

COMMON DANGERS IN THE WORKPLACE

EYE PROTECTION

Safety glasses or goggles are one of the most important pieces of personal protective equipment in a tool shop. All students engaged in practical shop activities where there is any risk of eye damage must wear safety glasses or goggles.

It is the responsibility of every supervisor to set an example by wearing safety glasses and to require students to do the same. Eye protection is of value only while covering the eyes.

It is strongly recommended that students purchase their own safety glasses/goggles as these can then be used at home or at school. If the school does provide glasses, they should be rinsed in a solution of detergent or Dettol before and after use to prevent the spread of infectious eye diseases.

Students who wear prescription glasses require safety goggles as well, unless their glasses have Hardex lenses with side protection mounted in the frames.

NOISE

Loud, disturbing sound can be detected easily without sophisticated measuring devices. If one has to raise one's voice to be heard, then there is a serious question whether the noise level is excessive. Accurate measurement should then be taken, as continuous exposure to high noise levels can lead to permanent loss of hearing.

Care should be taken to avoid prolonged use of machinery producing a high level of noise. Ear plugs or ear phones should be used by those exposed to high noise levels for long periods of time.

DUST

In addition to being annoying, dust can lead to chronic respiratory problems particularly during prolonged exposure. Tiny particles are the most hazardous as they are small enough to damage the lungs. All efforts to keep the dust level down in a shop should be taken. Dust levels, especially in a wood shop, should be measured periodically. Filter masks should be worn by those performing operations which produce dust.

GUIDELINES & RESOURCES
For Educators & Students in Cooperative Education Programs

CARBON MONOXIDE

This colourless, odourless gas is well known as being extremely lethal. It is a matter of great concern in an auto shop and all precautions must be taken to prevent leaking of CO into the classroom.

Cars must be hooked up to the outside ventilation system before the motor is started. A gas measuring pump should be available to periodically measure the CO level in the shop.

PLASTICS

Working with plastics can produce hazardous combustion products. Their preparation may require the use of hazardous solvents and organic peroxide catalysts. Only small quantities of materials should be worked with at one time in a well-ventilated area.

SOLVENTS

These products can cause bodily harm, by absorption through the skin or through the respiratory tract. Contact with the skin can cause dermatitis as well as systemic effects.

Solvents should always be used in a well-ventilated area and care should be taken to thoroughly wash any exposed skin as soon as possible after use.

Students must be warned not to put their hands in or near the opening of a container to determine what is inside.

STROBE LIGHTS

The main hazard, other than electrical, associated with using strobe lights in any environment is the risk of precipitating an epileptic seizure in individuals subject to such attacks. The production of light impulses at a frequency of about 7 Hz should be avoided.

Students should be warned as to the possible medical hazards of strobe lights at least one day prior to the use of strobe lights so that all those with related problems may speak to their supervisors and exercise the right of refusal to carry out such tasks.