

Minors in Labs

Goals and Objectives

Northwestern is committed to providing a safe and secure environment for all minors involved in activities in University laboratories. It is the goal of Northwestern to prevent minors' exposure to hazardous materials, laboratory pathogens, injurious incidents, and other inherent dangers that may be present in University laboratories. This document outlines the requirements regarding minors in Northwestern laboratories. In addition to the requirements laid out herein, all youth programs utilizing laboratories are expected to comply with the Minors in Northwestern Programs Policy.

Scope and Application

This applies to all minors entering Northwestern laboratories and the faculty, staff, volunteers, and programs sponsoring these laboratory activities.

Definition of Minor in Lab:

Anyone who fits all of the following criteria:

- Under 18 years of age. (The minimum age requirement for employment or internship eligibility is 16 years of age. However, the requirement can be lowered to 14 years of age for a program that follows the guidelines set forth in 29 CFR 570.37.)
- Not currently enrolled as a full-time student at Northwestern University.
- Participating in an internship or short-term program with a laboratory component.

Age Restrictions:

I. Youth under 12

- May not be present in a laboratory unless they are part of a PI-authorized and supervised tour/visit.
- The PI or designated supervisor will be responsible for proper supervision and for providing proper personal protective equipment (PPE) for visitors.
- Laboratory tours may only be conducted when all hazardous materials are properly stored and are not being used for experiments.
- Youth participating in tours/visits must be supervised at all times and may not participate in laboratory activities.

II. Youth 12-15

- May participate in a registered Northwestern academic program.
- Must have written consent from a parent/guardian.
- Must receive general lab safety training.
- Must be trained in the specific hazards to which they will be exposed in the laboratory and adhere to laboratory-specific requirements concerning PPE.
- Must be under the direct supervision of a designated qualified adult.

III. Youth 16-17

- May participate in registered Northwestern programs as employees, interns, or volunteers.
- Must have written consent from a parent/guardian.
- Must receive general lab safety training.
- Must be trained in the specific hazards to which they will be exposed in the laboratory and adhere to laboratory-specific requirements concerning PPE.
- Must be under the direct supervision of a designated qualified adult.

Responsibilities:

I. Principal Investigator (PI) and/or Program Director:

- Prior to youth arriving on campus or entering a laboratory, complete the Application for Minors to Enter Northwestern Laboratories form and submit to Risk Management.
- Ensure completion by parent/guardian of required consent forms.
- If the youth will be compensated for lab activities, the federal and state child labor laws apply (Illinois- 820 ILCS 205 and 56 IAC 250, Federal 29 CFR 570) and additional documentation requirements will need to be satisfied.
- Ensure training for all adults present in the lab is up-to-date.
- A Primary Supervisor must be designated and is responsible for supervision at all times for youth while in a laboratory area.
- Conduct a safety walk-through with the Primary Supervisor and any additional safety groups (Office for Research Safety, Radiation Safety, Risk Management, etc.) as needed to determine laboratory training requirements and necessary PPE.
- Prepare list of all chemical and biological materials to be used by youth during lab activities.
- If applicable, create Standard Operating Procedure (SOP) for all activities that include hazardous materials or processes. (SOP: Communicate hazards, proper handling procedures, engineering controls, necessary PPE and spill/emergency response plan.)
- Ensure youth completes required laboratory training.
- Ensure availability of necessary PPE.
- Ensure all accidents are reported to Risk Management.

II. Primary Supervisor

- Must ensure youth are not, under any circumstances, alone in a Northwestern laboratory, even if they are only conducting computational work. Closely supervise the youth in the laboratory at all times.
- Must take all training for working with minors as defined in the Minors in Programs at Northwestern Policy.
- Ensure youth wear PPE as required.
- Formulate access control plan. (Will the minors have ID's? What are the areas designated for authorized access? How will the minors be blocked from accessing unauthorized areas?)
- Confirm the adult to student ratio and ensure this is followed at all times.

Prohibited Activities and Items of Concern Minors in Laboratories

Prohibited per Federal and State Labor Laws (See HR for updates)	
Employees under age 18 cannot work in hazardous occupations. The U.S. and Illinois Departments of Labor provide the following as examples of hazardous occupations:	
Driving a motor vehicle	Explosives or articles containing explosive components are used, or stored
Working in areas with possible exposure to radioactive substances *	Working with certain power-driven machines or equipment
Working in areas with possible exposure to lead or its compounds, poisonous dyes, or dangerous chemicals	Performing work involving the handling or storage of blood, blood products, or body fluids or tissue

Activities Prohibited	
Utilizing carcinogens (Published by NTP, or IARC Group 1 or 2A)	Working with substances present on the OSHA Particularly Hazardous Substances (PHS) List
Handling teratogens/mutagens	Donning a respirator
Handling radioactive substances	Utilizing radioactive devices
Handling Risk Group 2 organisms or higher	Entering BSL-2 or higher
Research that includes animal handling **	Entering animal research facilities
Entering laboratories where biological select agents are stored and/or utilized ***	Work with class 3b or 4 lasers

* According to the U.S. Department of Labor, any work involving exposure to radioactive substances and to ionizing radiations (alpha and beta particles, electrons, protons, neutrons, gamma and X-ray and all other radiations which produce ionizations directly or indirectly, but does not include electromagnetic radiations other than gamma and X-ray) in any workroom in which self-luminous compound (any mixture of phosphorescent material and radium, mesothorium, or other radioactive element) is made, processed, stored, used, or worked upon; incandescent mantles are made from fabric and solutions containing thorium salts, or are processed or packaged; or other radioactive substances are present in the air in average concentrations exceeding 10 percent of the maximum permissible concentrations recommended for occupational exposure by the National Committee on Radiation Protection.

** An exception to the animal handling requirement may be made with permission from the Institutional Animal Care and Use Committee (IACUC) on an approved protocol.

*** The CDC has a specific protocol prohibiting the use of select agents by anyone under the age of 18.

Please Note: Visiting minors, not previously approved as part of a registered Northwestern program, are not allowed in the laboratories for any reason.

Northwestern

Application for Minors to Enter Northwestern Laboratories

Instructions:

- Program Director or PI who is sponsoring the minor who wishes to participate in an educational opportunity in a Northwestern laboratory must complete this form
 - Submit the completed form to Risk Management
 - The proposed activities must not begin until notice from Risk Management is received and the required trainings are completed.
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Name and Department of PI: _____

Email: _____

Contact person for PI (if different): _____

Name of Youth: _____ Age: _____

Address: _____

Relationship to PI: _____

Northwestern program sponsoring lab activity: _____

Program Director: _____

Location and description of the laboratory where the educational experience will take place:

Building: _____ Room: _____

Proposed start date: _____ Proposed end date: _____

Person(s) responsible for day-to-day lab supervision: _____

Supervisory plan: _____

Person responsible for ensuring all training is complete prior to the start of lab activities:

Description of proposed activities and educational goals, including a list of chemicals and/or materials to be used by the youth during the program: _____

Do the proposed activities involve any of the following?

Yes No Hazardous Materials (e.g. infectious materials, radioactive material, hazardous chemicals)

Yes No Human Subjects

Yes No Laboratory Animals