FACT SHEET 9

MARCH 2002

DoD Ergonomics Working Group

It's a fact...

You should know to safely *carry* heavy loads.

A poorly designed materials-handling task is one where the strength requirements to complete the task exceed the strength capabilities of most workers. Simply put, most workers would not be able to perform the task without overexertion.

Poorly designed tasks generally require workers to lift, lower, push, pull, or carry heavy loads. These tasks may also include excessive bending, reaching, or twisting of the body.

The following guidelines provide suggestions on how to properly **carry** various objects.

To eliminate the need to carry heavy objects:

- Rearrange the workplace to eliminate unnecessary movement of material.
- Use mechanical handling aids, such as—
  - Conveyors.
  - Lift trucks.
  - Hand trucks.
  - Tables or slides between workstations.
  - Four-wheel carts or dollies.
  - Air or gravity press ejection systems.
  - Overhead cranes.

Use special dollies and other equipment to make lifting easier, faster, and safer.

To reduce the weight carried:

- Reduce the weight of the object.
- Reduce the weight of the container.
- Reduce the load in the container.
- Specify quantity per container to suppliers.

- Eliminate one-handed carries.
- Improve the handhold or grip on the container.

To reduce the bulk of materials carried:

- Reduce the size or shape of the object or container.
- Provide handles or handgrips that allow materials to be held close to the body.
- Assign the job to two or more persons.

To reduce the carry distance:

- Relocate receiving, storage, production, or shipping areas.
- Use powered and nonpowered conveyors.

To convert the carry to a push or pull task:

- Use nonpowered conveyors.
- Use hand trucks and pushcarts.

This fact sheet is a product of the DoD Ergonomics Working Group and was adapted from their June 2000 publication, *Preventing Work-Related Musculoskeletal Disorders in the Workplace*.

Written for both supervisors and workers, this fact sheet provides basic information on ergonomics. For more information, visit the working group's Web site at http://chppm-www.apgea.army.mil/ergowg/product.htm.