

# WAREHOUSE WORKERS



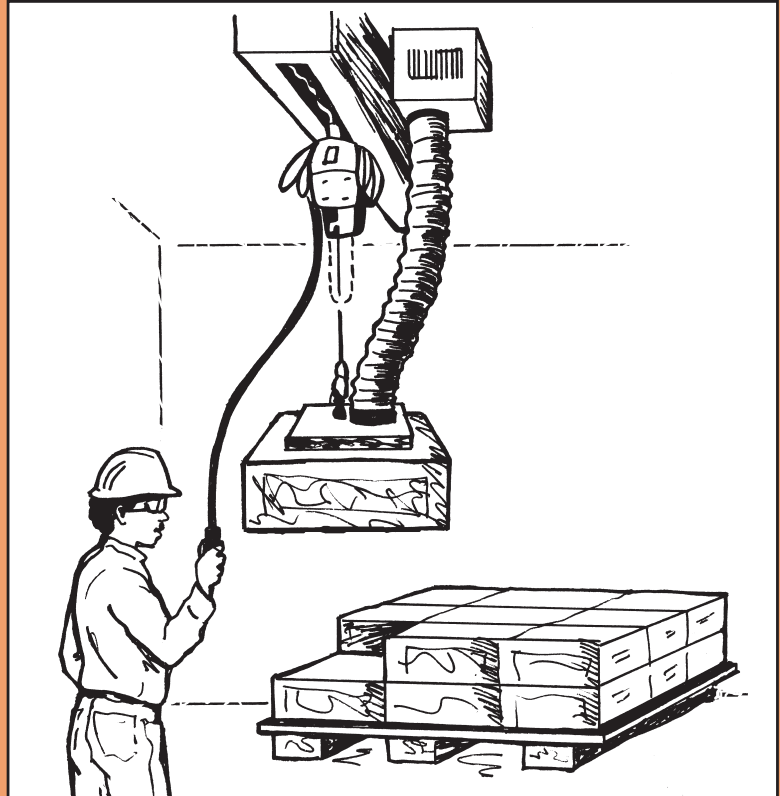
Lifting heavy materials this way can cause pain and injuries.

*Take the  
Hurt Out of  
Handling  
Materials*

## INSIDE:

- ▶ Causes and Symptoms of Injury
- ▶ Ways to Prevent Injuries

There are many ways your work can be made safer for you.

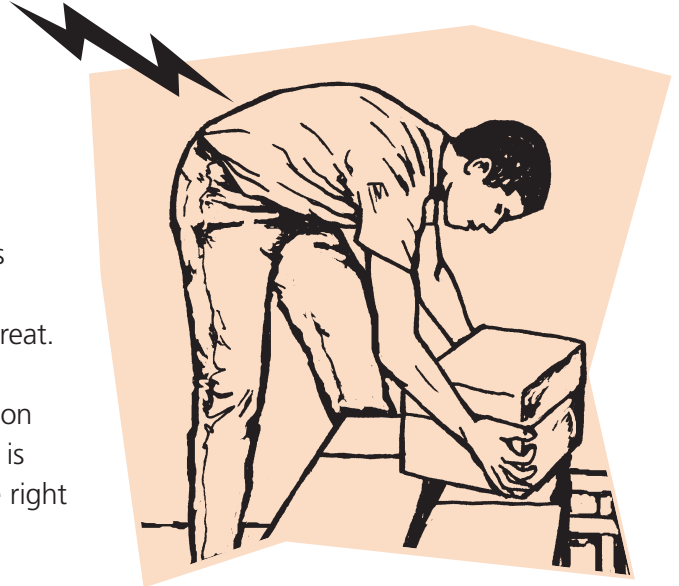


Using equipment such as this vacuum lift limits lifting and helps to prevent injuries.

**JUNE 2001**

## Is Your Job Causing You Pain?

- ▶ **Pain, tingling, numbness and weakness in the back, neck, shoulders, arms, wrists and hands** affect many warehouse workers. These symptoms may be related to your job.
- ▶ **Symptoms may start gradually.** Many workers try to ignore them at first. However, if ignored, symptoms can get worse and become harder to treat. Symptoms that occur at night may still be work-related. Even if they go away during vacations or on days off it doesn't necessarily mean the condition is gone. Inform your employer and get medical care right away if you have symptoms.
- ▶ **These symptoms may indicate serious injuries** that can interfere with your work and personal life. They can even lead to permanent disability.



## Why Do Warehouse Workers Have These Problems?

- ▶ **Repeated and forceful motions.** Moving and lifting boxes on and off racks, gripping heavy or bulky materials that don't have handles, and bending and twisting to lift heavy materials—over and over, all day long—can injure muscles, tendons and ligaments.
- ▶ **Uncomfortable and awkward work positions.** Twisting and reaching to get materials from racks and bins, and stooping to load and unload materials also can lead to injuries.
- ▶ **Handling materials for long periods without taking rest breaks.** This means muscle, tendon, and ligament injuries have less time to heal.
- ▶ **Cold storage work.** Cold temperatures can cause poor blood circulation and make injuries from forceful, repetitive work more likely.
- ▶ **A high-stress, fast-paced work environment with little employee control.** Having machines control the work pace, rushing to meet production standards, and working fast because of incentives can lead to unsafe work that causes injuries.

# How Can Injuries Be Prevented?

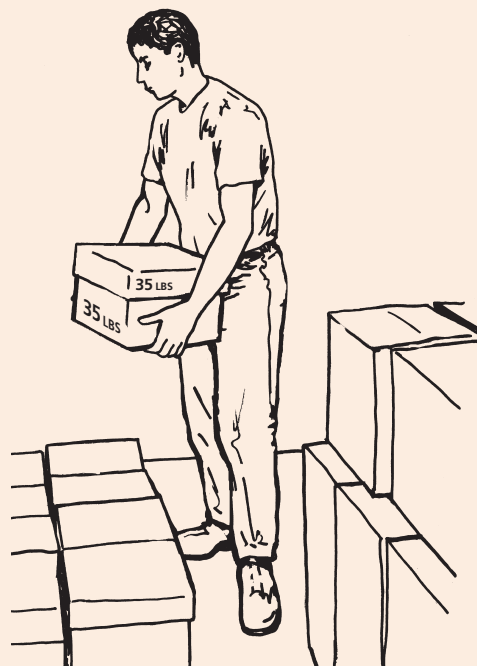
***By law, your employer is responsible for providing a safe and healthful workplace. Here are some things your employer and you can do to prevent injuries.***

- ▶ **Talk with others at work.** Do workers have symptoms? Are the causes of injury present? Does the employer know about preventive actions to take?
- ▶ **Provide a workspace designed to prevent injuries.** Make sure there is adequate space to prevent unnecessary twisting and bending. Plan storage to allow the majority of workers to handle materials in the area between their mid-thigh and shoulder. Provide adequate lighting, including task lights, if needed. Keep temperatures between 64° and 70°F when practical.
- ▶ **Organize the work to eliminate manual carrying and lifting** when possible.
- ▶ **Use powered handling systems such as conveyors, cranes, hoists, lift trucks, and vacuum lifts** instead of manual handling whenever possible. Maintain equipment in good condition. Train workers to use equipment safely.
- ▶ **Design manual handling jobs to be as safe as possible.**
  - *Store frequently handled materials in the most accessible locations.*
  - *Provide frequent breaks.*
  - *Reduce the weight of materials.* Consider requesting smaller packages, handling fewer items per load, and handling materials as a team.
  - *Provide handholds on materials* for safer gripping and lifting.
  - *Use equipment* such as hand trucks, carts, and pallet jacks.
  - *Adjust work/rest schedules.*
  - *Organize lifting jobs and train workers to lift safely.* See next pages.
- ▶ **Set realistic deadlines and production standards.** Allow workers to control the pace of jobs to reduce pressure and prevent unsafe work.
- ▶ **Train workers and managers on the causes and early symptoms of injury.**

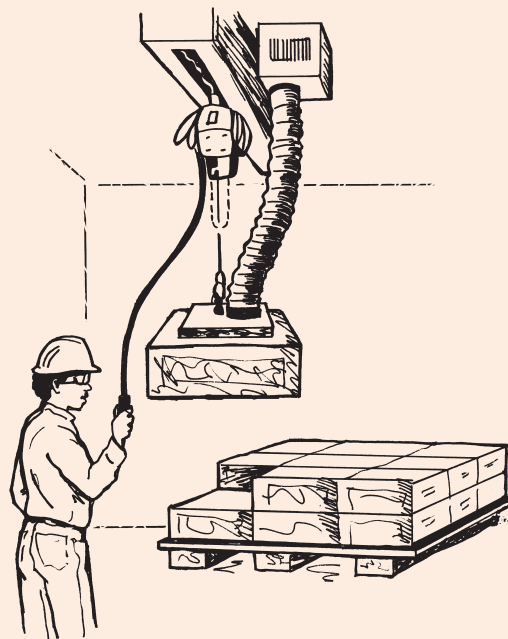
## SAFE MANUAL LIFTING TIPS

### ► Organize jobs beforehand

- *Label loads with their weights* whenever possible.



- *Design jobs to keep loads close to the body.*
- *Avoid jobs that involve lifting from the floor or ground.*
- *Provide frequent, short breaks* to allow for recovery between loads.
- *Provide assistance for all loads over 75 lbs.,* even one-time lifts. Use lifting equipment or team lifting.



■ *Determine if loads less than 75 lbs. can be lifted without assistance by answering these key questions:*

- How far is the load from the body?
- How far is the load from the floor?
- How far will the load be carried?
- How many times will the load be lifted and over what time period?
- Is it necessary to twist or rotate while lifting?
- Can you get a good grip on the load?

#### **EXAMPLE**

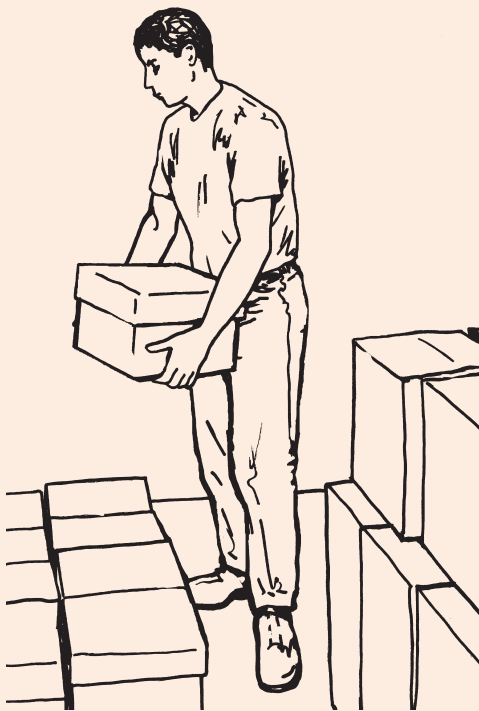
**Provide lifting assistance in each of these situations if you answer "Yes" to the questions.**

- Is the load more than 55 pounds? Will it be lifted more than 10 times per day?
- Is the load more than 25 pounds? Will it be lifted below the knees, above the shoulders, or at arms' length more than 25 times per day?
- Does the unsupported object weigh more than 10 pounds? Does it have to be gripped more than two hours total a day?

▶ **See "For More Information"** on the back cover for resources that can help you determine when loads can be lifted safely without assistance. Ergonomists or other trained health and safety professionals also can help.

► **Provide training that includes these safety procedures:**

- ***Make a clear path***—as straight as possible—for carrying loads. Don't risk stepping on, over, or around obstacles that could make you trip or slip.
- ***Make sure loads are balanced*** (distribute the weight evenly). If this isn't possible, keep the heaviest end of the load closest to your body.
- ***Keep lifts between mid-thigh and shoulder level.***
- ***Get a good grip*** on the load—add lifting handles if needed.
- ***Hug the load.*** Keep loads as close to your body as possible when lifting, lowering, and carrying.
- ***Turn your feet one at a time to change directions.*** Avoid twisting your body while lifting.



## Taking Action to Prevent Injuries

- ▶ **Form a safety committee.** It can be a big help in keeping your workplace safe. Get key people from both labor and management to participate. A successful committee is one that has strong employer support. An experienced ergonomic consultant can provide technical assistance. Here's what a safety committee can do:
  - Talk to workers and inspect jobs to find conditions that can cause injuries.
  - Encourage workers to report work-related injuries and symptoms to their supervisor.
  - Identify the jobs that have caused injuries.
  - Figure out how particular jobs may be causing injuries.
  - Develop practical solutions and recommend that management try them out on a few individuals.
  - Check to see if the changes are effective before recommending them for all affected jobs.
  - Monitor employees using new equipment and/or making other job changes.

## What Does the Law Say?

- ▶ **Your employer may have to follow a California rule about repetitive work. Find out:**
  - Were two or more workers injured within the last 12 months? The injured workers must have done the same type of work.
  - Did a doctor report that each injury is mainly caused by the job? Each worker can have a different diagnosis, as long as it's related to the same kind of repetitive work.
- ▶ **If the answer to both questions is "Yes," the employer must change the work or equipment to prevent injuries.** Worker training also is required.

This rule is called Repetitive Motion Injuries (General Industry Safety Order 5110). It is enforced by Cal/OSHA.

What is Cal/OSHA? It is California's Division of Occupational Safety and Health. This government agency investigates workers' complaints and answers questions about workplace safety rules. Complaints are confidential. Find the phone number in the blue Government Pages near the front of the phone book. Look under: State of California, Industrial Relations, Division of Occupational Safety and Health, Compliance or Enforcement.

For employers, California has the Consultation Service (1-800-963-9424). This agency explains workplace health and safety regulations, and helps employers comply with them. They do not cite or impose fines.

## For More Information...

▶ **HESIS (Hazard Evaluation System and Information Service).** [www.dhs.ca.gov/ohb](http://www.dhs.ca.gov/ohb)

Answers questions about workplace hazards and has many free publications available.

**For information on workplace hazards: (510) 622-4317.** Please leave a message and your call will be returned.

**For HESIS Publications: (510) 622-4328**

- *Guide to Getting Medical Care for Job-Related Pain That Won't Go Away.* Helps workers recognize symptoms that need treatment; choose a doctor; and work with health care providers, employers, and the workers' compensation system.
- *A Physicians' Guide to the California Ergonomics Standard.* Helps health care providers identify, document and treat work-related repetitive motion injuries and other musculoskeletal disorders.
- *HESIS Publication List.* Pamphlets and fact sheets on workplace hazards including chemicals, repetitive motion, and infectious diseases. Visit our website, call or write for the list.

▶ **Workers' Compensation.** If you are injured on the job, or work makes an existing injury worse, you may have a right to receive benefits such as medical care, wage replacement and retraining (if a job change is needed). Benefits are available to all workers, including immigrants, part-time and temporary workers. Call **1-800-736-7401** for more information and for free publications in English and Spanish:

- Factsheet #1: *What Every Worker Should Know*
- Factsheet #2: *After You Get Hurt on the Job*

▶ **Cal/OSHA Consultation Service.** Helps employers to improve safety and health conditions without triggering enforcement inspections. Call **1-800-963-9424** for assistance and for *Easy Ergonomics* and other materials.

▶ **National Institute for Occupational Safety and Health (NIOSH)** has an Ergonomics and Musculoskeletal Disorders web site: [www.cdc.gov/niosh/ergopage.html](http://www.cdc.gov/niosh/ergopage.html). The *Application Manual for the Revised NIOSH Lifting Equation* is a free download at [www.cdc.gov/niosh/94-110.html](http://www.cdc.gov/niosh/94-110.html) or may be purchased from National Technical Information Service (NTIS) by calling **1-(800) 553-6847** and requesting order number PB94-176930LJM.

▶ **Other ergonomics web sites:**

OSHA (U.S. OSHA program) Ergonomics Technical Links page: [www.osha-slc.gov/SLTC/index.html](http://www.osha-slc.gov/SLTC/index.html) (select ergonomics).

WISHA (State of Washington OSHA program) Ergonomics Education and Training page:

[www.lni.wa.gov/wisha/ergo/ergoed.htm](http://www.lni.wa.gov/wisha/ergo/ergoed.htm) (see the booklet *Lessons for Lifting and Moving Materials*).

CCOHS (Canadian OSHA program) Ergonomics Answers page: [www.ccohs.ca/oshanswers/ergonomics](http://www.ccohs.ca/oshanswers/ergonomics) (see the publications *Manual Materials Handling-Health Hazards* and *Back Injury Prevention*).

**ABOUT THIS FACT SHEET.** This publication was produced by HESIS, the Hazard Evaluation System and Information Service, Department of Health Services and Department of Industrial Relations, State of California.

The recommendations in this fact sheet were developed by HESIS based on our evaluation of research studies and published information, and on general ergonomic principles. They may not be appropriate for every warehouse or individual warehouse materials handler.

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# HESIS

**HAZARD EVALUATION SYSTEM  
& INFORMATION SERVICE**

California Department of Health Services  
Occupational Health Branch  
1515 Clay Street, Suite 1901, Oakland, CA 94612  
510-622-4300 • [www.dhs.ca.gov/ohb](http://www.dhs.ca.gov/ohb)

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State of California  
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