



Texas Tech University
Health Sciences Center

Faculty, Staff,
and Student

SAFETY HANDBOOK



Contents

Texas Tech University Health Sciences Center is committed to maintaining a safe work environment for its faculty, staff, and students. This Safety Handbook is an introduction to some of the safety policies and procedures that will help us, singularly and together, to achieve this goal.

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Safety Services Department

The TTUHSC Safety Services Department is responsible for providing the necessary support in the implementation of the various federal, state, and locally required safety programs and for carrying out the overall safety policies and procedures that have been established at TTUHSC. The department is structured to accomplish this with the following divisions: Administration, Environmental Safety, Laboratory Safety, Life and Fire Safety, Occupational Safety, Radiation Safety, and Safety Education and Training.

The Safety Services Department has the authority to abate unsafe conditions or operations within TTUHSC when, in the professional opinion of the Director of Safety Services or respective safety officer, the condition or operation constitutes an imminent hazard to life and/or property. Other conditions or operations considered to be not of an imminent nature, but in violation of standards published in the TTUHSC Safety Manual or local, state, and federal safety laws, will be recommended for correction through appropriate administrative channels.

Safety Services works with administration, academic departments, service departments, clinics, laboratories, and specialized committees in the development and implementation of safety programs. These programs are designed in such a way to prevent accidents and to identify and correct risks.

Each of the regional centers shall be responsible for implementing and maintaining the various safety policies and procedures. It shall be the responsibility of the Regional Dean or his designee to coordinate these safety programs with the Director of Safety Services.

Additional information about Safety Services, as well as the various forms and manuals mentioned in this handbook, are available online at <http://www.ttuhs.edu/admin/safety>.



Unit Safety Officers

Department Heads at TTUHSC, the Dean of the School of Medicine, the Dean of the School of Allied Health, the Dean of the School of Nursing, the Dean of the School of Pharmacy, and the Director of Health Care Systems have appointed Unit Safety Officers (USOs) to assist them in implementing and managing the safety program within their assigned area or department. USOs coordinate several safety activities within their assigned department, including accident reporting and investigation, safety education and training and the resulting record keeping, emergency notification and evacuation procedures, annual Health and Safety Reviews, departmental safety meetings, hazard reporting programs, and other safety duties as required by the TTUHSC Safety Program.

Health and Safety Review Program

The TTUHSC Safety Advisory Committee established the Health and Safety Review Program. The purpose of this program is to conduct a regular annual review for safety deficiencies throughout Health Sciences Center facilities and to monitor corrective action. It is also intended as an opportunity to comment on those areas where safety procedures do meet or exceed safety standards. Each Unit Safety Officer conducts a Health and Safety Review in another department whose work areas are similar to their own department. This review includes fire safety and emergencies, employee safety and facilities, signs and labels, and equipment and electrical.

After the review is completed, it is signed and forwarded to the Safety Services Department, which monitors corrective action and maintains the necessary files. Corrective action should be taken by responsible parties.

Accident Prevention

General Safety

- Keep a safety conscious attitude and avoid complacency.
- Get enough sleep before coming to work.
- Get the necessary training to do the job properly and safely.
- Avoid distractions or causing distractions.
- Never cut corners or take shortcuts.
- Obey safety signs, warnings and directions.
- Never let personal feelings or problems get in the way of safely performing job duties.
- Don't engage in horseplay or show off on the job.
- Never ignore a co-worker's unsafe acts or conditions.
- Ask questions about anything that is unclear.
- Avoid working alone or leaving tasks unattended.
- Identification badges must be worn at all times.
- Only individuals who work in a laboratory, room housing animals, or shop should be in those areas.
- Keep all work areas clean and orderly.
- Keep drawers closed when not in use.
- Keep all containers closed and stored when not in use.
- Do not stack file cabinets.
- Clothing should be appropriate to the job.
- Store and transport all materials in a safe manner.
- Know the location of emergency equipment, such as fire extinguishers, safety showers, eye wash stations and first aid kits.
- Avoid construction areas, when possible.
- Repair or replace damaged furniture and equipment.
- Use care in handling, disposing of, or storing sharp objects.
- Use a step stool or ladder for reaching objects.
- Only authorized persons should operate equipment.
- Report unsafe or malfunctioning equipment immediately.
- Do not deactivate any safety device or equipment.
- Inspect equipment for defects prior to use.

Accident Reporting and Investigation

Faculty and Staff Members

Faculty and staff members are required to immediately report all on-the-job incidents, injuries and illnesses to their supervisor, regardless of whether or not lost work time, medical expenses, or property damage were involved. In case of a medical crisis, dial 9-911 for immediate response by medical personnel. All TTUHSC employees whose names appear in the active payroll system are covered by the Texas Workers' Compensation Insurance (WCI) program.

Students

Students should seek medical attention at their personal physician, the Family Medicine Clinic or Student Health. Students are required to complete accident reports, and should contact the appropriate Office of Student Affairs for the necessary forms. Students involved in an off-campus clinical site may need to complete additional forms as required by that facility. Students are not covered by WCI.

Volunteers

Volunteers should report incidents to their immediate supervisor or the Director of Volunteer Services and refer to HSC OP 75.14 for Non-Employee Accident/Incident Procedures and reporting. Volunteers are not covered by WCI, therefore, any medical expenses incurred as a result of an injury or illness while volunteering at TTUHSC facilities are the sole responsibility of the volunteer and his/her insurance.

Patients and Visitors

For patients or visitors involved in an incident/accident in a common public, non-clinical area, first call the appropriate emergency number (Lubbock 9-911) if immediate medical assistance is needed. Head nurses will triage incidents occurring within their own clinics. Staff witnessing patient/visitor incidents will complete a Non-employee Accident/Incident Report and forward it to Clinic Administration.

Workplace Threats and Violence

TTUHSC strives to provide a safe and secure workplace free from threats, threatening behavior, or acts of violence against employees, students, visitors, or patients (HSC OP 76.08). Violations of the policy will lead to disciplinary action which may include dismissal, arrest, and/or prosecution.

Any person who makes substantial threats, exhibits threatening behavior, or engages in violent acts on TTUHSC property shall be removed from the premises as quickly as safety permits, and shall remain off TTUHSC premises pending the outcome of an investigation. TTUHSC will initiate an appropriate response, which may include, but is not limited to, suspension and/or termination of any business relationship, reassignment of job duties, suspension or termination of employment, and/or criminal prosecution of the person or persons involved. All TTUHSC personnel are responsible for notifying the Texas Tech Police Department at 743-2000 of any threats which they have witnessed, received, or have been told that another person has witnessed or received. Even without an actual threat, personnel should report any behavior they have witnessed which they regard as threatening or violent, when that behavior is job related or might be carried out on a TTUHSC controlled site, or is connected to TTUHSC employment. Employees and students are responsible for making this report regardless of the relationship between the individual who initiated the threat or threatening behavior and the person or persons who were threatened or were the focus of the threatening behavior. Personnel are also encouraged to report the threat or threatening behavior to their immediate supervisor.

All individuals who apply for or obtain a protective or restraining order which lists any TTU or TTUHSC locations as being protected areas must provide the Texas Tech Police Department with a copy of the petition and declarations used to seek the order, any temporary and/or permanent protective, or restraining order which is granted.

Personal Safety

Develop an action plan for crime prevention and reporting;

- In an emergency, dial 9-911 from any campus phone or 911 off campus or from a pay-phone. You may call 911 free of charge from any pay phone.
- Wear your identification badge at all times while on TTUHSC property.
- Don't leave your personal property unattended or unsecured. Property identification marking assistance is available through the Texas Tech Police Department at 742-2000.
- Keep your office and lab doors locked when you are gone and don't loan your keys to anyone.
- Be aware of your surroundings when you enter and exit an area and report suspicious persons and activities.
- Report obscene, profane, threatening, or harassing telephone calls to a supervisor or the Texas Tech Police Department.
- Tell someone when you are leaving, where you are going, and what time you expect to return.
- Don't walk alone, particularly after dark, and don't take shortcuts. The shortest route is not always the safest.
- Don't become predictable. Vary your routes frequently.
- Drive with your vehicle doors and windows locked and don't pick up hitchhikers.
- Don't accept a ride from anyone you don't know well.
- After hours, you can request a Texas Tech Police escort to your car by calling 743-2000. Waiting times for escorts may vary, depending on other Police duties.
- If you have been a victim of a crime, free counseling is available through Student Services and the Employee Assistance Program (EAP).
- Listen and respond to your instincts..they're usually correct.

Hazard Reporting Program

Hazards can be found almost everywhere, and there are many different types of hazards, including chemical (toxics, flammables, reactives), biological (infectious agents, blood), radioactive (x-rays, lasers, ultrasound), and physical (electrical equipment, ergonomics, fire, slips and falls).

If a faculty or staff member, or a student/volunteer becomes aware of a potentially hazardous condition, it should be brought to the immediate attention of their supervisor, so that necessary corrective action can be taken to prevent injury. Hazards can be reported by completing a Hazard Report form, available from a Unit Safety Officers, Safety Services, or from the Safety Services website at: <http://www.ttuhsu.edu/admin/safety>. The form provides an area for a written description of the hazard, the location of the hazard, and proposed corrective action. After the Unit Safety Officer and the Department Head review the completed Hazard Report, it is forwarded to the Safety Services Department for appropriate action. Safety Services notifies the initiator of the resulting action.

Persons with Disabilities

If you have a disability and require special services, contact your Unit Safety Officer. For information on the American with Disabilities Act, contact the Department of Human Resources.

Clinics and other departments that may care for non-ambulatory patients should be familiar with evacuation routes that are adequate for removing their patients in case of an emergency. Specific procedures concerning the handling of non-ambulatory persons should be in writing by responsible parties in each department. This information should be disseminated to all parties involved in the written procedures of evacuation.

Emergency Procedures

General

- Be familiar with the location of emergency equipment such as fire extinguishers, fire alarm pull stations, first aid kits, eye wash stations, and emergency showers.
- Report any broken or missing equipment immediately to Safety Services.
- Report any exit signs that are obstructed, damaged, or inoperable.
- Emergency evacuation and shelter routes and re-assembly areas are established by Unit Safety Officers. Contact your Unit Safety Officer for specific evacuation procedures.
- All egress pathways, including doorways, hallways, and areas around exits, must be free of obstructions (HSC OP 75.06). If the TTUHSC Fire Marshals identify equipment and materials in corridors which are in violation of this policy, the owning departments will be notified to remove said items within 30 days. After such time, the TTUHSC Fire Marshal will contact General Services to remove the items to a location selected by the owning department or dispose of the items in accordance with governing policy.
- Keep fire lanes clear at all times.
- Use stairs, not elevators, to evacuate the building.
- Clinic areas must have a written plan for the evacuation of patients, visitors and students. Those individuals holding positions of responsibility for patients, both ambulatory and non-ambulatory, must be notified and trained to accomplish these responsibilities.
- Patients, visitors, and students must be included in evacuation procedures and should be assisted with the evacuation process.

Note: Conditions may differ at Thompson Hall, the Medical Office Plaza, Medical Center Southwest and Health Care Systems contract locations. Contact your Unit Safety Officer or the Safety Services Department at 743-2597 for additional information.

Emergency Paging Codes

General

- In an emergency, **dial 9-911** from any TTUHSC telephone. Emergency paging codes are announced over the public address system by Information Technology in coordination with the Texas Tech Police Department TTUHSC Fire Marshall's office.
- Evacuation route maps identify the primary route with a solid line and secondary routes with a broken line.

Code Red - Fire Emergency

- In case of fire, follow **R-A-C-E** procedures.
- R**escue anyone who may be in immediate danger.
 - A**ctivate the nearest fire alarm pull station and call **9-911** from a safe location to report details.
 - C**ontain fire by closing, but not locking, doors as you leave the fire area.
 - E**vacuate to pre-assigned location outside the building by moving horizontally away from the fire and then using the stairs to get to the ground level.

Code Brown - Severe Weather/Tornado Emergency

Tornado or severe weather has been sighted in the vicinity or on a collision course with the facility. Prior to a "Code Brown" situation, the following announcements may be issued over the public address system:

Severe weather watch: tornadoes or thunderstorms are expected and could become severe.

Severe weather warning: tornadoes or severe weather have been sighted in area, but not necessarily in the immediate vicinity of the facility.

In the event of a Code Brown, move away from windows, doors, and large open areas and seek shelter immediately in the safe area designated by your Unit Safety Officer or the nearest stairwell.

Emergency Paging Codes

Code Black - Bomb Threat

Denotes a bomb threat has been received and you should evacuate immediately. Should you receive a bomb threat over the telephone, keep the caller on the phone as long as possible. Direct someone else to call 9-911 and notify the Texas Tech Police Department. Keep the caller on the phone as long as possible and try to find out the exact location of the bomb, when the bomb will detonate, the type of bomb, and the outstanding characteristics of the caller, such as sex, age and race. A complete checklist is available on the Safety Services web site at www.ttuhscc.edu/admin/safety.

Code Blue - Cardio-Respiratory Arrest

Denotes a medical crisis. Involved medical personnel will respond immediately.

Code Green - Internal Disaster

Denotes a minor or major internal disaster situation in which the TTUHSC complex has sustained damage and/or created circumstances which necessitated immediate relocation of occupants or evacuation of facility. If the "Code Green" is in your immediate area, evacuate immediately. Otherwise, close all doors and do not leave your area until you are directed to evacuate or the code is called "All Clear".

Code Yellow - External Disaster

Minor: denotes an external disaster situation in which University Medical Center expects to receive 10 to 15 patients who will require significant emergency treatment.

Major: denotes an external disaster in which University Medical Center expects to receive more than 15 patients who will require significant emergency care.

Those who have been assigned disaster response duties should take immediate action. All others should avoid contact with UMC during this emergency.

Emergency Paging Codes

Code White - Building Evacuation

This is used for internal disasters or any situation requiring evacuation of the entire facility. If a "Code White" is announced, you should evacuate immediately, using the pre-determined evacuation routes.

Fire Safety

Fire Prevention

- Smoking is prohibited within TTUHSC facilities and on all TTUHSC-owned property.
- Keep storage and work areas free of trash.
- Use chemicals only in well-ventilated areas away from heat or spark-producing sources.
- Check electrical equipment for old or worn wiring, and keep electrical motors clean and in good working order.
- Do not overload wall sockets or plug more than one heat-producing appliance into an outlet.
- Investigate strange smells coming from electrical equipment and report them immediately.

Fire Alarms

The HSC fire alarm system can be activated automatically by smoke detectors and manually by pull stations. Activation of the fire alarm system will cause:

- horn and light devices to sound
- hold-open fire doors to release and close
- air handlers to shut down
- magnetically locked doors to release
- elevators to automatically go to the ground floor and become unavailable for use
- dispatch of appropriate response teams.

Fire and Electrical Safety

Fire Extinguishers

Fire extinguishers are located in main hallways and within 100 feet of a known hazard. Use a fire extinguisher only after proper training. Even after extinguisher training, if you do not feel comfortable using a fire extinguisher, employ R.A.C.E. procedures and evacuate the facility immediately. Contact Safety Services for information about fire extinguisher training.

Fire Drills

Fire drills are conducted on a regular basis at TTUHSC facilities. Faculty, staff and students must respond to all fire alarms or drills. Fire drills do not require the removal of patients and visitors or the interruption of direct patient care. However, it is important that patients and visitors are made aware of the drill, so they do not panic or become frightened.

Electrical Safety

- Replace/ report any defective electrical cords or equipment.
- Investigate and report any unusual odors coming from electrical equipment or appliances.
- Unplug any electrical appliances not in use.
- Turn off and unplug any electrical device before attempting to service or repair it.
- Do not overload electrical circuits.
- Keep extension cords from becoming a tripping hazard.
- Extension cords shall be fused 15 amp power strips.
- Unfused, multiple outlet extension cords are not approved.
- Unusual situations concerning extension cords must be approved by the TTUHSC Fire Marshal.

Portable Heating Devices

- Heating elements of portable heating devices are limited to not more than 212 degrees Fahrenheit.
- The recirculating oil and the ceramic panel design, which meet the foregoing, have been approved by the TTUHSC Fire Marshal.

Fire and Electrical Safety

Holiday Decorations

- No candles or open flames.
- No live Christmas trees.
- Decorations cannot obstruct exits or corridors.
- Lights and/or electrical decorations must be plugged directly into a wall outlet or approved power strip, they may not be plugged into gang plugs or extension cords.
- All electrical decorations must be unplugged when the area is unattended or after normal business hours.
- Electrical cords must not create a tripping hazard.

Environmental Safety

Inspections

To promote safe conditions of TTUHSC buildings, the Safety Services Department conducts regular safety inspections and surveys of TTUHSC facilities. They also investigate complaints to confirm or evaluate unsafe conditions, practices, and procedures, violations of TTUHSC policies and/or safety-related local, state, and federal laws. Inspection and survey results are reported to the responsible entity for timely correction.

Biohazardous/Hazardous Waste Disposal

It is the responsibility of each supervisor to ensure that proper inventory, storage and control of hazardous materials be maintained and to ensure employees and students have been properly trained with regards to hazardous material use, storage, and disposal, and that they understand the use of and the information contained in the MSDS. The disposal of hazardous waste at TTUHSC is subject to various federal, state, and local regulations. For more information, refer to the Regulated Waste Disposal Manual, available from Safety Services.

Environmental Safety

Medical Waste

Regulated medical waste (also known as red bag, infectious, biomedical, and biohazardous waste) is any solid or liquid waste that can cause infectious disease or harbors human pathogenic organisms. It includes items such as needles, syringes, gloves, and laboratory and surgical supplies which have been in contact with blood, blood products, bodily fluids, cultures or stocks of infectious agents. However, with the exception of sharps, only waste that contains liquid blood or other potentially infectious material that is saturated or would drip if compressed must be placed in a biohazard container for special disposal.

All contaminated sharps (any contaminated object that can penetrate the skin such as needles, syringes, scalpel and razor blades, broken glass or capillary tubes), must be disposed of in an approved sharps containers immediately after use. Contaminated needles will not be bent, broken, recapped, or removed. Also, despite the safety mechanisms on products such as self-sheathing needles and retractable lancets, these items must be placed in sharps container after use.

Unless saturated with blood or body fluids or known to be infectious, the following items should not be placed in the biohazardous trash: vinyl or latex gloves, bandages, diapers, examination table paper, disposable speculums, sanitary napkins, Q-tips, Kleenex, tongue depressors, paper towels, cups, casts, packaging, or disposable gowns and foot covers.

Via an outside contractor, waste and sharps containers are emptied and replaced routinely and not allowed to overfill. TTUHSC medical waste is disposed of via a commercial contractor. Liquid biohazard waste is disinfected (chlorine bleach or isopropyl alcohol) and discharged into the sewer system.

Environmental Safety

Chemical/Other Hazardous Waste

Chemical waste is disposed of differently from medical waste, so the two should never be mixed. Chemical waste is collected and stored only in designated approved containers and disposed of according to federal, state, and local regulations (see “TTUHSC Regulated Waste Disposal Manual”). Chemical waste should be segregated into separate containers for chlorinated solvents, non-chlorinated solvents, aqueous acidic, and basic solutions. The following should never be disposed of in the central sewer system. Instead, contact Safety Services Environmental Division at 743-2597 to arrange for pick up and disposal.

- solutions of a pH less than 2 or greater than 12
- solutions containing heavy metals, especially Mercury
- reactive or unstable chemicals
- flammable liquids
- chlorinated solutions
- anything not miscible with water
- formaldehyde

Indoor Air Quality

The Environmental Safety Division of the Safety Services Department conducts an annual, indoor air quality test of each air handling unit at the TTUHSC. They also respond to calls concerning unusual or irritating odors. Odor calls made to Environmental Safety Division at 743-2597 are responded to in a timely manner in order to determine the source of the odor so that appropriate corrective action can be taken.

Pest Control

Pest control service is provided for the TTUHSC by the Environmental Division of Safety Services. This service covers control of pigeons, roosting birds, rodents and insects, including flies, mosquitoes, ants, roaches, silverfish, and other pests. All pest problems should be reported to Safety Services Department.

Laboratory Safety

General

- Keep laboratory doors closed at all times and locked when unattended.
- Eating, smoking, and use of cosmetics is prohibited in laboratories, near chemicals, or near laboratory animals.
- Food shall not be stored with or near chemical, biological, or radiological materials, nor near laboratory animals.
- Properly dispose of hazardous wastes. Call 743-2597 for pickup or assistance.
- Children are not allowed in laboratories.
- Read MSDSs and container labels before handling a chemical and know exactly what you are dealing with.
- Store chemicals according to the hazard classification.
- Follow the guidelines on labels and MSDSs.
- Never use a chemical that is not labeled properly.
- Don't sniff a chemical to identify it.
- Use appropriate PPE to decrease the exposure hazard.
- Shorts, short skirts, and sandals are not appropriate.

Laboratories, both research and clinical, present unique hazards requiring specific management practices to provide health and safety protection to personnel within and outside TTUHSC facilities. These specific laboratory management practices are compiled into the TTUHSC Laboratory Safety Manual that is published by the Safety Services Department. This manual serves as the acceptable TTUHSC Policy and Procedures for laboratory safety. All laboratory personnel will complete the required Laboratory Safety Course prior to independent work in any laboratory.

Safety Showers and Eye Wash Stations

Safety showers and eye wash stations must be located within 10 second travel time of areas where hazardous materials are used and access must remain open at all times. They are inspected annually by the Safety Services Department, and missing, broken or inoperable equipment should be reported immediately.

Laboratory Safety

Chemical Spill or Gas Release Procedures

The immediate actions of all employees in the event of a chemical spill or gas release must be understood BEFORE an incident occurs (HSC OP 75.03). In the event of an unexpected release of hazardous materials, the person(s) discovering the incident should make an initial assessment of the potential danger to themselves and others in the immediate vicinity of the incident. If they can safely contain and/or clean up the spill, they should do so and make the proper notifications afterward. A spill may be cleaned up by lab personnel if:

- the spilled material is known, and
- There is a Material Safety Data Sheet (MSDS) for the spilled material and the lab worker is familiar with the product's hazards, and
- MSDS-suggested personal protective equipment (PPE) is available and the worker has been trained in its use, and
- the correct clean-up supplies are available, and
- the lab worker is confident in his/her ability to clean-up the spill safely.

If a release occurs which is beyond a person's ability to safely contain and clean-up, he/she should immediately:

- Clear the area of all personnel, students, patients, volunteers, and visitors.
- Isolate the spill by closing doors to the area.
- Check for personal involvement and decontaminate, if necessary.
- Evacuate the area by activating the fire alarm if there is:
 - an uncontrolled open flame,
 - uncontrolled compressed gas release, or
 - any situation which poses an imminent threat to the health or safety of any persons.
- Call 9-911 or 743-2000 to contact the Spill Response Team for assistance with the spill.

Laboratory Safety

All spills greater than 1 liter must be reported to the Safety Services Department. In addition, the following spills must be reported, regardless of quantity:

- extremely flammable materials (flash point <20°F)
- extremely corrosive materials
- extremely toxic materials
- water reactive materials
- Mercury
- multiple materials
- uncontrolled compressed gas releases

Before attempting to clean up the spill, lab personnel must put on the PPE suggested in the MSDS “Control Measures” section. If no PPE is suggested then, at a minimum, the responder should wear:

- splash goggles (not just safety glasses)
- lab coat with the sleeves rolled down
- latex exam gloves, and
- nitrile or neoprene gloves – cuffed at the wrist

Each laboratory area should have available appropriate spill clean-up materials as indicated by the MSDSs of the products stored/used in the area.

After clean-up, carefully check the entire affected area for spill residue, hidden contamination, or unsafe conditions and complete the necessary spill release forms. Be sure to re-stock clean-up materials following a spill.

If you are injured during the actual spill or during clean-up, seek immediate medical attention in compliance with HSC incident reporting procedures (see page 5 of this handbook).

Additional information is available in the TTUHSC Safety Manual and the TTUHSC Laboratory Safety Manual.

Occupational Safety

Employee Health Program

TTUHSC offers free initial and periodic medical examinations for employees, students and volunteers with specific occupational risks (HSC OP 75.11). The Personnel Health and Medical Surveillance Program is directed toward primary prevention, early detection and treatment of employment-related illness for personnel who have contact with patients and/or human body fluids/tissues, are assigned to the TTUHSC spill response team (HAZMAT), work in the Laboratory Animal Resource Center (LARC), or work with animals or hazardous materials in any laboratory.

Covered personnel wishing to take advantage of the opportunity to participate in this program should contact the Personnel Health Unit at 743-1629.

Personal Protective Equipment (PPE)

TTUHSC provides the necessary personal protective equipment and clothing required for employees and students to be protected from exposure to hazardous material in their work area. Supervisors are responsible for providing appropriate PPE for employees and students, as well as ensuring applicable training and proper use of applicable PPE.

Employees and students are responsible for using the correct PPE when handling hazardous substances or when working in a hazardous environment and should monitor PPE for flaws or defects. Before leaving the work area, employees and students must remove all PPE and place it in the designated area or container for washing, decontamination or disposal.

For additional information on PPE, refer to a material safety data sheets on hazardous chemicals, standard operating procedures for an analysis of a specific job, or to research guidelines for protection from infectious materials.

Occupational Safety

Back Safety

Back injuries are the most common industrial accident and are frequently caused by unsafe lifting (any lifting that upsets the back's alignment, such as bending or twisting at the waist to pick up an object). Back injuries can be prevented by following a few basic guidelines.

- Use dollies or other mechanical equipment when possible.
- Gently stretch muscles to warm up.
- Lift or carry only what you can handle safely.
- Use proper lifting procedures:
 - keep a wide stance and solid footing
 - bend at the hips and knees to a squatting position, keeping the back straight
 - tighten stomach muscles
 - get a good grasp on the load and take a deep breath
 - lift steadily with your legs, not your back
 - hold the load close to your body
 - point feet in the direction of movement, never twisting at the waist
 - know where you are going and have a clear path
 - lower loads slowly, bending the knees and remembering to
 - maintain the spine's natural curves.
 - work as a team with co-workers for oversized loads.

Ergonomics

Ergonomics is the science concerned with designing work systems around the capabilities and limitations of the people who utilize those systems. Ergonomics can and should be applied within all work areas at TTUHSC. It is important that supervisors and administrators involved in the design phase of remodeling and construction projects ensure that these areas are designed with the users in mind. Additionally, employees who work in these area should be mindful of proper ergonomics for their work area so that they can take steps toward modification.

Occupational Safety

Some of the negative results of improper ergonomics are carpal tunnel syndrome; tendonitis; eye, shoulder, neck, and back discomfort; and less subtle manifestations such as lowered productivity, poor morale, and employee absences. All TTUHSC employees are encouraged to understand the ergonomics applicable to their work area, determine if the work area meets those ergonomic standards, and to make any necessary changes or modifications. Employees can call Safety Services at 743-2597 for assistance with work area evaluation.

Repetitive Strain Injuries (RSI),

Also known as Cumulative Trauma Disorders (CTDs), are types of injuries that develop over time and involve damage primarily to muscles, tendons, and nerves in the hands, wrists, elbows, back, neck and shoulders. Causes include the use of repetitive motions; remaining in one position for long periods; sitting, twisting, reaching or stretching in awkward positions; working with tools or equipment that don't properly match the body; using steady force when performing a job; and constant heavy vibration. Indicators of ergonomic injury include, but are not limited to, blurred vision or eye strain, chronic headaches, chronic muscle pain or soreness, nausea, dizziness, tingling or numbness in the extremities, fatigue early in the day, and reduced productivity.

Several preventive measures can be taken to reduce injury.

- Avoid repetitive movements whenever possible or take regular breaks.
- Don't wear gloves or clothing that are tight on the wrists.
- Adjust your chair for comfort and good posture.
- Use power tools instead of manual tools when possible.
- Grasp objects with the entire hand and all fingers.
- Keep wrists straight, rather than bent or flexed.
- Carry all objects with a palm-down grip.
- Organize work areas and functions for comfort.

Occupational Safety

Slips, Trips and Falls

Recognize the hazards by paying attention and making sure you can see the path ahead. If you see a hazard, avoid it by walking around it carefully or stepping over it, slowing down so you can keep your balance. Control the hazards by marking them clearly so others won't get hurt and then fix the hazard yourself or report it immediately to your supervisor or Safety Services.

- Keep everything in its proper place and remove debris or obstructions from stairs and walkways.
- Don't carry anything that blocks your vision while walking.
- Stay away from loading docks, manholes, and other ledges, and hold the railing on stairs.
- Never use broken or unstable ladders.
- Don't leave drawers open.
- Secure cords, wires and cables away from walkways.
- Always keep all the legs of a chair on the floor.
- Clean up or report spills immediately.
- Report loose or worn flooring or torn carpeting.

Infectious Disease Exposure Control

The function of TTUHSC entails an unavoidable risk of exposure to infectious disease. The institution, its faculty and staff members, and its students have an obligation to utilize those procedures necessary to minimize this risk. The Personnel Health and Medical Surveillance Policy (OP 75.11) establishes general guidelines for preventing the spread of diseases. All faculty, staff, and students who have a known or suspected occupational exposure must report the incident promptly using standard HSC procedures (see Accident Reporting and Investigation on pages 5-6 of this handbook). In addition, individuals exposed to HIV must document that baseline blood tests were performed within 10 days of the exposure date to confirm an absence of pre-existing infection.

Infectious Disease Exposure Control

Bloodborne Pathogen Transmission

All bloodborne pathogens are transmitted in the same ways: through body fluids, such as saliva, semen, vaginal secretions, and other body fluids visibly contaminated with blood. Bloodborne pathogens may enter the body and infect a person through a variety of means, including an accidental injury with a sharp object contaminated with infectious material, such as needles, broken glass, or anything that can pierce, puncture, or cut skin; through open cuts, nicks and skin abrasions, even dermatitis and acne; as well as the mucous membranes of the mouth, nose and eyes; and through indirect transmission, such as touching a contaminated object or surface and transferring the infectious material to the mouth, eyes, nose, or open skin.

Reducing the Risks

Many people carry bloodborne infections without exhibiting any visible symptoms. Some do not even know they are infectious. Universal precautions resolve this by requiring that all human blood and body fluids be treated as infectious.

- Don't bend, recap, shear or break contaminated needles.
- Place all contaminated sharps and materials in appropriate puncture-resistant, leak-proof biohazard containers.
- Report any sharps containers that are missing, mounted too high, or are otherwise not easily accessible.
- Wash hands frequently because it inhibits the transfer of contamination from the hands to other parts of the body and is a key element in reducing the spread of infection.
- If skin or mucous membranes come in direct contact with blood, wash or flush with water as soon as possible.
- Don't eat, drink, smoke, apply cosmetics or lip balms, or handle contact lenses where you may be exposed to blood.
- Don't keep food and/or drinks in refrigerators, freezers, cabinets, or on shelves, countertops or benchtops where there may be blood or other potentially infectious materials.

Infectious Disease Exposure Control

Hand Hygiene Guideline

According to the Centers for Disease Control, Clean hands is the single most important factor for preventing the spread of infectious diseases, and the spread of dangerous germs, including antibiotic resistance in health care settings. Just from contact with body secretions, health-care workers' hands can carry bacteria, viruses, and fungi that may be potentially infectious to others.

Hand washing and/or the use of alcohol-based handrubs is necessary *before* and *after* situations in which hands are likely to become contaminated, especially:

- Before preparing/serving food, eating, drinking or snacking
- After contact with mucous membranes, blood and body fluids, and secretions or excretions
- After contact with contaminated items such as chemicals, trash, hazardous waste, equipment or work surfaces
- After coughing or sneezing or touching ears, mouth or hair
- After using the restroom

Even if gloves are worn, hand washing is still extremely important when gloves are removed. Gloves may become perforated and bacteria can multiply rapidly on gloved hands.

Proper hand washing technique is vital to infection control. Just rinsing with water is not enough. For thorough cleaning:

- Wet hands with warm, running water.
- Apply a non-abrasive soap and rub hands together vigorously for at least 10-15 seconds. Wash all surfaces thoroughly including wrists, palms, back of hands, fingers, and under fingernails.
- Rinse thoroughly. To avoid recontamination, do not touch the sink or faucet.
- Dry arms and hands using a disposable paper towel. Pat your skin, rather than rubbing, to avoid chapping.
- Use the towel to turn off the water and open the door.

Immunizations

TTUHSC shall require proof or certification of appropriate immunity from selected diseases for all personnel and students in accordance with the Texas Department of Health. Appropriate immunizations will be offered to employees at the time of hire. For more information, contact the Personnel Health Unit at 743-1629 or pagers 767-6572 or 761-5034.

In addition, covered personnel who may perform invasive procedures should know their HIV antibody and hepatitis B antibody or antigen status (see Texas Health & Safety Code §85.201). Pre-exposure results shall be confidential, unless disclosure is authorized or required by law, and shall not become part of the medical, personnel, or student record of the person tested.

Respiratory Protection

In healthcare settings where patients with tuberculosis are seen, workers exposed to tuberculosis droplet nuclei are at increased risk of infection from exposure to TB. Certain high-risk medical procedures that are cough-inducing or aerosol generating can further increase the risk of infection in health care workers.

To reduce the spread of TB infection, personnel and students are advised to wear respiratory protection when:

- Entering rooms housing individuals with suspected or confirmed infectious TB.
- Transporting (including emergency-medical-response personnel), an individual with suspected or confirmed TB.
- In any setting where administrative and engineering controls are not likely to protect them from inhaling infectious airborne droplet nuclei.

Respiratory Protection

Where respiratory protection is required, TTUHSC will provide medical evaluations, respirators, and training at no cost to employees or students (HSC OP 75.12). Each department is responsible for providing NIOSH-certified respirators approved for protection from *M. tuberculosis*. All respirators will be issued on an individual basis, and only personnel who have undergone medical evaluation, fit testing, and appropriate training will be issued a respirator.

A physician or other professionally licensed health care professional (PLHCP) will review the required medical questionnaire and render a medical evaluation to determine the covered personnel's ability to use a respirator before he/she is fit tested or required to use the respirator in the workplace.

For more information about respiratory protection from TB, contact the Respiratory Program Administrator in the Safety Services Department at 743-2597.

Radiation Safety

TTUHSC and its regional campuses utilize radiation as a diagnostic agent and as a valuable tool in academic medical research. It is the responsibility of the Radiation Safety Division of Safety Services, the Radiation Safety Committee, and the users of radioactive materials or radiation-producing devices to employ the proper safeguards and procedures to ensure its safe use. The safe operating procedures, guiding regulations, and a full outline of the TTUHSC radiological safety program is contained in the Radiation Safety Manual, available from the Radiation Safety Division of Safety Services.

All radiation workers will complete the required Radiation Safety Shortcourse prior to independent work with any radioactive materials.

Safety Committees

TTUHSC is committed to maintaining a safe environment for its employees, students, and visitors. To accomplish this goal, a number of Safety Committees have been established (HSC OP 75.02), each with specific areas of responsibilities. These committees include:

- *Safety Advisory Committee* investigates and reviews safety issues and accident data to formulate and implement improvements in the overall safety program.
- *Radiation Safety Committee* formulates and reviews policies and procedures for the safe storage, handling, and disposal of radioactive materials, X-rays, and lasers.
- *Institutional Biohazards Committee* reviews and updates institutional policy for the disposal of hazardous and special waste materials and the handling of biohazardous chemicals and materials.
- *Institutional Recombinant DNA Committee* insures compliance with guidelines governing recombinant DNA research.
- *Institutional Review Board*
- *Infection Control Committee*
- *Animal Care and Use Committee* shall review and approve, require modifications in, or withhold approval of all TTUHSC activities involving animals (TTUHSC OP 73.03)
- *Environment of Care Committee*
- *Nurse Manager Committee* reviews nursing practice policies. Representatives from all clinical departments attend the committee to assure one level of care is maintained throughout the organization.

Safety Education and Training

Employees are properly trained to perform their work in a safer manner. TTUHSC provides a variety of safety training classes, including videotaped programs, lectures, computer-based training, and slide presentations.

Unit Safety Officers are responsible for first level safety training of employees within their department and for maintaining the necessary records. Training logs are audited on a regular basis by the Safety Services Department and are available for review by applicable regulatory agencies. Immediate supervisors are responsible for second levels (generic chemicals, exposures, and procedures) and third levels (specific chemicals, exposures, and procedures) of training.

New Employee Safety Orientation Program (NESOP)

This program, available through online training and on a regularly scheduled basis by Safety Services, covers the required annual safety education and training in accident prevention, safety policies and procedures, emergency procedures, the Texas Hazard Communication Act (Right-To-Know Law), and the TTUHSC Infectious Disease Exposure Policy (bloodborne pathogens). This training is required for all personnel and must be completed prior to beginning unsupervised duties. During NESOP, attendees will receive a brief questionnaire regarding site-specific information (Level 2) that they must complete, have signed by their supervisor, and return to Safety Services prior to beginning unsupervised duties.

Annual Employee Refresher Training

Employees must receive annual refresher training on accident prevention, TTUHSC Safety Programs, emergency procedures, the Texas Hazard Communication Act, and bloodborne pathogens/infection control. Contact your Unit Safety Officer or Safety Services for additional information on safety education and training programs.

Texas Hazard Communication Act

The purpose of the Texas Hazard Communication Act (Right-to-Know Law) is to improve the health and safety of employees by providing access to information regarding hazardous chemicals to which they may be exposed either during their normal employment activities, during emergency situations, or as a result of proximity to the use of those chemicals.

Notice to Employees

This notice, which must be posted conspicuously throughout the TTUHSC, is a brief outline of the act and includes information on workplace chemical lists, material safety data sheets, labels, employee education, accident reporting procedures, and employee rights.

Workplace Chemical List

Departments should maintain a listing of hazardous chemicals in each work area where hazardous chemicals are used or stored. This list shall be updated annually and kept for 30 years. Some chemicals, such as foods, drugs, cosmetics, pesticides, and radioactive and hazardous wastes, are excluded from the Act because they are covered by other regulations.

Material Safety Data Sheets

Prepared and distributed by the chemical manufacturer, MSDSs contain information regarding the chemical, including the name of the chemical, its physical characteristics, fire and explosion data, reactivity, health hazards, special protection precautions, and use, handling and storage procedures. Departments should maintain in each work area an MSDS for every chemical on the Workplace Chemical list. MSDSs must be readily available for review by employees. Safety Services maintains a file of MSDSs of chemicals known to be in use at TTUHSC. MSDSs can also be accessed via the Safety Services web page through *ChemWatch* for various biological materials.

Texas Hazard Communication Act

Labels

Labels on incoming containers of applicable hazardous chemicals may not be removed or defaced. The label information must include the identity of the hazardous chemical(s) and pertinent health and physical hazards, including the affected organs. Labels for chemicals not prepared in-house must contain the name and address of the manufacturer, emergency telephone number, instructions for proper storage and handling, and basic protective clothing, equipment, and procedures that are needed to work safely with the chemical. A chemical mix is assumed to be at least as hazardous as the most hazardous element.

Employee Education Program

In accordance with the Act, TTUHSC provides three levels of training on hazardous chemicals. Safety Services provides basic training on the Act for all employees and students. The immediate supervisor or faculty advisor provides training on specific chemicals and work practices used in a particular project or procedure. The third level of safety training on chemicals covers information on specific chemicals and work practices. Training records on hazardous chemicals are kept by Unit Safety Officers and must be maintained for 30 years.

Employee Rights

Employees have the right to:

- be informed of potential exposure to hazardous chemicals
- have access to the workplace chemical list and MSDSs
- be trained on the hazards of chemicals to which they may be exposed
- be informed on the necessary protective measures and be provided with appropriate personal protective equipment
- register a complaint without fear of reprisals.

NOTICE TO EMPLOYEES

The Texas Hazard Communication Act (revised 1993), codified as Chapter 502 of the Texas Health and Safety Code, requires public employers to provide employees with specific information on the hazards of chemicals to which employees may be exposed in the workplace. As required by law, your employer must provide you with certain information and training. A brief summary of the law follows.

HAZARDOUS CHEMICALS

Hazardous chemicals are any products or materials that present any physical or health hazards when used, unless they are exempted under the law. Some examples of more commonly used hazardous chemicals are fuels, cleaning products, solvents, many types of oils, compressed gases, many types of paints, pesticides, herbicides, refrigerants, laboratory chemicals, cement, welding rods, etc.

WORKPLACE CHEMICAL LIST

Employers must develop a list of hazardous chemicals used or stored in the workplace in excess of 55 gallons or 500 pounds. This list shall be updated by the employer as necessary, but at least annually, and be made readily available for employees and their representatives on request.

EMPLOYEE EDUCATION PROGRAM

Employers shall provide training to newly assigned employees before the employees work in a work area containing a hazardous chemical. Covered employees shall receive training from the employer on the hazards of the chemicals and on measures they can take to protect themselves from those hazards. This training shall be repeated as needed, but at least whenever new hazards are introduced into the workplace or new information is received on the chemicals which are already present.

MATERIAL SAFETY DATA SHEETS

Employees who may be exposed to hazardous chemicals shall be informed of the exposure by the employer and shall have ready access to the most current material safety data sheets (MSDSs), which detail physical and health hazards and other pertinent information on those chemicals.

LABELS

Employees shall not be required to work with hazardous chemicals from unlabeled containers, except portable containers for immediate use, the contents of which are known to the user.

EMPLOYEE RIGHTS

Employees have rights to:

- access copies of MSDSs
- information on their chemical exposures
- receive training on chemical hazards
- receive appropriate protective equipment
- file complaints, assist inspectors, or testify against their employer

Employees may not be discharged or discriminated against in any manner for the exercise of any rights provided by this Act. A waiver of employee rights is void; an employer's request for such a waiver is a violation of the Act. Employees may file complaints with the Texas Department of Health at the toll free number provided below.

EMPLOYERS MAY BE SUBJECT TO ADMINISTRATIVE PENALTIES AND CIVIL OR CRIMINAL FINES RANGING FROM \$50 TO \$100,000 FOR EACH VIOLATION OF THIS ACT.

Further information may be obtained from:

Texas Department of Health
Toxic Substances Control Division
Hazard Communication Branch
1100 West 49th Street
Austin, Texas 78756

1-800-452-2791
(512) 834-6603
Fax: (512) 834-6644



TDH

Texas Department of Health

Approved 4/99

AVISO A LOS TRABAJADORES

La Ley sobre Comunicaciones de Peligro en Texas (revisión de 1993), codificada bajo el Capítulo 502 del Código de Salud y Seguridad de Texas, exige que los patrones o empleadores del sector público ofrezcan a los trabajadores con información específica sobre los peligros de aquellos productos químicos a los que trabajadores pueden estar expuestos en su lugar de trabajo. De acuerdo con la ley, el patrón debe ofrecer la información y entrenamiento correspondiente. A continuación tenemos un breve resumen de la ley.

PRODUCTOS QUÍMICOS PELIGROSOS

Los productos químicos peligrosos pueden ser cualquiera de los productos o materiales que presentan algún peligro físico o de salud cuando se está usando, a menos de que sea uno de los exentos por la ley. Algunos ejemplos de los productos químicos peligrosos usados más comúnmente son los combustibles como la gasolina, productos de limpieza y muchos tipos de pinturas, pesticidas, heladeras, congelantes, productos químicos de laboratorio, cemento, varillas de soldadura, etc.

LISTA DE PRODUCTOS QUÍMICOS EN LOS CENTROS DE TRABAJO

Los patrones deben desarrollar en el lugar de trabajo una lista de productos químicos peligrosos usados o almacenados de tamaño mayor de 55 galones o de 500 libras de peso. Esta lista deberá ser renovada por el patrón, cuando sea necesario, pero cuando menos una vez al año, y debe ponerse al alcance de los trabajadores y sus representantes cuando lo soliciten.

PROGRAMA DE EDUCACIÓN PARA EL TRABAJADOR

Los patrones deberán proveer entrenamiento a los trabajadores nuevos asignados antes de que los trabajadores trabajen en una área que contiene un producto o material peligroso. Los trabajadores cubiertos deberán recibir entrenamiento por parte del patrón sobre el peligro de los productos químicos y sobre las medidas que pueden tomar para protegerse a sí mismos de esos peligros. Este entrenamiento deberá ser repetido tantas veces como sean necesario, pero por lo menos cuando un nuevo producto peligroso es introducido en el lugar de trabajo o se reciba nueva información sobre los productos químicos que ya están presentes.

LOS PATRONES PUEDEN RECIBIR PENALIZACIONES ADMINISTRATIVAS Y MULTAS CRIMINALES O CIVILES QUE VARIAN DE \$50 HASTA \$100,000 POR CADA VIOLACIÓN A ESTA LEY.

Para poder recibir más información del Departamento de Salud de Texas, División para el Control de Substancias Tóxicas, Sucursal de Comunicaciones Peligrosas:

Texas Department of Health
Toxic Substances Control Division
Hazard Communication Branch
1100 West 45th Street
Austin, Texas 78756
1-800-452-2791
(512) 834-6603
Fax: (512) 834-6644



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HOJAS DE DATOS SOBRE LA SEGURIDAD DEL MATERIAL

Los trabajadores que pueden estar expuestos a productos químicos peligrosos deberán ser informados por el patrón sobre esa exposición y deberán tener libre acceso a las hojas de datos más recientes sobre la seguridad de los materiales vigentes (MSDSs), en donde se explican los peligros físicos y de salud y dan información adicional sobre estos productos químicos.

ETIQUETAS

Los trabajadores no deberán trabajar con productos químicos peligrosos con recipientes sin etiquetas, a excepción de los recipientes portátiles para su uso inmediato, cuyos contenidos son conocidos por el usuario.

DERECHOS DE LOS TRABAJADORES

Los trabajadores tienen los siguientes derechos:

- tener acceso a las copias de MSDSs.
- recibir información sobre su exposición a productos químicos peligrosos.
- recibir entrenamiento sobre los productos químicos peligrosos.
- recibir equipo de protección apropiado.
- levantar quejas, ayudar a los inspectores, o atestiguar contra su patrón.

No se pueden despedir o discriminar contra los trabajadores en ninguna forma por hacer ejercicio de cualquiera de estos derechos proporcionados por esta Ley. La renuncia de un trabajador a sus derechos es nula; el patrón que solicita tal renuncia comete una violación de esta Ley. Los trabajadores pueden llamar al número de información que aparece más adelante, para levantar quejas ante el Departamento de Salud de Texas.

Familiarity Statement

Texas Tech University Health Sciences Center Faculty, Staff, and Student Safety Handbook

After you have read this handbook, complete this Familiarity Statement, cut or tear along the dotted line, and forward it to your Unit Safety Officer.

(Please Print Name)

(Social Security Number or TTUHSC ID)

(Name of Department)

I signify that I have read the TTUHSC Faculty, Staff, and Student Safety Handbook and that I will make every effort to comply with the safety requirements contained therein.

(Signature)

(Date)

Texas State Government Privacy Policies (Government Code):

1) With few exceptions, you are entitled on request to be informed about the information that the state governmental body collects about you; 2) Under Section 552.021 & 552.023, you are entitled to receive and review the information; and 3) Under Section 552.004, you are entitled to have the state governmental body correct information about you that is incorrect.

