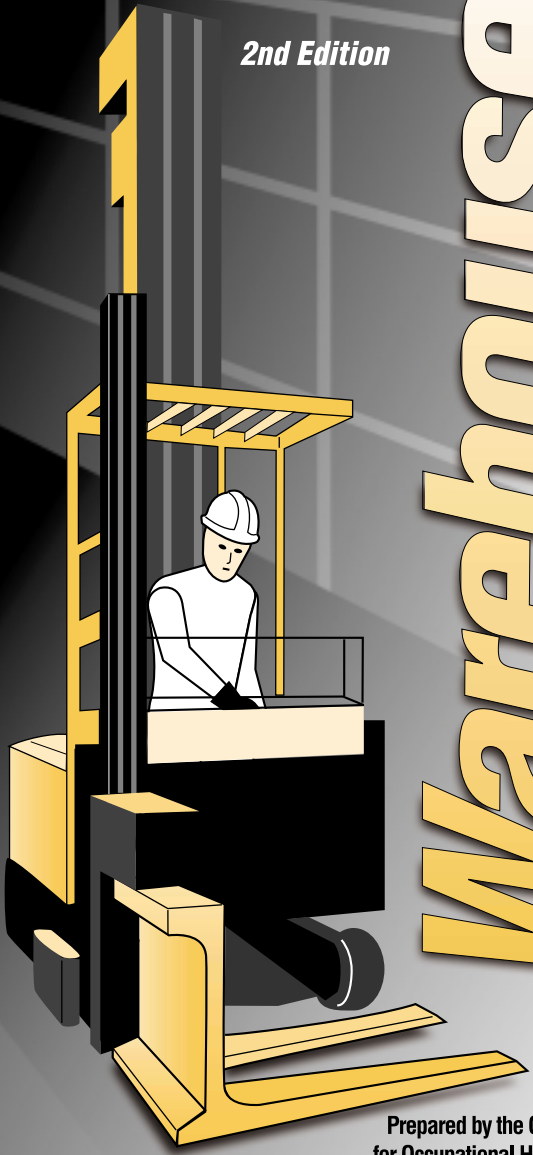
2nd Edition

Warehouse Workers Safety Guide



Prepared by the Canadian Centre for Occupational Health and Safety

Summary

Warehouse work involves a wide range of tasks and hence a wide range of health and safety hazards. Here are some of the injuries and illnesses that can occur:

- cuts and amputations from the use of knives, cutters, saws, packaging tools and materials
- burns from contact with live electrical conductors or hot equipment engines
- crushing injuries from material handling equipment and processes.
- electric shock or electrocution from power tools, defective switch panels, accidental contact with electric power lines, or cleaning of equipment that hasn't been turned off
- slips and falls from slippery or cluttered floors or inadequate lighting
- soreness and loss of function of wrists and arms due to repeated awkward movements or vibration, or working in one position for a long time
- back pain from lifting heavy or awkward loads and using awkward postures
- itching, swelling, redness of skin from temperature extremes, physical abrasion, exposure to detergents or cleaning solutions
- allergies and skin disorders from contact with metals and contaminated packages, inhalation of dusts and plant materials
- illness due to exposure to chemicals and pesticides, or contact with packages contaminated with biological infectious materials such as animal droppings
- carbon monoxide poisoning from internal combustion engine emissions due to poor vehicle maintenance and inadequate ventilation
- battery charging hazards from electric powered forklifts and other battery powered equipment

This guide presents ways of working safely to prevent injuries and illnesses in a warehouse.

Table of Contents

1. General Safety Tips on Lifting and Moving

Risks

- back injury
- muscle and joint injury of the hands, shoulders and waist
- strains, sprains, slips, falls

WEAR safety shoes and gloves.

WARM up (stretch your muscles) before lifting.

MINIMIZE manual lifting. Design the workplace to avoid lifts or transfers. Use mechanical aids such as hoists and transfer tables.

KNOW the weight of an item which you plan to lift. Get help for heavy or bulky items.

GRIP with the whole hand, not just the fingers. The palms of the hand have the greatest gripping area and strength.

AVOID grasping areas near pinch and shear points or the ends of long items.

KEEP the load close to your body. Face in the direction of the lift to avoid having to turn as the final action of a lift.

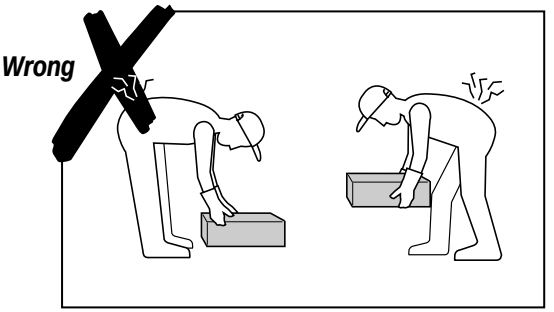
LET your legs do the lifting, not your back. When turning, use your legs and your feet.

LIMIT lifts to the range between your wrists and your shoulders.

PLAN before lifting. Anticipate distance, stairs, ramps and obstacles, and know where to set the load down.

PLAN for clearance to avoid getting pinched hands or fingers.

PLACE items on blocks or shims on flat surfaces to avoid getting pinched fingers.



DO NOT lift with wet or oily hands.

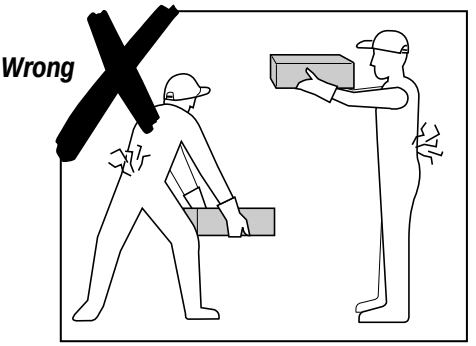
DO NOT turn by rotating at the waist.

DO NOT bend sideways at the waist.

DO NOT attempt to lift heavy items if you are not in good physical condition or do not lift regularly. Get help or use a mechanical aid.

DO NOT attempt to jerk an item off a surface to raise it.

DO NOT drop an item to put it down. Slide it onto a surface then gradually release it.



Pushing and Pulling

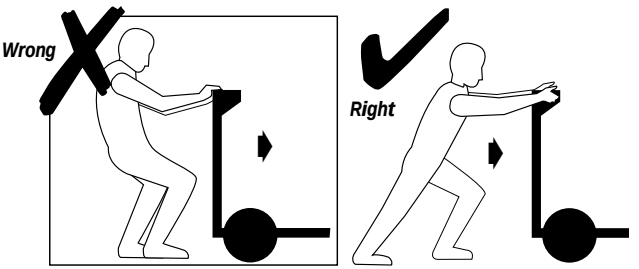
WEAR safety shoes with backs high enough to protect your ankles from being caught by the edge of the cart if possible.

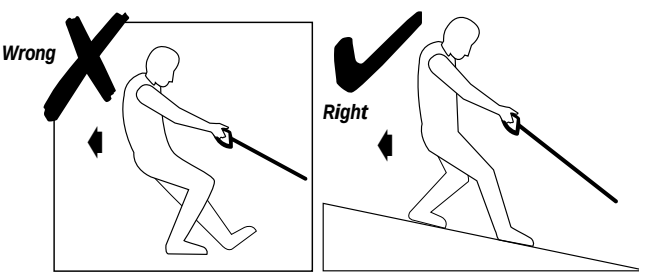
KEEP your back straight and your head in line.

PUSH a cart rather than pull it, when on a flat surface.

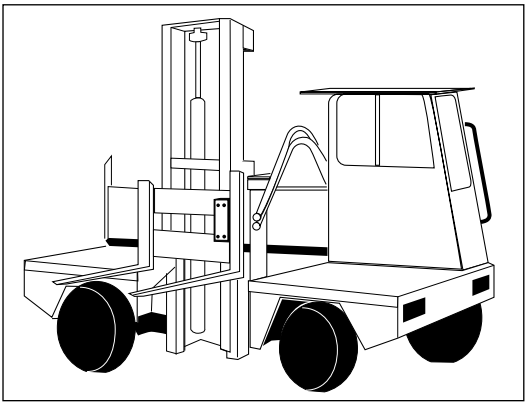
PULL a cart up a ramp using your legs and keeping your back straight.

WATCH for obstacles and other workers.





Side Loading and Straddle Trucks



Side Loading Trucks are designed to move long materials by loading them parallel to the direction of travel.

Straddle trucks are designed to transfer long materials. The truck ha four high legs with a hoist, and a cab normally suspended above and between the wheels.

Side loading and straddle trucks come in many sizes. Only trained and authorized operators should be permitted to operate these vehicles.

☑ READ procedures manuals and review with other operators.

ENSURE that you can see well. If visibility is limited use a second person as a flag person.

USE red flags on the ends of long objects being carried.

USE standard rigging practises when attaching loads.

Transfer Pipes and Ducts

Pipes and ducts are used to fill or empty storage containers. Static electricity can build up from the movement of their contents.

ENSURE all parts of the system are bonded and grounded.

USE confined space procedures (see p. 20-21) when servicing parts of the system that are below grade.

PROVIDE secondary containment for systems which carry corrosive, toxic or flammable materials.

USE only self-priming pump and feed systems.

ENSURE all lines have a slope to allow drainage and cleaning. This is very important where the same line and pumps feed multiple storage units with different materials.

CLEAN all tools used on pipelines to prevent transfer of chemicals, contamination and corrosion.

DO NOT perform maintenance work without following lockout procedures (p. 20-23).

3. Hazardous Materials

Warehouses need to establish policies and procedures for safe handling of hazardous materials. Such policies and procedures must include:

- product labels on all containers
- availability of material safety data sheets (MSDS)
- employee education in safe work practises

Flammable and Combustible Solids and Powders

Risks

- fire or explosion caused by dust build-up
- fire from a chemical that is reactive and wet

WARN workers and visitors about the hazards and the precautions to take.

ENSURE all recommended fire fighting equipment is available.

KEEP dust level below the lower explosive limits by using proper ventilation.

KEEP a scheduled cleaning program which includes structural cleaning and elimination of dust from areas where it can collect and later be circulated.

STORE materials in fire-resistant bins when practical.

SPACE stored materials to allow inspection, and to prevent heat buildup and spread of fire from smouldering materials. Some materials will burn without a visible flame and produce colourless, odourless gases.

USE spark-resistant tools.

ENSURE all conductive (metal) equipment is grounded and any plastics used do not create static electrical sparks. If flammable metals (Class D fire rating) are present, be sure proper Class D fire fighting materials are available and workers are trained in their use.

DO NOT sweep with a standard broom. Use a wet mop instead.

DO NOT use standard vacuum cleaners. Use commercial cleaners with high efficiency air (HEPA) filter and sealed motors, or use a dust collection system.

DO NOT operate electrical or gas powered equipment. A spark may cause fire.