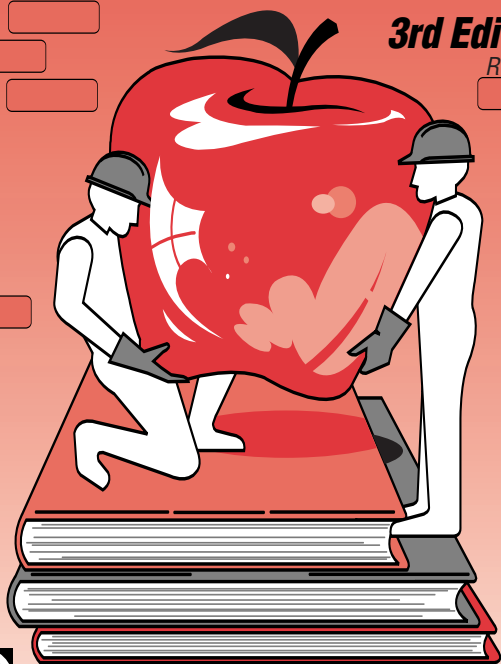


# School Workers

## *Health and Safety Guide*

**3rd Edition**

*Revised*



Canadian Centre for Occupational Health and Safety

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# 1. The Law Says...

Health and safety laws are meant to protect you.

By law your employer must provide you with a safe and healthy workplace.

It is your supervisor's responsibility to make sure that you understand the safe way of doing your work.

Working safely is your responsibility. You must use personal protective equipment required by your employer, follow safety procedures required in your area and report any hazardous conditions you are aware of.

If you think a task is dangerous for you or your co-workers, you have the right to refuse to do that job until it can be done safely. You must report to your supervisor your intention to refuse dangerous work.

## 2. Elements of On-the-Job Safety

1. **The right way is the safe way** of doing your job. Follow instructions. If you don't know, ask.
2. **Know potential hazards** in your work and ways of working safely to prevent such hazards.
3. **Know safety rules** for specific jobs and be able to explain these rules to fellow workers.
4. **Follow emergency procedures** in case of fires, medical emergencies, and need of rescue squad.
5. **Report all injuries** including minor scratches, cuts, burns, slips and falls. Your employer needs to know, in order to take corrective action to prevent future injuries. Follow your school's procedures for reporting injuries.
6. **Know where emergency equipment is located**, such as fire extinguishers, eyewash stations and safety showers, and learn how to use this equipment.

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7. **Use personal protective equipment** as required by your employer. Such equipment includes, but is not limited to, safety glasses, hearing protectors, respirators, safety boots, hard hats, gloves and face shields.
  8. **Learn special safety procedures** for particularly hazardous work such as vessel entry, confined space entry, electrical work and welding.
  9. **Follow electrical safety rules** when using electrical equipment, grounding portable electrical tools and working near overhead power lines.
  10. **Know how to protect yourself** when working outdoors in very cold or hot weather or in direct sunshine (UV rays).
  11. **Perform a circle check** before taking out a vehicle.
  12. **Lock out and tag energy sources** (electrical, mechanical, hydraulic, pneumatic, chemical, etc.) of all machinery and equipment under maintenance or repair.
  13. **Report unsafe practises** and unsafe conditions.
  14. **Wear clothing that's appropriate** to the tasks you perform. Do not wear loose sleeves, cuffs, rings, bracelets, nor anything else that may get caught in moving machinery and cause injury.

**Off-the-job safety is equally important.  
Safety should not stop when you leave your  
school or workplace.**

## SCIENCE LAB CHECKLIST

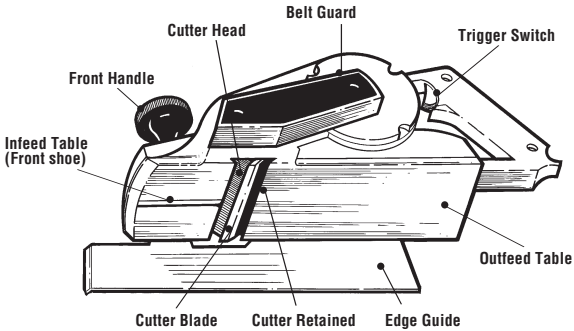
Date \_\_\_\_\_ Room No. \_\_\_\_\_

Inspector(s) \_\_\_\_\_

✓ **Satisfactory**    ✗ **Unsatisfactory, requires attention**

ITEM	INSPECT FOR...
<b>FACILITIES</b>	
<input type="checkbox"/> Hazard warning signs	posted, condition, location
<input type="checkbox"/> Equipment	condition, location
<input type="checkbox"/> Gas and water taps	condition, location
<input type="checkbox"/> Electrical outlets	condition, location
<input type="checkbox"/> Emergency equipment (fire, eyewash, etc.)	availability, condition, location
<input type="checkbox"/> First aid box	availability, contents, location
<input type="checkbox"/> Broken glassware disposal	availability, condition, location
<input type="checkbox"/> Labware cleaning facilities	condition, location
<b>CHEMICALS</b>	
<input type="checkbox"/> Procedure(s) for: purchasing, storage, use and disposal	established, availability, location
<input type="checkbox"/> MSDSs and labels (labels for biological specimens stored in chemical solutions included)	availability, location
<input type="checkbox"/> WHMIS training	availability
<input type="checkbox"/> Authorized access only	posted
<input type="checkbox"/> Procedures for toxic substances	established, posted
<input type="checkbox"/> Procedures for compliance with health and safety regulations	established, posted
<input type="checkbox"/> Emergency contact procedures	established, posted
<b>PRE-ACTIVITY AUDIT</b>	
<input type="checkbox"/> Safety and emergency procedures for students	established, posted, understood
<input type="checkbox"/> Student awareness of potential hazards, (ie. long hair, jewellery, etc.)	understanding of safe practices

## 6. Planers



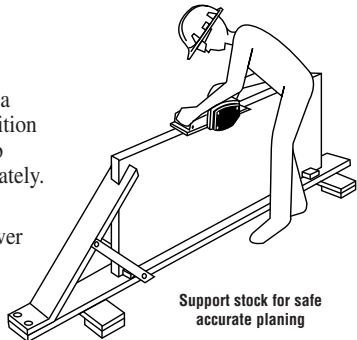
### Guidelines for Safe Use

- ✓ WEAR safety glasses or a face shield.
- USE blades of the same weight, and set at exactly the same height.
- ENSURE blade locking screws are tight.
- REMOVE adjusting keys and wrenches before turning power on.
- DISCONNECT the planer from the power supply before making any adjustments to the cutter head or blades.

### *Secure Work*

- ✓ SUPPORT stock in a comfortable position for doing the job safely and accurately.

DISCONNECT power supply to dump out chips.





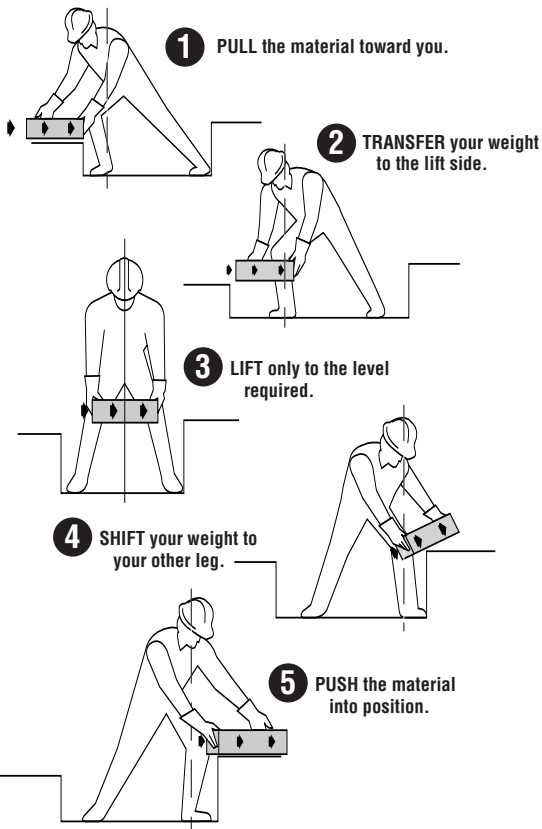
## Transferring Weight

Use the following sequence of motions for moving heavy or bulky materials.

**REDUCE** the load on your back by *transferring* weight.

**SHIFT** your body weight from one leg to the other.

**AVOID** twisting your back.



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## 2. Infection from Blood and Body Fluids

Contact with blood and body fluids visibly contaminated with blood may transmit illness.

### Cleaning and Decontaminating Blood-Contaminated Areas



WEAR gloves and use disposable towels or other means of cleaning that will ensure against direct contact with blood and body fluids.

DECONTAMINATE the area, with an approved germicide or 1:100 solution of household bleach.

WASH and disinfect all the equipment used in the cleaning task.

DISCARD all soiled cleaning materials in a leak-proof plastic bag, according to local/public health regulations for the disposal of infectious waste.

WASH hands thoroughly with warm water and soap, after removing gloves.

CHANGE gloves after each task or exposure.

DISPOSE used gloves as contaminated materials.

### Hand Washing Guidelines



WASH hands regularly, especially after each exposure.

WET, SOAP and LATHER for at least ten seconds.

WASH and scrub under the nails and cuticle.

RINSE thoroughly and dry.

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## 7. Portable Classrooms

### Health Concerns

There are reports that students and teachers in portable class rooms experience symptoms such as:

- ✎ irritation of nose, throat and skin;
- ✎ nose bleeding, muscle aches, extreme fatigue;
- ✎ breathing problems from allergic reactions such as asthma
- ✎ cold- or flu-like symptoms: runny nose, phlegm in the throat, coughing, wheezing;
- ✎ hoarseness and sore throats;
- ✎ itchy and inflamed eyes;
- ✎ nausea, joint pain, and headaches.

People who have allergies are more likely to be affected compared to others.

### Cause of Sickness

The possible cause of such sickness is believed to be poor indoor air quality and indoor air pollution. Similar illness can occur in any classroom with inadequate ventilation. Lack of adequate ventilation results in build-up of moisture, dusts, organic vapours, and emissions from the human body in the indoor air. High moisture content of the air (relative humidity) results in moulds and mildew growth. Moulds release spores into the building air. Inhalation of spore contaminated air increases the risk of allergies and other illnesses. All exposed persons are not equally affected. However, as level of air contamination and/or exposure time increases more and more people are affected.

The (Ontario) Inter-ministerial Committee on Indoor Air Quality (1987) and the ASHRAE 62-1989 standard on indoor ventilation recommend that an outdoor air supply of 15 cubic feet per minute (cfm) per occupant is necessary to provide a healthy indoor environment. This ventilation rate assumes that the outside air is evenly distributed in the room.

## 3. Working in a Sitting Position

### “Good” Body Position

There is no *one single body position* recommended for sitting.

Every worker can sit comfortably by adjusting the angles of the hips, knees, ankles and elbows.

The following are general recommendations. Occasional changes beyond given ranges are acceptable and sometimes beneficial.



KEEP the joints such as hips, knees and ankles open slightly more than  $90^\circ$

KEEP the upper body within  $30^\circ$  of upright positions.

ALWAYS keep the head aligned with the spine.

KEEP upper arms vertical to  $20^\circ$  forward.

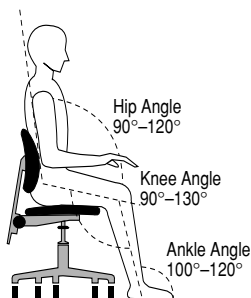
KEEP elbows at an angle between  $90^\circ$  and  $120^\circ$ .

KEEP forearms between horizontal and  $20^\circ$  up.

SUPPORT the forearms.

KEEP the wrists straight and aligned with the forearms.

PLACE the working object so that it can be seen at viewing angle of  $10^\circ$  to  $30^\circ$  below the line of sight.



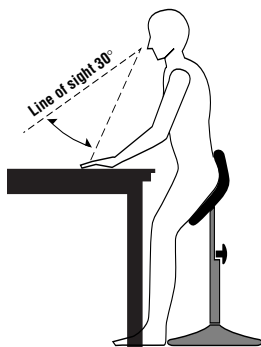
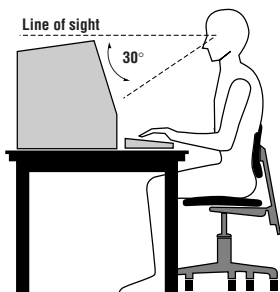
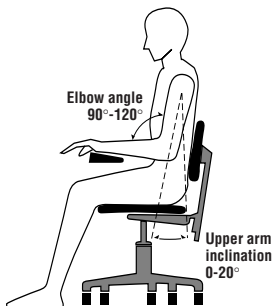
KEEP shoulders low and relaxed.

KEEP elbows tucked in.

TUCK chin in and do not bend forward when looking down and forward.

CHANGE positions frequently within recommended ranges.

CROSS legs alternately.



AVOID side bending.

AVOID forward bending.

DO NOT SLOUCH.

DO NOT SIT for more than 50 minutes at a time.

## What to Avoid While Sitting

Poor arrangement of the workstation fosters an awkward/poor body position. Poor body position hinders breathing and blood circulation and contributes to injuries affecting people's ability to move.

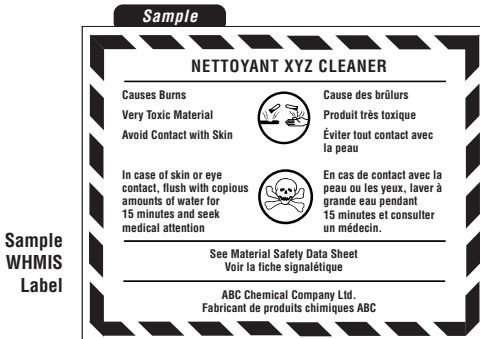
# 3. Workplace Hazardous Materials Information System (WHMIS)

## WHMIS (Pronounced **whimiss**)

WHMIS applies to all Canadian workplaces. It requires that all workers who work with or near a hazardous substance (controlled product) be informed about its potential hazards and recommended safe work practices.

WHMIS requires that information be provided in three ways:

1. All controlled products used in the workplace must have a WHMIS label on the container.
2. Material Safety Data Sheets (MSDS) and hazard information must be readily available in the workplace. A MSDS summarizes the health and safety information about the product.
3. Workers must receive training to be able to recognize and work safely with chemicals.



The HAZARD SYMBOL is an important part of the WHMIS label. It warns the user that a particular hazard exists. Actual hazards from toxic substances depend on the amount (level and duration) of exposure. A brief exposure at high levels may result in chemical poisoning within hours. Prolonged exposure at low levels may cause illness after several years.