## MATERIAL HANDLING DEVICES

# A SAFETY TALK FOR DISCUSSION LEADERS

This safety talk is designed for discussion leaders to use in preparing safety meetings.

Set a specific time and date for your safety meeting. Publicize your meeting so everyone involved will be sure to attend.

Review this safety talk before the meeting and become familiar with its content. Make notes about the points made in this talk that pertain to your workplace. You should be able to present the material in your own words and lead the discussion without reading it.

Seating space is not absolutely necessary, but arrangements should be made so that those attending can easily see and hear the presentation.

Collect whatever materials and props you will need ahead of time. Try to use equipment in your workplace to demonstrate your points.

### DURING THE MEETING

Give the safety talk in your own words. Use the printed talk merely as a guide.

The purpose of a safety meeting is to initiate discussion of safety problems and provide solutions to those problems. Encourage employees to discuss hazards or potential hazards the encounter on the job. Ask them to suggest ways to improve safety in their area.

Don't let the meeting turn into a gripe session about unrelated topics. As discussion leader, its your job to make sure the topic is safety. Discussing other topics wastes time and can ruin the effectiveness of your safety meeting.

At the end of the meeting, ask employees to sign a sheet on the back of this talk as a record that they attended the safety meeting. Keep this talk on file for your records.

#### MATERIAL HANDLING DEVICES

#### NOTE TO DISCUSSION LEADER:

Demonstrate mechanical devices used for material movement that are employed in your workplace. Take advantage of the experience of the workers by asking them to demonstrate the devices properly.

Obviously there are materials on the job that cannot be moved by hand. Whenever possible, material-handling tools should be used. They enable you to move heavy objects rapidly and with less effort. Levers, inclined planes, jackscrews, and block and tackle are some of the simpler devices.

But there are other devices that you use on the job every day--devices that are sometimes taken for granted.

#### **HANDTRUCKS**

Many types of handtrucks are used throughout industry, including wheelbarrows, dolly trucks and two-wheeled handtrucks. Two-wheeled handtrucks are used for lifting and transporting heavy and bulky objects for short distances.

When using these trucks, make sure the load is placed carefully. Your view should be unobstructed.

Two-wheeled trucks and wheelbarrows should be equipped with knuckle guards to help prevent hand injuries. These guards can be made of canvas, leather or rubber belts.

Cylinder trucks are used for moving compressed air cylinders; the cylinders should be handled carefully and secured to the truck with bands, chains or straps.

A three-wheeled handlift truck should always be centered under the skid it carries so that good balance is maintained. This truck should be pulled; pushing is limited to maneuvering. Leave the handle in the up position to control tripping hazards.

Hand pallet trucks are designed for moving pallets; they should also be pulled. The handle should be down only to jack the skid.

## POWERED INDUSTRIAL TRUCKS

Powered industrial trucks move material quickly and easily and save work and time. If you're selected as a lift truck operator you should know how to operate the trucks carefully and safely and react correctly to every situation.

Pay attention to maximum load limits--never overload. Back the truck down a ramp, but keep the load in front when you're going uphill.

Check to see that your path is clear before backing. Remember, pedestrians have the right of way.

Make sure your truck is inspected thoroughly before starting it and report any malfunctions to your supervisor. Check your brakes, steering, controls, forks, hoist, warning devices and lights before and after each shift.

Tilt the forklift masts back when you're driving the lift and keep your head, arms and legs inside. Keep the forks about 4 to 6 inches above the ground. Do not use your forklift as an elevator for co-workers.

Drive on the right side under normal conditions; avoid quick starts, quick turns and jerky stops. Come to a complete stop therefore reversing direction and watch the distance between other vehicles.

Sound your horn when approaching a blind corner or when workers may not see you. Reduce your speed when the driving surface is slick or rough.

Check clearances when loading or unloading a truck bed and know the weight capacity and condition of the bed.

Besides having regard for company rules, you, as a forklift operator, should operate your machine properly, efficiently and alertly.

# CONVEYORS

Generally, conveyors used in industry are roller, belt, screw, bucket, chain, overhead trolley, portable, mobile, tow, or assembly types.

It is important that powered conveyors be guarded with wire mesh enclosures or railings in order to keep you and others away from moving parts.

Avoid riding on conveyors, except those that incorporate platforms and control rooms for operating personnel.

Conveyors should have conveniently located warning devices and emergency stop controls. When maintenance is being performed, the power should be shut off and the switch locked.

Rollers or pulleys at the ends of belt conveyors should be guarded to prevent fingers and hands from being drawn into pinch points. A shield guard or housing should enclose each end and all other areas at floor level where you could come in contact with moving parts.

Screw conveyors should be completely covered and equipped with removable inspection covers and an interlocking guard, so that when a section of cover is removed the screw automatically stops.

Wheel conveyors should be equipped with side railings, installed high enough to extend beyond the tops of the wheels. The pinch points between the bottoms of the hoppers and the wheels present hazards that can be avoided by providing shunts or side-belt conveyors for unloading containers.

# CRANES AND DERRICKS

Only thoroughly trained persons are permitted to operate cranes.

The rated load must be plainly marked on each side of the crane and the crane must never be overloaded.

Never work or stand underneath a crane that is moving material. If you're the operator, do not swing loads over workers.

Keep hoisting chains and ropes free from kinks. Do not wrap chains or ropes around loads--use a load block hook with a sling. Operators should make sure the sling clears all obstacles.

Standard hand signals for boom cranes should be understood by both the operator and the signaler.

Crane operators should never remove their hands and feet from the controls while a load is suspended. All cranes should be inspected thoroughly by persons familiar with all engineering aspects of the cranes.

#### NOTE TO DISCUSSION LEADER:

This talk can be adapted to fit the needs of your operation. You may not use some of the equipment mentioned or you may wish to discuss some devices that were not touched upon.