University of Wisconsin System Guidelines for Students Working Alone Safely

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<u>Note</u>: This document focuses on **unpaid** students who are not covered by worker's compensation. It is meant to promote safety for student working on academic or service oriented projects associated with the university on and off campus. These guidelines are also appropriate for employees whose job activities may involve working alone.

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RATIONALE

Because of the nature of the university environment, it is often necessary for students to be alone in campus buildings after the regularly scheduled closure times for either special projects or ongoing work. Working alone in certain circumstances or environments requires special arrangements to minimize potential risks of injury.

UW System Office of Safety and Loss Prevention recommends that each campus develop and implement written procedures to protect the well-being of students who work alone under conditions that present a risk of injury.

INTENT

To assess the environment and take preventable measures to eliminate or minimize risks when students are alone.

To ensure procedures are developed, in so far as are reasonably practicable, to ensure the health and safety of students who perform work alone in a potentially hazardous environment or with hazardous materials or equipment.

SCOPE OF ACTION

This guidance applies to all students who perform tasks or duties on UW System premises or in fieldwork situations.

GUIDING PRINCIPLES

UW System is committed to implementing a method to support the safety and security of students working alone. Each department should conduct a hazard assessment and eliminate or control the hazards of working alone. The hazard assessment should be reviewed on an annual basis or when new situations are introduced or changed.

Department representatives should establish procedures to ensure the safety of students who work alone on campus. These procedures should be designed for the specific needs of a department but take into account those environments that have a particularly high potential to be hazardous.

Students working alone should be informed by their department representative of the procedures established by the campus for students working under the conditions above. Where students work alone, a means of communication to gain assistance in an emergency should be available as well as what to do in an emergency. Additionally, arrangements should be made for other individuals to check regularly on the welfare of persons working alone.

This guide discusses situations on campus where working alone could put a student at risk. It summarizes best practices and outlines procedures to help ensure the safety of those who work alone. It is meant to assist campuses in developing and implementing written procedures to protect the well-being of students who work alone.

GENERAL ASSUMPTIONS

It is generally inappropriate for undergraduate students to work alone. Exceptions may by made for low-risk work if the faculty verifies that an individual student fully understands normal and emergency procedures, uses all required protective equipment and that required emergency equipment is available and operating properly.

Where the faculty deems it is necessary for students to work alone, departments should ensure that students are qualified and trained in work and emergency procedures, including use of emergency equipment.

UW System students, including graduate researchers and visitors, should work only under conditions where the availability of emergency aid is compatible with the risk. Whenever doubt exists, the faculty supervisor should review the work assignment and define the emergency aid compatible with the work assignment.

SITUATIONS THAT MIGHT PUT LONE WORKERS AT RISK

Those who work alone can be grouped into three broad categories. Each of these situations has different hazards and ways to control them. See Appendix X for a more detail.

- 1. Those who handle cash. This includes athletic events, theatre events, and food service workers.
- 2. Those who perform hazardous work but have no routine interaction with other students, regular work staff, or the public (see Appendix A for examples of potentially hazardous work).
- 3. Students who travel alone but have no routine interaction with the public.

BEST PRACTICES FOR MANAGEMENT

There are many steps that should be taken to help ensure the safety of those who work alone. Best practices for any situation where students work alone involve:

- Assessing the hazards of the work area to identify existing or potential working alone hazard on their campus.
- Taking corrective actions or measures to prevent or minimize hazards or incidents from occurring.
- Assess the requirements for emergency equipment, emergency aid and practical means of obtaining assistance based upon the nature and degree of exposure to the hazard.
- Ensuring emergency aid is available and compatible with the work assignment.
- Training and educating students of the hazards and methods used to control or eliminate them so they can perform their work safely.
- Evaluating safety measures on a regular basis to ensure that these measures are effective, taking into account any new changes in the operation.
- Providing an effective system for communication between any student who works alone and person capable of assisting the student.
- Ensure incidents are reported, investigated and documented.

BEST PRACTICES FOR STUDENTS

- Report all accidents of work site incidents immediately to campus security.
- Participate in work area hazard assessments and the implementing of procedures to eliminate or control hazards of working alone.
- Adhere to appropriate measures established for working alone.
- Follow all safety instructions provided.
- Report suspicious activity to campus security.

GUIDELINES FOR HAZARD ASSESSMENT PROCEDURES

The hazard assessment will ensure that working alone is undertaken safely. This assessment should review the means of entry to the workplace and the means of leaving the workplace, the equipment that may be required to use, the exact tasks that are required to be undertaken any substances required to be handled, the environment and atmosphere in which one works and any people or clients with whom one is required to interact.

Factors to consider when assessing hazardous working conditions:

- 1. Length of time the student will be alone:
 - a. What is the reasonable length of time for the student to be alone?
 - b. How long will the student be alone to finish the job?
 - c. Is it reasonable for the student to be alone at all?
 - d. Is it legal for the student to be alone while doing certain activities (e.g. work in confined spaces, LO/TO operations)?
- 2. Communication:
 - a. What forms of communication are available?
 - b. Is it necessary to "see" the work, or is voice communication adequate?
 - c. Will emergency communication system work properly in all situations?
 - d. Is the communication system tested frequently?
- 3. Location of the work:
 - a. Is the work in a remote or isolated location? (A remote location does not have to be far away. Storage rooms that are rarely used can be considered remote or isolated).
 - b. Is transportation necessary to get there? What kind of transportation is needed?
 - c. Is the vehicle equipped with emergency supplies such as a first aid kit and mobile phone?
 - d. Will the student need to carry some or all of the emergency supplies with him/her when leaving the vehicle?
 - e. What are the consequences if the vehicle breaks down?
 - f. Does the student need training to be able to use the first aid equipment?
- 4. Type or nature of the work:
 - a. Is there adequate training and education provided for the student to be able to work alone safely?
 - b. If personal protective equipment is required, is it available, is it in good working order, and has the student been trained in its use, care and storage?
 - c. What machinery, equipment and tools will be used?
 - d. Is there a high risk activity involved?
 - e. Is fatigue likely to be a factor?
 - f. Are there extremes of temperature?
 - g. Is there a risk of animal attack, or poisoning/allergic reaction from insect/animal bites?
 - h. If the student is working inside a locked building, how will emergency services be able to get in?
 - i. Does the work involve working with money or other valuables?
 - j. Is there a possibility of interference, such as violence or criminal activity from other people?

- 5. Characteristics of the individual who is working alone:
 - a. Are there pre-existing medical conditions that may increase the risk?
 - b. Does the student have adequate levels of experience and training? (e.g., first aid, communication systems repair, vehicle breakdowns, relevant administrative procedures and/or outdoor survival.)

GUIDELINES FOR EVALUATION AND HAZARD CONTROL PROCEDURES

Departments should assess and prioritize the working alone hazards that have been identified and evaluate possible means of elimination or control. Contact your campus safety department or the System Office of Safety and Loss Prevention for additional assistance in evaluating working alone hazards.

Examples of controls implemented after the initial hazard assessments included:

- Restricted building access to the building card key, or "after hours permit" after regular scheduled closing times.
- Department doors are locked when working alone after hours. (Ensure emergency services are able to get into locked buildings).
- Carry a first aid kit, emergency supplies and a cell phone when traveling alone on UW System business.
- Park close to the building in the evening in a well-lighted area.
- Post signage, emergency contact information, and develop a communication system.
- Call campus security prior to arriving and before leaving the work area.
- Establish a check-in procedure. Make sure regular contact is kept with all workers. (Personal check by another person, or periodic telephone contact)
- Position workers where possible in locations of highest visibility.
- Require the use of a "buddy system" in high-risk situations ensure that students are aware that this option is available to them.
- Where appropriate, consider the use a security system such as video surveillance cameras, mirrors, observation windows, etc.; however, ensure that informed consent is obtained from employees prior to use.
- Schedule high risk tasks during normal business hours, or when another worker is capable of helping if an emergency situation arises.

AFTER-HOURS PERMITS

A system of after-hours permits can help prevent untrained persons from gaining access to laboratories and other hazardous locations within buildings. However, after-hours permits will not contribute directly to assuring safety when working alone.

COMMUNICATION SYSTEMS

A communication system can provide effective radio, telephone, or other electronic communication between a student that works alone and persons capable of assisting the student in an emergency or if the student is injured or ill.

TRAINING

Students should be trained to increase awareness of methods for identification, hazard reduction and prevention when working alone and dealing with situations or individuals that present a potential risk.

APPENDIX A: POTENTIALLY HAZARDOUS CAMPUS ACTIVITIES

The following are examples of hazardous activities/operations/conditions on campus where working alone may present a risk of injury. Based on specific hazard assessments the campus may determine that such activities should be closely monitored, restricted or outright disallowed.

- Work involving flammable and combustibles
- Work with equipment under high pressure
- Work with cryogens or infectious agents
- Work with hazardous or toxic chemicals
- Work with heavy machinery or equipment
- Work with portable and stationary power tools
- Welding, hot work and similar operations
- Electrical work and high energy
- Working at heights
- Work with lasers and certain radioactive materials
- Work with infectious sharps or moving blades
- High temperature cooking equipment, ovens and kilns
- Field studies, including the use of watercraft, traps, nets, and live specimens, poisonous plants/animals, work with research animals
- Handling cash
- Work in remote or isolated areas
- Extreme weather conditions
- Laboratory functions

Campus departments where working alone under certain conditions may present risk of injury:

1. NATURAL AND PHYSICAL SCIENCES

Chemicals, flammables, combustibles, gases, pressure, broken glass, lasers, radioactive material, preservatives, pathogens, toxins, sharps, hand tools, live specimens, radiation sources, high energy, lasers, power tools, electrical hazards, high pressures, tripping hazards when working in the dark, acids, bases, heavy equipment/rocks, farm equipment, field work/research farms, extreme weather conditions, laboratory functions

2. VISUAL AND PERFORMING ARTS

Welding, spray painting, foundry, stationary and portable power tools, high temperatures, chemicals, flammables, gases, high pressure, compressed gases, dusts, silica, heavy metals, acids, heights, electrical hazards, handling cash

3. ARCHITECTURE

Portable and stationary power tools, heights, structural collapses, spray paints

4. ENGINEERING

Radiation sources, welding, portable and stationary power tools, high temperatures, electrical hazards

5. ATHLETIC FACILITIES

Gymnastics equipment, weight room, football obstacle course, dealing with public (violence), climbing walls, cooking, handling cash

6. PHYSICAL/HEATING PLANT, BUILDINGS & GROUNDS

High temperatures, high noise, hot work, electrical work, portable and stationary power tools, chemicals and solvents, heights, flammables, combustibles, gases, acids, high pressures, confined spaces, radiation sources, heavy machinery, high energy equipment, poisonous plants/animals, work in remote or isolated areas, extreme weather conditions

7. FOOD SERVICES

Deep fat fryers, high temperatures, pressure, unguarded equipment, (mixers, bakeries), dealing with the public (violence), handling cash

APPENDIX B: DETERMINING THE NECESSARY TYPE OF EMERGENCY AID

The availability, type and means of summoning emergency help depend on the nature of the hazard and the degree of exposure to the hazard. Examples of this philosophy are noted on the following table¹:

Examples	Nature of Hazard	Emergency Aid	Emergency Equipment
Example 1	When a person has a high degree of direct exposure to high explosives, high energy, toxins, cryogenics, high pressure, or toxic gases and the emergency aid cannot be in the same location as the worker.	This emergency aid should be at the nearest safe location and the person monitored continuously by remote control.	Closed circuit TV and/or intercom are satisfactory means of continuous monitoring. Wear appropriate PPE.
Example 2	When a person has a high degree of exposure to open handling of flammables/combustibles.	A second person must be available to provide immediate aid and summon additional emergency aid.	Fire extinguisher nearby. Telephone and emergency contact numbers available.
Example 3	When a person is exposed to moving machinery or blades with adequate emergency stops.	An alarm may be attached to the emergency stop to summon emergency aid.	Emergency stops. Telephone and emergency contact numbers available. Wear appropriate PPE.
Example 4	When the exposure is low and the nature of the hazard make an operation relatively safe (e.g. recording temperature on a fractionating column, or counting plates).	A check procedure by telephone at definite intervals may be adequate.	Telephone and emergency contact numbers available.
Example 5	When a person works at heights, around noisy machinery, or hot work.	A second person must be available to check on the individual and provide immediate aid and summon additional emergency aid.	Telephone and emergency contact numbers available. Wear appropriate PPE.
Example 6	Where a person handles cash or goods which may cause the situation to attract criminal victimization.	A second person must be available to provide immediate aid and summon additional emergency aid.	Place in highly visible areas, security systems, telephone and emergency contact numbers

¹ Examples on this table are not all inclusive and are meant strictly as a guide in formulating the most appropriate emergency aid procedures according to the nature of the hazards involved.

APPENDIX C: BASIC COMPONENTS OF A WORKING ALONE PROGRAM

- \square Identify persons that work alone
- Assess hazardous working conditions
- Assess requirements for emergency equipment and emergency aid
- ☑ Provide appropriate emergency equipment & means of communication
- ☑ Establish written procedures to ensure health and safety
- ☑ Establish responsibilities
- ☑ Provide training in normal work procedures & emergency procedures
- ☑ Review established procedures annually

APPENDIX D: SITUATIONS THAT MIGHT PUT STUDENTS WORKING ALONE AT RISK

Cash Handling

The primary risk to students who handle money and valuables is the potential of violence. Cash handling activities can be found in food service, theatre and athletics departments. The main motivating factor is robbery.

Preventative measures for handling cash safely include:

- 1. Cash Handling Policy A good cash control policy is considered an effective deterrent. Take steps to reduce the amount of cash on hand, through the use of devices such as drop boxes.
- 2. Good Visibility Place cash handling in areas of high visibility if possible.
- 3. Robbery Awareness Training Workers and employers can act to reduce their risk of robbery if they are trained.
- 4. Security Systems surveillance systems can be a good theft deterrent.
- 5. Protective Shielding Protective shielding can be a control measure in reducing the risk of violence.

Hazardous Work

Students who perform work alone, without routine interaction with other workers or the public may be unable to get immediate help. The primary prevention strategy is to control the hazards associated with the work. Some examples of hazardous work include hot work operations in art studios, work with heavy machinery and certain laboratory functions.

Preventative measures for hazardous work include:

- 1. Safe Work Procedures Have written safety procedures for hazardous work and enforce their use.
- 2. Equipment Safety Ensure that workers use equipment as intended and according the manufacturer's specification. All equipment used in a work area should be maintained in good working condition.
- 3. Equipment and Supplies Appropriate first aid and emergency supplies, including personal protective equipment, must be provided to workers who are working alone.
- 4. Communication Plan Establish a communication system to gain assistance in case of emergency. If students are working alone in remote or isolated areas, a sign-out procedure can be established to track their whereabouts. An "overdue worker" procedure should also be in place for locating workers who fail to report on time.

Traveling Alone

Some of the risk to workers who travel alone involves injuries from motor vehicle accidents. The risk is greater when workers in remote areas are unable to summon help. Those performing fieldwork alone, and those in transit are at risk.

Preventative measures for traveling alone include:

- 1. Safe Work Procedures Drivers should have full concentration on the road when traveling alone. Allow sufficient rest time when traveling on long trips.
- 2. Equipment and Supplies Keep vehicles well-maintained to prevent exposure to unnecessary risk. Appropriate first aid and emergency supplies should be provided; including a cell phone.
- 3. Travel Plan Establish procedures appropriate to the hazards to track the whereabouts of the worker. The travel plan submitted by the driver can be used to assess the rest time available to the individual traveling alone.
- 4. Inclement weather Cancel optional trips when inclement weather is predicted (e.g. winter storm conditions).

APPENDIX E: DEFINITIONS

- <u>Hazard</u> Means a situation, condition, or object that may be dangerous to the safety or health of the person working alone.
- <u>Work Area</u> Any location where UW business, academic projects or research is performed is considered a part of the work area; including traditional business, classroom, and physical plant environments, field locations, collaborative sites, or other off-site work locations.
- Working
AloneIs defined as the performance of any work by an individual who
is not directly supervised by another person, nor within audible
or visible range of another individual, and where assistance is
not immediately available in the event of an injury, illness or
emergency.
- <u>Remote or</u> <u>Isolated</u> The location is separated by distance or topographical features such that the worker's well-being cannot be determined at appropriate time intervals by the visual observation of another worker who is not in the same location. (A remote location does not have to be far away. Storage rooms that are rarely used can be considered secluded or isolated).
- <u>Work</u> Means physical or mental effort or activity directed toward the production or accomplishment of something...regardless of employment status.

REFERENCES

"Working Alone Safely, A Guide for Employers and Employees". Alberta Human Resources and Employment. September 2000.

Alberta's Occupational Health and Safety Code, "An Explanation of the 'Working Alone Requirements". Alberta Human Resources and Employment. March 2004.

"Working Alone Safely, A Guide for Employers and Employees". Government of Newfoundland and Labrador, Department of Government Services. April 2005.

"Working Alone Safely Policy". Athabasca University. September 2004.

"Working Alone Safely". Canadian Petroleum Products Institute. May 2001.

"Working Alone or in Isolation". University of Victoria. January 2005.

"Code of Practice for Working Alone". Manitoba Workplace Safety and Health Division. February 2003.

"Working Alone Protocol". University of Lethbridge. Date not provided.

"Employer Responsibilities For Workers Who Work Alone". Manitoba Workplace Safety and Health Division. April 2001.