

University of Alabama Policy
Minors in Laboratories and Shops

The University of Alabama is committed to providing a healthy and safe environment for all members of the campus community and visiting members of the public.

This policy is meant to protect both the safety of minors and of other laboratory personnel. The underlying principles are:

Minors may be more susceptible to certain toxic agents and chemicals, Minors may be less aware of the potential risks and hazards in laboratories, Minors may require supervision and oversight.

The presence of minors in any University laboratory or shop that uses hazardous chemicals, biohazardous or infectious materials, radioactive materials or radiation-producing equipment, or where there are physical hazards including (but not limited to) compressed gases, high voltage, extreme temperatures, excessive noise, or lasers is restricted.

This restriction does not apply to students enrolled in courses listed in a campus course catalog having a laboratory component or in any of the University of Alabama's educational outreach programs.

This restriction does apply to all minors involved in summer internships, volunteering in research projects and participating in scheduled assignment in a laboratory setting.

The Department of Risk Management sets restrictions on minors' participation based on age ranges. Minors under the age of 14 are not permitted in University of Alabama laboratories or shops, except when participating in an approved and supervised tour. This prohibition extends to the minor children related to laboratory personnel.

For radioactive materials or radiation-producing equipment the state restriction is below 18 years of age

Laboratory: As used in this statement, "laboratory" refers to any part of a building used or intended to be used by the University for scientific or technical activities which may be hazardous; this includes teaching laboratories as well as research laboratories. This also covers off-campus facilities, on-and off-campus clinical facilities, and fieldwork locations where approved educational activities are conducted.

Shop: As used in this statement, a place where machinery and tools are used. "Shops" include but are not limited to engineering shops, art workshops, and other sites.

Personal Protective Equipment (PPE): Personal protective equipment is equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as lab coats, gloves, foot protection (steel-toed shoes), eye protection (safety glasses or goggles), protective hearing devices (earplugs, muffs), hard hats, respirators, fall protection harnesses, etc.

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Please take under advisement the following:

This policy is intended as a minimum requirement; each lab / shop may develop more restrictive policies and procedures as deemed necessary.

- A. Minor children of laboratory personnel are not permitted in laboratories or shops except as part of an organized event such as a tour. Exceptions may be granted on a case-by-case basis according to local guidelines, pending review and written approval by the campus Environmental Health and Safety (or designee).
- B. Minors are never permitted in any setting where research involving controlled substances is being performed, even if they are enrolled students. Persons under age 18 are not permitted in University of Alabama vivarium's unless their participation has been reviewed and approved by the campus Institutional Animal Care and Use Committee (IACUC) and the responsible vivarium facility manager based upon criteria established by the campus.
- C. Minors between the ages of 14 and 18 are allowed in laboratory settings only when:
 - 1. They are students enrolled in courses listed in a campus course catalog or part of an approved and supervised tour, **or**
 - 2. They have written consent from their parent(s) or guardian(s); and, They have received the appropriate University of Alabama safety training and the campus has documented that training; and They agree to strictly adhere to the campus or laboratory-specific requirements concerning Personal Protective Equipment (PPE); and

They are at all times under the direct supervision of a qualified adult designated for this responsibility.
- D. Before their scheduled assignment in a laboratory begins, minors must be trained on specific hazards to which they may be exposed in the laboratory/shop, how to recognize those hazards, and how to protect themselves from those hazards. Minors must be trained on the contents of the laboratory-specific chemical hygiene plan and the standard operating procedures and emergency procedures applicable to their scheduled assignment. Additional training may be required for tasks that involve hazardous chemicals, biological agents, research animals, and physical hazards. All training must be documented. Refer to the Policy on Laboratory Safety Training.

E. Legal Restrictions Regarding Certain Chemicals and Biologicals and Radiation

Regulations prohibit minors from using certain chemical, biological, or radiological materials. There are also specific training requirements based on the materials a minor will be handling and/or exposed to. Restrictions on chemical, biological, and radiological materials are as follows.

1. Chemical Safety Restrictions: Minors are not allowed to work with:
 - a) Highly hazardous materials, including pyrophorics, explosives, large quantities of flammable materials (e.g., hydrofluoric acid, acrylonitrile, osmium tetroxide, etc.)
 - b) International Agency for Research on Cancer (IARC) Group 1 or 2A carcinogens or UA/OSHA-regulated carcinogens
2. Biological Safety Restrictions: Minors may never work with or be present in circumstances requiring BSL-3 or BSL-4 containment. Restrictions for handling potentially biohazardous substances depend on age group:
 - a) Persons ages 14 to 16:
 - Are prohibited from handling biohazardous materials that require containment above BSL-1.
 - May enter a BSL-1 in a large open bay laboratory where BSL-2 work may be taking place, providing they have no contact with the BSL-2 work.
 - b) Persons ages 16 to 18:
 - Are prohibited from handling biohazardous materials that require containment above BSL-2.
 - May enter a BSL-2 with appropriate training and medical surveillance (if applicable).
3. Radiation Safety Restrictions: Minors are not allowed to handle radioactive materials or radiation-producing machines. PIs must apply to their campus EH&S Radiation Safety Officer (“RSO”) for exceptions. Exceptions must be documented in writing.

COMPLIANCE / RESPONSIBILITIES

Laboratory Supervisor or Principal Investigator	<p>The University academic or staff employee who sponsors a non-student minor's educational activity must certify adherence to this policy and local implementing procedures on the Minors Activity Registration Form.</p> <p>The PI or supervisor must make an evaluation of each physical hazard present in the work environment (e.g., compressed gases, high voltage, extreme temperatures, excessive noise, lasers, etc.) the minor may encounter as part of their scheduled assignment in the laboratory and</p> <ol style="list-style-type: none">(1) review the physical hazards with the minor,(2) review safe operating procedures for the equipment with the minor,(3) review emergency procedures for the equipment with the minor, and(4) establish specific and explicit instructions for the scheduled assignment the minor is allowed to perform(5) make sure all lab personnel have completed training on "UA Child Protection"
Location EH&S Personnel	<p>The local EH&S Office is responsible for assisting laboratory personnel in maintaining and monitoring health and safety requirements.</p>
Participant's Parent or Guardian	<p>Parent/guardian must sign campus required: Minor Student Laboratory Agreement and Consent Form, Rules for Minors in Laboratories and Shops, Minors Activity Registration Form</p>
Under Age Participant	<p>The participant must undergo required training and complete campus required registration forms.</p>

PROCEDURES

Principal Investigators or activity sponsors must follow these steps to obtain advance authorization and parental permission before allowing a minor to participate in research activities, and must ensure that minors under their supervision receive appropriate training about hazardous materials handling requirements and restrictions. Failure to do so will result in corrective action.

- F. Obtain written authorization before the minor begins scheduled assignment in the lab in accordance with location- specific policies and procedures, using appropriate forms.
- G. Provide direct supervision of the minor in the laboratory environment by a qualified adult laboratory supervisor at all times. Ensure supervision requirements are observed. "Direct supervision" means while entering, leaving or in the laboratory, the minor is physically accompanied at *all* times by a trained and knowledgeable supervisor.
- H. Review emergency procedures with the minor. Show the minor the following emergency equipment and locations: (Refer to the *Laboratory Site Safety Orientation* in the Policy on Laboratory Safety Training)
 - Telephone and emergency phone numbers,
 - Eye wash and emergency shower,
 - Fire alarm pull stations and fire extinguishers,
 - Building exits,
 - Where to assemble outside in case of building evacuation.
- I. Provide general and laboratory specific safety training.

As the Principal Investigator / Supervisor you must confirm that the minor receive appropriate laboratory safety training by:

- Assure that the minor completes campus-specific safety training before the minor begins scheduled assignment,
- Explain hazards specific to your lab, equipment, and the materials the minor may handle; e.g.
 - Show the minor how to access and understand Safety Data Sheets (SDS) for the chemicals with which they will utilize. (if applicable)

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- Explain possible routes of exposure, as appropriate (e.g., skin absorption, ingestion, inhalation) and precautionary measures precautions to limit exposures,
- Evaluate each potential hazard present in the work environment (e.g., compressed gases, high voltage, extreme temperatures, excessive noise, lasers, etc.) the minor may encounter as part of their scheduled assignment in the laboratory and
 - (1) review the potential hazards,
 - (2) review safe operating procedures for the equipment,
 - (3) review emergency procedures for the equipment, and
 - (4) establish specific and explicit written instructions (Standard Operating Procedures) for the work the minor is allowed to perform.
- Provide appropriate PPE and engineering controls, and train the minor in their proper use.
- Maintain all safety training documentation and *Release of Liability* forms in the lab's files and forward all required documents to EHS.

Related Items of Consideration:

[Rules for Minors in Laboratories and Shops](#)

[Minors Activity Proposal Registration Form](#)

[Minor Student Laboratory / Shop Agreement and Consent Form](#)