

The Hazard Assessment Tool identifies potential workplace hazards and specifies personal protective equipment (PPE) to protect workers from these hazards. This form must be completed annually by the Shop Manager, Supervisor, or qualified designee to assess hazards specific to their shop(s), and reviewed/signed by all shop personnel. The person conducting the assessment must verify that it is complete and that required training has been provided to all employees who may be exposed to the identified hazards.

Information

Department	
Shop location(s) [building & room number(s)]	
Shop Manager or Supervisor	
Name of person conducting assessment	
Phone number	
Email address	
Date of Assessment	

Hazard Assessment

Identify work tasks or activities performed in the shop using the following checklists. Review the potential hazards and PPE associated with each activity.

Activity performed in the shop?		Machinery (Mechanical) Hazards		
Yes	No	Activity	Potential Hazard	Applicable PPE
<input type="checkbox"/>	<input type="checkbox"/>	Use of cutting devices such as drill presses, milling machines, table saws, band saws, lathes or portable power tools.	Eye injuries, lacerations, physical entrapment.	Safety glasses (ANSI Z87.1) or goggles (large amounts of dust or working overhead). Proper attire (e.g. no loose clothing, long pants and closed-toed shoes). Long hair must be tied back.
<input type="checkbox"/>	<input type="checkbox"/>	Working with loud equipment, noises, sounds, alarms, etc.	Potential hearing damage or loss.	Hearing protection sufficient to keep noise below OSHA permissible exposure limit. Earplugs, ear muffs, or a combination of both, depending on noise reduction rating and comfort.

<input type="checkbox"/>	<input type="checkbox"/>	Sanding or grinding activities that produce airborne dust or flying particles.	Eye injuries, facial lacerations or abrasions, inhalation, hearing damage.	Safety glasses with side shields, goggles, face shield, leather gloves (not to be used with grinding wheels), jacket, N95 respirator, long pants, closed-toed shoes, ear muffs and/or plugs, depending on noise reduction rating and comfort.
<input type="checkbox"/>	<input type="checkbox"/>	Hot work such as welding, torch cutting, and brazing. Equipment with open flames or high heat levels.	Skin burns, eye damage, fires.	Safety glasses,/ or goggles, welding helmet with appropriate filter lenses, respirator/local exhaust ventilation for operations producing significant fumes, insulated gloves, flame resistant (FR) coveralls/smock/coat/apron, long pants, rubber-soled, closed-toed shoes (ANSI Z41.1).
<input type="checkbox"/>	<input type="checkbox"/>	Activities that expose employees to intense UV light or lasers.	Skin injuries, eye damage.	Long sleeves and pants, gloves when working with hands near accessible laser beams. Goggles/glasses/face shield with optical density matched to light parameters, optical UV protection (ANSI Z136).
<input type="checkbox"/>	<input type="checkbox"/>	Work with equipment, tools, or material that could scrape, bruise or cut hands.	Hand lacerations and contusions.	Cut-resistant gloves, leather gloves, or latex/nitrile gloves (depending on equipment).
<input type="checkbox"/>	<input type="checkbox"/>	Work with tools that vibrate.	Carpal tunnel, white finger.	Anti-vibration gloves.
<input type="checkbox"/>	<input type="checkbox"/>	Other unlisted task or activity. List task or activity:	List hazard:	List applicable PPE:

Activity performed in the shop?		Physical Hazards		
Yes	No	Activity	Potential Hazard	Applicable PPE
<input type="checkbox"/>	<input type="checkbox"/>	Disposal of trash and broken glass.	Hand lacerations.	Cut resistant gloves, leather gloves.
<input type="checkbox"/>	<input type="checkbox"/>	Aerial work such as with boom lifts.	Falls	Body harness, self-retracting line, or shock-absorbing lanyard.
<input type="checkbox"/>	<input type="checkbox"/>	Work with very cold equipment or dry ice; work in cold rooms.	Frostbite, hypothermia.	Insulated cryogenic gloves, warm clothing (cover exposed skin).
<input type="checkbox"/>	<input type="checkbox"/>	Work in areas with high temperatures (outdoors).	Heat illness	Wide brimmed hat, UV-blocking sunglasses, sunblock, light colored clothing with long sleeves and pants, shaded area for rest periods.
<input type="checkbox"/>	<input type="checkbox"/>	Work with hot liquids, equipment, open flames (water bath, oil bath).	Burns, eye damage.	Safety glasses or goggles for large volumes, insulated gloves (impermeable insulated gloves for liquids, steam), lab coat or apron.
<input type="checkbox"/>	<input type="checkbox"/>	Work in elevated areas where objects can fall and strike employees	Head injuries.	Hard hat, protective helmets (ANSI Z89.1) for employees below.
<input type="checkbox"/>	<input type="checkbox"/>	Work in areas where employees stand or bend near exposed beams, machine parts or pipes (low overhead clearance)	Head injuries.	Hard hat, hard/bump cap.
<input type="checkbox"/>	<input type="checkbox"/>	Overhead work.	Eye injuries.	Safety goggles.
<input type="checkbox"/>	<input type="checkbox"/>	Work with or near exposed electrical wiring or components.	Electrical shock, arc-flash.	Voltage-rated rubber insulating gloves, non-conductive hard hat, hard rubber-soled shoes, arc-rated face shield, safety glasses or goggles, flame resistant apparel.

<input type="checkbox"/>	<input type="checkbox"/>	Work with tools, heavy equipment, or other objects that could fall and strike legs/feet or work near sharp objects such as nails or spikes.	Leg or foot injuries.	Foot/shin guards, work boots or steel/composite toed boots.
<input type="checkbox"/>	<input type="checkbox"/>	Work with tools or material that might scrape, bruise, or cut an employee's hands.	Hand damage.	Cut-resistant gloves, leather gloves, latex/nylon/nitrile gloves.
<input type="checkbox"/>	<input type="checkbox"/>	Work in confined spaces.	Respiratory hazards, crushes, cuts and contusions, falls	Safety glasses or goggles, hard hat, chemical protective suit, work boots or steel/composite toed shoes, body harness and lanyard, and/or respirator may be required (depending on nature of job).
<input type="checkbox"/>	<input type="checkbox"/>	Work in very wet areas or areas that are slippery, areas near water.	Falls, drowning.	Slip resistant safety shoes, life jackets or buoyant work vests.
<input type="checkbox"/>	<input type="checkbox"/>	Other unlisted task or activity List task or activity:	List hazard:	List applicable PPE:

Activity performed in the shop?		Chemical Hazards		
Yes	No	Activity	Potential Hazard	Applicable PPE
<input type="checkbox"/>	<input type="checkbox"/>	Cleaning with chemicals.	Skin or eye damage, respiratory damage.	Safety glasses or goggles, chemical-resistant gloves, respiratory protection as needed.
<input type="checkbox"/>	<input type="checkbox"/>	Handling small volumes (<4 liters) of corrosive liquids.	Eye damage or burns.	Safety glasses or goggles, chemical-resistant gloves and apron, long pants, closed-toed shoes. Refer to chemical SDS for specifics.
<input type="checkbox"/>	<input type="checkbox"/>	Handling large volumes (>4 liters) of corrosive liquids.	Eye damage, burns, poisoning, inhalation.	Safety goggles, face shield, chemical-resistant gloves, chemical-resistant coat or apron, respirator.
<input type="checkbox"/>	<input type="checkbox"/>	Handling small volumes (<4 liters) of solvents or flammable compounds.	Eye damage, burns, poisoning, fire.	Safety glasses or goggles, chemical-resistant gloves and apron, non-synthetic fabric clothing
<input type="checkbox"/>	<input type="checkbox"/>	Use of a pressure or vacuum sealed apparatus.	Eye damage, burns, lacerations, hearing damage/loss.	Safety glasses or goggles, face shield, hearing protection (ear plugs/and or ear muffs)
<input type="checkbox"/>	<input type="checkbox"/>	Work with cryogenic liquids.	Skin injuries (frostbite), eye damage.	Safety glasses or goggles for large volumes, face shield, loose-fitting impermeable insulated (cryogenic) gloves, lab coat, closed-toe shoes.
<input type="checkbox"/>	<input type="checkbox"/>	Minor chemical spill cleanup.	Skin or eye damage, respiratory damage.	Safety glasses or goggles, chemical-resistant gloves, chemical-resistant apron or suit, and boot/shoe covers for high-risk activities. Respirator as needed.
<input type="checkbox"/>	<input type="checkbox"/>	Other unlisted task or activity. List task or activity:	List hazard:	List applicable PPE:

Activity performed in the shop?		Biological Hazards		
Yes	No	Activity	Potential Hazard	Applicable PPE
<input type="checkbox"/>	<input type="checkbox"/>	Hazardous spill cleanup.	Bloodborne pathogens.	Safety glasses, face shield, disposable light-latex, vinyl or nitrile gloves.
<input type="checkbox"/>	<input type="checkbox"/>	Other unlisted task or activity. List task or activity:	List hazard:	List applicable PPE:

Activity performed in the shop?		Laser Hazards		
Yes	No	Activity	Potential Hazard	Applicable PPE
Open Beam				
<input type="checkbox"/>	<input type="checkbox"/>	Aligning, troubleshooting or performing maintenance on equipment with an open beam and/or defeating the interlock(s) on any Class 3 or Class 4 laser system.	Eye damage.	Goggles/glasses with optical density based on beam parameters.
<input type="checkbox"/>	<input type="checkbox"/>	Viewing a Class 3R laser beam with magnifying optics (including eyeglasses).	Eye damage.	Goggles/glasses with optical density based on beam parameters.
<input type="checkbox"/>	<input type="checkbox"/>	Working with a Class 3B laser open beam system with the potential for producing direct or specular reflections.	Eye damage, skin damage.	Goggles/glasses with optical density based on beam parameters, long sleeves.
<input type="checkbox"/>	<input type="checkbox"/>	Working with a Class 4 laser open beam system with the potential for producing direct, specular, or diffuse reflections.	Eye damage, skin damage.	Goggles/glasses with optical density based on beam parameters, isolation from beam.
Non-Beam				
<input type="checkbox"/>	<input type="checkbox"/>	Handling dye laser materials, such as powdered dyes, chemicals, and solvents.	Health effects, burns.	Gloves, safety glasses, flame-resistant lab coat or coveralls.
<input type="checkbox"/>	<input type="checkbox"/>	Maintaining and repairing power sources for large Class 3B and Class 4 laser systems.	Electrocution, electrical burns, lacerations, contusions, burns.	Electrical isolation mat, flame-resistant lab coat or coveralls.
<input type="checkbox"/>	<input type="checkbox"/>	Using laser cutters.	Fume inhalation, eye damage.	Goggles/glasses with optical density based on beam parameters if beam is not protected, respirator/ventilation.
<input type="checkbox"/>	<input type="checkbox"/>	Perform other unlisted task or activity. List task or activity:	List hazard:	List applicable PPE:

Other Hazards		
Activity	Potential Hazard	Applicable PPE ¹

Signature	
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