

Protocol on Minors in Laboratories

(A) Purpose and Scope

This Protocol supplements Cleveland State University's policies related to Minors on Campus, specifically 3344-94-01 through 3344-94-06 and 3344-95-01 through 3344-95-06. It applies to all situations in which a person under the age of 18 will be present in a University laboratory facility, including as an enrolled student. Failure to follow this Protocol may result in disciplinary action.

(B) Definitions

Terms used in this Protocol have the meanings set forth below or in Policy 3344-94-02.

Biological Agents. Biological Agents are living organisms or products of living organisms such as viruses, bacteria, fungi, prions, and parasites.

Biosafety Level (BSL). Biosafety Levels are categories of biological hazards and safety protocols developed by the Centers for Disease Control and the National Institutes of Health. The Biosafety Level is related to the type of facility, appropriate engineering controls, safe work practices, and use of personal protective equipment.

- (1) Biosafety Level 1 containment is prescribed for agents that are not known to cause disease in healthy adult humans.
- (2) Biosafety Level 2 containment is prescribed for agents linked to human disease, but the disease is rarely serious; treatment is often available.

Child, Children or Minor. These terms refer to anyone under the age of 18.

Controlled Substances. Controlled Substances are narcotic and non-narcotic substances that are regulated under the Federal Controlled Substances Act and the Ohio Uniform Controlled Substances Act including but not limited to those substances listed in the schedules 21 CFR §§ 1308.11-1308.15.

Hazards. This term includes chemicals, blood borne pathogens, radioactive materials, animals, laboratory equipment (including electrical, mechanical, and/or hydraulic equipment) or any other potentially harmful apparatus, procedure or environment (e.g. chemical fume hoods, storage rooms, etc.) that could cause injury.

Laboratory. As used in this Protocol, “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 Protocol also covers off-campus facilities, on and off-campus clinical facilities, and field work locations where approved educational activities are conducted.)

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

(C) General Protocol

This Protocol is meant to protect both the safety of minors and other laboratory users. All laboratory users must be made aware that minors may be more susceptible to certain toxic agent chemicals; less aware of the potential risks and Hazards in laboratories; and may require additional supervision and oversight.

1. Children under the age of 14 are prohibited from entering laboratories, except on tours described in Subsection (C)(3)(c) below. Additional exceptions, including for participation in demonstrations described in Subsection (C)(3)(d) below, may be granted on a case-by-case basis upon review and written approval by the Dean of the College. The director of environmental health and safety will act as consultancy only.
2. Children of University employees are not permitted in laboratories except as part of an organized event such as a tour. Exceptions may be granted on a case-by-case basis upon review and written approval by the director of environmental health and safety.
3. Children between the ages of 14 and 18 are allowed in laboratory settings only when:
 - a) they are students enrolled in courses listed in the campus course catalog; or
 - b) (i) they have written consent from their parent(s) or guardian(s); (ii) they received appropriate university safety training and that safety training has been documented; and (iii) they strictly adhere to the campus and laboratory-specific requirements concerning personal protective equipment.
 - c) they are on a supervised tour that has been approved by Dean of the College ; or

- d) they are participating in a demonstration in a laboratory in which they will have no access to any restricted materials described in Section (D) of this Protocol.
 - e)
4. Children must be under the direct supervision of an Authorized Adult at all times. The Authorized Adult must have received training according to the University's minors on campus policy and must have reviewed the University's mandatory child abuse reporting requirements. "Direct supervision" means that while a minor is entering, leaving or in the laboratory, the Authorized Adult must physically accompany the minor at all times.
 5. Authorized children must be trained on the specific Hazards to which they may be exposed in the laboratory, how to recognize those Hazards, and how to protect themselves from those Hazards, including use of personal protective equipment. Children 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 laboratory. Additional training may be required for tasks that involve hazardous chemicals, biological agents, radioactive materials, research animals and physical risks. Children on tours described in Subsection (C)(3)(c) above or participating in demonstrations described in Subsection (C)(3)(d) above, may be provided an abbreviated training based on the nature of their laboratory activity.
 6. Any employment relationship between the University and a child between the ages of 16 and 18 must be approved in writing by the Chief Human Resources Officer prior to the beginning of the employment. The prior written approval should contain a specific description of the types of employment activities the child may engage in consistent with federal and Ohio law. Minors under the age of 16 may not receive any compensation in connection with their presence in a laboratory.

(D) Restrictions Regarding Controlled Substances, Certain Chemicals, Biological Agents and Radiation

The age restrictions set forth below may not be waived. Course catalogs and syllabi should include information regarding any course age restrictions.

1. Children are not permitted in any laboratory or other setting where research or teaching involving controlled substances is being performed, even if they are enrolled students.
2. Children are not permitted to work with highly hazardous materials, including pyrophorics, explosives, large quantities of flammable materials, compounds

- having a rat or LD50 less than or equal to 50 mg/kg (e.g., hydrochloric acid, acrylonitrile, osmium tetroxide, etc.) or International Agency for Research on Cancer (IARC) group 1 or group 2A carcinogens or Ohio/OSHA related carcinogens;
3. Restricted radioactive materials: Children under the age of 16 are not allowed to handle radioactive materials or radiation producing machines.
 4. Restrictions for handling potentially bio-hazardous substance are also subject to the following age group restrictions:
 - a) Children between the ages of 14 and 16 are prohibited from handling bio-hazardous materials that require containment above BSL-1. These minors may enter a BSL-1 containment area in a large open bay laboratory where BSL-2 work may be taking place, provided they have no contact with the BSL-2 work.
 - b) Children between the ages 16 and 18 are prohibited from handling bio-hazardous materials that require containment above BSL-2. They may enter a BSL-2 containment area with appropriate training and medical surveillance (if applicable).

(E) Prior Written Authorization Needed to Permit Minors to Work in Laboratory Environments

Sponsoring Units of the minor working in a laboratory environment must ensure that the following steps have been taken prior to a child entering a laboratory:

1. Obtain written authorization from the Department Chair before the Child begins his or her assignment in the laboratory in accordance with location-specific rules and procedures described above. Such authorization must be forwarded to the relevant Dean and the Director of Environmental Health and Safety.
2. Obtain fully executed and appropriate forms attached hereto as Exhibits A and B (e.g. general information and waiver of liability, assumption of risk and indemnity agreement) from a parent or guardian. Such waivers must be forwarded to the relevant Dean and the Director of Environmental Health and Safety.
3. Provide the child general and laboratory-specific safety training. This training must occur before the child begins to work in the laboratory. The training must include an explanation of the Hazards specific to the laboratory, equipment, and the materials that the child might handle. Provide

documentation of training to the relevant Dean and the Director of Environmental Health and Safety.

4. Review with the child all applicable emergency procedures with the minor, including a review of the emergency equipment and its locations. Such equipment includes, but is not limited to telephone and emergency phone numbers, first aid kits, eye wash and emergency shower, fire alarm pole stations and fire extinguishers, building exits, and outside assembly locations in case of a building evacuation. Provide documentation of training to the relevant Dean and the Director of Environmental Health and Safety.

Approved: 2/24/15