

Environmental Health and Safety Manual (EHS)

EHS 004: Definitions

Effective: 9/1/1998

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The terms used in this manual are defined as follows:

Academic Unit

For the purposes of [EHS 116](#), “Minors in Laboratories,” any department, school, or college where the program will take place.

Access Control

For the purposes of [EHS 121](#), “Utility Tunnel Access and Control of Hazardous Conditions,” the practice of restricting entrance to the tunnel system, including any room that has access points leading to the tunnel system, to authorized personnel. Physical access control includes human monitoring (by a guard or other attendant), through mechanical means such as locks and keys, or through technological means such as access control systems.

Air Purifying Respirator

Personal protective equipment that purifies air by passing it through a medium such as a cartridge. This includes half-face, full-face, and powered air purifying respirators.

Asbestos

A generic term used to describe a number of naturally occurring, fibrous silicate minerals that have been heavily used in commercial and industrial applications. Asbestos exposure has been associated with the development of a variety of diseases, including cancer.

ASU Community

ASU and ASU-related employees, graduate students, undergraduate students, postdoctoral researchers, visiting researchers, volunteers, and service providers

Authorized Driver

An ASU employee or volunteer who is required in the course and scope of employment or volunteer activity to drive an ASU vehicle for official business purposes, and meets the following requirements:

1. has a valid driver's license
2. has completed and is current with required training
3. has a driving record in good standing (less than 6 points)

and

4. has submitted a Driver's Authorization Form to Human Resources.

Automated External Defibrillator (AED)

A device that analyzes the heart's rhythm for an abnormality and, if necessary, directs the rescuer through voice prompts to deliver an electrical shock to the victim. The shock, called defibrillation, may help the heart reestablish an effective rhythm on its own.

Bloodborne Pathogens

Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, the hepatitis B virus (HBV) and the human immunodeficiency virus (HIV).

Cardiac Arrest

Cardiac arrest involves an abnormal heart rhythm. The heart's electrical impulses suddenly become chaotic, causing the heart to cease pumping blood effectively. Unless a normal heart rhythm is restored, death will follow within a matter of minutes.

Common Areas

Areas that are used by or accessible to all occupants in multifamily housing structures.

Conductor

For the purposes of [EHS 118](#), "Electrical Safe Work Practices," the following types of conductors are defined:

- Bare: a conductor having no covering or electrical insulation whatsoever
- Covered: a conductor encased within material of composition or thickness that is not recognized as electrical insulation
- Insulated: a conductor encased within material of composition and thickness that is recognized as electrical insulation.

Confined Space

A space that:

1. is large enough and so configured that an employee can bodily enter and perform assigned work
2. has limited or restricted means for entry or exit

and

3. is not designed for continuous human occupancy.

Examples include, but are not limited to, tanks, vessels, silos, storage bins, hoppers, vaults, sewers, pits, excavations, tunnels, and trenches.

Exit/Exit System

All contiguous areas that can be occupied between the occupied space and the building exit.

Exposed (as applied to live parts)

For the purposes of [EHS 118](#), "Electrical Safe Work Practices," capable of being inadvertently touched or approached nearer than a safe distance by a person. This term is applied to parts not suitably guarded, isolated, or insulated.

Eye and Face Protection

Eye and face protection includes, but is not limited to: safety glasses with side shields, splash and impact goggles, full face shields, and welding glasses/shields.

Foot and Leg Protection

Footguards, safety shoes or boots, and leggings that protect the feet and legs from falling, rolling, or sharp objects, molten metal, and hot, wet, and/or slippery surfaces.

Gas(es)

For the purposes of [EHS 122](#), "Compressed Gases," the following definitions apply:

Flammable Gas: A gas that, at ambient temperatures and pressures, forms a flammable mixture with air at a concentration of less than thirteen (13) percent by volume; or forms a range of flammable mixtures with air wider than twelve (12) percent by volume.

Toxic Gas: A gas that is a gas at room temperature; and has a medium lethal dose (LD(50)) of more than 50 mg, but less than 500 mg/kg of body weight when administered orally to albino rats weighing between 200 and 300 grams each; has a LD(50) of more than 200 mg/kg, but less than 1,000 mg/kg of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each; or has a medium lethal concentration (LC(50)) in air of more than 200 PPM, but less than 2,000 PPM by volume or less when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

Highly Toxic Gas: A gas that is a gas at room temperature; and has a medium lethal dose (LD(50)) of 50 mg or less per kg of body weight when administered orally to albino rats weighing between 200 and 300 grams each; has a LD(50) of 200 mg/kg of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each; or has a medium lethal concentration (LC(50)) in air of 200 PPM by volume or less when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

Hand and Arm Protection

Devices that protect the arms and hands from burns, cuts, electric shock, amputation, and absorption of chemical substances and include a wide variety of gloves, hand pads, sleeves, and wristlets. Devices should fit specific tasks.

Hazardous Airborne Contaminants

Toxic dusts, fogs, mists, gases, fumes, and smoke.

Hazardous Chemical

For the purposes of [EHS 104](#), "Laboratory Use of Hazardous Materials," a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic systems, and agents that damage the lungs, skin, eyes, or mucous membranes. Appendices A and B of the *Hazard Communication Standard* (29 CFR 1910.1200) provide further guidance in defining the scope of health hazards and determining whether or not a chemical is to be considered hazardous for purposes of this policy.

Hazardous Equipment

Devices or implements used in an operation or activity that may cause severe injury or death if improperly used (e.g., machine shop equipment such as lathes, saws, routers, presses, and X-ray equipment, or Class IIIB or IV Lasers without approved enclosures)

Hazardous Materials

Chemicals or radionuclides (as usable or waste products) that have a high degree of acute toxicity or physical danger (as listed in the *ASU Chemical Hygiene Plan*), or CDC/USDA Select Agents, and biological agents classified as Risk Group 3 or higher. Most notable here are reagents that could lead to a sudden incapacitation of the user such that he or she would be impaired in the ability to seek help. These include flammables, pyrophoretics, highly reactive compounds, and highly corrosive materials.

Hazardous Materials or Processes

A material, action, or operation that may pose a serious physical (e.g., synthesis of explosive or unstable materials), electrical (e.g., operations as defined in [EHS 117](#), "Lockout/Tagout," and [EHS 118](#), "Electrical Safe Work Practices"), or mechanical (e.g., modification to autoclaves, boilers, lifting equipment) risk to the health and safety of personnel.

Head Protection

Protective hats or helmets that protect the head against impact blows from flying objects. In some cases, hats should also protect against electric shock.

Hearing Conservation

Measures taken to reduce the risk of noise-induced hearing loss.

Hearing Protection

A device inserted in or placed over the ear in order to weaken air-conducted sound, e.g., foam ear plugs and/or ear muffs.

High-Occupancy Vehicles

Those vehicles capable of transporting more than eight occupants, including the operator, and approved for official use by ASU.

Incident

For the purposes of [EHS 115](#), "Incident Reporting and Investigation," an incident is defined as occurrence or event that interrupts normal procedures or precipitates a crisis resulting in any of the following:

1. injury or illness to ASU employees, students, and visitors
 2. events that were likely to cause potential injury or illness to an ASU employee, student, or visitor (near miss)
- and
3. damage to ASU property in excess of \$500.

Insurance Coverage

The Arizona Department of Administration, Risk Management Section (RMS), maintains property (physical damage) and liability insurance coverage for vehicles in accordance with state law and regulations. The property and liability coverage for vehicles is provided on a primary basis. RMS provides liability only coverage on an excess basis for privately owned vehicles utilized for official business with the university; coverage for physical damage to privately owned vehicles is not provided. RMS does not provide medical payment coverage for occupants of any vehicle used for university business

Laboratory

For the purposes of [EHS 104](#), "Laboratory Use of Hazardous Materials," and [EHS 116](#), "Minors in Laboratories," a facility or room where the use of potentially hazardous chemicals, biological agents, or sources of energy (i.e., lasers, high voltage, radiation, etc.) is used for scientific experimentation, research, or education.

Non-ASU-Owned High-Occupancy Vehicles

High-occupancy vehicles that are leased, rented, or privately owned, and used for university business.

Non-permit Confined Space

A confined space that does not contain or does not have the potential to contain any uncontrolled hazards that can cause death or physical harm.

Nuisance Dust

Dust with a long history of little adverse effect on the lungs; does not produce significant disease or toxic effect when exposures are kept at reasonable levels.

Occupational Exposure to Potentially Infectious Materials

Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Official Business

Vehicles shall be used for official university business only, according to Arizona Revised Statutes §38-538.02 and Arizona Administrative Code R2-10-107.

Vehicles shall not be used for the following purposes:

1. business other than official university business
2. domicile-to-duty transportation
3. personal convenience

or

4. the transportation of any other person not essential to the accomplishment of the purpose for which the vehicle is dispatched.

Organized Educational Program

For the purposes of [EHS 116](#), "Minors in Laboratories," any regularly scheduled curriculum applied toward a degree from ASU.

Other Potentially Infectious Materials

Semen; vaginal secretions; cerebrospinal fluid; synovial fluid; pleural fluid; pericardial fluid; peritoneal fluid; amniotic fluid; saliva in dental procedures; any body fluid that is visibly contaminated with blood; any unfixed tissue or organ (other than intact skin) from a human (living or dead); human immunodeficiency virus (HIV)-containing cell or tissue cultures, organ cultures, and HIV or hepatitis B virus (HBV)-containing culture medium or other solutions; blood, organs, or other tissues from experimental animals infected with HIV, HBV, or other potentially infectious agents in the materials cited above.

Permissible Exposure Limit

An occupational exposure limit to specific chemicals and hazardous dusts that is published and enforced by the U.S. Occupational Safety and Health Administration as a legal standard.

Permit-Required Confined Space

A confined space that has one or more of the following characteristics:

1. contains or has the potential to contain a hazardous atmosphere
2. contains a material that has the potential for engulfing an entrant
3. has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section

or

4. contains any other recognized serious safety or health hazard.

Potentially Hazardous Sources of Energy

For the purposes of [EHS 121](#), "Utility Tunnel Access and Control of Hazardous Conditions," exposed electrical parts (as applied to live electrical parts) capable of being inadvertently touched or approached nearer than a safe distance by a person; pressurized chemical or steam systems; and sources of kinetic energy such as water or chemical storage tanks.

Powered Industrial Trucks

Mobile power-propelled trucks used to carry, push, pull, lift, stack, or tier material. Vehicles that are used for earth moving and over-the-road hauling are excluded.

Principal Investigator (PI)

For the purposes of [EHS 104](#), "Laboratory Use of Hazardous Materials," and [EHS 123](#), "Working Alone with Hazardous Materials, Processes, or Equipment," a principal investigator (PI) is any person who is either responsible

for the design, conduct, or reporting of research, and/or responsible for the development and conduct of academic programs that may involve the use of hazardous materials.

Qualified person

For the purposes of [EHS 121](#), "Utility Tunnel Access and Control of Hazardous Conditions," one who is familiar with the construction and operation of the equipment and the hazards involved.

Relocation

For the purposes of [EHS 405](#), "Laboratory Start-up/close our and Equipment Relocation," relocation is the process of taking existing laboratory equipment and moving to a new location within ASU, transferring to a non-ASU entity or transferring to salvage for dispensation.

Respiratory Protection

Air-purifying and supplied-air respiratory equipment designed to protect the user's respiratory system from hazardous airborne contaminants.

Responsible Party

For the purposes of [EHS 104](#), "Laboratory Use of Hazardous Materials," the responsible party is any person or their designee, who is either: responsible for the design, conduct, or reporting of research; and/or responsible for the development and conduct of academic programs that may involve the use of hazardous materials.

Sanctioned Country

A license from the U.S. Treasury Department is required prior to travel to a sanctioned country. Typically, a trade embargo exists between that country and the United States.

Single-Use Dust Mask

Air-purifying particulate respirator, acceptable only for use in nuisance dust situations.

Supplied Air Respirator

An apparatus that provides clean air for breathing. Two types are:

1. air-line that does not carry its own air supply but obtains its air from a cylinder or compressor; the wearer is connected via hose to the air supply
- and
2. self-contained, which carries its own cylinder of supplied air and is used in atmospheres that have high airborne contaminant levels or are immediately dangerous to life and health (IDLH).

Torso Protection

Protective clothing such as vests, jackets, aprons, coveralls, and full body suits that are constructed of various materials used to protect the torso from hazards such as heat, splashes from molten metals, liquids, impacts, cuts, acids, and radiation.

Travel Warning

The U.S. government strongly recommends that no U.S. citizen enter a country under a travel warning. A country under a travel warning may become sanctioned at any time.

Unit Head

For the purposes of [EHS 116](#), "Minors in Laboratories," the chair, dean, or director of the affected academic unit.

Utility Tunnel

For the purposes of [EHS 121](#), "Utility Tunnel Access and Control of Hazardous Conditions," a space for wires, conduits, pipes, and other conveyances used in the delivery of utilities with enough room for a human to enter.

Vehicle

For the purposes of this policy a vehicle includes any automobile owned, leased, or rented by ASU, any cart owned, leased, or rented by ASU, and any other motorized vehicle owned, leased, or rented by ASU driven on public roads or on ASU Campus Malls.

Working Alone

“Working Alone” means that an individual cannot be seen and cannot be heard by another individual.