HOW MUCH CAN YOU LIFT?

Find ergonomic solutions to real and potential problems in your workplace.

Many workers and employers ask what constitutes a safe load and many experts have tried to provide an acceptable answer. In reality, however, it is almost impossible to establish effective rules for maximum weights to be lifted. **For each lift, many factors affect both the worker and the job to be done**.

TO REDUCE THE RISK OF INJURIES, YOU MUST:

- Analyze each work area separately (e.g., housekeeping, maintenance, food services). Each department and area has a different set of risk factors facing staff.
- Consider these four major factors before you decide whether a lift is safe or unsafe: worker characteristics, load characteristics, task characteristics and environmental characteristics.

WORKER CHARACTERISTICS

- Consider the worker's height, strength, skills, willingness to accept risk, training, age, health and work experience.
- Consider getting other staff members to help.
- Look at the time within the shift when the lift is being done (e.g. at the end of the shift when fatigue is a factor).

LOAD CHARACTERISTICS

- Consider the weight and shape of the object or person being lifted.
- Is it a small patient, a heavy resident or a large, awkwardly shaped box?
- Where is the load located?
- Is the weight labelled on the boxes?
- If the load is an object, does it have handles?

TASK CHARACTERISTICS

- Are speed and accuracy needed?
- Does the lift involve twisting and/or bending?
- Can you keep the person or object close to your body while lifting?
- Is the load hot or cold?
- Consider the position of the object or person before and after the lift, the distance you must carry and how often you must lift.

ENVIRONMENTAL CHARACTERISTICS

- Are the floors and lighting in good condition?
- Is lifting and transferring equipment available?
- Are there any distractions?
- What is the layout of the workplace?
- Must staff work around obstacles?

AVOIDING LIFTING INJURIES

To reduce the number of lifting injuries, you should start by gathering a team whose mandate is to identify and reduce risk factors related to lifting tasks. Your team should consist of representatives from all levels – front line staff, unions, senior and middle management, etc. This committee should break down its tasks into small steps. For example, it could begin by selecting a specific job or department where many employees are injuring themselves while lifting.

The next step is to complete a task analysis of the job. This involves **observing staff while they work for at least two or three shifts**. If more than one worker performs the job, observe as many workers as possible.

TASK ANALYSIS CONSIDERATIONS

While observing tasks that involve the lifting of objects, keep in mind these points:

- **What:** Describe and measure what is being lifted (e.g. a box 4ft x 1ft x 2ft).
- **Weight:** Measure the weight.
- **Dimensions:** The larger the object the more stressful it is to lift. Measure the dimensions (e.g. a box 4ft x 1ft x 2ft).
- **Frequency:** Indicate the number of lifts per shift, hour or minute. Where is the load located?
- **Duration:** How long does each lift take?
- **Horizontal distance from the body:** How far is the load from the spine of the worker?
- **Vertical position of the load at start:** Where are the lifter's hands in relation to body at the start of the lift (e.g. ankle, knee, waist)?
- **Vertical lifting distance**: How far vertically is the weight lifted (e.g. from knee to waist)?
- **Handling/grip:** Is the load lifted with one hand or two? Is the power or pinch grip used? Are there handles on the object?
- **Posture of the back:** Is the trunk bent forward and/or twisted?
- **Equipment:** Does the object have to be lifted manually? Is a mechanical lifting device available?

LIFTING OBJECTS

If the task involves the manual lifting and handling of items such as boxes, apply these principles to solve problems you identify in the task analysis:

- Eliminate the need for manual materials handling by using mechanical lifts and changing the work area layout (e.g. lower or raise working height).
- Decrease job demands by decreasing the weight of the object, changing the type of material handling activity (e.g. place heavy objects at waist height in storage areas), changing the work area layout, taking more time to perform the job and asking another worker to assist.
- Minimize repetitive movements by reducing forward bending motions and twisting movements.

If your task analysis identifies problems with lifting and transferring patients or residents, the solutions are more complex. However, your joint health and safety committee (JHSC) can receive valuable input from staff who must complete the lifts and transfers. Two possible solutions to reduce the risks that your staff face in everyday lifting are: to **eliminate all manual lifting of patients** and **systematically assess the risk factors** in order to identify the safest and most appropriate lift or transfer to use with each client.