Minors in Research Operations

Policy

Revision Date: 04/21/2023

Applies To: All academic, clinical, and service units involved in research operations involving minors. This does not apply to minors enrolled as U-M students.

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Minors in Research Operations Policy Statement

Unsupervised volunteers and visitors, including minors, create a risk for injury and increased liability for the University of Michigan (U-M). Environment, Health & Safety (EHS) requires that a responsible person (18 years of age or older) appointed by the Chair or Department Head directly supervise all minors when they enter a laboratory to work or for a visit. Departmental policy to this effect will reduce or eliminate the risk of personal injury to minors in research laboratories and the risk of damage to projects and property.

All University of Michigan (U-M) employees must comply with the requirements contained in this document and complete all required training.

Minors in Research Policy

The Minors in Research Operations Policy is derived from the following U-M policies:

- University of Michigan, Standard Practice Guide 201.20 - Employment of Minors
- University of Michigan, Standard Practice Guide 601.34 - Children on Campus
- University of Michigan, Standard Practice Guide 605.01 - Safety, Health and Environmental Policy

It provides guidance to reduce or eliminate the risk of personal injury to minors in research laboratories and the risk of damage to projects and property. The Minors in Research Program does not pertain to the following individuals:

<table>
<thead>
<tr>
<th>IF THE INDIVIDUAL IS A …</th>
<th>THEN REFER TO THE FOLLOWING WEB PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor enrolled as U-M a student</td>
<td>This Policy is Not Applicable</td>
</tr>
<tr>
<td>Volunteer for Michigan Medicine</td>
<td>Michigan Medicine Volunteer Services</td>
</tr>
<tr>
<td>Non-minor visiting or volunteering</td>
<td>EHS Visitors &amp; Volunteers</td>
</tr>
<tr>
<td>Minor participating as a subject in university-sponsored research</td>
<td>Children on Campus</td>
</tr>
</tbody>
</table>

Related Minors in Research Operations Policy Documents

- Illness or Injury Report Form (Work Connections)
- Incidents and Near Miss Form (EHS)

Additional Resources

All reference guidelines, regulations, and other documents are available in Appendix A of this document.
Observation-Only Visits

Minors not taking part in a university-approved visit or volunteer role are not permitted within research settings. Research settings must never be used as a substitute for childcare options due to the nature of risk. Among other things, this prohibition applies to instances when an employee office is inside a laboratory space. Minors participating as "observation-only" participants are not allowed to perform tasks in research facilities. An example of an observation-only visit is when high school students tour a laboratory.

Approval Process

Anyone wishing to bring a minor into research facilities for an acceptable reason must:

1. Seek approval per their Department’s procedure.
2. Refer to the University of Michigan, Standard Practice Guide 601.34 - Children on Campus. Specific requirements regarding program registration, code of conduct, background screening, training, and reporting requirements apply to minors working or volunteering in research facilities.

Personal Protective Equipment Requirements

Minors must be provided with appropriate personal protective equipment (PPE) as needed based on work activity underway in the laboratory. At a minimum, safety glasses, long pants and closed-toe shoes must be worn.

Training

Observation only minors must receive a brief discussion of potential hazards that may be encountered in the laboratory during their visit and procedures to follow in the event of an emergency.
Minors Performing Research Activities (Volunteer or Employed)

It is recommended that minors participating as volunteers are at least sixteen; fourteen is the minimum age for legal employment. If minors are participating in research activities as employees, refer to the University of Michigan, Standard Practice Guide 201.20 - Employment of Minors for a listing of jobs and titles that have State Department of Education approval for minors. The following table identifies work restrictions for minors participating in research activities.

<table>
<thead>
<tr>
<th>HAZARDS</th>
<th>RESTRICTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals</td>
<td>Minors are not allowed to use or be exposed to any hazardous substance which means a contaminant, substance, mixture of substances that is toxic, corrosive, an irritant, a strong sensitizer, or flammable or which generates pressure through decomposition, heat, or other means if the substance or mixture of substances is capable of causing substantial personal injury, impairment, or substantial illness through absorption, inhalation, or personal contact. Substances, as described above, would be designated with the signal word “DANGER”. Locating the signal word on a label.</td>
</tr>
<tr>
<td>Biological Materials</td>
<td>Any biological materials including animal substances, and tissues designated as BSL2 on the IBC application may not be used by minors in the lab. Additionally, animals administered biological material designated by the IBC as BSL2 may not be used.</td>
</tr>
<tr>
<td>Radioactive Materials</td>
<td>Use of radioisotopes and/or radiation-producing equipment has dose limitations for minors. Use must be approved through EHS-RSS.</td>
</tr>
<tr>
<td>Animal Use</td>
<td>Lab directors may apply for an exception to the ULAM Director to allow a minor to work with lab animals under the direct supervision of an Authorized User approved by the Animal Care and Use Program (ACUP). Refer to the Institutional Animal Care and Use Committee (IACUC) Policy on the Classification and Expectations of Personnel Involved with Animal Activities.</td>
</tr>
<tr>
<td>Respiratory Use</td>
<td>Minors are not allowed to be assigned work tasks that requires the following respiratory protection:  • A self-contained breathing apparatus  • A supplied-air respirator  • An air-purifying respirator  • A gas mask  • A chemical cartridge respirator</td>
</tr>
<tr>
<td>Equipment Use</td>
<td>Minors are not allowed to be assigned work task that involves the following types of equipment:  • Power-driven wood-working machinery  • Power-driven metal-forming, metal-punching, and metal-shearing machines.  • Power-driven saws  • Power-driven hoisting apparatus including a power industrial truck, crane, or hoist.  • Knifes, blades (cryostat, microtome, vibratome)</td>
</tr>
</tbody>
</table>
**Work Permits**

"Minors under the age of 18 cannot be employed or permitted to work, **with or without pay**, or volunteer until the person, company, business, firm or corporation proposing to employ the minor obtains and keeps on file at the minor’s place of employment (work location) a current and valid age-appropriate work permit, which has been issued by a state of Michigan issuing officer of the school district, intermediate school district, public school academy or nonpublic school prior to starting work." (Work Permit Information, 2023)

Refer to the University of Michigan, Standard Practice Guide 201.20 - Employment of Minors, and consult your Department HR representative to ensure all requirements are met.

**Approval Process**

Approval of the work that minors are to perform **must** be received prior to the visit and it **must** be available to produce upon request.

1. Complete the attached Work Activity Form **for Minors Performing Research**. Email the form to minorsinresearch@umich.edu.
2. EHS will review the proposed Work Activity Form for Minors Performing Research.
3. EHS may deny the proposed Work Activity if requesting lab(s) have prior compliance issues or failure adhering to U-M laboratory or EHS policies.
4. Upon EHS approval, EHS will send the Informed Consent and Authorization to the Minor and their Parent/Guardian for digital signatures.
5. EHS will send an Approval document to the Supervisor and the Lab Director/Department Head for digital signatures.

**Personal Protective Equipment Requirements**

Minors **must** be provided with appropriate personal protective equipment (PPE) as needed based on work activity underway in the laboratory. At a minimum, safety glasses, long pants, and closed-toe shoes **must** be worn.

**Training**

EHS Student Laboratory Safety training or General Laboratory Safety training **must** be completed by each minor prior to using or being exposed to any hazardous materials or operations. Additional EHS training courses as deemed necessary by the minor’s supervisor. Additional training may include:

- Centrifuge Training
- Laser Safety Basic Training
- Radiation Safety
- X-ray Diffraction

**Lab-Specific Training**

Lab-Specific Training provided by the Lab Director **must** cover necessary work practices, procedures, and policies to ensure that minors are protected from all potentially hazardous chemicals, biological pathogens and dangerous equipment used in the laboratory. Training on emergency procedures **must** also be included.
## Recordkeeping

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboarding Forms</td>
<td>Must be maintained by the research facility for at least two years after the minor turns 18 years old.</td>
</tr>
<tr>
<td>• Work Activity Form for Minors Performing Research</td>
<td></td>
</tr>
<tr>
<td>• U-M Informed Consent and Authorization for a Minor to Engage in Laboratory Research Activity form</td>
<td></td>
</tr>
<tr>
<td>Training Documentation</td>
<td>Documented and maintained in the research facility</td>
</tr>
<tr>
<td>Near Misses, Injuries, Accidents, and Illnesses Reports</td>
<td>Must be reported (for more information, refer to the Emergency Procedures section)</td>
</tr>
<tr>
<td>Youth Employment Standards Act 90 of 1978, as amended Posting Requirement from the Michigan Department of Education</td>
<td>Post conspicuously in areas where the minors work.</td>
</tr>
</tbody>
</table>

**NOTE**: EHS will attach a copy of this document to the Approval Form

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## Emergency Procedures

All near misses, injuries, accidents, and illnesses involving minors (regardless of the level of participation) must be reported. Appropriate medical treatment may be necessary. Determine what must be done for each minor and ensure all responsible persons are aware of the procedures.

<table>
<thead>
<tr>
<th>LEVEL OF PARTICIPATION</th>
<th>FORM TO COMPLETE</th>
<th>MEDICAL TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Observer</td>
<td>Incidents and Near Miss Form</td>
<td>Refer minors to their own physician or the nearest emergency center depending on the nature of their issue.</td>
</tr>
<tr>
<td>• Volunteer performing research activities</td>
<td>Incidents and Near Miss Form and submit to EHS</td>
<td>Employed Minor: Follow the same procedure as employees.</td>
</tr>
<tr>
<td>• Employee performing research activities</td>
<td>Incidents and Near Miss Form and submit to Work Connections</td>
<td></td>
</tr>
<tr>
<td>• Illness or Injury Report Form and submit to Work Connections</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix A: Referenced Documents

**U-M**
- U-M Volunteer Guidelines
- UMHS Volunteer Services Website
- Risk Management Services
- IACUC Policy on the Classification and Expectations of Personnel Involved with Animal Activities

**State of Michigan**
- Labor and Economic Opportunity Website
- Youth Employment Standards Act 90 of 1978, as amended Posting Requirement

**Federal Government**
- Child Labor Provisions for Nonagricultural Occupations under the Fair Labor Standards Act(pdf)
- OSHA Quick Card - Hazard Communication Standard Labels(pdf)
Appendix B: Roles and Responsibilities

Deans, Directors, and Department Heads

- Actively support this Policy within individual units.
- Review and Approve Requests for minors observing and working in UM Research Facilities.
- Ensure individuals responsible for minors follow all requirements in University of Michigan, Standard Practice Guide 601.34 - Children on Campus.

Supervisors/Lab Directors

- Follow and Implement procedures in accordance with this Policy to obtain approvals as required for minors and maintain documentation of approvals.
- All responsible persons for minors must follow all requirements in University of Michigan, Standard Practice Guide 601.34 - Children on Campus.
- Provide ongoing supervision of all minors. Designate a qualified laboratory supervisor and an alternate supervisor, if necessary.
- Never allow a minor to conduct research activities without direct supervision at all times.
- Ensure minors receive training and maintain documentation of the training.
- Ensure minors are provided with PPE as required for their work.
- Contact EHS to request training, technical assistance, and to evaluate health and safety concerns within their unit.

EHS

- Review and approve minors working in research facilities.
- Provide technical assistance to research operations regarding allowing minors into research areas.
- Prepare and provide access to training tools for the research operations.
## Glossary of Terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Head</td>
<td>This individual holds authority over a Primary Investigator or other researcher and is in a position to review requests for visits. This raises the approval level beyond the individual lab or research facility.</td>
</tr>
<tr>
<td>Minor</td>
<td>A person under 18 years of age who is not enrolled in a degree program at U-M. Policies apply whether the minor is employed or volunteering to work.</td>
</tr>
<tr>
<td>Lab Director</td>
<td>Lab director for research activity.</td>
</tr>
<tr>
<td>Research Operations</td>
<td>Includes any space within a UM building as well as research conducted in field locations on behalf of the U-M. Includes activities where clinical, research, production, or laboratory support operations are conducted as well as space where research animals are housed or supported.</td>
</tr>
<tr>
<td>Responsible Person</td>
<td>Any person <em>(18 years of age or older)</em> approved by a Lab Director or Department Head to oversee and/or supervise the activities of a visitor/volunteer/minor while in the research facility.</td>
</tr>
</tbody>
</table>