/kg, or • Rat LC50 inhalation of gas or vapor >1,000 ppm, but ≤3,000 ppm, or mist, fume, or dust >500 mg/m^3, but ≤2,000 mg/m^3 for one hour.
4 Acutely Toxic. Deadly. Considered a "Poison".	Median Lethal Dose (LD50) • Rat, oral ≤5 mg/kg, or

- Rabbit, skin ≤50 mg/kg, or
- Rat LC50 inhalation of gas or vapor ≤1,000 ppm, or mist, fume, or dust ≤500 mg/m^3 for one hour.

Flammability - Numbering Guidelines

0 No Flash Point
1 Flash Point >200 °F (>79.1 °C)
2 Flash Point = 100-200 °F (37.8-79.1 °C)
3 Flash Point = 73-100 °F (23-37.8 °C) or <73 °F, but Boiling Point >100 °F (37.8 °C)
4 Flash Point <73 °F (23 °C) and Boiling Point <100 °F (37.8 °C)

Reactivity - Numbering Guidelines

0 Minimal Hazard. Materials that are normally stable and are not water reactive.
1 Slight Hazard. Materials, which can become unstable at elevated temperatures or which may react with water with the release of some energy, but not violently.
2 Moderate Hazard. Materials, which are normally unstable and readily undergo violent chemical reaction, but which do not detonate. This includes materials, which react violently with water.
3 Serious Hazard. Materials which are of themselves detonable, but which require a strong initiating force or which must be heated under confinement or are sensitive to thermal or mechanical shock at elevated temperatures or which react explosively with water.
4 Severe Hazard. Materials which in themselves can detonate at normal temperature and pressure, including those which are sensitive to thermal or mechanical shock at normal temperature and pressure.

Hazard Code Criteria

If the bottom square is blank, the kit or component contains materials with no special hazards.

CA Carcinogen. This kit contains a reagent which has more than 0.1% of a chemical regarded as a potential or known carcinogen. A material is considered a "carcinogen" if it either causes cancer in humans, or, because it causes cancer in animals, is considered capable of causing cancer in humans. A material is considered a carcinogen if:
1. The International Agency for Research on Cancer (IARC) has evaluated and found it a carcinogen or potential carcinogen;
2. The National Toxicology Program's (NTP) Annual Report on Carcinogens lists it as a carcinogen or potential carcinogen;
3. OSHA regulates it as a carcinogen;
4. One positive study has been published.

CO Corrosive. One or all of the reagents may be considered corrosive. A "corrosive" is a chemical that causes visible destruction of or irreversible alterations in living tissue by chemical action at the site of contact, or which causes a severe corrosion rate in steel or aluminum.

I Irritant. One or all of the reagents contain a chemical, which may be irritating to the eyes, skin, and/or upper respiratory tract. An "irritant" is a non-corrosive material that causes a reversible inflammatory effect on living tissue by chemical action at the site of contact as a function of concentration or duration of exposure. A substance capable of causing a reversible or irreversible inflammatory effect to the skin, eyes, nose, throat, or lungs.

Ox Oxidizer. The Department of Transportation (DOT) defines an oxidizer or oxidizing material as a substance that yields oxygen readily to cause or enhance the combustion (oxidation) of other materials.

PB Blood Product. One or all of the reagents has human blood, human blood components, or products made from human blood and should be considered a potential biohazard.

T Toxic. One or all of the reagents in the kit are toxic. Please refer to definitions of health hazard data for further explanation.

S Sensitizer. The kit contains a substance that on first exposure causes little or no reaction in humans or test animals, but upon repeated exposure may cause a marked response not necessarily limited to the contact site. Skin sensitization is the most common form. Respiratory sensitization to a few chemicals also occurs.

W Water Reactive. This symbol normally has a straight line drawn horizontally through the middle. However, our database can not support this symbol and therefore, for Roche Diagnostics MSDS purposes, the "W" represents a water reactive chemical. The kit contains a substance or mixture that reacts with water to release heat or a flammable, toxic gas, or to otherwise present a health hazard.

Links

Spohn System MSDS
Locate and Double click this icon on any Spohn PC desktop.
Select one of the four tabs, enter chemical name and click "search"

Abbott MSDS
Google search link
Select "United States and International", then select yes, then select English, then select SDS File Language, then procede to step 2 on same webpage.

Advanced Instruments
http://www.aicompanies.com/index.cfm/ServiceAndSupport/Material_Safety_Data_Sheets

Beckman MSDS
https://www.beckmancoulter.com/wsrportal/wsrportal.portal?_nfpb=true&_windowLabel=UCM_RENDERER&_urlType=render&wlpUCM_RENDERER_page=msdsDownloadTab

BioMerieux MSDS
https://www.mybiomerieux.com/
Sign into account to proceed

Nova Biomedical MSDS
http://www.novabiomedical.com/product-documentation/
Select "Enter", then select "Material Safety Data Sheets", then follow instructions.

Roche MSDS
https://www.mylabonline.com/msds/index.php
Choose your MSDS category, then instrument

Siemens MSDS
https://www.medical.siemens.com/webapp/wcs/stores/servlet/SMDOCLIB?catalogId=-101&categoryId=100006&langId=-101&storeId=10001

Policy

Laboratory associates will use the above links or a search engine to read and understand the MSDS of any chemical used on the job. Questions concerning MSDS may be directed to any Lead Technologist, or the Chemical Hygiene Officer. A binder of MSDSs is maintained in the Emergency Department at each site.

LABORATORY ERGONOMICS PLAN

SOP Number:	CSF090	**Creation Date:**	1/23/2013
Department:	Laboratory	**Effective Date:**	3/19/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.77200	CAP
Related Documents	

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Safety Manual

LABORATORY ERGONOMICS PLAN

Purpose:
Reduction of stress to the musculoskeletal system of laboratory associates.

Background:
A. Statistics indicate that back injuries, the most frequent ergonomic problem, are second only to the common cold in the cause of lost work time.
B. Occupational musculoskeletal disorders are a leading cause of disability among workers and result in suffering, decreased productivity, and economic hardships.
C. Employers can be cited for ergonomic hazards under OSHA General Duty Clause, Section 5 (a)(1) of the OSHA Act.

Policy:
CHRISTUS Spohn Hospital Corpus Christi Laboratory will protect its associates from ergonomic hazards to the fullest extent possible. The following measures will be utilized:
1. Workplace Hazard Analysis
2. Administrative Controls
3. Engineering Controls
4. Personal Protective Equipment
5. Associate Training
6. Medical Management

Workspace Hazard Analysis
Workspace Hazard Analysis will be performed by the Physical Therapy Department and reported to the Laboratory Managers. Managers will review findings and decide when to implement recommendations.

Administrative Controls
Administrative controls will be implemented to assure that
• There are sufficient numbers of associates present to do the job safely.
• Associates have been properly trained prior to being put at risk.
• Appropriate rest breaks are provided.
• Worker selection and placement are based on ability to satisfy functional requirements and job demands of the assignment.

LABORATORY ERGONOMICS PLAN

Engineering Controls

Each facility will provide engineering controls as needed, including but not limited to wrist rests, ergonomic chairs, and proper placement of computer monitors.

Sufficient space will be provided to allow full range of motion. Training will be provided for engineering controls. New equipment purchases will be approved by the Laboratory Manager and must be designed to prevent ergonomic injuries. Safety will be the primary consideration in new equipment purchases.

Personal Protective Equipment

Personal protective equipment such as back braces will be provided where determined necessary by the Occupational Health Dept and Physical Therapy Department.

Associate Training

Training in proper body mechanics will be provided as appropriate for each job category. Guidelines for preventing ergonomic injuries are covered in the required annual Healthstream web-based training.

Medical Management

Associates who experience ergonomic problems from job duties must report all symptoms to their Lead Technologist, Laboratory Manager or Safety Officer. These problems will be reviewed to determine the need for medical management and additional hazard controls. Associates who have experienced occupational ergonomic injuries must report to their Lead Technologist, Laboratory Manager or Safety Officer and be referred to the Occupational Health Department.

NOISE MANAGEMENT PLAN

SOP Number:	CSF100	**Creation Date:**	02/28/2013
Department:	Laboratory	**Effective Date:**	3/7/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.77300	CAP
Related Documents	

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NOISE MANAGEMENT PLAN

PURPOSE
To ensure associates are protected from harmful noise levels

DEFINITION
Harmful noise level shall be defined as any sound that exceeds 85 decibels. A sound level of 85 decibels shall be assumed if associates must shout to be heard at any time.

POLICY
Noise level management will include sounds generated within the lab facilities as well as sounds generated outside the lab facilities.

PROCEDURE
Lead Technologists shall alert the Safety Officer to any noise that may exceed 85 decibels.
If the noise level cannot be reduced, associates shall wear NIOSH approved noise attenuating equipment while exposed to harmful noise levels.

LIQUID NITROGEN

SOP Number:	CSF110	**Creation Date:**	02/28/2013
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LIQUID NITROGEN

Principle:

The extremely low temperatures of liquid nitrogen can freeze human flesh very rapidly causing serious frostbite injury. The gas issuing from the liquid is also extremely cold. Delicate tissue, such as that of the eyes, can be damaged by an exposure to the cold gas that would be too brief to affect the skin of the hands or
face. It is imperative that precautions are observed when coming in contact with the liquid nitrogen (LN2) freezer and any objects cooled by liquid nitrogen.

Procedure:

1. Never allow any unprotected part of your body to touch objects cooled by liquid nitrogen. Such objects may stick to the skin and tear the flesh when you attempt to free yourself.

2. Wear protective clothing.
a. Protect your eyes with safety goggles; safety glasses without side shields are not adequate protection.
b.Wear cryo-gloves when handling anything that is, or has recently been, stored in liquid nitrogen in either the liquid or gas phase.
c.When handling liquid nitrogen in open containers, wear a cryo-protective apron.

3. When transferring liquid nitrogen from the storage tank into another container, do so very slowly to minimize the internal stresses that occur when the receiving container is cooled.
a.Always use the transfer hose to facilitate transfer; **never pour** the liquid.

4. Liquid nitrogen containers must be vented to allow the escape of nitrogen gas; always assure that vents are not blocked or closed off.

5. Never use hollow rods or tubes as dipsticks.
a. Liquid will spout from the top due to gasification.
b. Store and use liquid nitrogen only in well-ventilated areas. Excessive amounts of nitrogen, a colorless, odorless and tasteless gas, can reduce the concentration of oxygen and cause suffocation.

First Aid:

1. If a person becomes dizzy or loses consciousness while working with liquid nitrogen

a. Move to a well-ventilated area immediately.
b. Apply artificial respiration if breathing has stopped.
c. Keep warm and at rest.
d. Seek medical attention.

2. If skin is exposed to liquid or cold gas:

a. Restore tissue to normal temperature as rapidly as possible by using water at 108 degrees F; water will feel slightly warm to an area of flesh other than the rescuer's hands.
b. Don't expose to water over 112 degrees F.
c. Remove or loosen clothing that may constrict blood flow to frozen area.
d. Don’t rub the frozen area either before or after rewarming.
e. Seek medical attention.

LIQUID NITROGEN SPILL PROCEDURE

Purpose: Vapors from liquid nitrogen may cause dizziness or asphyxiation without warning. Contact with gas or liquefied gas may cause burns, severe injury or frostbite.

Procedure:

Small Spills:

1. Close all doors adjacent to the affected area.
2. Evacuate all personnel to at least 80 feet in all directions.
3. Isolate the area by calling Plant Maintenance to close the HVAC system to the affected area.
4. Allow the liquid Nitrogen to dissipate. In the event of a leak contact Airgas service personnel at 882-2531.

Large Spills:

1. Close all doors adjacent to the affected area.
2. Isolate an area of up to 330 feet in all directions to avoid injury to employees and visitors. If necessary call security at extension 1-3003 and request immediate assistance.
3. Call Plant Maintenance to close the HVAC system to the affected area.
4. Allow the liquid Nitrogen to dissipate. In the event of a leak contact Airgas service personnel at 882-2531.

LABORATORY ULTRAVIOLET EXPOSURE CONTROL PLAN

SOP Number:	CSF120	**Creation Date:**	2/28/2013
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Related Documents	

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LABORATORY ULTRAVIOLET EXPOSURE CONTROL PLAN

Introduction and Definition

Ultraviolet light (UV) is defined as electromagnetic radiation in the spectral region between 180 and 400 nanometers (nm). UV has the highest photon energy range. Penetration is limited - target organs are the skin and cornea, although the immune system may also be affected. UVA or Near UV are those UV frequencies "near" the visible frequencies and may also effect the lens. UVB or Actinic UV, the midfrequencies, are the most damaging. UVC, or "Far UV," or "Vacuum UV" (i.e., UV wavelengths <200 nm, which are "far" from the visible wavelengths), have photon energies in excess of 12 eV, but are quickly absorbed in air.

• Standards: No OSHA standard, but protective measures (e.g., UV goggles) are required. The ACGIH TLV curve is most stringent at 270 nm, and limits near UV to 1 mW/cm_2 ; based on protection against sunburn (erythema), actinic skin, and conjunctivitis and photokeratitis (welder's flash). Also concern for skin cancer; most cases caused by sun. UV also causes increased skin pigmentation (tanning). Intense acute exposures, and possibly less intense cumulative exposures can cause cataracts.

• UV is more hazardous because the symptoms are delayed (no immediate sensation of being over exposed.) Effects are exaggerated for skin which has been photosensitized by agents such as coal tar products, by photoallergens, or by certain diseases (e.g., erythropoietic porphyria).

• Common sources in the laboratory: mercury vapor and quartz lamps (black lights), UV decontamination bulbs, and UV lasers.

Purpose:

The reduction/prevention of occupational exposure to UV radiation while performing laboratory duties.

Policy:

Overexposure to UV light, direct or reflected, should be minimized. Lamp sources should be sealed or enclosed whenever possible, and appropriate eye protection and/or face shields should be worn if unshielded sources are used. Long-sleeved clothing and gloves should be worn to protect arms and hands.

Laboratory UltraViolet (UV) Exposure Prevention Plan

Unshielded UV light sources have the potential of causing photokeratitis (eye injury) with only short exposure periods and should, therefore, be used in a manner that limits exposure time. Many overexposures to UV light have

occurred when the exposed individual was not aware of the hazards of the UV source. To prevent eye and skin injuries, unshielded sources of UV light must be conspicuously labeled with a warning attached to the housing of the source. The warning sign should state:

Caution
ULTRA-VIOLET LIGHT
PROTECT EYES AND SKIN

UV Light Protection

The key to effectively reducing UV exposure is to properly shield the source. Unshielded light sources require that users wear the appropriate personal protection. Personal protection that is appropriate may include goggles and face shields along with labcoats with long sleeves.

Training

Individuals who use UV sources must be instructed on the safe use of such sources and the appropriate PPE to be used.

Roles and Responsibilities

Department

Notify Safety Officer when new UV sources are obtained. Minimize UV exposure by shielding UV sources or by providing goggles, face shields or masks, as appropriate, for unshielded devices.

Associate

Follow instructions regarding safe use of unshielded UV light sources. Wear protective goggles and/or Lab coats as required. Report exposures to the Lead Technologist, Manager, or Safety Officer.

Personal Protective Equipment--Instrument/ Task Dependent

- Flourescent Microscope Reading slides – No PPE needed
- Maintenance of Bulb Housing- Performed by vendor
- Changing Bulb - No PPE required; bulb will not fire if housing is disconnected.
- Germicidal Lamp in Biosafety Hood (TB room) The UV source is not turned on during specimen processing. At the end of the day, the UV source is turned on for a period of 1 hour. The associate leaves the room. If it is necessary to remain in the room, goggles and long-sleeved lab coat must be worn.

- Microbiology, Chemistry, Hematology instrumentation with UV sources Equipment operation – No PPE required All UV sources within instrumentation are properly shielded. Laboratory associates do no maintenance on UV sources.

LATEX ALLERGY AWARENESS

SOP Number:	CSF130	**Creation Date:**	02/28/2013
Department:	Laboratory	**Effective Date:**	3/7/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.77700	CAP
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	3/7/2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
3/7/2013	01	New Form	Joe Lewis MD

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Safety Manual

LATEX ALLERGY AWARENESS

This Policy supplements the System Document Latex Allergy Guidelines

Purpose

To inform associates at hire and annual review of the

- risks of latex glove use
- recommendations for latex glove use

Policy

Laboratory associates will review this information at hire and annually thereafter

NIOSH Alert: **Workers exposed to latex gloves and other products containing natural rubber latex may develop allergic reactions such as skin rashes; hives; nasal, eye, or sinus symptoms; asthma; and (rarely) shock.**

- Workers with ongoing latex exposure from wearing latex gloves or using latex-containing medical supplies are at risk for developing latex allergy. Such workers include health care workers (physicians, nurses, aides, pharmacists, operating room employees, laboratory technicians, gardeners, food service workers, and housekeeping personnel) may also be at risk.
- Atopic individuals (persons with a tendency to have multiple allergic conditions) are at increased risk for developing latex allergy. Latex allergy is also associated with allergies to certain foods especially avocado, potato, banana, tomato, chestnuts, kiwi fruit, and papaya. People with spina bifida are also at increased risk for latex allergy.
- Latex allergy should be suspected in anyone who develops certain symptoms after latex exposure, including nasal, eye, or sinus irritation; hives; shortness of breath; coughing; wheezing; or unexplained shock. Any exposed worker who experiences these symptoms should be evaluated by a physician, because further exposure could cause a serious allergic reaction. A diagnosis is made by using the results of a medical history, physical examination, and tests.
- Testing is also available to diagnose allergic contact dermatitis. In this FDA-approved test, a special patch containing latex additives is applied to the skin and checked over several days. A positive reaction is shown by itching, redness, swelling, or blistering where the patch covered the skin.
- Once a worker becomes allergic to latex, special precautions are needed to prevent exposures during work as well as during medical or

dental care.

- Certain medications may reduce the allergy symptoms, but complete latex avoidance (though quite difficult) is the most effective approach. Many facilities maintain latex-safe areas for affected patients and workers.

Possible Solutions

Use appropriate gloves for latex-sensitive employees:

- The employer shall ensure that appropriate personal protective equipment, in the appropriate sizes, is readily accessible at the worksite or is issued to employees.
- Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided [1910.1030(d)(3)(iii)].
- Among the alternatives are synthetic, low protein, and powder-free gloves. Powder-free gloves may reduce systemic allergic responses.
- Do not use latex gloves when there is no risk of exposure to blood or other potentially infectious materials (OPIM).
- **Note:** Hypoallergenic gloves, glove liners, or powderless gloves are not to be assumed to be non-latex or latex free.
- OSHA's Bloodborne Pathogens Standard requires handwashing after removal of gloves or other personal protective equipment. This helps to minimize powder and/or latex remaining in contact with the skin [1910.1030(d)(2)(v)].

NIOSH recommends:

- Use appropriate work practices to reduce the chance of reactions to latex:
- When wearing latex gloves, do not use oil-based hand creams or lotions (which can cause glove deterioration) unless they have been shown to reduce latex-related problems and maintain glove barrier protection.
- After removing latex gloves, wash hands with a mild soap and dry thoroughly.
- Do not use latex gloves when there is no risk of exposure to blood or OPIM.

HAZARDOUS MATERIALS AND WASTE MANAGEMENT

SOP Number:	CSF140	**Creation Date:**	2/24/2013
Department:	Laboratory	**Effective Date:**	3/18/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.77800	CAP
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	3/18/2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
3/18/2013	01	Major Revision	Joe Lewis MD

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HAZARDOUS MATERIALS AND WASTE MANAGEMENT

PURPOSE

Describe the department's process for selecting, using, and disposing of hazardous materials and waste. This policy is a supplement to the System Biohazardous Waste Handling Procedure

POLICY

Information concerning chemical hazards in the workplace is communicated to laboratory staff through written and oral instructions.

ACCOUNTABILITY

All laboratory associates are responsible for understanding and complying with the department's provisions for the safe handling and disposal of hazardous materials and waste. Section Lead Techs are responsible for associate and student/visitor orientation and recurrent training.

PROCEDURES

1. Protective Measures. Laboratory associates follow provisions to minimize the risk of hazardous materials and waste.

A. Hazardous Waste Reduction.

Process Changes: Laboratory associates reduce the threat whenever possible by seeking non-toxic substitutes for a toxic chemical; and adopting procedures which require smaller reagent quantities

Reagent Acquisition Constraints: Laboratory Associates will purchase reagents in smaller containers and in smaller total quantity to minimize risk from spillage and excessive waste. Safety will be the primary concern when selecting reagent quantity and concentration for purchase.

Specimen Acquisition and Retention Constraints: Laboratory Associates will encourage and provide feedback to specimen collectors to facilitate collection of smaller specimen volumes; specimens will be retained according to laboratory section guidelines and then promptly processed for disposal.

B. Minimize On-Hand Quantities

On-hand chemicals do not exceed a 15 day use factor. Larger quantities may be stored only if the spill threat is minimal; one that can easily be handled by the laboratory section's emergency response protocol.

C. MSDS Sheets

The hospital maintains an MSDS website that is available to all on-duty associates.

D. Emergency Response Procedures.
The department maintains HazMat spill kits. Laboratory associates are responsible for handling all spills and HazMat incidents that occur within the department. All associates are trained to take immediate actions; provide spill control and containment; perform decontamination and cleanup; prepare spill cleanup for disposal; and then document the event by reporting to their Lead Technologist or the Safety Officer.

LABORATORY WASTE DISPOSAL

POLICY:
Seven waste streams exist in the CSHCC Laboratories. These are as follows:

Hazardous Chemicals: Dispose of hazardous chemicals according to MSDS guidelines and package inserts. Contact Environmental Services for removal of chemicals which cannot be disposed of in any other waste stream.

Sharps: Dispose of sharp objects (needles, broken glass, etc.) into hard plastic boxes provided specifically for this purpose.

Biohazardous Waste: Dispose of any items which may be contaminated with infectious material into red bags marked with the "Biohazardous" symbol.

City Sewer: Many liquids (urine, dilute chemicals) may be disposed of into the city sewer system.

Confidential Documents: Dispose of documents containing patient information or other confidential information by placing them in designated containers within the laboratory.

Recyclable Waste: Some items, especially cardboard boxes, are recycled by Environmental Services.

Regular Waste: Dispose of items which do not fit the criteria for any other waste stream and are not an infection risk or injury risk into trash receptacles lined with clear plastic bags.

HAZARDOUS MATERIALS AND WASTE MANAGEMENT--PROCEDURE

SOP Number:	CSF150	**Creation Date:**	2/25/2013
Department:	Laboratory	**Effective Date:**	3/18/2013
Author:	S Baker	**Version:**	01

Applicable Standards	
Standard	Organization
GEN.77800	CAP
Related Documents	

Version History		
Version	Effective Date	Deactivation Date
01	3/18/2013	

Review History (Up to the Last 15 Occurrences)			
Date	Version	Revision Type	Review By
3/18/2013	01	New Form	

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DISPOSING OF COMMON WASTES

DILUTE ACIDS, BASES, CAUSTICS:

These liquid chemicals may be poured directly into the city sewer system. Flush pipes with water for several minutes after pouring any single chemical into the system.

TISSUE SPECIMENS:

Small amounts (500 ml or less) of 10% formalin may be poured down the city sewer and flushed with large amounts of water. Tissue is packed in medical waste disposal boxes containing adequate absorbent material. When full and sealed, these disposal boxes are removed by Environmental Services.

BLOOD AND BODY FLUID SAMPLES

Blood specimen collection tubes, spinal fluid, and other body fluids are collected into leak proof containers, which are provided and replaced periodically by Environmental Services.

BROKEN GLASS, PIPETTES, NEEDLES, SCALPELS, BLADES, RAZOR BLADES AND OTHER DISCARDABLE SHARP ITEMS:

These items are placed in hard plastic containers provided specifically for sharps disposal. Transfer of these items from one container to another is prohibited.

URINE:

Urine may be poured directly down the city sewer system. Urine containers are then discarded into the biohazardous waste stream.

PACKING BIOHAZARDOUS BAGS INTO CARDBOARD BOXES

WARNING:

Do not place mercury-filled devices (including batteries), mercury fixatives, chemotherapy drugs, antineoplastics/cytotoxics, bulk chemicals, used stains, solvents, thinners, paints, formaldehyde, formalin, alcohol, acetone, toluene, radioactive items, chemical sterilizing agents, disinfectants, or any container with "Hazardous" label in Biohazardous waste.

PROCEDURAL NOTES:

- Liquid volumes in excess of 20cc must be placed in a leak proof secondary container before placing them in a cardboard box lined with a biohazard bag; or be placed in hard plastic biohazard containers.
- Red "biohazardous" bags from laboratory trashcans must be no more than ¾ full and tied closed.
- All sharps must be in appropriate sharps containers which are no more than ¾ full and securely closed.
- Containers must be packaged so that there is no breakage, leakage or movement of the inner packaging that would allow the release of the liquids into the secondary packaging.

PROCEDURE:

1. Open hard plastic or cardboard box. For cardboard boxes make sure that the bottom is locked into place. Metal rolling bins labeled "Biohazard" may also be used.
2. Line open box with a red "biohazard" bag. (Not required for Metal bins)
3. Line open box with a second red "biohazard" bag.
4. Fill lined box until full.
5. Tie liner either in a knot, secure with a rubber band or with a twist-tie.
6. Close box securely.

TITLE: Hazardous Material Spill(s) - PROCEDURE

Date Issued: 03/09
Date(s) Revised: 08/12
Date(s) Reviewed: 08/12

Section: Environment of Care
Number: B-155-P
Originator: Safety Management

Approved By: Tony Barton
(Original with signature archived in Document Control)

Director

PURPOSE:

CHRISTUS Spohn Health System establishes procedures to address hazardous material spills and explains the in-house emergency numbers to notify in case of a spill and the phone numbers of the emergency response agencies.

PROCEDURE:

1. **Biohazardous/Infectious Waste**

   Biohazardous or Regulated waste – means liquid or semi-liquid blood or other potentially infectious materials (OPIM); contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or OPIM.

   Other Potentially Infectious Materials (OPIM) – means the following human body fluids, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; any unfixed tissue or organ (other than intact skin) from a human (living or dead). Refer to **CHRISTUS Spohn Bloodborne Pathogen Exposure Control Plan** for more information

   a. **Small Spills: (1 Liter or Less)**
      i. Contain spill with towels or linens.
      ii. Use proper protection such as gloves, gowns, masks and eyewear place contents in a biohazardous container/bag
      iii. Wipe area with approved disinfectant, allow to air dry.
   b. **Large Spills: (Over 1 Liter)**
      i. Contain spill with towels or linens.
      ii. Provide EVS staff with the location of the spill and the approximate amount of material spilled.
      iii. EVS will assist staff in clean up and appropriate disinfectant

2. **Chemical Spill**

   If a chemical spill occurs anywhere within the complex or on CHRISTUS Spohn Health System grounds, use the hospital emergency number. Inform the PBX Operator to call a "Code Orange Internal" and location.
   a. **Small Spills: (1 liter or less)**
      i. Refer to MSDS. Contain spill with towels, linens, or absorbents.
      ii. Use proper protection per MSDS. Place contents in leak proof container and dispose per state and local requirements.
   b. **Large Spills: (Over 1 Liter)**
      i. Provide EVS staff with the location of the spill, the material involved, and the approximate amount of material spilled.
      ii. IF EVS is unable to properly clean up the spill a remediation vendor can be contacted and if appropriate the Hazardous Materials unit of the local Fire

department will be contact for assistance until vendor can arrive for remediation.

iii. The facility Safety Officer and the Regional Director of Safety & Security will be notified of the spill

iv. Appropriate documentation will be completed as in a security report, a variance report and a TOIAP Workplace Injury Package for each associate that was exposed

c. Security assists in securing the spill site.

d. The following telephone numbers are used with a Hazardous Material Spill:

i. Fire Department: 911

ii. Texas Commission on Environmental Quality 1-800-832-8224

3. **Chemotherapeutic Spill**

a. Specially trained nurses and or pharmacists will be responsible for supervising and conducting the clean up and disposal of all types of chemotherapeutic spill.

b. Appropriate documentation will be completed as in a security report, a variance report and an TOIAP Workplace Injury Package for each associate that was exposed.

4. **Formalin Spill**

a. Formaldehyde is usually found in hospitals as a mixture called Formalin. Commercially available Formalin contains 37% formaldehyde, 15% methanol, and 48% water. The Formalin is usually diluted to 3.7% to 10% formaldehyde for work procedures. Caution must be utilized when handling formalin. Repeated or prolonged contact with formaldehyde can cause allergic reactions, irritations of the skin, eyes, and respiratory tract. Chronic exposure may result in nasal carcinomas and abnormal reproductive effects

b. **These steps are guidelines to aid in the event of a formaldehyde spill. Only those employees who are properly instructed should clean up a formaldehyde spill.**

i. **Small Spill**s: **(1 liter or less)**

1. If a small amount of formalin (less than or approximately equal to 1 liter is spilled, immediately eliminate all sources of ignition.
2. The proper personal protective equipment shall be used including rubber gloves and eye protection.
3. Absorb the spill with formaldehyde absorbent following instructions on the absorbent's container.
4. Place solidified mixture into a leak proof container, which in turn is placed in a biomedical waste box.
5. Wash the spill site with copious amounts of water, absorb with a towel, and place the contaminated towel in the biomedical waste box.
6. If there is any doubt concerning the clean up of a spill, contact the System Safety Manger and or the Plant Operations Manager.
7. Notify your supervisor of the spill occurrence.

ii. **Large Spill**s: **(Over 1 Liter)**

1. If a large amount of formalin is spilled, or a leak occurs, immediately inform others in the work area of the spill, and direct them to evacuate.
2. Have a co-worker call Plant Operations, and/or Security.
3. Safety permitted, start taking precautions to reduce the spill hazard by insuring all sources of ignition are terminated.
4. **Do not stay in the spill area**.
5. Follow your department's emergency evacuation plan.
6. If properly trained staff is capable of cleaning up the spill, the proper personal protective equipment is required.
7. Properly trained associates must wear an air-purifying respirator, goggles, rubber gloves, gown, and shoe covers.
8. Absorb the formaldehyde with an absorbent and dispose of the absorbent material in a biomedical waste box.

9. Wash the spill site with copious amounts of water, absorb with a towel, and place the contaminated towel in the biomedical waste box.
10. If the spill in uncontrollable and help is needed, the Fire Department Hazardous Materials Unit, at **911**, must be notified.

Resources:
OSHA 1910.1200, Texas Commission on Environmental Quality

Related Documents:
Bloodborne Pathogen Exposure Control Plan

Reviews:
08/12

CHRISTUS SPOHN HEALTH SYSTEM

TITLE: Occupational Event Reporting - Procedure

Date Issued: 06/98
Date(s) Revised: 06/01, 05/04, 07/08, 01/10
Date(s) Reviewed: 04/10

Section: Environment of Care
Number: B-109-P
Originator: Safety Director

Approved By: Bruce Holstien President, CEO
(Original with signature archived in Document Control)

PURPOSE:

To ensure associate injuries and illnesses are properly reported within 24 hours.

CHRISTUS Spohn Health System supports an occupational health management process that minimizes accident frequency and severity, improves morale and work safety, and when needed renders quality medical care.

PROCEDURE:

1. Actions Taken in the Event of Injury/Illness

    a. The injured associate will notify his or her supervisor immediately after being injured at work, no matter how minor the injury appears to be (including any disease exposure). For an injury due to an accident or for a known exposure to an occupational disease, verbal notice must be provided immediately and no later than within 24 hours after the time of injury. For an actual injury due to occupational disease or cumulative trauma, verbal notice must be provided 24 hours after being medically diagnosed or within 14 days after an associate should have known of the injury, whichever is earlier.

    b. Reporting Process (TOIAP Program)

        1) Injured/Ill Associate. The following forms must be completed and submitted within 24 hours after the time of an injury.

            (a) Occupational Event Report (OER). The OER provides details of the event that resulted in the injury. This report must be completed within 24 hours to receive coverage.
            (b) Medical Treatment Authorization Form
            (c) Authorization for release of wage or salary information
            (d) Authorization for release of health information
            (e) Blood and Body Fluid Exposure Report (when applicable)

        2) Injured/Ill Associate's Director/Manager

            (a) Supervisor's Occupational Event Investigation Report. The injured/ill associate's department director or the facility's shift supervisor in his/her absence will conduct an investigation and complete this report within 24 hours of the occurrence.

(b) Witness Statement(s). Witness statements will also be completed by anyone who observed the event and attached to the supervisor's report. NOTE: Witness statements will normally not be solicited from patients.

3) Occupational Health Nurse Event Report. Both associate and director completed reports and forms will be forwarded to the Occupational Health Nurse (OHN) for review and verification. The OHN in-turn will complete the OHN event report based on a medical determination.

4) The OHN then sends the completed reports to the occupational health representative for further processing and forwarding to the occupational health safety and claims center.

c. Drug and Alcohol Screen. An associate injured on the job may be required to submit to a drug and alcohol test based on CHRISTUS Health's "Drug Free Workplace" directive.

2. The Emergency Department provides associates with emergency treatment and substitutes for the occupational health nurse in his/her absence. The Emergency Department will ensure an occupational event report is provided each occupationally treated associate. The treating physician must fill out the Injury Treatment Report for each injured associate and forward it to the occupational health nurse.

3. Approved Doctor, Hospital or Clinic for Medical Treatment. In order to receive occupational injury benefits approved medical providers and facilities coordinated through the TOIAP Plan Administrator must be used.

4. Safety. The safety director will review associate accidents to oversee corrective measures for reducing or eliminating future occurrences.

5. Recordkeeping. The occupational event report, investigations, medical information, and other regulatory reporting forms will be kept in the associate's occupational health record. The medical record will be kept in a separate location from Human Resource files under the supervision of occupational health staff. These medical files are kept confidential and retained for the duration of employment plus 30 years thereafter.

Related Documents:
CHRISTUS Health "Drug Free Workplace" Directive 22.6
http://standards.christushealth.org/legal/Procedures/Guideline%2022.6%20to%20Management%20Directive%2022.pdf

TOIAP Forms link:
Non-Needlestick Event forms:
http://sharepoint.echristus.net/spohn/occupationalmed/TOIAP%20Workers%20Compensation%20Forms/TOIAP%20Workplace%20Injury%20Package%20(Non%20Needlestick).pdf

Exposure to Bloodborne Pathogen forms:
http://sharepoint.echristus.net/spohn/occupationalmed/TOIAP%20Workers%20Compensation%20Forms/TOIAP%20Bloodborne%20Pathogen%20Exposure%20Packet.pdf

Reviews:
04/10

Prevention Of Hepatitis A, B and C

Date Issued: 05/07
Date(s) Revised: 10/09, 07/12, 09/12
Date(s) Reviewed: 11/09, 09/12

Section: Occupational Health
Number: N-102
Originator: Occupational Health

Approved By: Pamela S. Robertson, President, CEO
(Original with signature archived in Document Control)

PURPOSE:

To protect the health and safety of patients, associates, patients' and associates' family members, and our communities from vaccine preventable diseases and to comply with various regulatory/oversight organization requirements.

POLICY:

1. The following associates will be given Hepatitis A vaccine as part of an immunization program if they cannot provide documentation of this immunization:
   a. Dietary Department Associates
   b. Plant Maintenance Associates/Plumbers
   c. Environmental Service Associates
   d. Child Care Associates
   e. Gift Shop Associates who handle food

2. Hepatitis A vaccine will NOT be administered to pregnant associates in that the safety of Hepatitis A vaccination during pregnancy has not been determined.

3. Hepatitis A vaccine may be given to immunocompromised associates.

4. Associates will be given Hepatitis B vaccine as part of an immunization program if they cannot document completion of the Hepatitis B vaccination series **OR** provide documentation of a positive Hepatitis B Surface antibody titer.

5. Hepatitis B vaccination MAY be administered to associates with a history of MS, Guillain-Barré syndrome, autoimmune disease (e.g., systemic lupus erythematosis or rheumatoid arthritis), or other chronic diseases[1].

6. Hepatitis B vaccine MAY be administered to pregnant associates.

7. Hepatitis B immunization offers lifetime protection and so booster vaccination is not necessary. If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) will be made available.

8. Associates may receive Hepatitis B intradermal inoculation for prior incomplete vaccination series. Intradermal inoculation may also be used when a rapid immune response post exposure.

9. In a case of accidental exposure to blood or other body fluids, CHRISTUS Spohn Health System may test a source patient for Hepatitis B or C without the source patient's specific consent to the test in accordance with Texas Health and Safety Code, Title 2, Chapter 81.095.

10. There currently is NO safe and efficacious vaccine available for preventing the transmission of Hepatitis C (i.e. there is no immunization against Hepatitis C). In the event of exposure to Hepatitis C

positive blood, the associate will be tested periodically to assess for the development of Hepatitis C infection.

11. Available data regarding the prevention of HCV infection with immunoglobulin (IG) indicate that IG is NOT effective for post exposure prophylaxis (PEP) of hepatitis C and so no post exposure prophylaxis will be given to associates exposed to Hepatitis C positive blood.

12. A Vaccine Information Statement (VIS) will be given to associates EACH time Hepatitis A or B vaccines are given, in accordance with the National Childhood Vaccine Injury (NCVIA) Act of 1986.

Related Documents:
N-112 Vaccine Preventable Diseases

Reviews: 11/09, 09/12