

Virginia Tech
Environmental Health and Safety

Subject: Guidelines on Minors in the Workplace

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1. Purpose

The purpose of this guideline is to identify under what circumstances and/or conditions minors should be allowed to work or perform research at Virginia Tech, and to establish requirements when minors visit facilities where there are potential hazards present. These requirements are necessary to protect a minor’s health and safety and to provide reasonable measures to prevent harm from potential exposure to hazardous agents or conditions.

2. Scope

The requirements outlined in this guideline apply to all minors who visit, work, volunteer or conduct research at Virginia Tech and is directed to include all persons under age 18 whether visitors, students, employees or volunteers.

2.1 Rules and Regulations

With few exceptions, Virginia Tech should not hire minors under the age of 14, and employment certificates should be obtained for all minors under the age of 16. Employment certificates are not required to employ minors 16 or 17 years of age who have graduated from high school or who have received a General Educational Development (GED) diploma. A copy of the employment certificate, issued as required by Title 40.1 of the Code of Virginia, should be provided to and maintained by the hiring department as part of the personnel record for the minor employee.

Hours of work restrictions should be established for minors under 16, and supervisors are encouraged to keep records to verify hours worked and breaks given to minors under 16. Hours of work shall comply with Federal Regulations 29 CFR 570.35(a) and (b). Under the Fair Labor Standards Act (FLSA), youths 14 and 15 years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under certain conditions.

Permissible work hours for 14- and 15-year-olds are:

- 3 hours on a school day;
- 18 hours in a school week;
- 8 hours on a non-school day;
- 40 hours in a non-school week; and
- between 7 a.m. and 7 p.m., except from June 1 through Labor Day, when nighttime work hours are extended to 9 p.m.
- Must be given a 30 minute rest or meal period after 5 consecutive hours of work

Minors who will be employed by Virginia Tech are subject to the same university requirements and forms completion as any other new hire as outlined in the university's selection process and policies. This includes the completion of the I-9, Tax Withholding forms, and the appropriate supporting documentation. Pre-employment checks, including drug and alcohol, driving, medical and criminal history, may also be applicable. In addition, the forms and approvals outlined in this guideline should be completed as required. See Section 5.0 for more information.

Specific types of employment should be prohibited or limited for minors under the age of 18. No minor under the age of 18 should be employed in a "hazardous occupation" or perform research activities involving a "hazardous occupation" except as permitted hereinafter.

2.2 Hazardous Occupations

Minors should not be allowed to work, volunteer or conduct research at Virginia Tech that involves the following activities, trades or work locations except as specifically allowed by this guideline:

1. In any mine or quarry;
2. In or about any location where explosives or articles containing explosive components are made or stored;
3. In any location involving exposure to radioactive substances or ionizing radiation including X-ray equipment, except with the express approval of the Radiation Safety Committee who may be contacted via the Radiation Safety Officer at Environmental Health and Safety, mail code 0423;
4. In any location involving exposure to laser radiation of Class 3B, 3R or 4, except with the express approval of the university Laser Safety Officer who may be reached at Environmental Health and Safety, mail code 0423;

5. At operating or assisting to operate or maintain any grinding, abrasive, polishing or buffing machine, any power-driven metal forming, punching or shearing machine, power-driven paper products machine, any circular saw, band saw or guillotine shear, or any power-driven woodworking machine unless the minor is at least 16 years of age and participates in or has completed a work-training program;
6. At operating or assisting to operate any power-driven bakery machine unless they use only noncommercial grade mixers and blenders similar to those found in a home kitchen or the minor participates in or has completed a work-training program;
7. In any capacity in preparing or handling any composition that is acutely toxic, carcinogenic to humans, or that is a reproductive hazard (mutagen or teratogen) except with the express approval of Environmental Health and Safety and the department head where such research is to be conducted..
8. In any capacity in or about excavation, demolition, roofing, wrecking or shipbreaking operations;
9. As a driver or a helper on an automobile, truck, or commercial vehicle. However, minors who are at least 17 years of age who have a valid vehicle operator's license appropriate for the vehicle they will operate, departmental permission and a motor vehicle record free of serious offenses may drive automobiles or trucks on public roadways as permitted by [state law](#) and university policy if:
 - a. The vehicle does not exceed 6,000 pounds gross vehicle weight, the vehicle is equipped with seat belts for the driver and any passengers, and all persons are required to use the seatbelts when driving the vehicle;
 - b. Driving is restricted to daylight hours;
 - c. The minor has completed a State-approved driver education program;
 - d. The driving does not involve: (i) the towing of vehicles; (ii) route deliveries; (iii) urgent, time-sensitive deliveries; or (iv) the transporting at any time of more than three passengers;
 - e. The driving does not involve more than two trips away from the primary place of employment in any single day for the purpose of transporting passengers;
 - f. The driving takes place within a 30-mile radius of the primary place of employment; and
 - g. The driving is only occasional and incidental to the minor's employment and involves no more than one third of the employee's work time in any workday and no more than 20 percent work time in any work week;
10. As a driver of a powered industrial truck (e.g., forklift) or powered lawn or farm equipment;
11. In logging or sawmilling;
12. In any occupation involving slaughtering, meatpacking, processing or rendering unless the minor participates in or has completed a work-training program;
13. In any laboratory where select agents are used or stored;
14. In any laboratory or facility designated as BSL-3, ABSL-3 or higher for recombinant or infectious organism.

15. In or on any construction sites, scaffolding, aerial lifts, elevated platforms, roof tops, or confined spaces without the express written approval of Environmental Health and Safety.
16. In any occupation that would expose the minor to a recognized hazard capable of causing serious physical harm or death including but not limited to work on energized electrical systems ≥ 50 volts AC and work adjacent to an unguarded fall hazard of 4' or more.

Minors under the age of 16 should not be in the service of any veterinarian while treating farm animals unless the minor participates in or has completed a work-training program, nor should they be employed in any warehouse, laundry processing, or hotel room service.

2.3 General Requirements

Minors who are employed in any capacity to work with animals and/or infectious agents must be added to or covered under the Animal Care and Use Protocol currently approved by the Institutional Animal Care and Use Committee and/or the Institutional Biosafety Committee, as applicable, and must enroll in the university Occupational Health Assurance Program (OHAP). Also, minors who will use respirators must enroll in OHAP. Declination of participation in the OHAP is not an option for minors.

Minors are allowed to volunteer, work and/or conduct research activities if the following requirements are met in full:

1. All information, signatures and approvals required by this guideline are complete.
2. This guideline has been read and the potential hazards information sheet has been completed and has been reviewed and signed by the parent or legal guardian of the minor.
3. As applicable, a Minor's Work Registration Form has been submitted to and approved by either the Institutional Biosafety Committee, Radiation Safety Committee, Laser Safety Officer, and/or Environmental Health and Safety.

2.4 Requirements for Supervisors

The supervisor, principal investigator or other authority who is proposing to hire a minor or who will oversee a minor performing work at Virginia Tech should:

1. Verify the age of the minor and review this guideline to assure all requirements are met.
2. Assure the minor is not allowed to perform work defined as a hazardous occupation unless approvals have been granted as required.
3. Assure that training on the Chemical Hygiene Plan, Hazard Communication Program, Radiation Safety Program, Biosafety Plan, and/or other health and safety programs as applicable has been provided to the minor in advance of the work.

4. Assure Personal Protective Equipment (PPE) specific to the hazards has been provided to the minor with instructions on use and disposal.
5. Assure the minor has received all required health and safety training in advance of the work. Training could include, but is not limited to, Bloodborne Pathogens, Laser Safety, Laboratory Safety, Radiation Safety, and Farm Safety. See http://www.ehss.vt.edu/training/what_training.php for a complete listing.
6. Assure the minor has been trained on the requirements of the Building Emergency Action Plan for the location where the minor will work.
7. Provide all needed hazard-specific safety training.
8. Assure the minor is supervised at all times.
9. Assure hours of work comply with Federal Regulations 29 CFR 570.35.
10. Assure the area where work is to be performed is in full compliance with all applicable programs of Virginia Tech's office of Environmental Health and Safety.
11. Obtain the written approval of the department head for such work.

2.5 Work Training Program

Minors may perform some types of work identified as a Hazardous Occupation in Section 2.2 of this guideline if they have completed or participate in a work-training program that contains the following elements:

1. A schedule of organized and progressive work processes and tasks prepared by the supervisor and on which the minor shall be trained.
2. Hands-on and verbal safety instruction for each job task.
3. Direct and close supervision by a competent and experienced person at all times.
4. Written documentation that the minor has passed a safety test and a performance test.

For visiting minors who are not employees or volunteers, documentation provided by the school or sponsoring organization may serve in lieu of a defined work-training program provided by Virginia Tech.

2.6 Requirements for Visiting Minors

Minors who visit Virginia Tech facilities should be provided a safe and healthy work environment as outlined in [university Policy 1005, Health and Safety](#). The Virginia Tech representative coordinating the visit must:

1. Assure all hazards present in the area are adequately controlled such that no minor will be exposed to a hazardous condition. If controls will not adequately prevent hazard exposure, assure the minor has been provided and wears all necessary PPE, and is provided instructions on use and disposal.
2. Provide access to hand washing facilities or other hand sanitizing means and encourage their use.

3. Be familiar with the Building Emergency Action Plan for the location where the visit will occur and be prepared to provide directions to visitors should an emergency occur.
4. Assure visiting minors are supervised at all times, and are not left alone if there are potential hazard exposures present in the area being visited. Also, provide sufficient numbers of personnel to assure adequate supervision of minors at all times.
5. Visiting minors may not access construction sites, scaffolding, aerial lifts, elevated platforms, roof tops, or confined spaces without the express written approval of Environmental Health and Safety.

3. Procedures

It is recommended that the individual who will oversee a minor performing work as a student, employee or volunteer:

1. Provide the parent or legal guardian the Potential Hazards Information Sheet for review. Retain a signed copy of that document for inclusion in the departmental personnel files.
2. Complete and have the parent or legal guardian of the minor sign the Potential Hazards Information Worksheet and Release of Liability Form.
3. Complete and submit the Minor's Work Proposal Registration Form.
4. Complete and submit the Work Proposal Registration Form. This form will be reviewed, if applicable, by the Institutional Biosafety Committee, Radiation Safety Committee or other authorities. The minor may not begin work until all needed approvals have been received.
5. If the minor will be a volunteer, complete a *Letter of Volunteerism* as outlined in Policy 4330, *Guidelines for the Use of Volunteers*.
6. Have written permission from the department head to engage minors in work or volunteer research.
7. Submit a copy of all required forms to Environmental Health and Safety (675 Research Center Drive; Blacksburg, VA 24061 or fax number (540) 231-3944) at least two weeks prior to beginning the work that involves the minor.
8. Maintain all documentation associated with minors, including personal records, waivers and training documentation, for two years beyond the minors 18th birthday.

4. Definitions

"Minor" means any person who has not attained 18 years of age.

"Research" means any active, diligent, and systematic process of inquiry in order to discover, interpret, or revise facts, events, behaviors or theories, or to make practical applications with the help of facts, laws, or theories.

"Select Agent" means biological agent or toxin listed in 73 CFR part 4 and 9 CFR part 121.4

“**Visitor**” means any person who enters a laboratory, greenhouse, animal facility, machine shop, or other location owned or occupied by Virginia Tech upon the express or implied invitation of the principal investigator, laboratory manager, or supervisor.

“**Volunteer**” means any person who, of his or her own free will, provides services to Virginia Tech for civic, charitable, or humanitarian purposes without promise, expectation, or receipt of compensation.

5. References

Code of Virginia (<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+TOC>), 40.1-78 to 116, [Child Labor](#).

[Policy 1005, Health and Safety Policy](http://www.policies.vt.edu/1005.pdf) (<http://www.policies.vt.edu/1005.pdf>)

[Policy 4060, Background and Driving Record Investigation](http://www.policies.vt.edu/4060.pdf)
(<http://www.policies.vt.edu/4060.pdf>)

[Policy 4298, Wage Employee Time Worked Records](http://www.policies.vt.edu/4298.pdf) (<http://www.policies.vt.edu/4298.pdf>)

[Policy 4330, Guidelines for the Use of Volunteers](http://www.policies.vt.edu/4330.pdf) (<http://www.policies.vt.edu/4330.pdf>)

[Policy 4815, Minors on Campus or Participating in University - Related Programs](http://www.policies.vt.edu/4815.pdf)
(<http://www.policies.vt.edu/4815.pdf>)

**RELEASE OF LIABILITY, WAIVER OF CLAIMS, EXPRESS
ASSUMPTION OF RISKS, AND HOLD HARMLESS AGREEMENT**

I HAVE READ, UNDERSTAND, and INITIALED the Potential Hazard Information Sheet describing the potential risks and dangers associated with my child’s proposed work at Virginia Polytechnic Institute and State University (“Virginia Tech”). I fully understand that there are potential risks and hazards associated with exposure to hazardous materials, substances and processes. I AGREE TO ALLOW my minor child to work at Virginia Tech and freely accept and assume all associated risks and hazards. I ALSO AGREE AND UNDERSTAND that my child’s work may be suspended at any time, at the discretion of Virginia Tech and its officers, agents, and employees, if the safety of my child, Virginia Tech employees and/or other persons at Virginia Tech become a concern.

I, for myself and my estate, heirs, administrators, executors, and assigns, hereby release and hold harmless the Commonwealth of Virginia, Virginia Tech, the Virginia Tech Board of Visitors, and their officers, directors, employees, representatives, agents, assignees and volunteers (collectively, the “Released Parties”), from any and all liability and responsibility whatsoever, however caused, for any and all damages, claims, or causes of action that I, my estate, heirs, administrators, executors, or assigns may have for any loss, illness, personal injury, death, or property damage arising out of, connected with, or in any manner pertaining to my child’s work at Virginia Tech. I further hereby agree to defend, indemnify and hold harmless the Releases from any judgment, settlement, loss, liability, damage, or costs, including court costs and attorney fees that Released Parties may incur.

In signing this agreement, I acknowledge and represent that I have read and understand it and that I sign it voluntarily and for full and adequate consideration, fully intending to be bound by the same.

Printed Name of Minor Child

Signature of Parent/Legal Guardian

Printed Name of Parent/Legal Guardian

Date

I have read, understand, and will adhere to the Virginia Tech’s “Minors in the Workplace” Guideline. I understand that failure to comply with this Guideline is dangerous to my health and safety and that I may be removed from the facility immediately for any failures or deviations in compliance.

Signature of Minor

Date

Please return the signed sheet by mail to: Environmental Health and Safety; 575 Beamer Way; Blacksburg, VA 24061 or fax number (540) 231-3944. A copy of this form should also be maintained by the department and the person who is sponsoring the activity.

Potential Hazard Information Sheet

Definition	Hazards	Examples	
Chemicals	Refined compound that could be in the form of a solid, liquid or gas. These may or may not be hazardous. Some compounds may have numerous hazard classifications (flammable, toxin & carcinogen) .	Carcinogens: may cause some sort of cancer with long term exposure - usually many years in the future	Benzene
		Teratogen: shown to affect the reproductive system of males & females & may cause birth defects in the developing fetus.	Alcohol, thalidomide, X-rays
		Neurotoxins: may affect the nervous system.	Ethidium Bromide, snake venom
		Flammables: will burn or explode	Acetone, Xylene, Alcohol
		Reactives: will react explosively	Peroxides, acrylamide
		Corrosives: will cause tissue damage with contact through inhalation, eye, skin, etc	Acids & bases
		Toxins: may cause illness or death on exposure.	Cyanide
Compressed Gases	High-pressure cylinders that hold gases. These are usually large & heavy. Gas may be harmless, toxic, corrosive, flammable	Physical hazard: Explosion hazard if they rupture. Asphyxiation hazard if they vent the gas to the workplace & it displaces oxygen	Asphyxiant: Nitrogen, helium, any other non-oxygen gas Flammable: Hydrogen Toxic: Ammonia
Radiation/ Radioactive Materials	High energy particles (alpha & beta) or photon (X-rays, gamma).	Tissue & Organ damage with high doses	Uranium, Phosphorus-32, Sulfur-35, X-rays
Physical hazards	Hazards from noise, machinery or tools, heat, cold, etc.	Tissue damage, hearing loss, eye injury, cancer	Manual tools such as hammers, or mechanical tools such as drills. Cold: liquid nitrogen, dry ice Heat: burners
Lasers	Highly focused, high energy light radiation.	Eye damage and possible skin damage	Class 3B, 3R and 4, and open beam laser operations

Definition	Hazards	Examples
Nanomaterials	Some compounds may have numerous hazard classifications (flammable, toxin & carcinogenic) .	The health hazards associated with exposure to Nanomaterials are largely unknown at this point-in-time, though some indication of health effects can be determined based on the source material.
Biological Agents	Living organisms or products of living organisms such as Viruses, Bacteria, Fungi, Prions & Parasites. Hazards from infection with these agents are organism dependent & can range from mild treatable to severe untreatable. Classification of hazard in four Risk Groups with level 1 as the least hazard & level 4 as the extreme hazard.	1 – Agents are not associated with disease in healthy adult humans
		2 - Mild to severe disease which is rarely serious and for which preventative or therapeutic interventions are <i>often</i> available
		3 – Severe or lethal human disease for which preventative or therapeutic interventions <i>may</i> be available
		4 – Not allowed at Virginia Tech
Recombinant DNA	Genetically modified organisms with variations in genes within the organism.	Often unknown consequences once introduced into the human body.
Toxins – Microbial, Plant, Animal	Poisons produced by plants, living organisms or animals.	Tissue & organ damage or death.
		Nanogold, Fullerenes, Carbon Nanotubes
		Influenza, Polio & Salmonella
		Tuberculosis & AIDS
		Hemorrhagic fever
		Viral vectors like Adeno & Adeno-associated viruses used to transfect or express genes.
		Plant – Ricin Animal – Fish & Snake venom Microbial – Staph, Tetanus

Parent/Legal Guardian Signature: _____ Date: _____

Minor Signature: _____ Date: _____

Printed Name of Minor: _____

RULES FOR MINORS WORKING IN LABORATORIES, ANIMAL FACILITIES, MACHINE SHOPS AND SIMILAR LOCATIONS

1. Your sponsor or supervisor will inform you if there are hazards present in the work area. Never work alone in any laboratory or other potentially hazardous environment without direct, immediate adult supervision from your sponsor/supervisor or designee.
2. You must wear personal protective equipment (PPE) as directed and dispose of it appropriately. PPE includes goggles, gloves, coats/gowns, and other face/body protection as dictated by the hazard being worked with or around. Always remove PPE when leaving the work area.
3. You must follow the instructions of your sponsor or supervisor.
4. You must report any accident (regardless of severity) immediately to your sponsor or supervisor.
5. You must keep your hands away from your face and wash them well with soap and water prior to leaving any work area and after removing gloves.
6. You must never eat, drink, chew gum, apply lip balm, or touch contact lenses while in any laboratory environment.
7. You must wear closed-toe shoes while in any laboratory, animal facility, machine shop or similar location.
8. You must tie back long hair to keep it out of all the hazards listed above.
9. You must wear long pants and long sleeves while working in these facilities.
10. I agree to ask questions if I don't understand the safety requirements.

Parent/Legal Guardian Signature: _____ Date: _____

Minor Signature: _____ Date: _____

Printed Name of Minor: _____

Work Proposal Registration Form

Proposals are due at EHS **at least 2 weeks** prior to beginning the work.

Principal Investigator/Supervisor/Sponsor:	Department:
Phone Number:	Email:

Name of Minor:	Minor's Date of Birth:
Name of Minor's School:	Name of Parent or Legal Guardian:

Is this Project (check one):	<input type="checkbox"/> Student Intern	<input type="checkbox"/> Science Fair Project
	<input type="checkbox"/> Volunteering	<input type="checkbox"/> Other (specify):
	<input type="checkbox"/> Employment	
Is this Project part of a Virginia Tech Sponsored Program?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, which one:

This Work will be Performed in (building):	Room(s):
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Project Title:
Project Start Date: Project End Date:

Materials and Equipment to be Used – Check and List all that Apply

Chemicals	Biological Material	Equipment
<input type="checkbox"/> Flammable	<input type="checkbox"/> Recombinant DNA	<input type="checkbox"/> Fume Hood
<input type="checkbox"/> Reactive	<input type="checkbox"/> Bacteria	<input type="checkbox"/> Biosafety Cabinet
<input type="checkbox"/> Carcinogenic	<input type="checkbox"/> Viruses	<input type="checkbox"/> Laminar Clean Bench
<input type="checkbox"/> Toxic	<input type="checkbox"/> Fungi	<input type="checkbox"/> Autoclave
<input type="checkbox"/> Corrosive	<input type="checkbox"/> Parasites	<input type="checkbox"/> Centrifuge
<input type="checkbox"/> Oxidizer	<input type="checkbox"/> Human Source Material	<input type="checkbox"/> Analytical Instruments
<input type="checkbox"/> Cryogen	<input type="checkbox"/> Insects	<input type="checkbox"/> Industrial Machinery
<input type="checkbox"/> Pharmaceuticals	<input type="checkbox"/> Plants	<input type="checkbox"/> Noise Producing Equip.
<input type="checkbox"/> Gasses	<input type="checkbox"/> Animals	<input type="checkbox"/> Laser Class 3B, 3R or 4
<input type="checkbox"/> Radioactive Materials	List:	<input type="checkbox"/> X-ray Equipment
List:		<input type="checkbox"/> Other Equipment
		List:

Description (attach separate sheet if necessary):

I AGREE TO SPONSOR (MINOR'S NAME) _____, AND BY MY SIGNATURE BELOW, AGREE THAT:

- I have read, understand, and will adhere to the Virginia Tech's "Minors in the Workplace" Guideline. The signed Potential Hazard Information Sheet is attached.
- I will complete this minor's Hazard Specific Safety Training before he or she is exposed to the hazard for which the training is required.
- Personal protective equipment appropriate for, and specific to, the work exposures will be provided.
- This individual will be supervised at all times while in any area where there are potential hazard exposures (for example, laboratories, machine shops, animal holding areas) and will never be left alone.
- Their hours of work will comply with Federal Regulation 29 CFR 570.35.
- I have attached the signed "Release of Liability" and "Rules for Minors" forms.
- I have obtained and will maintain on file the Employment Certificate, if required.
- The work area in which the minor will perform work has been inspected by me and is in full compliance with all applicable Virginia Tech safety programs and regulations.

Name of PI/Supervisor/Sponsor: _____

Signature: _____ Date: _____

Name of Department Head/Chair: _____

Signature: _____ Date: _____

I have read, understand and will adhere to the Virginia Tech "Minors in the Workplace" Guideline.

Name of Minor: _____

Signature: _____ Date: _____

Institutional Biosafety Committee (IBC) Approval *(if required)*

Initials Date

Institutional Radiation Safety Committee Approval *(if required)*

Initials Date

Institutional Animal Care and Use Committee Approval *(if required)*

Initials Date

Radiation Safety Committee Approval *(if required)*

Initials Date

Environmental, Health and Safety Approval

Initials Date

Please return the signed sheet by mail to: Environmental Health and Safety; 575 Beamer Way; Blacksburg, VA 24061 or fax number (540) 231-3944. A copy should also be maintained by the department and the person who is sponsoring the activity.