



STANFORD UNIVERSITY

ENVIRONMENTAL HEALTH & SAFETY

Health & Safety Requirements for Minors in Laboratories at Stanford University

1.0 BACKGROUND

1.1 Purpose

This document is intended to provide guidance to Principal Investigators* on the health and safety requirements for minors participating in the University-sponsored function of laboratory research. Due to their relative lack of experience with hazard recognition in a laboratory environment, restrictions are placed on minors when working in laboratories to help ensure a safe research experience. These requirements and restrictions apply regardless of whether the minor participates as a volunteer, employee, or registered student at the University.

Reference the following sections for information on:

- Supervision & training requirements
- Restricted activities
- Incident reporting procedures
- Medical treatment procedures

1.2 Existing Labor Laws and University Policies & Guidelines

This document further assists Principal Investigators in complying with existing California labor laws and Stanford University policies which provide restrictions on the hiring of minors:

- **California Child Labor Laws**
 - <http://www.dir.ca.gov/dlse/ChildLaborPamphlet2000.html>
- **Administrative Guide:**
 - **Protection of Minors** <https://adminguide.stanford.edu/chapter-1/subchapter-8/policy-1-8-1>
 - **Recruiting and Hiring of Regular Staff (Section 2.f)** <https://adminguide.stanford.edu/chapter-2/subchapter-1/policy-2-1-2>

Additionally, this document supplements current Stanford University Employee & Labor Relations guidelines on minors participating in University-sponsored functions that require more than an intermittent presence in a work area:

- **Exclusion of Minors in the Workplace at Stanford University (Section C)** <http://med.stanford.edu/content/dam/sm/asg/documents/FormsAndPolicies/KidsAtWork.pdf>

1.3 Contact Information

For questions about this document, contact the EH&S Occupational Health & Safety Program at 723-0448. For information on administrative procedures and requirements, visit the Office of Science Outreach website at <http://oso.stanford.edu/resources/faculty> or contact your home department.

2.0 DEFINITIONS

- A minor is a person under 18 years of age, including registered students at Stanford University.

* or Laboratory Supervisors in locations where the head of the laboratory is not a Principal Investigator

- A laboratory is a research or clinical setting where scientific research or instruction is conducted. This often includes working with or near hazardous materials (e.g., hazardous chemicals, biohazardous agents, radioisotopes, etc.) and/or physical safety hazards (e.g., lasers, moving machinery parts, extreme temperature, electrical apparatus, etc.).

3.0 SUPERVISION & TRAINING

3.1 *Supervision*

The Principal Investigator (PI) has responsibility for the health and safety of minors working in his/her laboratory and adherence to laws and policies described in 1.2 above. This also includes the provision for and enforcement of correct use of engineering controls, work practices, and personal protective equipment.

The PI may delegate daily supervision of minors to trained and knowledgeable lab personnel. However, the PI retains primary responsibility. Minors may only work in laboratories under direct supervision by the PI or designated lab personnel. Minors are not permitted to be alone in the lab. For these reasons, minors are not permitted to have their own building and laboratory access.

3.2 *Training*

Minors working in laboratories are required to complete all appropriate safety training before beginning lab work. The PI is responsible for ensuring appropriate safety training for minors working in his/her lab.

- General Laboratory Training: Online safety training is available through the STARS training tab in the Axess portal and requires a sponsored SUNet ID for the minor. Completion of the following online safety courses is required for all minors working in laboratories:
 - EHS-4200 – General Safety & Emergency Preparedness
 - EHS-1900 – Chemical Safety for Laboratories

Depending on additional potential hazards the minor may be exposed to and/or department-specific requirements (consult your home department for guidance), other online safety courses may be required:

- EHS-1500 – Biosafety
 - EHS-1600 – Bloodborne Pathogens
 - EHS-2200 – Compressed Gas Safety
 - EHS-4820 – Laser Safety Training
 - EHS-5250 – Radiation Safety Training
 - EHS-5275 – Working Safely Near Radioactive Materials
 - VSC-PROG-001 – Animal Care and Use Program
- Lab-specific Training: Lab-specific training is required for minors and is to be provided by qualified lab personnel. Required components of this training include a review of the specific hazards (e.g., chemical, biological, radioactive, physical, etc.) that exist in the lab and the procedures, equipment, and resources available for working safely with these hazards.

For additional guidance, reference [How to Develop Lab-specific Training](#) in the [Laboratory Chemical Safety Toolkit](#).

3.3 *Documentation*

All lab-specific safety training provided to the minors is required to be documented and retained by the PI for at least one year.

4.0 RESTRICTED ACTIVITIES

If the proposed research for a minor includes a restricted activity that is described below, please contact the Occupational Health & Safety Program at 723-0448 for more information.

Potential Hazard	Activities that are <u>NOT</u> Allowed	Additional Requirements
Biohazardous materials	<p>Entering a BSL-3 lab or working with materials that are BSL-3</p> <p>Working with select agents or toxins</p>	<p>Minors working with BSL-2 materials are required to be approved on the relevant protocol with the Administrative Panel on Biosafety and to have their minor status disclosed.</p> <p>PI will assess risk for work associated with human blood, body fluids, and tissues, including tissue culture. For questions, the PI should contact the Biosafety office at 723-0448.</p> <p>Minors are required to receive pre-placement medical evaluations from their personal care provider if they will be working with human blood, body fluids, and tissues, including tissue culture. A Hepatitis B Vaccine Status Form for Minors is required to be submitted to the Stanford University Occupational Health Center prior to starting work.</p> <p>For questions, the physician may contact the Occupational Health Center at 725-5308.</p>
Chemicals	<p>Working with restricted chemicals, controlled substances, select carcinogens, reproductive toxins, highly acutely toxic substances, self-reactive chemical</p>	
Lasers		<p>Contact Health Physics at 723-3201 if proposed research involves lasers. Depending on the class of laser used, a base line laser eye exam may be needed prior to starting work.</p>
Packaging and shipping of hazardous materials	<p>Packaging and shipping of biological samples, chemicals, dry ice, and radioactive materials</p>	

Potential Hazard	Activities that are <u>NOT</u> Allowed	Additional Requirements
Radioactive materials or radiation emitting machines	Working with or around ionizing radiation or radioactivity if the occupational exposure exceeds 10% of the adult annual limit.	Contact Health Physics at 723-3201 if proposed research involves radioactivity.
Research animal contact and work	Risk Category 1 (RC1) work which includes work with non-human primates (including unfixed tissue and bodily fluids), hoofed mammals (e.g., swine, goats, sheep, cows), wild rodents, and certain field studies	<p>Minors are required to be listed on the relevant protocol with the Administrative Panel on Laboratory Animal Care (APLAC) and to have their minor status disclosed.</p> <p>Minors are required to be medically cleared by their personal care provider before beginning Risk Category 2 (RC2) work which includes animal work that does not fall within the RC1 category. A medical clearance form signed by their personal care provider is required to be kept on file with the PI or PI's home department.</p> <p>For questions, the physician may contact the Occupational Health Center at 725-5308.</p>
Spills involving hazardous materials		Trained minors may only clean up spills under direct supervision by trained and knowledgeable lab personnel.

5.0 INCIDENT REPORTING

Any incident or accident (chemical exposure, needle stick injury, animal bite/scratch, etc.) involving a minor is required to be reported to the PI immediately.

- **Documentation:** The minor is required to complete an [SU-17B](#) form under guidance from the PI to document the incident. This form is required to be signed by the PI and a copy faxed to Risk Management as soon as possible, but no later than 24 hours of the incident occurrence.
- **Notifications:** The PI is required to immediately notify his/her home department of any lab-related incident involving a minor. Immediately after departmental notification, the PI or home department is required to notify the minor's parent/legal guardian.
- **Cal/OSHA reportable injury/illness:** Call the EH&S Emergency Hotline at 725-9999 immediately so that EH&S can report the incident to Cal/OSHA. Reference [Serious Injury/Illness Reporting Procedures](#) for additional guidance.

6.0 MEDICAL TREATMENT

The minor's parent or legal guardian is responsible for the cost of any medical treatment provided as the result of a lab-related injury or illness that is not covered by workers' compensation insurance. Contact your home department for more information.

- Serious injury/illness: Treatment shall be immediately arranged at Stanford Hospital Emergency Department or at the nearest available emergency department.
- Non-serious injury/illness: Treatment should be coordinated by the minor's personal care provider. For questions, the provider may contact the Stanford University Occupational Health Center at 650-725-5308 for consultation.