

Appendix A: General Shop Safety Guidelines

EHS has developed these guidelines for those who currently, or might in the future, use power tools and heavy machinery in shops and laboratories. These guidelines DO NOT serve as a replacement for formal training in lab techniques or shop safety. Only trained personnel should use shop equipment after they have been trained by their supervisor. Failure to follow proper precautions can result in serious injury or death.

1. Never Use a Machine If You Are NOT Trained – Always Get Training Before Operating Any Machinery.

You must attend general safety training and specific training on the machine you intend to use. If you are unfamiliar with a particular tool or instrument, do not use it until you are properly trained on its usage.

2. Never Work Alone – Always Use “Buddy System”.

At least two adults must be in the shop when power tools are being used. You must get permission from your Shop Supervisor for off-hours and weekend work if the shop permits off-hours work.

3. Never Use Machine When Impaired

The use of alcohol or drugs prior to the use of shop machinery is strictly forbidden and is ground for suspension or termination of shop access privileges. Be aware of other situations which may impair your ability to work safely, including illness, tiredness, stress, hurrying, or the use of medication that could make you drowsy.

4. Never Start Work If You Cannot Do The Job Safely - Just Don't Do It.

There are limits to what can be built in a given shop and in a given time, and how safely you can do it in hurry. If it cannot be done safely don't start it.

5. Never Wear Open Toe Shoes - Use Closed-Toe Shoes in the Shop.

Sandals, flip-flops or other open-toed shoes are prohibited at all times in machine shops. Tools, chips and fixtures are sharp, and often hot. Shoes will help protect your feet from injury. Flame retardant shoes are recommended when welding.

6. Never Work Without Proper Eye Protection - Always Wear Appropriate Safety Glasses or Goggles When Working or Cleaning Tools.

The minimum standard for protective eyewear is safety glasses with side-shields; machine users must observe this standard at all times. Eyewear which offers additional protection against splashing or other hazards may be indicated based on a risk assessment of the process or procedure. Prescription glasses with plastic lenses must meet ANSI Standard Z87.1 for safety.

7. Never Work With Loose Hair, Jewelry, Clothing, etc. – Always Remove or Secure Anything That Might Get Caught in Moving Machinery.

All shop users must secure or remove personal items that may become entangled in a machine. Long hair, necklaces, ties, dangling ID badges, jewelry, loose clothes, watches or rings, may get caught in tools and can drag you along resulting in serious injury or death. Check with shop supervisor for appropriate attire.

8. Never Bring Hands Close to Sharp Objects – Always Keep Your Hands At a Safe Distance From Sharp Tools.

Make sure that nothing that you do will cause you to be cut by working too close to a sharp tool or moving machine part. Maintain a safe distance.

9. Never Create a Dusty and Smoky Environment - Dust, Chemicals and Smoke Can Be Dangerous to Your Health, so Work in Well-Ventilated Areas, Minimize Contamination and Use Appropriate Protective Equipment (PPE).

Only use dust or fume-generating machines in their intended areas. Ensure the shop is well ventilated and appropriate PPE is used when working with such machines.

10. Never Be Shy to Seek Help – Always Ask If You’re Unsure about the Safe Operation of a Tool or Any Aspect of a Job – Have Shop Staff Check the Tool or Work with Which You Are Unfamiliar.

Exercise common sense and clarify your tasks and responsibilities before starting work.

11. Never Leave Your Work Area Disorganized – Always Clean Up After Yourself.

Before you leave your work site all tools must be returned to their storage location, machines must be cleaned and wiped down and the floor swept, as necessary. Leave appropriate time for cleanup at the end of your project.

12. Never Remove Safety Guards – They are Present for a Reason

Safety guards must never be disabled or removed under any circumstances. You must ensure that safety guards are in place on moving parts before you start working. Follow all appropriate shut-down procedures before working on a machine if the repair requires removal or alteration of guarding.

13. Never Use Gloves While Using Rotating Equipment – Check With Supervisor, if Needed. Remove Them Before Starting Work.

Gloves can become entangled in rotating machine parts resulting in serious injuries.

14. Never Leave Broken or Damaged Tools or Abnormal Equipment Unreported – Always Inform Your Supervisor to Remove Broken Items from Service for Repair.

Broken parts or equipment can result in serious injuries and delays. Make sure you tag broken or damaged equipment and inform Shop Supervisor to arrange repair before next use.

15. Never Make Any Adjustments to a Machine When it is in Operation -Always Talk to Your Supervisor for Permission When Adjustment is needed.

Make sure you are competent and have permission from your supervisor to affect repairs. Ensure power is off, equipment is properly locked out and safety devices are in place.