

Working Alone Policy

As a practice, working alone with hazardous materials, equipment or otherwise working under conditions that may create the risk of serious injury (hereafter referred to as hazardous conditions) should be avoided.

Anyone at MIT (faculty, staff, students, and visitors) who works with (or intends to work with) potentially hazardous conditions (in any location, i.e. laboratories, shops, field work) that may result in immediate injury or serious harm must discuss this activity with their Principal Investigator (PI) or supervisor prior to conducting the work alone and determine that the risk of working alone is controllable under the specific conditions established by the PI or supervisor for the work. If the PI or supervisor determines that the risk cannot be minimized to a controllable level, then the individual should perform the work only when others are present or a suitable alarm device is available that will summon help immediately.

Furthermore, **undergraduates** shall not work alone with hazardous materials, equipment, or operations that can result in immediate injury or death without prior written approval from the immediate PI or supervisor. Written approval should only be granted after the risk assessment is performed and reviewed by the PI or supervisor with the individual.

This policy states the minimum requirements for working alone across the Institute and supersedes any less restrictive policy or procedure. Specific Working Alone policies from Institute Committees or individual DLCs or individual PIs or supervisors that are more restrictive shall take precedence.

Guiding Principles in Support of MIT's Working Alone Policy

Updated: 10/8/12

Scope

While it is recognized that nearly all activities in a laboratory could result in serious injury (e.g., cuts from broken glass or hitting one's head in a fall) the intent of this policy is to have the PI or supervisor and the individuals involved make a careful assessment of the activities involved that may create a potentially hazardous condition.

This policy would not apply to areas outside laboratories such as offices, conference rooms, tea rooms, break rooms, or classrooms, where hazardous materials, equipment, or operations would not be expected to be present. It is intended to mitigate those incidents or accidents where there is an immediate need for assistance from one or more individuals to provide help and/or call for assistance (e.g., emergency responders)

Working alone applies to anytime night or day. Working alone means when no one else is in direct line of sight or within sound of the person. Devices that can be worn to sound an immediate alert to a central, continuously manned location (e.g., Police, Facilities) can be substituted for people. The use of a cell phone as an emergency contact device may also be adequate in certain situations.

The adequacy of a "device" that can be worn by the individual will need to be addressed on a case-by-case basis with advice from the EHS Coordinator and the EHS Office. For information on cost and availability of acceptable devices submit a Physical Security Work Order to Security and Emergency Management Office (SEMO) at http://web.mit.edu/sapweb/PS1/facilities_home.shtml.

Hazardous Conditions Assessment

Hazardous conditions that can result in immediate injury or death must be defined by the PI or supervisor with assistance from the EHS Coordinator or the EHS Office on a case-by-case basis. This may include work with animals such as primates. Once this review is done it does not need to be repeated for subsequent similar activities. A system will be established and maintained by the EHS Office to compile individual conditions, which a PI or supervisor can refer to for guidance. The EHS Office will serve to provide consistency across the campus.

Some form of formal or informal risk assessment should have already been completed prior to initiation of the potentially hazardous work as required by a DLC's Chemical Hygiene Plan, Hazard Communication Plan, Laser Safety Plan, Job Safety Analysis, Standard Operating Procedure, or other relevant DLC plans, policies or procedures.

Undergraduate's guidance

For undergraduates, written approval is needed each time the hazardous material, equipment or operation and/or location change. The review need only be done and agreed to once for generic operations where the risks will not change provided the conditions agreed to are followed. The

approval is based on the PI's or supervisor's assessment that the undergraduate has adequate skills and responsibility to perform the work under the specified conditions.

An example form that can be used to document the decisions appears as Attachment #1.

Risk Assessments

Factors to consider when making the risk assessment are: toxicity, reactivity, corrosivity, explosivity of the material; quantity; control procedures (PPE, fume hoods, shields, etc.); availability of emergency equipment such as eye washes and emergency showers; potential energy of the equipment or material; complexity of machinery or equipment; difficulty of manipulations; training, experience and demonstrated good judgment of the individual; level of uncertainty about any of the above. All these lead to determining the level of control that is needed and can be maintained to reduce the risk.

Some examples of controls that can be used to eliminate or reduce risk to an acceptable level are:

- 1. Perform the activity in a fume hood or glove box or other enclosure*
- 2. Limiting the quantity of materials*
- 3. Wearing appropriate PPE*

Examples of materials or activities where working alone is discouraged:

- 1. Work with pyrophoric materials*
- 2. Work with highly reactive materials*
- 3. Work involving entry into a confined space*
- 4. Work around high voltage*
- 5. Certain machine shop activities*

Partial list of Current policies that are more strict and override the Institute policy:

- 1. Committee on Animal Care and DCM. <https://web.mit.edu/comp-med/restrict/cac/sptop04b.html>*
- 2. Radiation Protection Committee. No undergraduates can work alone in the gamma irradiation facilities. All other work with radioactive material is permitted following the institutes' Working Alone policy and approval of the Radiation Protection Committee. The RPC may impose working alone restrictions in the conditions of approval for radioactive materials use authorizations.*
- 3. Committee on the Assessment of Biohazards/ Embryonic Stem Cell Research Oversight: http://web.mit.edu/cab/CAB_policy_UROP_student_teacher_supervision.doc*
- 4. Plasma Science and Fusion Center (PFSC), see General Laboratory Safety Rules and Policies: <http://www.psfc.mit.edu/esh/notice.html>*
- 5. Lincoln Laboratory. Contact LL EHS Office for information about LL's policy, safety@ll.mit.edu or 781-981-2380*
- 6. Chemical Hygiene Plan (CHP): https://ehs.mit.edu/site/sites/default/files/files/chp_template.doc*

Attachment #1
EXAMPLE

Undergraduate Working Alone Permission Form

DEPARTMENT, LABORATORY OR CENTER: _____

THE UNDERGRADUATE STUDENTS LISTED BELOW HAVE PERMISSION TO WORK ALONE FOR THE FOLLOWING LABORATORIES/SPACES (indicate room numbers or specific location):

Name(s)		Location(s)	

AFTER A RISK ASSESSMENT HAS BEEN PERFORMED, UNDER THE FOLLOWING CONDITIONS (indicate specific activities or materials and any restrictions):

FOR THE FOLLOWING DATES (Could be specific days or an extended period, e.g. a semester):

SIGNATURES (Any change in the location, conditions or dates should be amended in this form and initialed or a new form should be issued.):

Principal Investigator: _____ Date: _____

Undergraduate Student(s): _____ Date: _____

_____ Date: _____

EHS Coordinator: _____ Date: _____

Other: _____ Date: _____

All signed forms must be returned to (location or person) for recordkeeping.

ADDENDUMS:

PI Initial: _____ Date: _____

Undergraduate Student(s) Initial: _____ Date: _____

_____ Date: _____

EHS Coordinator Initial: _____ Date: _____