A. PURPOSE

The purpose of this policy is to identify when minors will be allowed to work (paid or unpaid), conduct research, and observe research activities in a University of Colorado Denver or University of Colorado Anschutz Medical Campus (“the university) laboratory or animal facilities.

B. SCOPE

The university’s Environmental Health and Safety, Risk Management and the Office of Vice Chancellor for Research have developed this policy to address the admittance of minors in university laboratories and animal facilities that may contain potentially hazardous chemicals, radioactive materials, or biohazards.

Minor students occasionally may enter laboratories as part of educational programs under carefully controlled and supervised conditions. Minors under the age of 14 are not
permitted inside of any university laboratory, or animal facility. An exception may be made for university-sponsored tours or science fair projects which are designed for youth under the age of 14 and which have documented training and safety policies. Refer to campus policy 3001, Child Protection Policy, for further details.

Visiting minors, not previously approved as part of a university of Colorado Denver program, tour, or science fair are not allowed in any university research laboratory or animals facility for any reason.

C. DEFINITIONS

**Animal Facility** - Any university animal housing, animal support or animal procedure room.

**Biohazards** - Any infectious agent and/or materials (e.g. biological toxins) produced by a living organism that causes disease in another living organism, including but not limited to human blood, bodily fluids, tissues and organs, recombinant DNA materials, bacteria, viruses, fungi and parasites, plants or plant pests carrying plant disease; animals carrying infectious diseases; plant and animal toxins; animal dander and other similar materials.

**Common Use Area** - spaces where no hazardous work is performed or hazardous materials are held. Examples of common use areas are: libraries, break rooms, cafeterias or cafes, administrative offices, lobbies, patios, and hallways.

**Minor Workers** - Minors who are working as paid employees or unpaid student volunteers, special volunteers, or summer students are referred to as "workers" for the purposes of this policy.

**Laboratory** - Any building or part of a building used or intended to be used to conduct research, academic, clinical, other technical work or scientific experimentation which may have present physical, biological, chemical or radiological hazards.

**Minor** - Any person under the age of 18.

**Responsible Person** - University Principal Investigator and/or faculty member or supervisor responsible for the laboratory or his/her designee responsible for overseeing and/or supervising the activities of a visitor/volunteer present in the laboratory or animal facility.

**Select Agent** - A biological agent or toxin listed in 73 CFR part 4 and 9 CFR part 121.4.

D. POLICY STATEMENT

The following applies to minors when accessing university laboratories and animal facilities. The program is intended to provide for the safety of employees, visitors and volunteers; ensure compliance with federal, state, and local requirements; and to avoid disruption of research activities.
1. **Minors who are Patients/Healthy Research Subjects** - are exempt from this policy.

2. **Minor Workers**
   
a. In general, all minors who are paid employees working at the university must be at least 16 years of age. Minors under the age of 16 may be employed through an Exception to Policy submitted by their Laboratory Supervisor or Principal Investigator to university Human Resources and Environmental Health and Safety (EHS). This Exception to Policy must detail the minor's work plan and include a Risk Assessment and Minor in Lab Consent form (item D.2.b, below. *This policy and its restrictions also applies to unpaid minors between the ages of 14 and 18 who are participating in an Institutionally-sanctioned educational opportunity (i.e. Science Fair projects or other approved school project), as well as to visiting minors as described in D.3, below.*

   **Restrictions include:**
   
   1) Must be at least 14 years old (unless an exception is granted by an ad hoc committee established by EHS on a case-by-case basis after a detailed risk assessment and endorsements)

   2) Cannot work with unfixed human blood or bodily fluids (such as human clinical samples)

   3) Cannot enter BSL3 or BSL2+ facilities

   4) Cannot work in an area with high radiation or airborne radioactivity

   5) Cannot work with hazardous chemicals such as carcinogens, teratogens, mutagens, toxins, acutely toxic or controlled substances

   6) Cannot work with select agents or select agent toxins

   7) Cannot handle research animals **unless prior approval and clearance** is obtained from the Office of Laboratory Animal Resources (OLAR), Institutional Animal Care and Use Committee (IACUC), EHS, and Occupational Health

b. Principal Investigators (PI) and Laboratory Directors intending to have minors in their lab are responsible for preparing a "Minor in Lab Consent" form for parents/guardians of minors to sign and return to the PI. The Consent form will be modified by the department to include the risks in the lab and will serve as the Minor's Parent/Guardian Waiver Form. More information for the process of onboarding minors can be found on the Health Science Career pathways Hub ([https://www.cuanschutz.edu/offices/inclusion-and-outreach/programs/office-](https://www.cuanschutz.edu/offices/inclusion-and-outreach/programs/office-))
for-educational-outreach-and-pathways-initiatives). Once the form has been completed and signed by required parties, this should be sent to urmuccdirs@cu.edu for review and then used in badging approval. Contact university Risk Management (URM) at urmuccdirs@cu.edu or find the template at the URM website under the minor tab at https://www.cu.edu/risk/volunteer-trainee-and-minor-participants. For safety and security reasons, it is strongly recommended that two adults are present at all times while working with the minor.

c. All minors must have successfully completed the university’s (1) Laboratory Safety, (2) Chemical Waste Management, (3) Blood Borne Pathogens and (4) Regulated Medical Waste training courses before beginning work in laboratories or the Animal Facility. Minors that will be performing work in an animal facility must enroll in Occupational Health and take the courses required by IACUC (https://research.cuanschutz.edu/committee-support/home/iacuc-home/requirements-for-conduct-of-research-involving-animals). Additional training may be required depending on the nature of the laboratory.

d. EHS recommends that minors only work with Risk Group 1 biological materials (https://my.absa.org/tiki-index.php?page=Riskgroups). Exceptions may be made on a case-by-case basis after an in-depth risk assessment by EHS and the PI of the specific biological materials, proposed procedures, and hazard mitigation strategies.

e. Requirements for Minors Intending to Use Radioactive Materials - Per Institutional policy, minors are not authorized to use radioactive materials. However, because Federal regulations may allow for some minors to use radioactive materials under very restrictive conditions (see below) requests for minors to use radioactive materials can be submitted to EHS and will be reviewed on a case-by-case basis. Prior to working with radioactive materials, a minor must submit a Minor's Permission to Work in university Radioactive Materials Laboratory form as stipulated in section 3.4.1 - Use of Radioactive Materials by Minors of the Radiation Safety Manual (linked at https://www.ucdenver.edu/docs/librariesprovider174/guidance-and-manuals/radiation-safety-training-manualb6d444e5302864d9a5bfff0a001ce385.pdf?sfvrsn=7fffc20b9_0) to EHS for approval by the university’s Radiation Safety Officer. EHS will verify the following criteria are met:

1) Minors under the age of 16 are prohibited from working with radioactive materials;

2) Minors who are 16 or 17 years of age are prohibited from handling source vials and need special permission from the Radiation Safety
Officer (RSO) to use other radioactive materials, including performing monthly surveys;

3) An adequate risk assessment and justification has been provided and alternate non-radiological methods are not available;

4) Before working with radioactive materials, minors must have successfully completed Radiation Safety training;

5) All use of radioactive material by an RSO-approved minor must be directly supervised at all times by a trained adult university staff member who has successfully completed the EHS Radiation Safety Training courses, found at https://research.cuanschutz.edu/ehs/home/training/radiation-safety

6) Failure to supervise a minor while he or she is using radioactive materials will result in immediate suspension of the Authorized User's privilege to order and receive radioactive materials;

7) Written consent of the minor's Principal Investigator and parents/guardians is required as part of the approval process (see D.2.b. above).

3. Minors who are Visitors, Shadowing, or Observers

   a. Laboratories - Visiting minors will not be permitted in any laboratory except with the specific written permission of the laboratory director. A laboratory director contemplating a visit by his/her own minor children will obtain written authorization from his/her supervisor.

   b. Clinical Areas - Non-patient minors shall be under adult supervision at all times during their visits to clinical areas not located within the University of Colorado Hospital. Examples include but are not limited to Clinical Trial areas in the "400" Series buildings.

   c. In addition, all minors who are visiting, shadowing or observing are subject to the prohibitions listed in D.2.a, above.

E. RESPONSIBILITIES

Employees: Any employee who brings a minor to the university must have the necessary university approvals. Do not allow visitors, including children, in laboratories until proper approval has been obtained; or into any animal facilities unless accompanied by a Principal Investigator or Responsible Person as defined in this policy. All employees charged with escorting minors must ensure they maintain direct supervision at all times and that all guidelines and safety procedures are followed.
Principal Investigator (PI): PI is responsible for determining if an area is safe for a minor to enter and that all appropriate and required forms are submitted. The PI must provide written approval for a minor to enter their laboratory. This process must be completed well in advance of activity involving minors.

Environmental Health and Safety (EHS): EHS oversight includes assessing potential risks associated with minors entering hazardous areas at the university. EHS assists the PI with the risk assessment in addition to providing training, technical assistance, information and guidance and limitations on the use of all radioactive material, infectious agents, carcinogens, reproductive toxins and acutely toxic chemicals. EHS will also review and coordinate approval for all requests for exceptions.

Electronic Security, University Police Department: Electronic Security has the responsibility of ensuring that minors have correct badging and laboratory access for their level of training and assigned duties.

University Risk Management: Risk Management is responsible for making available parental consent and waiver forms on-line and for assisting with risk assessments, as needed.

Health Science Career Pathways Hub: as part of the Office for Educational Outreach and Pathways Initiatives, the Hub supports activities and programs involving trainees and minors, including providing guidance on appropriate onboarding processing, training, and facilitating learning opportunities.

Information: For further information regarding this policy please contact EHS at 303-724-0345.

Notes

1. Dates of official enactment and amendments:
   October 1, 2010: Adopted/Approved by the Vice Chancellor for Research.
   October 1, 2014: Revised
   May 24, 2022: Revised

2. History:
   October 1, 2010: New policy to identify when minors will be allowed to work, conduct research or observe research activities in CU Denver | CU Anschutz Laboratories or animal facilities.
   October 1, 2014: Revised
   May 24, 2022: Revised the policy to reflect the Health Sciences Career Pathway Hub coordinating learning opportunities.

3. Initial Policy Effective Date: October 1, 2010

4. Cross References/Appendix:
• NIH Policy #3015, Admittance of Minors to Hazardous Areas (Release Date: 01 JUNE 2010)

• Title 10 of the Code of Federal Regulations, Chapter I- Nuclear Regulatory Commission, Part 20, Subpart A, Section 1004, Units of Radiation Dose; Subpart C, Section 1201, Occupational does limits for adults; Section 1207, Occupational does limits for minors; and Subpart D, Section 1301, Dose Limits for Individual Members of the Public.


• Colorado Youth Employment Opportunity Act (C.R.S. 8-12-101 et seq.)


• NIH Grants Policy (October 1, 2012)

• Campus Policy 3001, Child Protection Policy