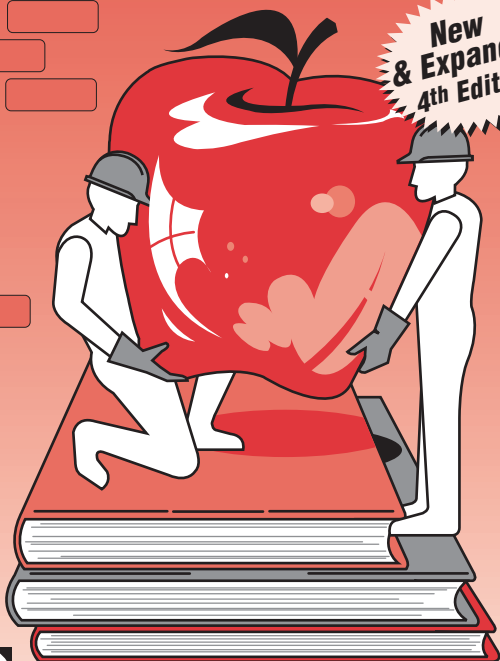


School Workers

Health and Safety Guide

**New
& Expanded
4th Edition**



Canadian Centre for Occupational Health and Safety

Summary

School employees include teachers, administrative staff, facility management personnel and maintenance staff. These employees perform a wide range of tasks, many of which can cause bodily injuries or illnesses. You can prevent such injuries and illnesses by following safe work practices and using proper protective equipment.

Examples of some injuries and illnesses are:

- ✎ cuts and amputations from the use of machine equipment in shops and gardening tools
- ✎ bruises and abrasions from plants and trees
- ✎ burns from hot soldering irons, burners, heaters, and hot engines in auto shop
- ✎ electrical shock or electrocution from contact with live electrical parts or electric powerlines
- ✎ slips and falls in wet and/or cluttered areas
- ✎ soreness and pain in hands, wrists, shoulders or back as a result of doing repetitive work, working in an awkward posture, applying too much force over and over again, operating vibrating equipment or lifting heavy loads improperly
- ✎ itching, swelling, redness of the skin as a result of exposure to very hot or very cold weather, or contact with plants and animals
- ✎ burns and skin disorders as a result of contact with laboratory chemicals, cleaning solutions, pesticides, or contact with plants and animals
- ✎ illness as a result of a contact with people with infectious diseases or contaminated biological wastes
- ✎ allergies as a result of dust inhalation, contact with plants and animals, and insect bites and stings

This Guide provides ways of working safely to prevent these injuries and illnesses.

Many health and safety behaviours are learned by example. Children and youth model what they observe.

Comprehensive safe school plans and programs should focus attention on the strengths and experiences of students, teachers, administrators and other school personnel.

Contents

Section I	Basic Rules of Safety	
	1. The Law Says	2
	2. Elements of On-the-job Safety	2
	3. Safety Tips for New Employees	4
	4. Safety Tips for Supervisors	4
	5. Safety Tips for Teachers	5
Section II	Maintaining a High Standard of Safety	
	1. OSH Responsibilities	8
	2. Workplace Inspections	9
	3. Accident Investigation	12
	4. First Aid	14
Section III	Emergency Preparedness	
	1. Emergencies	18
	2. Fire Safety	18
	3. Eyewash Stations	21
	4. Emergency Showers	22
Section IV	Classroom Safety	
	1. General Safety	24
	2. Science Rooms	25
Section V	Arts and Crafts	
	1. Arts and Crafts Materials	30
	2. Photography	33
Section VI	Industrial Technology	
	1. Hand Tool Operations	36
	2. Drill Presses	38
	3. Wood Turning Lathes	40
	4. Band Saws	42
	5. Circular Saws	44
	6. Planers	46
	7. Grinders	48
	8. Soldering Irons	50
	9. Gas Welding and Cutting	51

Section VII	Maintenance and Custodial Practices	
	1. Office Safety	56
	2. Ladders	58
	3. Scaffolds	62
	4. Powered Boom Platforms	63
	5. Manual Materials Handling	64
	6. Lock-out Procedures	66
	7. Confined Space Entry	67
	8. Toxic Chemicals	69
	9. Painting	70
	10. Basic Electrical Safety	71
	11. Grounds Maintenance	73
	12. Waste Disposal	76
Section VIII	Sanitation and Infection Control	
	1. Sanitation	78
	2. Infection from Blood and Body Fluids	79
	3. Biohazardous Waste	80
	4. Hand washing for infection control	81
Section IX	Sports and Activities	
	1. Playground Safety	84
	2. Sports and Sporting Activities	88
	3. Off-Site Activities	90
Section X	Work Environment	
	1. Indoor Air Quality	92
	2. Noise	94
	3. Ventilation	95
	4. Lighting	96
	5. Working in Hot Environments	98
	6. Working in Cold Environments	102
	7. Portable Classrooms	106
	8. Asbestos Management	111
	9. Ultraviolet Rays	113
	10. Electromagnetic Radiation	115
Section XI	Workplace and School Violence	
	1. What is violence?	118
	2. Workplace or School Violence Prevention Policy	120
	3. Working with Young People	122
	4. Prevention of Harassment, Bullying and Mobbing	124
	5. Internet harassment	128

Section XII	Ergonomics	
	1. Repetitive Motion Injuries (RMIs)	132
	2. Computer Workstations	134
	3. Working in a Sitting Position	136
	4. Chair and Work Surface Adjustment	139
	5. Workstation Exercises	142
Section XIII	Personal Protective Equipment	
	1. General Guidelines	146
	2. Safety Glasses	148
	3. Safety Footwear	150
	4. Safety Headwear	151
	5. Hearing Protection	153
	6. Hand Protection	155
	7. Respirators	156
Section XIV	Health and Safety Legislation	
	1. Legislative Responsibilities in Schools	160
	2. Canadian OH&S Legislation	162
	3. Workplace Hazardous Materials Information System (WHMIS)	170
	4. Material Safety Data Sheets (MSDSs)	172
	5. Public Health Promotion Legislation	173
	6. Fire Code	173
	7. Building Code	174
	8. Environmental Protection Legislation	174
	9. US OH&S Legislation	175
Section XV	Information Sources	
	1. Canadian Government Departments with Responsibility for OH&S	180
	2. US Federal Safety and Health Agencies	186

1. General Safety

Inspect the general condition of the classrooms and the building facilities at the beginning of the school term, and at least monthly thereafter. You may use the following checklist as a guideline. Add or delete items of inspection as required.

Sample

GENERAL SAFETY CHECKLIST

School

Date

✓ Satisfactory ✗ Unsatisfactory, requires attention

	ITEM	INSPECT FOR ...
<input type="checkbox"/>	OSH legislation	Posted (as required)
<input type="checkbox"/>	Floors	Clean, dry, uncluttered, non-skid
<input type="checkbox"/>	Ceilings, walls, windows	Clean, dry, dust/mould-free
<input type="checkbox"/>	Furniture	Good general condition
<input type="checkbox"/>	Stairways	Tidy, uncluttered, well illuminated
<input type="checkbox"/>	Exits and signs	Visibility, illumination
<input type="checkbox"/>	Ladders	Proper type, condition, access,
<input type="checkbox"/>	Illumination	Intensity, glare
<input type="checkbox"/>	Temperature	Thermal comfort of occupants
<input type="checkbox"/>	Ventilation	Condition of ducts, odours, noise
<input type="checkbox"/>	Fire extinguisher	Proper type, location, inspection/ maintenance
<input type="checkbox"/>	Waste disposal	Waste disposal containers, recycling containers
<input type="checkbox"/>	Clean-up routine	Established responsibilities, frequency
<input type="checkbox"/>	Electrical equipment	Power outlets, extension cords, portable electrical equipment
<input type="checkbox"/>	First aid procedure(s)	Posted, first aid box accessible, staff adequately trained
<input type="checkbox"/>	Emergency procedures	Posted, clear, staff trained
<input type="checkbox"/>	WHMIS	Labels, MSDS/SDS, training provided
<input type="checkbox"/>	Safety rules	Posted, clear, understood
<input type="checkbox"/>	Hazard warning signs	Posted, visibility

11. Grounds Maintenance

General Precautions

- TRAIN your helpers to ensure that they can work safely with any tools or power equipment, and that they understand the hazards of each task.
- IDENTIFY and destroy poisonous plants such as poison ivy.
- PROTECT against insects with insect repellents when needed.
- REST periodically during strenuous jobs such as digging or sawing, especially in hot weather.
- MAKE sure emergency numbers are clearly posted.
- KNOW location of first aid kit and how to use the contents.
- DO NOT TOUCH stray or dead animals. Contact an animal control agency for removal.

Personal Protective Equipment

- WEAR high-cut safety footwear with steel toes and reinforced soles.
- USE eye protection when power tilling, breaking up rocks or concrete, using strong cleaning agents, spraying or dusting.
- USE approved head protection when working under low branches and falling objects.
- WEAR sturdy gloves with grips.
- USE vibration absorbing gloves while operating vibrating equipment.
- WEAR gloves made of the appropriate material when handling fertilizers and pesticides.
- WEAR proper sunglasses when in direct sunlight for extended periods.
- USE UV sunscreen.
- WEAR a brimmed hat and comfortable clothing that provide sun protection.
- DO NOT WEAR loose or torn clothing.

8. Asbestos Management

Asbestos is a well known carcinogen. Exposure to asbestos has been linked to mesothelioma (a rare type of cancer of the pleura-covering of the lungs and the inner surface of the chest wall), asbestosis (scarring of the lungs), and other cancers which may appear 10–20 years or more after exposure. Identification and removal of asbestos containing materials is the best method of eliminating the risk of harmful exposures.

In the past, common uses of asbestos included:

- ✎ insulation, fire proofing, sound proofing, ceiling and floor tiles, acoustic spackles, and vinyl asbestos floor tiles;
- ✎ thermal insulation on pipes, boilers, and ceilings, fire protection on structural steel beams;
- ✎ lining of heating and ventilation duct work, window glazing, and adhesives.

Asbestos is no longer used in these products but some of the older, installed products may still remain.

When contained in stable solid building materials, asbestos is not released into the air and hence, does not pose health risk. Renovation work and damage to building materials can produce dry, crumbly (friable) material capable of releasing asbestos fibres in the air. Airborne asbestos fibres enter the lungs with the inhaled air. Specific procedures and precautions have been developed to prevent the release of asbestos fibres in the air. Extreme caution is necessary to protect children from asbestos exposure.

The US government has adopted the Asbestos Hazard Emergency Response Act (AHERA–40 CFR 763) in 1987. In Canada, guidelines are available from Health Canada, school boards and the government health and safety departments. In consultation with the health and safety committee, each school should establish their own asbestos management plan. The following is a general outline of the actions recommended to control asbestos exposure:

2. Workplace or School Violence Prevention Policy

Every school or workplace should have a violence prevention policy developed by management in consultation with employees and other stakeholders. The purpose of the policy is to clearly communicate management's commitment to preventing violence and to provide an overview of your school or board's position on violence.

How to write a violence prevention policy?

DEFINE what you mean by violence in precise, concrete language.

PROVIDE clear examples of unacceptable behaviour (verbal and written threats, harassment, physical intimidation or assault) and working conditions (working late or working alone without acceptable safeguards).

STATE in clear terms your school's view toward violence and its commitment to the prevention of violence.

PRECISELY state the consequences of making threats or committing acts of violence. For example:

Within the school or workplace, consider when to apply verbal or written reprimands, suspension, or termination/transfer (of employee), or take legal action.

For classrooms or areas that provide services to the public, consider when to apply reprimands, temporarily or permanently suspensions or withdrawal of services, or take legal action.

OUTLINE the process by which preventive measures will be developed.

ENCOURAGE reporting of all incidents or potential incidents of violence.

OUTLINE the confidential process by which employees or students can report concerns or incidents, and to whom.

1. Legislative Responsibilities in Schools

The legislation applicable to schools prescribe general and some specific safety responsibilities and cover all occupants which includes students, staff, Board staff, and visitors. The safety responsibilities include the following:

School Board/Trustees

- COMPLY with the duties of the employer as stated in the Health and Safety Act.
- ESTABLISH fire drills and emergency procedures.
- MAINTAIN school buildings, furniture and equipment in proper repair.
- OBTAIN adequate insurance for building, equipment, employees, and volunteers while under the jurisdiction of the Board.
- DEVELOP a policy statement that includes safe school plans.
- ENSURE a safe and peaceful school.
- ASSIGN responsibilities.
- MONITOR compliance.
- PROVIDE training.
- INVESTIGATE incidents of unsafe conditions, violence and vandalism.
- DEVELOP corrective action plans.

Director of Education/Supervisory Officer

- SUPERVISE the use and maintenance of the building and property of the School Board.
- VISIT schools and classrooms as the school board may direct.
- ASSIST eachers to bring about improvement in the quality of education.
- MAKE SURE that the schools are conducted in compliance with the Education Act and Regulations.