

# **Environmental Health and Safety**

# ASU SUPERVISOR SAFETY MANUAL

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#### INTRODUCTION TO THE SUPERVISOR SAFETY MANUAL

The Arizona State University Supervisor Safety Manual was developed by ASU's Department of Environmental Health and Safety (EHS) as a training and reference tool for all ASU supervisors. The Arizona State University (ASU), Supervisor Safety Manual, is an abridged version of existing Occupational Health & Safety programs and ASU policies. Arizona State University's Department of Environmental Health and Safety (EHS) and Occupational Health & Safety (OH&S) have provided the compliance guidance materials and referenced polices found in each section of the manual.

The manual is divided into three sections:

- 1. Safety
- 2. Industrial Hygiene
- 3 Environmental

These sections contain essential health and safety information as well as answers to general compliance questions. Each section topic summarizes specific ASU EHS and OH&S program and policy requirements. Each section topic outlines the required information for supervisor responsibilities and provides quick references to applicable Federal, State and University policy. The manual appendix includes various sections topic forms and applicable documents used regularly by supervisors. Additional copies of these forms can be found within the interactive electronic copy of this manual, available through the Department of Environmental Health and Safety at ASU.

The intent of the Arizona State University Supervisor Safety Manual is to aid and assist supervisors with integrating existing ASU Environmental Health and Safety Programs and Policies into everyday work practices. Supervisors are responsible for implementing safety policies and procedures in the work areas they supervise. The manual provides information and references to specific requirements of existing ASU Environmental Health and Safety program in one document. Supervisors now have the ability to easily search for and read specific health & safety information and supervisor requirements. For further instruction or information regarding this manual please contact the Department of Environmental Health and Safety.

"The content of this Safety Manual is not all-inclusive and should not be construed as containing all necessary compliance and safety information. Guidelines within each section are intended to provide an abridged version of existing ASU EHS programs, policies and procedures that apply to employees. For direct assistance or questions regarding the manual please contact the Department of Environmental Health and Safety."





# Section one

Departments are expected to maintain a safe and healthy working environment for their faculty, staff, students and visitors to our campus. Departments are expected to assure that all employees are thoroughly familiar with their safety responsibilities and that safety practices are followed at all times. Departmental worksites should be inspected on a frequent basis to identify and correct hazards. Employees are expected to comply with all safety requirements and act proactively to prevent accidents and injuries by communicating hazards to supervisors or reporting concerns directly to ASU EHS offices.

#### What are your Supervisory responsibilities?

Supervisors are responsible for implementing safety policies and procedures in the work areas they supervise, including:

- Establishing clear expectations related to safety and setting an example. Ensuring the work areas they supervise are kept in a safe condition (i.e., free of obvious hazards such as housekeeping trip hazards).
- Ensuring employees are aware of any department safety rules and ensuring employees follow those rules.
- Ensuring employee concerns related to safety are addressed and contacting EHS if assistance is needed.
- Ensuring employees are provided any required personal protective equipment (PPE) and ensuring its proper usage.
- Ensure employees report accidents and injuries immediately.
- Ensure employees attend the required safety training courses.
- Consulting EHS for any unusual task or new use of hazardous materials.
- Including safety related requirements when completing employee performance evaluations.





#### Training and recordkeeping

ASU's EHS department provides training for the vast majority of ASU's safety training needs. All ASU employees are required to take Fire Safety & Prevention training which introduces each employee to emergency evacuation requirements, fire extinguisher use, and introduces them to other potential safety training needs through the EHS Training Determination Tool available at <a href="ehstrainingtool.asu.edu/">ehstrainingtool.asu.edu/</a>. Using this tool, you as a supervisor, or the employee can build a personal safety training curriculum based on job function or tasks performed. It is each supervisor's responsibility to ensure each employee meets their safety training requirements by the frequency identified in their safety curriculum.

**Training records** for ASU employees may be accessed any time from the EHS Training web page <u>cfo.asu.edu/ehs-training</u>. For questions about ASU's employee safety training requirements contact the Environmental Health and Safety Department at <u>ehstraining@asu.edu</u> or 480-965-1823.

**Availability of OSHA Standards -** OSHA has developed several employee health & safety regulations that require employers to provide copies of those regulations available to affected employees. Given that these regulations change periodically, ASU regularly communicates to its employees the locations of <a href="web links">web links</a> that provide up to date electronic copies of these regulations. Employees may print a paper copy directly from those links which go directly to the <a href="OSHA">OSHA</a> web site, or can contact EHS to obtain a copy if needed. Please use electronic copies were feasible.

Access to Medical Records and Chemical Exposure Records - Just as information is available to you related to potentially hazardous materials you may use, any medical or exposure monitoring that has been conducted on your behalf is also available to you. This includes any medical examination you participated in associated with your work and any industrial hygiene personal monitoring data. Industrial hygiene personal monitoring data is information related to chemical or physical agents you may have been potentially exposed to during the course of your work such as formaldehyde or noise. This information may be requested through your Supervisor and/or EHS.

These records are located at either the EHS Department, Campus Health Service or your department's human resources files. The individual responsible for ensuring access to these records is the EHS Industrial Hygienist. A copy of the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1020 standard is available at "Access to employee exposure and medical records" and describes your right to access these records.





For more information including questions on employee access to medical records or medical evaluations or training requirements, please contact the EHS Department by dialing 480-965-1823 or <a href="Email"><u>Email</u></a>.

# Workplace / safety

As a part of ASU's General Workplace Safety requirements it is important that potential safety hazards be recognized, controlled, or eliminated from the workplace whenever possible. Hazards may include, but are not limited to, biological, chemical, environmental, and physical and radiological hazards.

When hazards cannot be eliminated, they must be mitigated through special training, equipment lockout/tagout procedures, or other administrative control procedures including standard operating procedures (SOPs) for area specific actions, job safety analyses (JSAs), and personal protective equipment (PPE) requirements.

Supervisors are responsible for reviewing all job descriptions to determine if safety controls measures and PPE are required. Items such as eye and face foot protection, hearing protection, safety shoes and protective clothing will be provided by your department. Some safety controls and PPE, such as respirators, require medical training through EHS.

# Housekeeping

At ASU, we strive to keep the work area, specifically walking and working surfaces, clean and free from debris and trash which could cause slipping and tripping hazards. Every building provides exits sufficient to permit the prompt escape of occupants in case of a fire or other emergency. Keep exit doors and signs clear of obstructions and maintain the minimum required width of 44 inches in aisles and hallways intended for public access to exit doors. Maintain aisles at a minimum of 28 inches clear and free of potential obstructions. Exits are marked by visible signs and illuminating EXIT signs where required. The required exit access may be more than 44 inches depending on the occupant load and the configuration of the space.

Enclosed stairways provide safe passage to the outside in the event of an emergency. Keep stair doors closed to prevent the spread of fire and smoke and keep stairwells clear of storage. The exit system (corridors, passageways, stairways, and exit doors) must be free of any combustible or hazardous materials and must be maintained unobstructed.





#### **Electrical safety**

To ensure that electrical work in buildings is installed in accordance with the National Electric Code (NEC) and to protect the university and the university community, only journeyman electricians and licensed/bonded contractors are authorized to perform electrical work on campus buildings and equipment.

Any electrical equipment or outlets that are near a water source or exposed to outside weather conditions must be on a Ground Fault Circuit Interrupter (GFCI) system to prevent shock and comply with NEC.

All electrical equipment and appliances must be tested and approved for use by a nationally recognized testing laboratory, i.e., Underwriters Laboratory (UL), Factory Mutual (FM). It is the user's responsibility to ensure that all electrical equipment and appliances are approved by a nationally recognized testing laboratory, inspected prior to use for any damage, repaired or discarded if damaged, and that equipment and appliances are used as recommended by the manufacturer.

The university has general safety requirements for use of electrical equipment or devices in university buildings and prohibits the use of any electrical equipment or devices that are not in compliance university policies, building/fire code and the national electric code.

• Extension or flexible cord specifications (temporary use only): Minimum of 16 gauge with ground (three pronged male end)

The cord and both ends (male and female) must have strain relief; be intact with no damage or fraying or exposed wiring.

- Only use extension cords or electrical cords in the same room/area (prohibited for use through walls, doorways, ceilings, floors or running under carpets)
- Use of extension cords for permanent wiring (extension cords are for temporary use and must meet the specifications above; limit use to 90 days or less)
- Devices or extension cords that increase outlet capacity (only surge protectors with individual circuit breakers are authorized)





#### Portable and fixed ladders

Ladders come in all shapes, sizes and material types. They are useful in many different industries for a variety of applications. Unfortunately, they have also been involved in a number of accidents when not properly used. Ladder safety training is required for all employees required to use ladders as part of their job, and is available web based on the EHS website at <a href="mailto:assu.edu/go/blackboard/selfenroll/?cid=214749">assu.edu/go/blackboard/selfenroll/?cid=214749</a>.

The design for portable ladders must have no structural defects or accident hazards such as sharp edges, burrs.

- Always face the ladder when climbing or descending.
- Always place the ladder on secure footing and lock in place.
- Short ladders must not be spliced together to make long ladders.
- The top of a regular stepladder must not be used as a step.

#### **ASU** tools and equipment

- All equipment must be inspected to ensure its safe operating condition.
- All guards must be in place, and meet or exceed all applicable governmental regulations (OSHA, EPA, DOT, etc.). Secured to prevent machine movement.
- Machines must be located to give enough clearance between them so that the movement of one operator will not interfere with the work of another.

# **Buildings and grounds maintenance**

ASU policy <u>FAC 101: Campus Maintenance Responsibility</u> identifies that Facilities Management has been charged with the overall responsibility for campus building maintenance. Only Facilities Management is authorized to perform building maintenance, painting, remodeling, or construction work (up to \$50,000.00 in labor, no limit for materials), unless Facilities Management issues a building permit to the requester. Any work done by other university entities or by outside contractors is subject to inspection by Facilities Management to ensure that building code requirements are met and that university standards are maintained.





Requests for service should be submitted at <a href="cfo.asu.edu/requests-for-service">cfo.asu.edu/requests-for-service</a>. If related to addressing a hazardous condition, or to prevent potential accidents please mark it as safety related. Ensure any location where a hazard exists is clearly identified or the area closed to employees and the public until the issue is resolved. Please contact your EHS Compliance Officer, or EHS if you require assistance determining if a location should be closed until the service request is completed.

As a general rule, if a piece of equipment is not part of a building system for which Facilities Management has full operating control, then regardless of whether it was installed at the time of construction or added later, it is the responsibility of the department that controls the equipment to fund its repair, maintenance, or replacement. If extenuating circumstances exist, they should be discussed with the appropriate Facilities Management assistant or associate director.

# Safe driving

The ASU Authorized Driver training applies to all ASU facilities and operations, and all ASU employees and volunteers who operate university owned and non-university owned, leased, or rented vehicles used for university business.

EHS Policy EHS 119: Motor Fleet Safety was adopted to ensure insurance coverage is maintained on ASU owned and leased vehicles.

- Each department supervisor is to identify employees under his or her supervision
  who will operate a university owned and non-university owned, leased, or rented
  vehicle, or personal vehicle where mileage allowance is paid for university business
  purposes, and ensure that each identified employee has a valid State of Arizona
  driver's license of the appropriate class, submits a <u>Driver Authorization form</u>, and
  completes Authorized Driver training on-line within three months of assignment.
- Each department supervisor is to ensure that each employee notified about refresher training requirements completes this training within 30 days of notification.
- Each department supervisor is responsible for identifying employees under his or her supervision who will operate a university-owned or university leased/rented vehicles for university business purposes.





 Supervisors are responsible for ensuring that each identified employee has a valid State of Arizona driver's license of the appropriate class and attends Authorized Driver training prior to using a state vehicle.

# **Driver Training**

ADOA insurance coverage requires that each affected ASU employee completes the Authorized Driver training class within three months of initial hire date or appointment to a position requiring the operation of a vehicle. Authorized Driver Refresher training must be completed annually if Department of Motor Vehicle records indicate an affected employee has more than six (6) points but less than eight (8) on their driving record. EHS will notify affected employees that have completed the initial training of the need to complete the refresher requirements.

- Driver training can be completed through any Authorized Driver classroom training offered by EHS OR through completion of the Authorized Driver web based class on Blackboard. <u>Classroom classes</u> will be scheduled regularly and offered through Environmental Health and Safety or by completing the <u>EHS Training Determination Tool</u>
- In addition to completion of training an employee or volunteer driving a university owned, leased, or rented vehicle for official business, including ASU electric carts, must complete all of the following as part of the Authorized Driver Program:
  - Complete an Authorized Driver Process at the time of hire or at the time the employee needs to drive safely for university business
  - Have a valid United State Driver's License
  - Agree to an annual check of Motor Vehicle Records and complete Authorized
    Driver training annually if the driver's license has more than six points but less than
    eight.
- Completion of the Authorized Driver Process requires each department to identify the Driver position for each driver as either required or optional (please see the Authorized Driver Department Process file at <a href="mailto:asu.edu/hr/documents/auth-driver-dept-procedures.pdf">asu.edu/hr/documents/auth-driver-dept-procedures.pdf</a> and the Supervisor Responsibilities page <a href="mailto:cfo.asu.edu/16-a-supervisor-what-are-my-responsibilities-ensure-employees-who-report-me-and-drive-asu-have">cfo.asu.edu/16-a-supervisor-what-are-my-responsibilities-ensure-employees-who-report-me-and-drive-asu-have</a>.

The use of cell phones or other hand-held electronic devices for text messaging, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication is strictly prohibited, except as otherwise permitted in this policy. This does not include glancing at or listening to a navigational device that is secured in a designed holder affixed to the vehicle provided that the destination and route are programmed into the device before operating the vehicle.





Motor-powered vehicles and carts are only authorized to drive, operate, or park on a sidewalk, mall, or other pedestrian area on an ASU campus when an adjacent **street is not accessible or compatible**.

#### **Rules of Transit**

The following shall apply to those areas of the campus not under the jurisdiction of <u>Arizona Revised Statutes Title 28</u>, the state transportation code:

# Right of Way

- Each pedestrian or operator shall yield the right of way to all emergency personnel.
- Each operator shall yield the right of way to any pedestrian.
- Each operator of a non-pedestrian device shall yield the right of way to any other operator of a non-pedestrian device as necessary to ensure safe, courteous transit.
- Each operator of a vehicle shall yield the right of way to any operator of a non-pedestrian device.
- Each operator of a vehicle shall yield the right of way to any other operator of a vehicle as necessary to ensure safe, courteous transit.

#### **Transit Routes**

- A walkway may be used by pedestrians only. Examples include an atrium, patio, point of ingress/egress, stairwell, single step, or flight of stairs, the university overpass, and a disability accommodation ramp.
- A traveled way may be used by pedestrians and operators. Examples include a campus mall, sidewalk, parking lot, service drive, and loading bay, unless designated otherwise.

**Note:** While a parking structure is a traveled way, operation of a non-pedestrian device is prohibited in a parking structure, excluding enforcement personnel of the ASU PD Bicycle Patrol.

• A campus street may be used in a manner consistent with Arizona Revised Statutes title 28, the state transportation code.

#### **Direction of Travel**

An operator will bear to the right side of any traveled way as necessary to ensure safe, courteous transit.





#### Intersections

Unless otherwise indicated, an operator may proceed through an intersection of traveled ways, or of a traveled way and a walkway, at a speed not to exceed that of surrounding pedestrian traffic if and only if safe, courteous transit is ensured and all provisions of the Code are observed.

# **Speed Limits**

1. The <u>maximum</u> speed at which a non-pedestrian device or vehicle may be operated on a traveled way or campus street shall not exceed that which is reasonable and prudent for the conditions at the time or that which creates a hazard to any person or property. <u>In no case shall that speed exceed 5 miles per hour on any traveled way or 15 miles per hour on any campus street</u>.

NOTE: <u>5 mph is approximately twice the speed of an average pedestrian walking under fair conditions</u>.

2. Under conditions of heavy congestion on a traveled way such that progress cannot be made without sudden changes in direction, e.g., "weaving," the reasonable and prudent speed is here defined as that of the surrounding pedestrian traffic. If a nonpedestrian device or vehicle cannot be operated safely and courteously at that speed, operation shall be terminated. Operation may resume only when conditions permit safe, courteous operation within the applicable speed limit.

# **Required Training**

Completion of the Authorized Driver training course is required for employees who operate a state owned or other university-owned or non-university owned, leased, or rented vehicle for ASU business purposes. This includes motorized electric carts operating on campus malls, sidewalks, or campus property.

- Training must be completed within three (3) months of initial hire date or upon assignment requiring vehicle operation.
- The course can be completed via any EHS classroom course OR through the online Authorized Driver Blackboard course. Classroom classes will be scheduled regularly and offered through Environmental Health and Safety (<a href="https://cfo.asu.edu/ehs-training">https://cfo.asu.edu/ehs-training</a> or by completing the EHS Training Determination Tool (<a href="https://ehstrainingtool.asu.edu/">https://ehstrainingtool.asu.edu/</a>.
- Authorized Driver training must be completed annually if Department of Motor Vehicle records indicate an affected employee has six (6) points or less than eight (8) points on their driving record; when held responsible for unsafe driving; or when held responsible for a near-miss involving people/property.









# **Required Equipment**

University-owned vehicles or carts must be inspected by Fleet Service to ensure that the vehicle or cart is in safe condition and is equipped with the following safety and accountability devices:

- A flashing yellow 360-degree beacon light mounted securely on the top of the vehicle
- A beeper audible from the front of the vehicle or cart
- A an accurate speedometer, if originally equipped
- All other street equipment required by state law for safe operation on public roadways, including but not limited to brake lights;
- Lighting equipment, such as headlights, taillights, and turn signals, if originally equipped.

# **Exception**

Carts or vehicles designated for "day use only" in legible lettering on each side only need to have brake lights.

- A current Arizona license plate, properly displayed, and registration document carried securely on board (a photocopy of the original registration document is acceptable)
- Vehicle number, printed legibly on the back and sides of the vehicle, with letters not less than one inch high
- Current vehicle inspection decal issued by Fleet Service, in a position to be easily viewed by the driver, and
- Current ASU parking decal. <u>Non-ASU vehicles must obtain a Vehicle Inspection sticker from Parking & Transit Services.</u>

#### **Enforcement**

- The campus administration and finance officer authorizes ASU PD and PTS to
  enforce the code. The campus administrative services officer may authorize others
  to enforce the code, as needed. ASU PD, by virtue of its employment of state
  certified sworn peace officers, is also empowered to enforce all state laws, both on
  and off university property, the most notable of which for this context is <a href="Arizona Revised Statutes Title 28">Arizona Revised Statutes Title 28</a>, the state transportation code.
- An enforcement officer may issue a citation for any violation of the code. The
  enforcement officer may assign a level of severity to the violation that is
  commensurate with any aggravating circumstance present at the time of the
  violation. A citation may be issued for a violation of the code with or without proper
  operator identification.





- An enforcement officer may impound a non-pedestrian device or vehicle in conjunction with a citation for a violation of the code.
- An enforcement officer may instruct an operator to redirect, modify, or terminate operation of a non-pedestrian device or vehicle, whether or not a citation has been issued. Failure to comply with such instruction is a Level 3 violation of the Code and, at the discretion of the enforcement officer, may be addressed as violation of state law, i.e., <u>Arizona Revised Statutes 13-2911</u>, which relates to compliance with the rules of an educational institution.
- An enforcement officer may ask an operator to leave university property, whether
  or not a citation has been issued. Failure to comply with such a request is a
  violation of state law, i.e., <u>Arizona Revised Statutes 13-1502</u>, which relates to
  criminal trespassing. Operation of a non-pedestrian device or vehicle in order to
  comply directly with such a request is permitted if such operation is safe and
  courteous at all times, unless otherwise prohibited or an instruction to terminate
  operation has been issued.

#### **Hazard Communication**

The Hazard Communication (HAZCOM) Standard (or "Employee Right-To-Know" standard) applies to any ASU facility or department that uses hazardous chemicals. Hazardous Chemicals are defined by OSHA as any chemical which poses a physical hazard or a health hazard. This is determined by information in the Safety Data Sheet (SDS). At ASU, we address the requirements of these regulations through this written Hazard Communication Program and our written Laboratory Safety Program (i.e. Chemical Hygiene Plan). These written programs are available through ASU EHS. Any use of Hazardous Chemicals other than in a laboratory registered with EHS is covered by the HAZCOM program.

The main objective of the HAZCOM program is to minimize employee exposure to hazardous chemicals in the workplace. This program ensures employees are informed of the potential hazards in their workplace, and also the appropriate means to protect themselves. When chemicals are used by ASU employees in the performance of their duties, these activities shall be conducted in accordance with the provisions of the ASU HAZCOM.





# Applicable regulations:

➤ 29CFR1910.1200; Toxic and Hazardous Substances; Hazard Communication.

It is the responsibility of ASU to provide a safe workplace for its employees. The main objective of the Arizona State University (ASU) <u>Hazard Communication Program</u> is to minimize employee exposure to hazardous chemicals in the workplace. ASU's HAZCOM ensures employees are informed of the potential hazards in their workplace, and also the appropriate means to protect themselves. When chemicals are used by ASU employees in the performance of their duties, these activities shall be conducted in accordance with the provisions of the ASU HAZCOM. The written HAZCOM shall be readily available to all employees, employee representatives and appropriate regulatory agencies upon request.

#### THE HAZCOM STANDARD REQUIRES ASU TO:

Ensure hazard identification;

- Determine employee exposure to hazardous chemicals;
- Develop a written hazard communication Program;
- Inform employees of identified potential hazards;
- Provide training and information on safe work practices;
- Establish a file of the chemicals used;
- Acquire and distribute Safety Data Sheets (SDS) for each chemical used;
- Maintain a container labeling system; and
- Establish record keeping procedures.







# Hazardous Materials (Chemical) Inventories (EHS Registration)

A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet will be maintained by each individual work area (such as a shop or lab). A copy of the prepared chemical inventory shall be forwarded to Environmental Health and Safety at and updated at least annually along with registration information (similar to responsible party information collected for laboratories). EHS is required to maintain the Master Chemical Inventory for ASU and assist departments with hazardous materials management guidelines. Chemical inventory templates and registration documents are to be obtained from the Facilities Safety Program Manager or EHS.

Chemical inventories should be placed with the SDS's for each shop location. Information shall be accessible to all employees at all times. Chemical inventories are to be forwarded to EHS and updated at least annually.

Each ASU employee is responsible for knowing the following:

- Know the location and how to use the information provided in the SDS;
- Ensure proper labeling of hazardous chemical containers;
- Attend initial and any update or follow-up hazard communication training as required;
- Report potential hazards; accidents and near-misses to supervisor immediately;
   and
- Assist in implementing recommendations for improving safety.





# **Chemical Labeling**

All secondary container(s) shall use either the NFPA or the GHS label or manufacturers label of the appropriate size for the container. Supervisors will ensure that appropriate labels are available. If a manufacturer's label is unavailable, the appropriate information should be copied from the SDS to the blank NFPA label available at

(http://www.asu.edu/ehs/documents/lab-diamond-labels.doc). If it is not practical to label a container, the proper chemical hazard information may be placed on a sign near the container, which is clearly visible to employees.

Containers of hazardous chemicals at ASU must be received with a label that provides the appropriate identification and the hazards associated with the chemical. The label is to be supplied by the manufacturer, importer or distributor of the chemical. If the container arrives without a label, an HMIS label will be affixed to the container as outlined:

- Identity of chemicals (chemical or common name on the Safety Data Sheet);
- Name and address of the chemical manufacturer or distributor; and
- Appropriate hazard warning (designated by the chemical manufacturer or distributor).

Labels will not be removed unless the container is immediately re-labeled or the chemical in the container is emptied, cleaned and/or a new type of chemical is placed in the container, and the chemical container is re-labeled with the identity of the new chemical.

It should be noted that while the NFPA 704 Labeling system and the GHS labeling system are not the same. Laboratories registered with EHS is posted with an NFPA 704 label (referred to as an NFPA Diamond) as are chemical storage containers and chemical storage areas as required by local fire codes. When transferring information from the SDS make certain which rating is being provide, because many manufacturers may use the NFPA rating or both ratings.

#### **Non-Routine Tasks**

The methods used to inform employees of the hazards of non-routine tasks (such as the cleaning of reactor vessels, or one time equipment maintenance tasks) include the Confined Space Entry Program, Prior Approval under the ASU Chemical Hygiene Plan and Appendix D of this program "Job Hazard Analysis Form".

#### **Unlabeled Pipes**

Unlabeled pipes in any work area must be identified on engineering drawings and the hazards associated with chemicals contained in unlabeled pipes in their work areas will be identified through SDS available in that work area.





Supervisors are also responsible to ensure Vendors, Contractors and Visitors under their control understand that they are responsible for the following:

- Notifying their ASU contact of their activities and reviewing any information provided related to Hazardous Chemicals in use at ASU;
- Providing SDS and related hazard information to their ASU contact prior to utilizing any Hazard Chemical associated with their activities at ASU;
- Complying with all applicable EHS regulations and ASU Policies related to their activities related to their purchase order, contract or any other agreement with ASU:
- Informing each ASU department of any hazardous chemical(s) they may be using during the performance of their work.

# **Employee Training**

The workplace supervisor will ensure that employees are trained in the specific topics covered in the HAZCOM and provide further training relative to the specific hazardous chemicals employees will use in the performance of their duties.

# **Resources for Obtaining SDS**

SDSs can be obtained by contacting the vendor selling the product or the product manufacturer. Most SDS can be found by a simple web search such as goggle. If you have difficulty locating an SDS please contact EHS at <a href="Emailto:Emai







#### FIRST AID and CAMPUS HEALTH & SAFETY INFORMATION

# First Aid Kits [Non-mandatory]

In most cases ASU is not required to provide first aid kits under current health and safety regulations due to the proximity to <u>Campus Health Services</u> and other medical facilities near most ASU facilities. Your department is not required to have a first aid kit. However, If your department does want to provide a first aid kit, ensure that it is checked regularly (i.e., monthly) and that the contents include the following minimum quantities based on the following guidance.

The American National Standards Institute (ANSI) and International Safety Equipment Association (ISEA) American National Standard – Minimum Requirements for Workplace First Aid Kits and Supplies (ANSI/ISEA Z308.1-2015) has established minimum performance requirements for first aid kits and their supplies.

First aid kits are classified based on the assortment and quantity of first aid supplies intended to deal with most types of injuries and sudden illnesses that may be encountered in the workplace. These may include major and minor wounds; minor burns; sprains and strains; and eye injuries. As each work environment is unique, it is expected that the contents of each kit will be supplemented as needed based upon the recommendations of a person competent in first aid.

#### **Classification of First Aid Kits**

The latest ANSI/ISEA standard introduces two classes of first aid kits: Class A and Class B.

<u>Class A</u> kits are designed to deal with the most common types of workplace injuries.

<u>Class B</u> kits are designed with a broader range and quantity of supplies to deal with injuries in more complex or high-risk environments.

A table listing the minimum required components for both Class A and Class B kits is provided on page 2. The assortment and quantity of supplies included in the kits were chosen based upon reviews of workplace incidents requiring first aid treatment, similar international standards and current injury treatment practices. The quantity and size specifications given are the minimum necessary to comply with the 2015 standard.

**Type II Kits:** Intended for use in portable indoor applications where the potential for damage due to environmental factors and rough handling is minimal. These kits should be equipped with a carrying handle. Some applications for Type II first aid kits are general indoor use, or use in office or manufacturing environments.

Type III Kits: Intended for portable use in mobile indoor and/or outdoor settings where the





potential for damage due to environmental factors is not probable. Kits should have the means to be mounted and have a water resistant seal. Typical applications include general indoor use and sheltered outdoor use.

**Type IV Kits:** Intended for portable use in mobile industries and/or outdoor applications where the potential for damage due to environmental factors and rough handling is significant. Typical applications include the transportation industry, utility industry, construction industry and the armed forces.

ANSI Z308.1-2015, TABLE 1: CLASSES OF FIRST AID KITS & REQUIRED SUPPLIES				
First Aid Supply	Minimu	ım Quantity	Minimum	Size or Volume
	Class A Kits	Class B Kits	(U.S.)	(Metric)
Adhesive Bandage	16	50	1 x 3 in.	2.5 x 7.5cm
Adhesive Tape	1	2	2.5 yd. (total)	2.3m
Antibiotic Application	10	25	1/57 oz.	0.5g
Antiseptic	10	50	1/57 oz	0.5g
Breathing Barrier	1	1		
Burn Dressing (Gel Soaked)	1	2	4 x 4 in.	10 x 10cm
Burn Treatment	10	25	1/32 oz.	0.9g
Cold Pack	1	2	4 x 5 in.	10 x 12.5cm
Eye Covering (with Means of Attachment)	2	2	2.9 sq. in.	19 sq. cm
EvalChia Wash	1 fl. oz. total			29.6 mL
Eye/Skin Wash		4 fl. oz. total		118.3 mL
First Aid Guide	1	1	N/A	N/A
Hand Sanitizer	6	10	1/32 oz.	0.9 g
Medical Exam Gloves	2 pair	4 pair	N/A	N/A
Roller Bandage (2 inch)	1	2	2 in. x 4 yd.	5 cm x 3.66 m
Roller Bandage (4 inch)	0	1	4 in. x 4 yd.	10 cm x 3.66 m
Scissors	1	1	N/A	N/A
Splint	0	1	4.0 x 24 in.	10.2 x 61cm
Sterile Pad	2	4	3 x 3 in.	7.5 x 7.5 cm
Tourniquet	0	1	1 in. (width)	2.5 cm (width)
Trauma Pad	2	4	5 x 9 in.	12.7 x 22.9 cm
Triangular Bandage	1	2	40 x 40 x 56 in.	101 x 101 x 142 cm

Note: Non-prescription medications such as aspirin, anti-inflammatory and pain relievers are not to be included in first aid kits due to the potential for misuse. Where the potential for injury to the eyes, face, or body of any person may be exposed to hazardous materials, supervisors are responsible for informing employees of the location of first aid kits and eye wash/safety shower within the work area for immediate emergency use.

# **Campus Health Services**

If you are seeking campus medical treatment for non-emergency injury, Campus Health Services Building (HSB) is located at the campus locations listed below. Call: 480-965-3349 for any of these locations.





Downtown Phoenix	Tempe
Fax: 602-496-0675 Location: Nursing & Health Innovation Building Mailing Address: College of Nursing & Health Innovation Downtown Phoenix 500 N. 3rd Street, Suite 155 Phoenix, AZ 85004 Located on the first floor of the College of Nursing & Health Innovation Building.  Hours: Year Round: Monday - Friday, 8 a.m. – 5 p.m.	Fax: 480-965-6531 Location: Health Services Building Mailing Address: ASU Health Services Tempe PO Box 872104 Tempe, AZ 85287-2104  Medical Records Fax Number: 480- 965-6531  MMR Fax Number: 480-965-8914
Polytechnic	West
Polytechnic  Fax: 480-727-1599 Location: Adjoined to the Sun Devil Fitness Complex Mailing Address: ASU Health Services - Polytechnic 7332 E. Sun Devil Mall Mesa, AZ 85212	West  Fax: 602-543-8079 Location: University Center Building, Room 190 Mailing Address: ASU Health Services - West University Center Building, Room 190 4701 West Thunderbird Road Glendale, AZ 85306





\*Health Services maintains the schedule of Arizona State University, and is closed during university closures.

# Injury reporting and Treatment information

# **Reporting Accidents, Injuries and Illnesses**

Accidents or incidents are typically defined as an unintended happening or mishap. Most often an accident is any unplanned event that results in personal injury or in property damage. The failure of people, equipment, supplies, or surroundings to behave or react as expected causes most accidents.

ASU asks that all incidents resulting in an injury to an ASU employee, student, or visitor, or damage to ASU property in excess of \$500 be reported to EHS. Incidents may be reported electronically by using this form for <u>ASU employees' injuries and property damage</u> and this form for all incidents involving <u>non-ASU personnel</u>. Alternatively you may report the incident by telephone at 480-965-3783 or 480-965-1823.

If an ASU employee is injured or becomes ill from a work related incident, the Arizona Department of Administration requires reporting and additional forms to be completed in order to process Worker's Compensation Claims. These forms along with step by step instructions on how to complete the process are included in Appendix A of this manual.

Also, please be aware that ASU's Worker's Compensation Insurance Carrier, the Arizona Department of Administration (ADOA) has added a Nurse Triage Service (CORVEL) for use by any ASU employee who is unfortunate enough to be injured while on the job. Employees who are injured and have not yet received medical treatment should contact CORVEL at 800-685-2877.

Insurance related information is available on the <u>Insurance Services webpage</u> and additional insurance forms are available on the <u>Insurance Forms webpage</u>.

As a reminder, Supervisors or other management personnel completing incident investigation reports should determine an initial or apparent cause to the accident and ensure correct action is taken as appropriate to prevent others from being injured in the same manner. Listed below are steps involved in completing an accident investigation.

- Ensure medical treatment is provided if necessary. Call 911 if it is a medical emergency.
- If medical attention is not sought right away, or it's uncertain if medical treatment is needed, the employee should call CORVEL at 800-685-2877.





- Secure the scene if there is a serious accident and contact ASU EHS.
- Identify what occurred by interviewing the employee and/or any witnesses.
- Identify what happened (who, what, where, why).
- Identify an apparent cause of the accident.
- Complete the Supervisor's Incident Investigation Form (SIIR) and review it with the Facilities Development and Management Safety program Manager and Mishap Review Board.
- Submit the forms included in Appendix A to the FDM Human Resources Representative.

Please contact the EHS office by dialing, 480-965-6219 or <u>Email</u> if you require assistance in determining the cause of an incident.

# For Emergency Situations

Dial 9-1-1
Police • Fire • Medical

Emergency Procedures and Information: <a href="mailto:asu.edu/emergency">asu.edu/emergency</a>
Emergency Information Hotline: 480-727-9911

<a href="mailto:campus Safety">Campus Safety and Compliance Hotline</a>

A copy of the ASU Emergency Response Guide is included with this manual. Please review it, become familiar with instructions for each type of emergency and keep it in a convenient location for quick reference.

#### CONTACT INFORMATION

In the event of a serious or major accident please contact your local Emergency Response; Police, Fire and Ambulance by dialing 911.

For all campus emergency Response, contact ASU Police by dialing: **480-965-3456.** 



Environment, Health and Safety (EHS) EHS Primary Phone: 480-965-1823 Reporting Serious Injuries: 480-965-1823 or 480-727-9669

If you are a Facilities Management employee in need of immediate assistance call:

**480-965–3633** After hours: **480-965–3653** 





For web based emergency response alerts and information please visit the ASU Emergency Website: <a href="https://cfo.asu.edu/emergency">https://cfo.asu.edu/emergency</a>.





#### Remember:

Emergency call boxes on the Polytechnic, Tempe, and West campuses provide a direct and immediate communication with the ASU Police Department Communications Center.

Emergency call boxes are identified with a bright blue light above the phone. Call boxes are located in parking structures (multiple locations on each level) and high traffic areas throughout each campus.

# **ASU Alert & Advisory System**

ASU has in place an *emergency notification and advisory communication system* that delivers alerts to the ASU community with up to date information for emergency situations on all ASU campuses. The ASU Alert and Advisory System uses standard SMS text messaging, personal e-mail, Facebook, ASU Twitter Alerts\ and ASU RSS feeds to deliver the appropriate communications about both life-threatening and potentially hazardous situations.

ASU Alert & Advisory System can be found at the following address: <a href="mailto:cfo.asu.edu/alerts-and-advisories">cfo.asu.edu/alerts-and-advisories</a>

#### **HOW TO SIGN UP**

- Go to the ASU Alert & Advisory System Home Page listed above and click on the, "ASU Alert," hyperlink.
- Sign in using your ASUrite ID and password.
- Create a new user account.
- Input your cell phone number, cell phone carrier and Email address.
- Check the box for, "ASU Advisory," under optional groups.
- Check the box, "agree to terms of service," after reviewing.
- Create the account and validate phone numbers and Email to make your account it active.
- Follow the ASU Alert Twitter page and sign up for the RSS feed (optional).
- Do not forget to, "Log out".





#### **Emergency Response**

The following emergency response guide was prepared to aid supervisors in how to properly respond to potential emergencies, disasters, accidents, and injuries.

If you have questions concerning a unique situation not covered in this reference, or need additional emergency information, please contact:

- ASU Police at 480.965.3456 or
- ASU Environmental Health and Safety (EHS) at 480-965-1823.
- For online access see: <a href="https://cfo.asu.edu/emergency-guide">https://cfo.asu.edu/emergency-guide</a>

# What you can do now to prepare

- Keep emergency supplies in your office (medications, flashlights, comfortable shoes, bottled water, batteries, portable radio)
- Post an Emergency Response Guide in a visible location in your office. Ensure all staff are made aware of its location and ALL location information is filled out for emergency responders.
- Become familiar with all exit routes from your building and establish a muster area away from the building.
- Locate the nearest fire extinguisher and pull station and register for a fire safety and fire extinguisher training course.
- Register for Cardiopulmonary Resuscitation (CPR), Automated External Defibrillator (AED), First Aid, Crime Prevention, or other safety training courses.

If calling 911 from a Cell Phone identify your location as ASU and the campus.

# Using a Fire Extinguisher

Only use a fire extinguisher if the fire is very small and you have been trained to do it safely. If you can't put out the fire, leave immediately and make sure the building alarm is activated and emergency personnel notified.

Total and immediate evacuation is the safest.



#### FIRE SAFETY AND PREVENTION AT ASU

# Applicable regulations:

<u>International Fire Code (IFC 2003)</u>; National Fire Protection Association (NFPA 2007)

#### Introduction

The ASU Fire Prevention and Safety Plan objectives are, to provide one comprehensive fire prevention and safety document that provides references to safe practices, and ensure fire prevention measures are implemented in each university operation.

# Responsibilities

Managers and Supervisors - Managers and supervisors are responsible for ensuring all ASU and department fire and safety policies and evacuation plans are implemented, and all staff is aware and trained on the policies and evacuation plan. The policies and evacuation plan must be specific to their operation and comply with the Plan and all applicable codes.

EHS encourages all departments to have a fire and safety self-inspection program to ensure the facility is safe and that any safety hazards can be identified and mitigated appropriately. A copy of the fire and safety self-inspection form can be obtained from EHS.

# **Certificate of Occupancy**

No building or portion of a building will be used or occupied without being issued a Certificate of Occupancy by CPMG's Building Inspectors (for construction/renovation facilities) or Fire/Safety Inspection Report from the ASU Fire Marshal's Office or by EHS (for any instances other than construction/ renovation related).

#### **Permits**

Permits are required by Environmental Health and Safety for the following:

- Special Events
- Fireworks or Pyrotechnics
- Open flames or open burning
- Storage of chemicals over the UBC/UFC exempt amounts or if considered a controlled area
- Any condition, operation, or use of materials considered being hazardous, dangerous, or unsafe

# **Portable Fire Extinguishers**

Remember, you must receive Fire Safety and Prevention training in order to use fire extinguishers at ASU.



#### SLIP, TRIP AND FALL PREVENTION

Slip, trip and fall injuries continue to be a leading cause of injury to ASU employees. At ASU, fall injuries have occurred due to poor housekeeping, on stairways (most often when handrails aren't used) and on the malls. There can be many potential causes to slip, trip and fall injuries. Common tripping hazards include clutter in walkways, poor lighting, open drawers and uneven surfaces. To avoid slips, trips and falls, these three areas of focus can go a long way towards injury prevention:

#### 1. Housekeeping:

- Clean up spills as soon as they occur or mark spills with warning signs.
- Mop or sweep up debris from floors.
- o Remove obstacles from walkways.
- Secure mats and carpets with tape to ensure they remain flat.
- o Close cabinets or drawers when not in use.
- Report any lights not working.
- 2. **Flooring:** Report any floors or stairways that have become slippery such as those with rough surfaces that have become worn over time.
- 3. **Proper footwear:** In areas prone to oily or wet floors, or where we spend a lot of time outdoors, proper footwear is important to prevent slipping and tripping.

Please verify that stairs and steps within your work areas are kept clear and are maintained in good condition. It is recommended that you periodically remind employees that to reduce the risks of slips, trips and falls at work, please remember to:

- Pay attention when walking, don't rush.
- Use handrails on stairways. (Handrails are cleaned frequently and hands should be washed or a waterless sanitizer used frequently during cold and flu season, so there is no excuse not to use the handrail).
- Make wide turns at corners.
- Keep flooring in good condition.
- Ensure views are not obstructed.
- Report unsafe conditions such as the one below.

If you see stairs in need of repair, bollards missing or left in the down position on our campus malls, or other potential slip, trip and fall hazards, please report them right away to your supervisor or to your Facilities Development and Management Organization. Online requests can be made at <a href="https://cfo.asu.edu/fdm-requests-for-service">https://cfo.asu.edu/fdm-requests-for-service</a>.





You should also be aware of the following:

- Open sided floors or platforms 4 feet or more above adjacent surfaces must be appropriately guarded.
- Ladders and scaffolding must be designed, constructed and used as designed.
- Elevator doors must not open between floors.
- Wall openings must be appropriately guarded.
- All ASU employees accessing building roofs must complete either FDM annual OSHA training or Roof Access and Authorization Training available on the EHS training web site through Blackboard.

# **Contractor Safety/project management**

Contractors must comply with all local, state, and federal safety requirements and assure that all of their employees and sub-contractors performing work on ASU property have been suitably trained. Contractors must comply with the requirements under Arizona Department of Occupational Safety and Health (ADOSH) for General and Construction Industry Standards.

Any ASU employee who oversees contractors or vendors involved in construction, renovation, or demolition activities must ensure that each contractor or vendor has completed a Service Provider Acknowledgement Agreement (see Appendix C).

In addition, any supervisor overseeing contractors or vendors should be aware of the following information and notify the contractor to address any inconsistencies noted related to the following.

#### **EMPLOYEE WELLNESS**

As part of our **wellness to you** initiative, you can now host a wellness class for the employees in your department, college or building. Employee Wellness classes are typically offered over the lunch hour. Classes are scheduled throughout the academic year on a variety of health care topics. If there is a topic you would like to see offered, please contact EAO at 480-965-2271.

#### LABORATORY SAFETY

Laboratories at ASU contain hazardous materials and processes. The ASU laboratory safety program has the mission to minimize the risk of injury or illness to laboratory workers by ensuring employees and students are trained and equipped with the information and equipment to work safely in the laboratory. EHS provides support and guidance to faculty, staff, laboratory supervisors and managers, students, and other ASU community members. EHS assists with development and implementation of appropriate lab safety practices and procedures. At ASU, we address the lab safety requirements through the written Laboratory Safety Program (i.e. Chemical Hygiene Plan). This written program is available through ASU EHS. Lab safety related documents and information are available @ ASU Laboratory & Research website.





A laboratory is a facility or room where potentially hazardous chemicals, biological agents, or sources of energy (i.e. lasers, high voltage, radiation, etc.) are used and scientific experimentation, research, or education occurs. Each laboratory at ASU is required to complete a laboratory registration with EHS and renewed annually. The registration is posted at the entrance door of each lab and provides a list of hazards in the room and personnel contacts. Please notify lab occupants prior to entering and working in any laboratory. They will inform you of any special entry requirements. Information regarding laboratory safety is available @ ASU Laboratory & Research website or contacting EHS @ 480-965-1823.

#### SPECIAL EVENTS

Special events are defined as any event that is not of normal occurrence and involves the public. All special events on university property or involving university personnel must have an ASU event coordinator submit a request to EHS to review, approve, and provide recommendations to address any code issues, safety issues, and insurance issues.

In every submitted request, EHS requires the following information at least 30 calendar days prior to the event (see <u>permit request form</u>):

- A copy of the certificate of insurance identifying ASU, Arizona Board of Regents, and the State of Arizona as additionally insured (minimum coverage is determined by the Environmental Health and Safety Insurance Coordinator and any contracts that may be involved with the event)
- Type and purpose of the event
- Dates and times of the event
- Location of the event
- Number of people expected
- Type and size of any temporary structures (structures will require a certificate of fireproofing, see IFC for more details)
- Number of vehicles expected (a permit may be required to park vehicles on campus. Contact ASU Parking and Transit Services for more information)
- Name, title, and contact telephone numbers of the event coordinator/s (home, work, cellular telephone numbers and pager numbers)
- Special equipment to be used (i.e., cooking and lighting equipment, powered or motorized equipment, etc.)
- Special hazards (i.e., open flames, flammable and combustible liquids and gases, fireworks, pyrotechnics, etc. For minimum mortar separation distances see IFC)
- A layout plan of the event

All requests will be reviewed for safety and fire code compliance and the event coordinator will be contacted with an approval, rejection, or special condition approval with stipulations to meet the intent of applicable codes.





# **Section two**

# **Ergonomics**

#### **APPLICABLE REGULATIONS:**

#### ➤ 1970 OSHA Act; Section 5(a)(1), General Duties Clause.

The General Duty Clause, as it applies to ASU employees, describes the employer's obligation to furnish to each employee a place of work that is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees, (29 USC 654). This clause from the OSH Act is utilized to cite serious hazards where no specific OSHA standard exists to address the hazard, as is the case with ergonomic stressors.

# How can I get a workstation evaluation?

Evaluations can be conducted. However, office furniture and related evaluations are a specialized skill and are conducted for a fee by outside contractors. Please see the EHS Ergonomics website for more information.

# How do I access training resources available at ASU?

Environmental Health and Safety provides training classes specifically for office workers, and for targeted audiences with specific ergonomic risks. Contact EHS with any specific concern related to ergonomics including awkward body postures during routine tasks.

# Special Populations

Accommodations to workstations can be made to assist persons with special needs. These include but are not limited to the elderly, expectant women, small and big persons, and the disabled. For any questions regarding accommodations under the ADA, please contact your Human Resources Representative.

# Indoor air quality

# **Indoor Air Quality Management Program**

Indoor air quality, or IAQ, refers to the indoor working environment on campus. Where building ventilation systems are unable to keep indoor working areas within certain measurements these areas are sometimes referred to as having "poor indoor air quality".

In general, an area with "good" indoor air quality will have air temperatures below 80°F in the summer and above 65°F in the winter, relative humidity levels between 30% and 60%, carbon dioxide levels below 1000 ppm, carbon monoxide levels lower than 9 ppm, and no obvious drafts or offensive odors.





IAQ concerns frequently peak on campus in late spring and early autumn, as the heating and cooling systems are changing over for the new season. Air temperatures during these change-over periods are frequently uncomfortable and poorly regulated, especially in older facilities. Relative humidity levels can get very low in some buildings on campus during the heating season, leading to eye and throat irritation due to the dryness of the air. Fortunately, our facilities maintenance staff are very aware of what makes good IAQ and they work hard to keep things in good shape for building occupants.

For assistance with indoor air quality concerned please contact EHS at 480-965-7673.

The following are items to remember when overseeing construction projects:

#### Initial planning

When possible conduct work activities during evening time when buildings are not occupied.

Identify potential work-related airborne contaminants (i.e., dusts, fibers, odors, or hazardous volatile substances such as volatile organic compounds (VOCs), combustion products, and biological materials). These contaminants may be produced from disturbance of building materials or demolition (e.g., drywall, plaster, ceiling panels, flooring), from products used in the construction process (e.g., paints, adhesives, carpeting, cleaning agents), from equipment used in construction process (e.g., generators, compressors, welders, motor vehicles, heavy equipment), and when building systems are disrupted (e.g., natural gas, water, sewer, ventilation).

Identify how contaminants may spread through the building. Contaminants move from high pressure areas to low pressure areas via conduits, such as HVAC returns, HVAC system intakes, open doors, utility chases, wall penetrations, elevator shafts, etc.

Identify how building occupants may be affected by the spread of contaminants.

Identify available control options, such as containing the work area with sheets of polyethylene plastic, modifying HVAC operation, reducing emissions, intensifying housekeeping, rescheduling work hours, moving occupants, defining re-occupancy criteria, etc.

Design specific control measures into the project to keep dusts, odors and hazardous volatile substances out of occupied areas (consult SMACNA guidelines for details).

# Isolate major construction areas

Construction areas in occupied buildings must be isolated from adjacent non-construction areas using temporary walls, plastic sheeting, or other vapor retarding barriers.

Construction areas must be maintained at a negative air pressure to surrounding nonconstruction areas.





Recirculating air ducts must be temporarily capped and sealed (appropriate filters may be used if nuisance particulates are the only contaminant of concern).

# Protect the ventilation system from dust and moisture

Do not operate supply air systems without filters in place.

Building materials subject to degradation from ambient environmental exposure must be protected or replaced if damaged.

Duct-work and air handling equipment must be stored in a clean, dry location prior to installation and openings must be securely covered to prevent entry of dust, moisture, general construction debris/dirt and vermin.

Utilize the air handling units (AHUs) to "flush" the building to reduce off-gassing of interior furnishings and finishes at least 48 hours prior to occupancy. Fully open outside air intakes and fit AHUs with temporary filters during this period. Replace filters after system flushing.

# **Notify occupants**

Prior to the commencement of work, notify potentially affected building occupants (through the construction project manager and building monitor) with a brief description of the planned work, expected dates and times, and precautions taken to protect air quality. Advanced notice of construction or renovation should be given so employees may take necessary actions in anticipation of the work.

# **Ongoing management**

After work has begun, monitor and enforce plan specifications for keeping dusts, odors, and hazardous volatile substances out of occupied areas.

Provide periodic progressive updates to building occupants through the construction project manager and building monitor.





# **Personal Protective Equipment (PPE)**

# **Applicable regulations:**

• 29CFR1910.132; Personal Protective Equipment (PPE)
The Personal Protective Equipment (PPE) requirements at ASU were developed to protect the employee from hazards that exist in the work environment. Personal Protective Equipment combined with administrative and engineering controls are intended to prevent injury or impairment to the function of any part of the body through absorption, inhalation or physical contact.

The intent of ASU's Personal Protective Equipment requirements are to provide supervisors with guidelines for managing a safe work environment through the use of Personal Protective Equipment.

# Design

 All personal protective equipment shall be of safe design and construction for the work to be performed.

#### **Hazard Assessment**

- The supervisor shall assess the workplace to determine what workplace hazards are present using the Certificate of Hazard Assessment (CHA). The CHA will determine what personal protective equipment (PPE) is needed for the potential exposures identified.
- <u>PPE Hazard Analysis</u> forms may be downloaded from EHS <u>Forms and Required Permits</u> web page.

# **Equipment Selection**

- Select and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;
- Select PPE that properly fits each affected employee.

# Asu eye and head protection

- Supervisors are responsible for ensuring proper eye protection is used in all areas where there
  is the potential for eye injuries.
- Employees may voluntarily wear eye protection during any operation or activity. However, ASU is not required to provide prescription safety glasses. Employees may purchase prescription eye wear that meets ANSI Z87.1 Alternatively, ASU will provide safety glasses or goggles that will fit over prescription eye wear.





#### Hand protection

- Chemical resistant gloves will be worn when handling or managing chemicals.
- Gloves will also be worn while handling hazardous or toxic chemicals that can be absorbed through the skin.
- Latex or equivalent gloves will be worn by anyone administering first aid.

#### **Asbestos Management Program**

#### **APPLICABLE REGULATIONS:**

#### 29CFR1910.1001; Toxic and Hazardous Substances; Asbestos.

Many of ASU University's buildings constructed prior to 1985 contain asbestos, including floor tiles, mastics, HVAC duct tape, pipe insulation, roofing, spray-applied ceiling textures, ceiling tiles and drywall taping compounds; therefore asbestos management is a major concern. The current ASU asbestos policy is to manage asbestos containing materials in place.

Management in-place means that asbestos containing materials are disturbed or removed only when necessary. Typically this is prior to building renovations or demolitions, when the material could be disturbed or when the material becomes damaged.

Federal, state and county agencies regulate asbestos-related activities at ASU. Only state-approved asbestos contractors and consultants are utilized for asbestos-related work. ASU's <u>Asbestos Management Program</u> was developed jointly by Environmental Health and Safety (EHS) and the <u>Capital Programs Management Group</u> (CPMG).

The major components of the program are:

- Training- Training is required for Employees who may contact or disturb building materials suspected of containing asbestos and employees whose duties require entry to the ASU tunnel system. EHS offers a 2-Hour Asbestos Awareness Training class. For <u>class</u> <u>information</u> and <u>registration</u> logon using your ASUrite user name and password then search for Asbestos Awareness.
- Inspections of buildings or areas to be renovated- All asbestos containing materials (ACM) are identified prior to demolition, renovation or other activities that may cause disturbance to these materials. Building surveys that include material sampling and analysis are performed in accordance with <a href="EPA">EPA</a> and <a href="OSHA">OSHA</a> requirements.
- Hazard evaluations- Known asbestos containing materials are periodically inspected for any changes in condition. If materials are found to have become damaged, the materials are repaired or removed.
- Air monitoring- Periodic air monitoring is conducted in the ASU Utility Tunnel system and in buildings which are known to contain friable asbestos-containing materials (fireproofing,





sprayed-on ceilings, ceiling tiles, etc.). Air monitoring is also conducted for ASU personnel whose work duties require them to enter the tunnel system.

Asbestos abatement or repair- Asbestos abatement is the removal, repair, encapsulation, enclosure, or clean-up of asbestos containing material. Abatement is performed in academic and non-academic buildings and utility tunnel systems to assist departments with planned renovation or maintenance activity and to ensure compliance with federal, state and local regulations. Unplanned emergency abatement is performed to remove asbestos materials from mechanical equipment to allow critical repairs to be performed, or clean up an area contaminated by asbestos when a building system suddenly fails (e. g. roof leaks, steam system failures).

# Waste and recycling

Recycling efforts across ASU's campuses have two main goals: to increase recycling participation and to reduce contamination that can relegate an entire bin of recyclables to the landfill. With the size of the ASU community, proper recycling can have a major impact on reducing our solid waste. The ASU Community can recycle paper, plastic, aluminum and cardboard at each campus. Additionally, each campus has many other recycling opportunities. Please check to see what's available at your campus at <a href="mailto:sustainability.asu.edu/practice/what-asu-is-doing/waste-recycling/recycle.php">sustainability.asu.edu/practice/what-asu-is-doing/waste-recycling/recycle.php</a>.

When recycling materials that may be potentially hazardous, be sure to follow all the instructions provided to ensure that recycled materials don't become contaminated or improperly mixed making sorting cost prohibitive. Examples of materials that may not go into typical recycling containers include alkaline batteries, light bulbs and broken laboratory glassware. The information below explains EHS involvement in recycling and preventing potential regulatory issue and poor recycling practices.

EHS collects and recycles many types of batteries as a service to the ASU Community to help protect the environment and ensure reuse of valuable resources whenever possible. Recycling of used alkaline, lithium and nickel cadmium batteries prevents potential pollution of soil and water and provides an opportunity to reuse many of batteries minerals.

If you collect these types of items within your department, you may request that EHS come by to pick them up. To make an on-line waste pick-up request for used batteries, go to: <a href="mailto:cfo.asu.edu/ehs-environmentalaffairs">cfo.asu.edu/ehs-environmentalaffairs</a> or call EHS at 480-965-1823.

#### **Green offices**

The Green Office program has two different approaches available, self-guided and facilitated. A Global Institute of Sustainability (GIOS) representative leads an employee group in the facilitated option. The self-guided alternative enables a designated departmental staff member to guide his or her officemates through the process. sustainability.asu.edu/about/resources/green-office/index.php" title="Green Office">Green Office presentations and checklists are easily downloadable.

Each of the three levels includes 10 sustainability focus areas that contain between one and five items for colleagues to implement into their workspaces. Following each of the three program levels, all of the participating coworkers sign a completed checklist. University Sustainability Practices





awards Green Office certifications to the departments that submit the signed checklists.





# **APPENDIX A**

#### Safety meeting topics

ASU's EHS department publishes monthly safety topics that provide a relatively brief overview of specific topics that are of current interest to ASU employees. A few examples are below. To sign up to receive these topics please contact us at EHS@asu.edu.

- Heat stress.
- Knife safety.
- Safe driving.
- Tobacco free campus.





# **Heat stress prevention**

- **Slow down.** Reduce, eliminate or reschedule strenuous activities until the coolest time of the day. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors.
- Dress for summer. Wear lightweight, light-colored clothing to reflect heat and sunlight. Be
  aware that protective clothing or personal protective equipment may increase the risk of heat
  stress.
- **Put less fuel on your inner fires.** Foods, like meat and other proteins that increase metabolic heat production also increase water loss.
- **Drink plenty of water.** Your body needs water to keep cool. Drink enough water that you never become thirsty. Approximately 1 cup every 15-20 minutes. Persons who have epilepsy or heart, kidney or liver disease, are on fluid restrictive diets or have a problem with fluid retention should consult a physician before increasing their consumption of fluids.
- Avoid alcohol, and drinks with large amounts of caffeine or sugar. By eating a healthy, balanced meal after strenuous work, you can work to ensure you're not consuming excess sugar through sports drinks and can instead properly hydrate with a cool glass of water.
- Take more breaks in extreme heat and humidity. Take breaks in the shade or a cool area when possible. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, go to a library, store or other location with air conditioning for part of the day.
- Don't get too much sun. Sunburn reduces your body's ability to dissipate heat.
- Do not take salt tablets unless specified by a physician.

EHS has developed heat stress prevention training that is web based and is available at <a href="http://www.asu.edu/go/blackboard/selfenroll/?cid=207384">http://www.asu.edu/go/blackboard/selfenroll/?cid=207384</a>.

The Center for Disease Control has prepared a very good guide for prevention of heat stress both on and off the job that is available at

http://www.bt.cdc.gov/disasters/extremeheat/heat\_guide.asp . We recommend you review and discuss with friends and family

# **Tobacco Free Campus**

As of August 1, 2013 all ASU campuses have been tobacco-free. Use of tobacco products with exception of designated areas in leased university housing and private vehicles is strictly prohibited. For more information please see <a href="ACD 804: Tobacco-free Campus.">ACD 804: Tobacco-free Campus.</a>. Contact the Student Rights Coordination Office at (480) 965-1654 if you observe a violation of this policy by a student or guest on an ASU Campus.

There is a student enforcement group that can assist with students and guests. ASU employees observed violating this policy are to be reported to their immediate supervisor.





# Safe Driving

Driving while distracted has become an increasing factor in vehicular accidents, both on and off campus. Unfortunately, in 2011 more than 6,000 deaths were attributed to distracted driver in the U.S. The problem is becoming so severe that insurers, granting agencies and local governments are taking steps to penalize those involved in an accident due to distracted driving. ASU's fleet safety policy has now been updated to address distracted driving,.

Recently, EHS Policy EHS 119: Motor Fleet Safety (<u>asu.edu/aad/manuals/ehs/ehs119.html</u>) was updated to prohibit use of hand held electronic devices while operating an ASU vehicle or electric cart.

The use of cell phones or other hand-held electronic devices for text messaging, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication is strictly prohibited, except as otherwise permitted in this policy. This does not include glancing at or listening to a navigational device that is secured in a designed holder affixed to the vehicle provided that the destination and route are programmed into the device before operating the vehicle.

Each department supervisor is responsible for ensuring employees understand and comply with this policy update. Use of a cell phone or similar is now permitted only in case of an emergency or in a hands-free mode under the policy update.

Supervisors are still required to identifying employees under his or her supervision who will operate a university-owned or university leased/rented vehicles for university business purposes and ensures that each identified employee has a valid U.S driver's license of the appropriate class, attends *Authorized Driver* training prior to using a state vehicle or rental car, or prior to operating an electric cart on campus.

ADOA insurance coverage requires that each affected ASU employee completes the Authorized Driver training class within three months of initial hire date or appointment to a position requiring the operation of a vehicle. Authorized Driver training must be completed annually if Department of Motor Vehicle records indicate an affected employee has six (6) points or more on their driving record. EHS will notify affected employees that have completed the initial training of the need to complete the refresher requirements.

Each employee operating a university-owned and university leased/rented vehicle for university business is responsible for the following:

- 1. having a valid State of Arizona driver's license of the appropriate class;
- 2. using seat belts in all vehicles that provide them;
- 3. completing training requirements:
- 4. refraining from using hand-held electronic devices while operating an ASU vehicle, rental car or electric cart;





- 5. conducting pre-trip inspections as identified in Authorized Driver training; and
- 6. reporting any change in the status of his or her U.S. driver's license to his/her supervisor..

Accident Reporting - A written report must be made on all motor vehicle accidents, despite the amount of damage, within 24 hours of the time of the accident, using the forms supplied by the investigating officer at the scene of the accident or by Fleet Service. Employees driving a state vehicle that are involved in a collision with another vehicle will exchange driver and insurance information to include but not limited to: name of driver and occupants, telephone number for driver, insurance provider information to include the policy number and expiration date, and all name(s) and contact information for any witnesses. Take photographs of the scene and vehicle damage and submit with the incident report. It is the responsibility of the operator to obtain two (2) estimates for repair as soon as practical and immediately deliver them to Fleet Services for insurance processing. If the vehicle cannot be driven it must be towed to Surplus Property or other location designated by the department. A driver involved in a traffic accident on university property must report the traffic accident to the ASU Police Department as soon as possible or no later than 24 hours after the accident per PDP 203-05 asu.edu/aad/manuals/pdp/pdp203-05.html

Traffic Citations - University officers, employees, students, and volunteers are personally responsible for the prompt payment of fines for any traffic citations received while driving a university vehicle. Under no circumstances shall citations be paid with state funds.

Maximum Speed - No vehicle shall be driven at a speed more than the posted speed limit or faster than road conditions permit, according to *Arizona Revised Statutes* § 28–701. No vehicle operator shall violate any local or state law, or university regulations.





#### **Proof of Insurance and Roadside**

Assistance Proof of insurance or "evidence of financial responsibility" is satisfied by display of the designation "State of Arizona, Arizona State University, For Official Use Only" on the vehicle. A State of Arizona insurance card is maintained in each vehicle. You should also maintain key contact information in your vehicle or on your person, in the event you need roadside assistance

Remember, when you operate a vehicle you are responsible for your safety and the safety of the vehicles occupants and pedestrians who may be in your path. Take this responsibility seriously. Please drive safely and responsibly.

# **Knife Safety**

Utility knives and box cutters are common in today's workplace. Utility knives are used in a variety of applications such as shipping, receiving, grocery store stocking, restaurant work, meat packing, construction, manufacturing, and more. In fact, all places where boxes, cartons, bags, shrink wrap and other materials must be cut or opened, you will find utility knives and cutters. With box cutters and utility knives being so common and easy to use, some people make the mistake of thinking that they are completely safe to use. Even using a so-called "safety knife" has some risk if the safety knife is used incorrectly. Therefore it is very important to follow safe knife handling procedures at all times.

Occupational hand injuries in the workplace are all too common. It is estimated that more than \$3,000 worth of health care, worker's compensation and loss in productivity can be attributed to just one cut or laceration to the hand. In fact, the Occupational Safety and Health Administration (OSHA) estimates that more than \$300 million is spent for hand lacerations each year.

# Provided below are some additional knife safety tips to consider:

- Point the blade away from yourself when cutting. Make sure no body parts are in the cutting path. Also, be certain that other people are at a safe distance before cutting.
- When not in use, see that you store your knife or cutter in a safe location. Make sure the blade is safely stored away.
- For larger jobs consider wearing Personal Protective Equipment (PPE) made of a cut resistant fabric.
- Knives with retractable blades must have the blade retracted immediately after use. Selfretracting safety knives do this automatically, thereby protecting you and others without extra effort.
- Utility knives, box cutters or any safety knives or cutters must be discarded or repaired if not
  working properly. The safety features of knives and cutters must not be circumvented or
  removed. Knives with damaged safety mechanisms should be discarded.
- Utility knives work best when they're sharp. They are easier to operate and safer to use when sharp. <u>Dull knives are dangerous knives!</u>
- Dispose of dull or rusty blades in a blade disposal container. <u>Never</u> discard loose blades in the
  garbage or leave them where they can injure an unsuspecting person.





- Use knives and cutters for their intended purpose. Using your knife in a way in which they were
  not designed or on the wrong materials can damage the blade and cause injury to yourself or
  others.
- If a knife is falling, even a safety knife, you risk injury by trying to stop it with your hand or foot. Let the knife fall to the ground rather than trying to grab it as it falls.
- Do not toss a knife to someone. It is also recommended that you do not hand a knife directly to someone. Set down the knife and let the other person pick it up.

Choose the right tool for the job. There are many different types for your kind of job!

If you have questions about this safety topic please contact EHS at (480) 965-1823 or EHS@asu.edu.





# **APPENDIX B**

#### WORKER'S INJURY and COMPENSATION FORMS

- Employer's Report of Industrial Injury form No. ICA 04-0101(Rev. 11/07).
- Health Care Provider Release to Return to Work/Certificate of Illness.
- Industrial Compensation Authorization.
- Supervisor's Incident Investigation Report.

**Note:** All required forms may be accessed from the HR Forms website at asu.edu/hr/forms/wcformspacket.pdf.

