

Laboratory Attire in Research and Teaching Labs

Personnel (faculty, staff, students, visitors) in laboratories (research and teaching) that are in the presence of hazardous materials are required to wear appropriate clothing and personal protective equipment as determined by a risk assessment.

Overview

The University of Texas at Austin is committed to providing a safe environment for all members of the campus community. It is University policy to comply with all applicable health, safety and environmental protection laws, regulations and requirements.

Title 29 of the Code of Federal Regulations, Part 1910, Subpart 1. *Personal Protective Equipment*, states that “protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.”

Pursuant to this regulation, and in an effort to prevent laboratory injuries, the Laboratory Safety Advisory Committee (LSAC) has developed this policy regarding Personal Protective Equipment (PPE) for all campus research/teaching laboratory faculty, staff, students and visitors.

RESPONSIBILITIES

Preventing injuries is the responsibility of every member of the campus community. Specific responsibilities are assigned to higher level members of the research and teaching community in order to implement and ensure compliance with this Policy by their subordinate staffs.

The President has overall responsibility for compliance with health and safety requirements at all facilities and programs under campus control.

The Vice President for Research is responsible for the implementation of this Policy in all applicable research laboratories within his or her jurisdiction.

The Vice President for University Operations is responsible for the implementation of this Policy for personnel under his or her jurisdiction.

The Provost is responsible for the implementation of this Policy in all applicable laboratories within his or her jurisdiction.

The Laboratory Safety Advisory Committee (LSAC) is responsible for promoting a safe working environment in all research and teaching laboratories on campus.

Department Chairpersons are responsible for communicating, promoting and enforcing this Policy in their respective research and teaching areas.

Faculty, Principal Investigators and Laboratory Managers are responsible for complying with this Policy and ensuring their staff/students receive appropriate training and comply with this Policy as it relates to their research and teaching activities.

Personnel in laboratory areas are responsible for following laboratory safety requirements and for wearing PPE as outlined in this Policy and in laboratory-specific safety training.

The office of Environmental Health & Safety (EHS) is responsible for inspection of laboratories and enforcement of this Policy. In cases where laboratory activities pose an immediate danger to life or health, designated EHS staff have the responsibility and authority to order the temporary cessation of the activity until the hazardous condition is abated.

SAFETY REQUIREMENTS

The following requirements pertain to all research and teaching laboratory environments utilizing hazardous chemical, biological or unsealed radiological materials (see definitions, below). The requirements do not apply to research and teaching laboratories that involve solely mechanical, computer, laser, other non-ionizing radiation, or electrical operations; these hazards will be addressed under separate policies, as appropriate. Deviations from these requirements, including the defining of specific hazardous materials use areas within rooms, may be permitted under certain conditions and will require express, written approval from EHS.

A. Full-length pants, or equivalent, and close-toed shoes must be worn **at all times** by all individuals that are occupying the laboratory area including office/desks inside the laboratory. The area of skin between the shoe and ankle should not be exposed.

B. Protective gloves must be worn while utilizing any hazardous chemical, biological or unsealed radiological material. These gloves must be appropriate for the material being used. The Safety Data Sheet (SDS) for the material should be referenced when determining the effectiveness of the type of glove to be used.

C. Laboratory coats, or equivalent, are required to be worn while working on, or adjacent to, all bench top/fume hood procedures utilizing hazardous chemicals, biological or unsealed radiological materials. Laboratory coats must be appropriately sized for the individual and be buttoned to their full length. Laboratory coat sleeves must be of a sufficient length to prevent skin exposure while wearing gloves.

D. Flame resistant laboratory coats **must** be worn when working with any amount of pyrophoric materials, or **any** amount of flammable liquids near open flames. Flame resistant laboratory coats must be worn when working with flammable liquids in amounts that pose a greater than de minimis risk as determined by a risk assessment. It is recommended that cotton (or other non-synthetic material) clothing be worn during these procedures to minimize injury in the case of a fire.

E. Fluid-resistant or barrier laboratory coats should be worn when handling biological materials classified at BSL-2 or higher.

F. Laboratory coats may not be worn outside of a laboratory unless the individual is traveling directly to a laboratory work area within the building. Laboratory coats may not be worn outside. Gloves must not be worn in public area outside of the laboratory (i.e., hallways, elevators, offices). Gloves should also be removed prior to handling any equipment that could result in cross-contamination (e.g., telephones, computers, etc.).

G. Each department or research unit shall be responsible for providing professional laundry services as needed to maintain the hygiene of laboratory coats. Lab coats may not be cleaned at private residences or public laundry facilities. Any personal clothing that becomes contaminated with hazardous materials must be decontaminated before it leaves the laboratory.

H. Eye protection or equivalent engineering controls must be used while handling any hazardous chemical, biological or unsealed radiological materials. All eye protection equipment must be American National Standards Institute (ANSI) approved and appropriate for the work being done.

I. Some operations and procedures may warrant additional PPE, as indicated by the SDS, the standard operating procedures for the material being used, facility policies or regulatory requirements.

J. In laboratories where offices/desks are in the laboratory, PPE will not be required in designated “safe” zones approved by EHS. These areas must be clearly demarcated by signage or floor markings. No hazardous materials are permitted within the “safe” zone.

K. Non-laboratory personnel (custodians, maintenance, EHS, visitors) must wear full-length pants and closed-toed shoes when in the laboratory. Additional PPE may be required as determined by risk assessment.

DEFINITION OF HAZARDOUS MATERIALS

The following materials are defined as hazardous for the purposes of this Policy:

- Any unsealed radioactive material
- Biological materials categorized as BSL-2, or research animals
- Chemicals listed as a select or regulated carcinogens
- Chemicals listed as toxic, highly toxic or reproductive toxins
- Flammable, air-reactive, or water-reactive chemicals
- Corrosive chemicals in concentrations of one (1) molar or greater.
- Known chemical irritants or sensitizers

This list is to be used as a guideline. PPE and other safety measures, as appropriate, must be used to protect personnel from any and all known hazards that are present.