

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER EL PASO

General Information for Principal Investigators

Safety Services

El Paso 915-215-4820

Lab Safety website: <u>http://www.ttuhsc.edu/Admin/safety/lab.aspx</u> E-mail: <u>safetyserviceselp@ttuhsc.edu</u>

Introduction

The purpose of this guide is to help new TTUHSC EI Paso faculty get their research labs up and running by providing an introduction to some of the requirements for conducting research at TTUHSC EI Paso. This guide is not comprehensive. Safety Service's goal is to be a resource for new faculty, and to help assure that research is performed safety and within the requirements of local, state, federal, and international requirements.

We encourage you to schedule a meeting with the Safety Services' office so that we can identify your needs and answer any of your questions.

Safety Services Department

The Safety Services department consists of six divisions:

- Environmental,
- Fire & Life,
- Education & Training,
- Occupational,
- Laboratory,
- Radiation.

TTUHSC EI Paso's safety directors and managers address the unique needs of our institution.

Contact Information:

El Paso: (915) 215-4820

Our website is: <u>http://www.ttuhsc.edu/admin/safety/ELPASO/default.aspx</u> Our email address is: <u>safetyserviceselp@ttuhsc.edu</u>

Safety Training Requirements

<u>New Employee Safety Orientation Program (NESOP)</u> is general safety training required of all new employees, regardless of full time / part time status.

<u>Laboratory Safety Essentials (LSE)</u> is required of ALL laboratory personnel including PIs. The training consists of four different modules. A score of at lease 80% is required to pass each section.

<u>Radiation Safety Training</u> is required for everyone working in any area that is licensed for radioactive materials. For radiation safety training, please contact your local Safety Services office.

<u>Shipping Hazardous Materials Training</u> is required for anyone who packages or ships hazardous materials or infectious substances. Any person who is involved with hazardous

materials shipments must be certified in accordance with 49 CFR. Please contact the Safety office for more information.

<u>Select Agent Training</u> is required for anyone working in a lab where select agents are used or stored.

Information on these courses can be accessed on the Safety Services Training web site: <u>http://www.ttuhsc.edu/admin/safety/training</u>.

Laboratory Compliance Manual

The Laboratory Compliance Manual will be provided to you by Safety Services. The manual should be readily available in your lab. TTUHSC OP 75.01 incorporates this manual as institutional policy. We recommend that you use the manual to store training certificates, IBC paperwork, lab SOPs, etc.

In addition, there are three sections that need to be completed by principal investigators and signed by all lab personnel.

- Chemical Hygiene Plan (CHP): This defines how an investigator will manage the procurement, storage, usage of chemicals as well as how spills and exposures will be handled.
- Exposure Control Plan (ECP): This defines how an investigator will prevent exposure to blood borne pathogens while personnel are working with human or non-human primate derived tissues, fluids, or cell lines.
- Hazard Communication Plan (HCP): This defines how an investigator will manage container labeling and communication of the chemical hazards present in the lab.
- Material Safety Data Sheets (MSDS): This section summarizes "Right to Know" information, what Material Safety Data Sheets are, and where they can be found. This must be read and signed by lab personnel.

Laboratory Safety Inspections

There are two laboratory safety inspections per year conducted by Safety Services: a formal inspection, which is announced, and an informal, unannounced inspection. These inspections aim to identify hazardous conditions in the lab. Investigators will receive a memo from Safety Services informing them of the results of the inspection, and outlining any recommendations. Safety Services will periodically walk through laboratories to ensure safety in the laboratories is kept and policies and procedures are followed at all times.

For areas licensed for radioactive materials, unannounced inspections will occur monthly.

Compliance Committees

Several institutional compliance comities exist to oversee various types of research. New faculty should consult with the committees relevant to their research prior to beginning research activities.

The research committees are:

- Institutional Biosafety Committee (IBC) reviews work with biological and chemical hazards. Some other committees require IBC approval first, so it is good to start with the IBC.
- Recombinant DNA Biosafety Committee (RDBC) reviews research involving constructing or utilizing recombinant DNA or genetically modified animals
- Institutional Review Board (IRB) reviews work with human subjects
- Institutional Animal Care and Use Committee (IACUC) reviews all animal research
- Radiation Safety Committee (RSC) reviews work with radioactive materials, and grants sublicenses to investigators. A sublicense must be obtained before radioactive materials may be purchased. Contact your Safety Services office for information on obtaining a sublicense.

More information about each of these committees may be found at the HSC Research website: http://elpaso.ttuhsc.edu/research/

Registering with the Institutional Biosafety Committee (IBC)

The IBC is appointed by the President to oversee the use of hazardous biological and/or chemical materials for research. The committee requires investigators to submit an IBC application with the appropriate addendum(s) if the materials being utilized meet the following conditions:

Highly Hazardous Chemicals & Chemical Toxicants: The hazardous toxicants and toxins which require an approved IBC protocol are defined as any chemical or toxin which is a: highly toxic, hazardous chemical = LD50 (oral/rat) of ≤50 mg/kg or, if LD50 not available, a GHS rating of 1 or 2 oral, 1 dermal, or 1 inhalation; or HMIS rating of 4.

Biologicals: The IBC requires protocol registration for any Biosafety Level 2 or higher biological material. This includes human and non-human primate fluids (i.e., blood, serum, etc.), tissues and cells (including cell lines).

Biological Toxins

Proprietary compounds of unknown toxicity

Select Agents in exempt quantities

The IBC forms can be found on the Office of Research Integrity website: http://elpaso.ttuhsc.edu/research/committees/ibc/default.aspx

Biohazardous Material and Research Laboratory License

The IBC in conjunction with Safety Services will issue this license to the principal investigator if:

- IBC protocols are approved
- Lab inspections are passed
- All laboratory workers are trained

The Biohazardous Material and Research Laboratory License must be posted in a conspicuous location in the lab.

Environmental Health and Safety Assistant (EH&S) Biological and Chemical Tracking Software

Institutional policy requires that a chemical / biological inventory be submitted for each principal investigator upon initial assignment to the laboratory. The chemical inventory should be <u>reviewed quarterly</u> by the principal investigator <u>by utilizing the EH&S Web Application</u>.

The EH&S software can be accessed on the Safety Services web site: <u>https://elponsite01.elpaso.ttuhsc.edu/ehsa/login?reason=logout</u>- Log-in requires eRaider credentials. Contact Safety Services if you have problems logging in.

Chemicals at TTUHSC are bar-coded upon arrival. Each campus administers this program in the best way to fit their campus. Your local safety office can explain how this will work for your lab. When a chemical container that bears an internal bar-code is empty, they are to be disposed of in designated green collection bins that are places in and labs and common, shared areas. If you do not have access to a green bin, safety can provide one for you. At this time, Odessa and Abilene campuses do not have the green collection bins. On these campuses it is the responsibility of the research staff to remove items from their inventory as they are depleted.

Inventories of hazardous biological items will be maintained by the lab staff.

Safety Services does not bar-code biological items at this time.

Chemical Disposal

Hazardous wastes should be collected in accumulation containers. Mark each accumulation container as "WASTE" and include the date that accumulation began, and a list of the contents. Stickers to assist with this are available from Safety Services.

In order to submit a chemical disposal request, please complete the following on-line form: <u>https://www.ttuhsc.edu/admin/safety/training/services/chemical.aspx</u>

Fill out the form with the appropriate information and your Safety office will pick-up the chemicals and properly dispose of them.

The above form may be used for accumulated waste, or unwanted or expired chemicals in their original container.

Biohazard and Sharps Waste

Biohazardous and bio-contaminated sharps waste shall be collected in appropriate red biohazard labeled containers. The entire sharps container must be placed in the biohazard waste container. The container must be appropriately sealed. Biohazard bags and sharps containers are not supplied by Safety Services, but should be purchased from an appropriate vendor.

Contact the Safety Services office for specific information or if additional information is needed.

Lab Biohazard/Radiation Placards

Laboratory placards <u>shall</u> be posted at entrances to lab areas. The placards serve to alert others to the hazards present as well as provide relevant contact information for the persons responsible for the lab.

To obtain a new placard, or update your existing placard, contact your Safety Services office.

Memorandum of Understanding (MOU)

This legislation originated from the Texas Department of Public Safety and the Texas Higher Education Coordinating Board. The MOU comes in response to the common occurrence of theft of certain chemicals and items from research laboratories for use in the production of illegal drugs.

In order to comply with the MOU, complete a simple online survey to establish an inventory of the controlled substances and items within your lab.

The survey can be accessed on the Safety Services web site:

http://www.ttuhsc.edu/admin/safety/training/mou.

- a. Sign in with your e-Raider name and password.
- b. Check any and all items that are present in your designated laboratory space.
- c. If you do not have any of the items on the list, check "None of the Above".