



# 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 and Lab Supervisors 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 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 and Lab Supervisors 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: Minors (Section 2.f)**  
[http://adminguide.stanford.edu/22\\_1.pdf](http://adminguide.stanford.edu/22_1.pdf)

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://stanford.edu/dept/elr/forms/Children\\_Work\\_10\\_02.pdf](http://stanford.edu/dept/elr/forms/Children_Work_10_02.pdf)

##### 1.3 *Contact Information*

For questions about this document, contact the Occupational Health & Safety Program at 723-0448. For information on administrative procedures and requirements, contact your local department and the Office of Science Outreach at 724-4332 or [kstorm@stanford.edu](mailto:kstorm@stanford.edu).

#### 2.0 DEFINITIONS

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

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)/Lab Supervisor has [responsibility](#) for the health and safety of minors working in his/her laboratory. This includes the provision for and enforcement of correct use of engineering controls, work practices, and personal protective equipment.

The PI/Lab Supervisor may delegate daily supervision of minors to trained and knowledgeable lab personnel. However, the PI/Lab Supervisor retains primary responsibility. Minors may only work in laboratories under direct supervision by the PI or designated lab personnel. For this reason, 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/Lab Supervisor 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 local department for guidance), other online safety courses may be required:

- EHS-1500 – Biosafety
  - 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 trained and qualified lab personnel. Required components of this training include a review of the specific hazards 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 [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/Lab Supervisor 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.

Hazard	Activities that are <u>NOT</u> Allowed	Additional Requirements
Biohazardous materials	<p>Entering a <a href="#">BSL-3</a> lab or working with materials that are <a href="#">BSL-3</a>.</p> <p>Working with human and nonhuman primate blood, body fluids, tissues, or retroviruses</p> <p>Working with <a href="#">select agents or toxins</a></p>	
Chemicals	Working with <a href="#">restricted chemicals</a> , <a href="#">controlled substances</a> , <a href="#">select carcinogens</a> , <a href="#">reproductive toxins</a> , <a href="#">highly toxic chemicals</a> , and <a href="#">highly reactive materials</a>	
Lasers		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.
Packaging and shipping of hazardous materials	Packaging and shipping of biological samples, chemicals, dry ice, and radioactive materials	
Radioactive materials or radiation emitting machines	Working with or around radioactivity if the occupational exposure exceeds an annual dose of 100 mrem	Contact Health Physics at 723-3201 if proposed research involves radioactivity.
Research animal contact and work	<a href="#">Risk Category 1 (RC1)</a> 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 medically cleared by their personal care physician before beginning <a href="#">Risk Category 2 (RC2)</a> work which includes animal work that does not fall within the RC1 category. A <a href="#">medical clearance form</a> signed by their personal care physician is required to be kept on file with the PI or PI's home department. For questions, the physician may contact the Occupational Health Center at 725-5308.</p> <p>Minors are required to be listed on the relevant protocol with the <a href="#">Administrative Panel on Laboratory Animal Care (APLAC)</a> and have their minor status disclosed.</p>

Hazard	Activities that are <u>NOT</u> Allowed	Additional Requirements
Spills involving hazardous materials		Minors may only <a href="#">clean up spills</a> 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/Lab Supervisor immediately.

- **Documentation:** The minor is required to complete an [SU-17B](#) form under guidance from the PI/Lab Supervisor to document the incident. This form is required to be signed by the PI/Lab Supervisor 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. 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

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 local department for more information.

- **Serious injury/illness:** Minor to be treated at Stanford Hospital Emergency Department or emergency department of other local hospital.
- **Non-serious injury/illness:** Minor to be treated by personal care physician. For questions, the physician may contact the Occupational Health Center at 725-5308.