Handout 1: Basic Safety Rules & Checklists

It's the law . . .

- Health and safety laws help protect you from workplace injury and illness.
- According to the law, it's **your employer's responsibility** to provide you with:
  - A safe and healthy workplace
  - General orientation and training
  - Training for your specific workplace and job
  - Initial and ongoing supervision
- Working safely is **your responsibility** too. You must:
  - Attend the workplace orientation
  - Follow required safety procedures and report hazardous conditions
  - Use personal protective equipment required by your employer
- In occupational health and safety legislation, workers have the right to:
  - Know potential and actual hazards in the workplace and how to deal with them
  - Participate in health and safety activities
  - Refuse work you believe to be unusually dangerous

Your health & safety checklist

When you start a new job, ask your supervisor or employer the following health and safety questions:

- ❑ What are the potential hazards of the job?
- ❑ Is job safety training available?
- ❑ What safety equipment do I need to do my job?
- ❑ Will I receive training on how to use the personal protective equipment (PPE) required for the job?
- ❑ What should I do in case of fire or another emergency?
- ❑ Where do I find fire extinguishers, first aid kits, first aid rooms and emergency assistance?
- ❑ What are my responsibilities regarding health and safety?
- ❑ If I notice something wrong, who should I report to?
- ❑ Who is responsible for answering safety-related questions?
- ❑ What should I do if I get injured or have an incident?
- ❑ How can I contact my health and safety committee or representative?

General workplace safety

Be aware of your own safety and that of others who work around you. Here is a general list of safety precautions you must observe **in most work areas**:

- The **right way** of doing your job is the **safe way**.
- Follow instructions.
- If you don't know or understand, ask!

Hazard awareness & recognition

- **Be in tune with your work environment.** Watch for hazards. Don’t allow yourself to be distracted by your cellphone or by listening to music while at work.
- **Develop good housekeeping habits.** Keep your workplace organized and eliminate clutter (for example, garbage, tools, electrical wiring or boxes that should be in storage) before it results in a trip (to the doctor) or a fall.
- Learn and follow safe procedures when handling or using electrical equipment and power cords.
- Do not distract a person using a machine or equipment or interfere with its operation.
- Use, store and dispose of hazardous materials or substances in a safe way. For example, office supplies with a chemical base, other chemicals, paints,

pesticides, wood or metal finishing compounds, asbestos, oily rags, biohazards such as used medical supplies or contaminated food products.
- Do not smoke in your workplace or work vehicle. There may be a fire or explosion hazard.
- Do not go to work if you are under the influence of medication, drugs or alcohol. You are a hazard to yourself, your co-workers and everyone around you.
- Walk, don't run, in work areas.

Personal protective equipment

- Make sure your clothing is appropriate for the tasks you have to do. No loose-fitting clothing that could get caught in machinery.
- Use personal protective equipment (PPE) if the job you're doing requires it. Ensure the PPE fits properly and is maintained.

Safe manual practices & ergonomics

- Do your work in a way that minimizes the stress on your body. Ask for an ergonomic assessment.
- Develop your **way of working** so that you:
  - Handle and use tools and equipment properly
  - Use correct posture
  - Work at a reasonable pace
  - Take suitable breaks
  - Use appropriate lifting aids (lifts, dollies, and so forth) to prevent back strain
  - Get training to do your job before you do it
- Develop your individual **workspace** so that you:
  - Have optimal body support when you work for an extended period of time (e.g. adjustable chair when seated, suitable footwear if standing or walking)
  - Can control ventilation, temperature and lighting to meet your needs
  - Can organize your workspace to do your job effectively
- Use safe practices when lifting and transferring objects from one place to another.
- Take regular breaks when doing tasks that require repetitive movements.

Safe operation & maintenance of equipment

- Understand the correct operating procedures and safety precautions before operating a piece of equipment or machinery. Use protective guards.
- Report defective or unsafe equipment to a responsible individual.
- Avoid the injuries faulty equipment can cause.

Fire regulations & equipment

- Learn the locations of all fire extinguishers, fire-pull stations and fire exits.
- Learn the fire drill procedures.

First aid

- Locate the nearest first aid facility and eye wash stations. Learn who the first aid attendant is.
- Report all incidents occurring in school to your teacher. Report workplace incidents to your supervisor and the Workers' Compensation Board.

Lockout procedures

You may work in an area where maintenance procedures are being carried out on powered machinery. At these times, detailed lock-out procedures are essential to prevent anyone from operating a machine that is being worked on and to prevent the unexpected energizing of a machine.

Lockout must involve more than merely disconnecting the power source. Workers have been killed by machinery that is dead electrically, but whose hydraulic systems were still functioning. The machines must be assessed thoroughly. All energy sources – electrical, pneumatic, hydraulic or gravitational – must be made inoperable, a state often called **zero mechanical state**.

Each maintenance worker should have his or her own lock and key (combination locks are not allowed). Only these locks should be used to lock out energy sources. The machine operator should be informed of maintenance plans, and the lock should be tagged to identify the maintenance worker who has locked out the machinery.

No one other than the maintenance personnel who place the locks and tags can remove them. Operators and other workers are strictly forbidden to remove either the tag or the lock.

These procedures apply not only to stationary industrial equipment but also to mobile equipment, including truck equipment, and heavy construction equipment.

Handout 2: Discussion Questions for *Don't Risk Your Life*

1. Why are 14 to 24 year olds most likely to be injured on the job?

2. Why do you think the young workers went ahead and performed the task?

3. How could the incidents in this video be prevented?

Handout 3: Using Your Senses to Identify Hazards

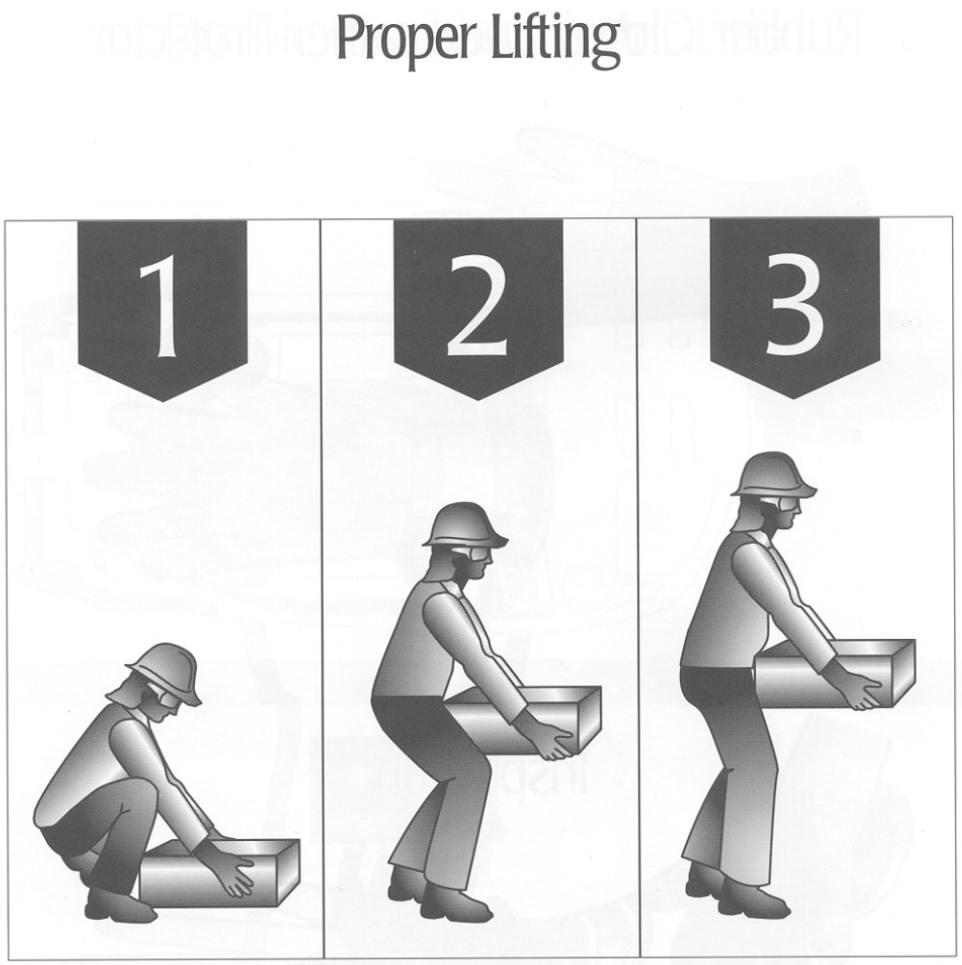
You need your senses to help prevent injuries and incidents. Some hazards you can see with your eyes, others you can only smell or feel. You can taste some and hear others. For some hazards you can use more than one of your senses. Some hazards are invisible; you cannot see, hear, taste, smell or feel them.

Some words may belong with more than one sense.

Trip/fall	Dust	Fumes	Vapour
Broken bone	Bacteria	Air	Heat
Radiation	Knife	Electric shock	Smoke
Cold	Stress	Noise	Vibration
Pollution	Garbage	Oven cleaner	

See	Hear	Smell	Taste	Feel	Invisible

Handout 4: Diagram & Description of Safe Lifting Techniques



Lifting exercise

When you bend down to pick something up, follow these simple steps:
(Select an item in the classroom for demonstration purposes.)

1. Place your feet apart for good balance.
2. Bend your knees.
3. Keep the load close to the centre of your body.
4. Lift gradually, smoothly and without jerking.
5. Do not twist your back while lifting, but pivot with your head.
6. Co-ordinate your lift when working with a partner.
7. Don’t lift beyond safe weight limits.

Handout 5: Basic Things to Think About When Manual Handling

Your lower back is stressed most by bending, twisting, lifting, pushing, pulling and carrying. Injury occurs when the demands on the joints, discs, ligaments and muscles trying to hold your spine together are too great.

Consider how your job is designed.

- What's the amount of weight lifted?
- How much lift is required? (i.e., from "how low" to "how high")
- How far is it necessary to carry the load?
- How much will your body twist with how much weight?
- How often will you have to lift this load?
- How long will it be necessary to sit?
- Is the chair designed for erect and comfortable posture?
- What about the work surface height and tilt? Does it allow for erect posture?
- How much bending is necessary? How far, how often, how long?

Use proper lifting rules.

- Tuck in your chin.
- Keep the load close to your body.
- Position your feet before you lift to reduce twisting with the load.
- Lift with your legs.
- Don't lift beyond your safe limits!

Follow proper ergonomic rules for sitting.

- Keep your feet flat on the floor, or use a foot rest for support.
- Don't have space between the back of your knees and the front of your chair.
- Make sure the back of your chair supports your back.

Let your back recover from the stress of work.

- Frequently stretch out of your position.
- Do one or two simple stretches at least once every hour.

Summary

Consider three basic things to prevent muscular fatigue and injury on the job:

1. Design work tasks properly.
2. Use your body properly to do the job, doing the right things to take care of your body.
3. Respect personal limitations. Ability to move things varies based on age, strength, body development, health and ability to deal with fatigue.

Handout 6: Discussion Questions for *Electrical Hazards*

1. Describe how an electrical shock affects your body.

2. What may happen if you have an electrical shock while standing on a ladder?

3. What does grounding do?

4. Repairs can be made to electrical equipment when it's locked out. Describe this procedure and explain why equipment should be locked out.

5. What types of personal protective equipment and clothing should you wear if you work with electricity?

Handout 7: Discussion Questions for *Maintenance & Safe Operation of Machinery*

1. What is the function of guards on equipment?

2. Machines often have guards, but workers don't use them. Why? Why not?

3. What is meant by "locking out" equipment?

4. Who is responsible for restarting machinery after it has been locked out?

Handout 8: How loud is it?

Estimate the noise level of the following sounds and record your response in the space provided.

Common sounds & noise levels	
Rustle of leaves	___ dBA
Conversation	___ dBA
Refrigerator	___ dBA
Noisy restaurant	___ dBA
Busy traffic	___ dBA
Alarm clock	___ dBA
Live rock music	___ dBA
Stereo headphones (1/2 volume)	___ dBA
Symphony concert	___ dBA
Jackhammer	___ dBA
Motorcycle	___ dBA
Screaming child	___ dBA
Workplace noise levels in some occupations	
Drywaller	___ dBA
Material/equipment mover	___ dBA
Labourer	___ dBA
Carpenter, framer	___ dBA
Concrete worker	___ dBA
Ironworker	___ dBA
Welder	___ dBA

Handout 9: Discussion Questions for *Noise*

1. What is the difference between permanent and temporary hearing loss?

2. What are the early signs of hearing loss?

3. What is really happening when people “get used to” a noise?

4. What are the three ways to deal with noise hazards? Give an example of each.

Handout 10: What is too loud?

Circle true or false.

1.	Loud noise is a leading cause of hearing loss.	T	F
2.	Loud noise damages the nerve endings in the inner ear, which results in hearing loss.	T	F
3.	The most rapid damage to hearing happens in the first five to 10 years of exposure to loud noise.	T	F
4.	Noise-induced hearing loss is permanent.	T	F
5.	Noise is measured in decibels (dBA). Noise less than 85 dBA isn't hazardous.	T	F

Handout 11: What is too loud on the farm?

Studies show that farmers have poorer hearing than the general population. A high percentage of farmers show signs of excessive noise exposure. People who operate farm equipment for extended periods of time require special protection.

Exposure to 85 decibels or less for an eight-hour day is considered "safe" for most people. Exposure to "loud noises" for extended periods of time can cause damage to the inner ear that is irreversible even with medical or surgical techniques. Even short exposure to noise exceeding 85 decibels is hazardous and may cause permanent damage.

Your environment is too noisy if . . .

- A person standing a few feet away from you must talk very loudly or even shout to be heard.
- You sometimes feel a "ringing" or a "buzzing" in your ears after a few hours of being in a noisy environment.
- On returning to your room after a break, you find the TV is on full blast.

Reducing the noise level at the source provides the best hearing protection.
The second best alternative is wearing personal protective equipment (PPE) and maintaining it.

Ear muffs offer the highest attenuation (sound reduction). They are fairly comfortable and come in a variety of types, materials and sizes (Colours too – try hot pink for a fashion statement!).

Preferred in moderate noise, **ear plugs** do not supply enough protection for high intensity noise. Most ear plugs are designed as disposable. After using them once, you should throw them out (just like dental floss). Cotton batting and earphones won’t protect you adequately.

Inspect and clean reusable plugs daily. Most disposable plugs should be discarded at the end of the day. Inspect the seals on ear muffs and replace them as required. Ultraviolet light causes deterioration of the plastic and foam components of most muffs.

People often underestimate the importance of wearing protective equipment because the damage happens so gradually there is no dramatic experience. For this reason, farm workers should pay special attention to the dangers of excessive noise before permanent hearing loss results.

Questions for *What is too loud on the farm?*

1. Studies have shown that farmers have:

    a) Better than average hearing
    b) Average hearing
    c) Poorer than average hearing

2. What is considered a safe noise level?

    a) 85 dBA per week
    b) 8.5 dBA per hour
    c) 85 dBA or less for eight-hour day

3. The most effective method for hearing protection is:

    a) Wearing earphones
    b) Reducing the noise at the source
    c) Turning your equipment off when you feel a "ringing" or buzzing in your ears

4. Hearing loss:

    a) May be temporary or permanent
    b) Happens gradually with no dramatic experience
    c) Can sometimes be regained
    d) All of the above

5. For protection against moderate noise exposure:

    a) Ear muffs are recommended.
    b) Ear plugs are adequate.
    c) Cotton batting could be used.

6. Which of the following statements are true for proper maintenance of hearing protective equipment?

    a) Reusable plugs should be thoroughly cleaned and inspected daily.
    b) Most disposable plugs can be used at least twice.
    c) Seals on ear muffs should be inspected & replaced as required.
    d) Ultraviolet light (in sunlight) is not harmful to plastic or foam components of most ear muffs.

Handout 12: Chemical & Biological Hazards Chart

How are we exposed to chemical and biological hazards? How are we affected by the hazards?

List five “chemical hazards,” their effects on our health and how we are exposed to them.

	Name of chemical	**Health effects**	**Ways of being exposed**
1	Asbestos	Cough, lung cancer	Inhale
2			
3			
4			
5			

List five “biological hazards,” their effects on our health and how we are exposed to them.

	Name of biological hazard	**Health effects**	**Ways of being exposed**
1	Uncooked chicken or meat	Food poisoning	Ingest (eat)
2			
3			
4			
5			

Handout 13: Methods of Control

1. What are some hazards at your job (home or school)?

2. List five methods of control used at the source (refer to first question):

   A. _____

   B. _____

   C. _____

   D._____

   E. _____

3. List two methods of control used along the path:

   A. _____

   B. _____

4. List six kinds of personal protective equipment used by the worker:

   A. _____

   B. _____

   C. _____

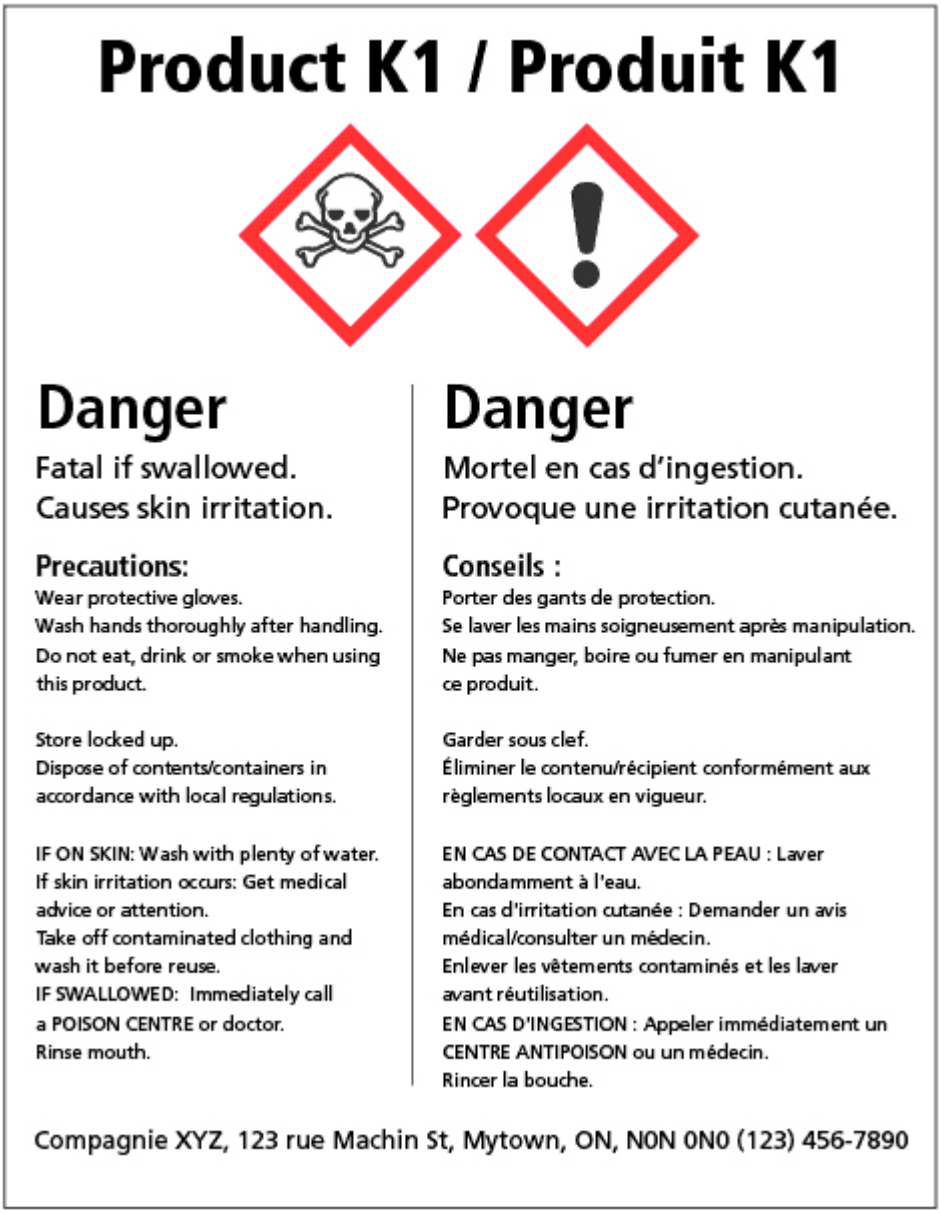
   D. _____

   E. _____

   F. _____

Handout 14: Supplier's Label Quiz

Example of a supplier's label



Source: Canadian Centre for Occupational Health and Safety

Supplier's Label Quiz

1. Supplier labels are required on:

   a) Containers furnished by suppliers of hazardous products
   b) Hazardous products imported into the workplace from outside Canada
   c) All of the above

2. What does each hazard symbol on this label stand for?

3. Where would you find information for this product?

4. When you use this product, what precautionary measures should you take?

Handout 15: Safety Data Sheet Quiz

Questions

1. Before working with a substance, especially for the first time, you should:

   ____ a) Check the SDS
   ____ b) Check the label
   ____ c) Check both the label and the SDS

2. Would you usually find the following information on a label or SDS? Write L for "label" or S for "SDS."

   ____ a) Symptoms of acute and chronic health effects
   ____ b) Information on the specific personal protection you should wear
   ____ c) Immediate first aid information

   You will need to consult the SDS on the following pages for question 3.

3. You are working with a controlled product. You need to transfer some of it to a portable container for a job you are doing. After consulting the SDS for this material, you find out that the personal protective equipment you need to work safely with this material is under which section of the SDS?

   ____ a) First aid measures
   ____ b) Toxicological properties
   ____ c) Physical data
   ____ d) Preventive measures

4. A worker has noticed some skin irritation for the last couple of weeks, just about the time the worker started using this cleaner. You check the SDS to see whether the symptoms could be related to the use of the product. You discover that (check one):

   ____ a) the cleaner could be causing the problem
   ____ b) the cleaner could not be causing the problem

Handout 16: Prevention of Slips, Trips & Falls

You can prevent slips, trips and falls by:

- Recognizing and correcting a potential incident situation when you see it
- Being aware of what you can and can't do (i.e., what's beyond your ability)
- Doing things the safe way even if it takes longer
- Fixing, removing or avoiding potential accidents
- Using the proper equipment to do the job
- Wearing proper footwear

Handout 17: Discussion Questions for *Managing Shift Work*

1. What is shift work?

2. What are some safety problems that can develop in shift work?

3. How can shift work hazards be controlled?

4. What types of workplaces are more prone to potentially violent situations?

Handout 18: Discussion Questions for *Harassment*

1. If you feel you are being harassed in the workplace, what should you do?

2. If you feel that a co-worker is being harassed in the workplace, what should you do?

3. As a new worker, you are exposed to comments and gestures by co-workers of the opposite sex. You find their actions offensive. How would you deal with the situation? Create and act out a role play for this situation.