WORKERS' COMPENSATION INSURANCE

IWIF

Loss Control

Manufacturing Industry

Hazard & Safety Guide

SAFETY SAVES *With* IWIF

213 02/03

Manufacturing Industry **Hazard & Safety Guide**

The purpose of this publication is to reveal some facts about the manufacturing industry which will help you to understand and reduce the costs of injuries. **We hope that you will use this information to assess your workplace and create the safest and most productive worksite possible.**

Data compiled by the Loss Control Department of the Injured Workers Insurance Fund indicates five primary risk factors within the manufacturing industry. What follows is a list of recommendations/solutions that our analysis indicates will, if put into practice, help cut the cost of workers' compensation and make your place of business safer.

1. Material Handling

Workers in manufacturing must continually move raw, in-process, or finished goods in the routine course of producing marketable commodities. Equipment, too, must often be moved and maintained. Improper handling of these materials can cause overexertion, repetitive motion injuries, and strains and sprains.
In many instances, these risks can be controlled by:

- Whenever possible, requiring the use and maintenance of lift-aid equipment such as hoists, cranes, forklifts, dollies, carts and other mechanical devices rather than manually lifting.

- When materials must be lifted by hand, workers should be required to employ proper lifting techniques such as:
  1. Size up the load before lifting
  2. Have a clear path to carry load, beforehand
  3. Bend the knees
  4. Avoid overreaching or stretching
  5. Avoid twisting or turning the body once the object has been lifted
  6. Pivot with your feet once the object has been lifted
  7. Set the load down properly
  8. Always push, not pull, the load
  9. Split the load when necessary
  10. Get help, if needed

- Implement training

2. Personal Protective Equipment

Another risk factor in the manufacturing industry is the lack of, or improper use of, personal protective equipment. Employers should provide the appropriate personal protective equipment to employees as well as training on its proper use.

Assess the need for Personal protective equipment which may include the following:

1. Eye and Face Protection
2. Respiratory Protection
3. Head Protection
4. Foot Protection
5. Electrical Protective Equipment
6. Hand Protection

Set the guidelines for selection, use, cleaning and maintenance of personal protective equipment.

Implement training

3. Good Housekeeping

Good housekeeping in the workplace contributes to a safe working environment by minimizing obstacles and potential safety threats such as spills, fall and trip hazards, etc.

Falls are one of the leading causes of injury to workers in manufacturing. In fact, most slips, trips and falls can be traced to poor housekeeping practices.

- Areas that should be considered for good housekeeping may include:

1. Machinery and Stationary Equipment
2. Tools and Movable Equipment
3. Floors, Aisles and Passageways
4. Doors and Windows
5. Loading Docks
6. Vents
7. Grounds
8. Stairways
9. Elevators
10. Storage

- Good housekeeping practices can yield the following benefits:

    1. Lower operating costs
    2. Reduced fire hazards
    3. Improved traffic flow
    4. Efficient space utilization
    5. Improved organization
    6. Efficient time management
    7. Improved control over resources
    8. Few mishaps or accidents
    9. Increased production time
    10. Improved work environment

• Implement Training

4. Safeguarding and Lockout/Tagout

Serious injuries to employees can result from a failure to appropriately safeguard, lockout or tagout machinery and/or equipment. Without proper machine guards, workers can suffer serious injuries to their extremities or can be pulled into a machine by their hair or by loose-fitting clothing. In addition, injuries can occur when maintenance is performed on equipment/ machinery without disabling the power or using lockout/tagout procedures.

- Assess your need for servicing and maintaining equipment/machinery:

    1. Is the employee required to place any part of his/her body into an area or on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle?

    2. Is the employee required to remove or bypass a guard or other safety device?

    3. Is the machinery or equipment being serviced by the employee likely to have unexpected energizing or start up or release of stored energy.

    4. Machine or equipment requires isolation of energy source, shutting down, blocking and securing before service or maintenance.

- If you answer yes to the above, compliance is required.

- Steps to perform lockout/tagout:
    1. Lock out the energy isolating device(s) with assigned individual lock(s).
    2. Lockout devices, where used, shall be affixed in such a manner that will hold the energy isolating devices in a “safe” or “off” position.
    3. Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the “safe” or “off” position is prohibited.
    4. Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.
    5. Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
- Implement training.

5. Effective Supervision

Well trained supervisors will manage well-planned jobs and will ultimately produce safe and productive work environments. Research shows that many supervisors are promoted because of their technical ability or their productivity, but not on their safety record. He or she may not be ready for the human relations challenges of creating safe and productive environments. To meet this challenge, employers should:

- Provide supervisory training - train supervisors in human relations skills, behavior-based management and their responsibility for safe production. The IWIF Loss Control Department can help by offering supervisory management training programs in the following areas:
    1. Accountability to work safely is part of the job - Just as productivity is valued when supervisors are evaluated, so should accountability for a safe work environment. Make safety a part of every supervisor's performance appraisal.
    2. Establish written management commitment to workplace safety.
    3. Select a medical provider to assist in getting injured employees back to work early.
    4. Develop employee involvement through safety committees or regular health and safety meetings.
    5. The employee selection process should include a job application, reference checks, drug screening, and an in-depth interview.

6. Machine Safety/Equipment Handling

Any piece of equipment/machinery can be hazardous to workers in manufacturing if used incorrectly or carelessly. Establish an communicate machine safety and equipment usage procedures to affected employees in an effort to ensure safe operation and maintenance of machines and equipment.

- Identify/list potential hazards associated with equipment/machinery (ex. electric shock, loading/unloading problems, getting body parts or clothes caught in machinery)

- Identify/list safety precautions against potential hazards to help prevent accidents (ex. machine guards, protective clothing, safety shoes, safety goggles, proper ventilation, proper maintenance)

- Identify/list safety precautions and procedures for safe operation (ex. start-up, feeding/loading, quality control, operation, shutdown, maintenance)

Implement training programs to ensure employee safety while operating equipment/machinery (ex. new/existing equipment, orientation for new employees, lockout/tagout, proper maintenance)

IWIF Workers' Compensation Insurance

For more information and assistance in implementing your safety program, please contact your IWIF Loss Control Consultant at 1-800-264-IWIF.
IMPORTANT: This guide is advisory only. It may not list all hazards or conditions needing correction or deemed unsafe. Safety and health remain your responsibility. IWIF assumes no liability for identification or correction of conditions or hazards.

This publication is also available on-line in PDF format from www.iwif.com