

# What are the Objectives of Implementing a Safe Patient Handling Program?



## QUESTION

What are the objectives of implementing a safe patient handling program?

- A. Train/Evaluate, conduct needs analysis, institute a non-lift policy.
- B. Plan patient maneuvers, avoid patient lifting where possible, train/evaluate.
- C. Standardize patient assessments, consult with patients on lifting, plan patient maneuvers.
- D. Organize a safe-patient handling committee, avoid manual lifting where possible, institute a no lift policy.

## ANSWER

- B. Plan patient maneuvers, avoid patient lifting where possible, train/evaluate.

## WHY IS IT RIGHT

Patient handling is the top cause of injury among care workers. Care workers who move people are at significant risk of sprains and strain injuries. Physically dependent people need to be assessed, taking into account the task being

performed and the space in which the work will take place. Controlling the risk involves providing appropriate mechanical equipment, and training workers on safe work procedures and use of equipment.

This information must be clearly communicated to all staff that may care for the client including staff that may be filling in for workers that are ill or on vacation.

Appropriate symbols and codes can communicate whether the client is capable of an unassisted transfer, can bear his or her weight on at least one leg during an assisted transfer, or requires a mechanical lift.

The ability of the client to communicate with the caregiver to either identify physical limitations or to aid in the transfer will also determine the need for a mechanical lift.

**Overexertion injuries among healthcare workers is consistently two to five times greater than the rate of the general workforce.** The single greatest cause for these injuries is manual patient handling such as manual lifting, moving and repositioning of hospitalized patients, home-health care patients, and nursing home residents.

Overexertion injuries can cause musculoskeletal injuries such as herniated discs, joint and tendon inflammation and ligament or muscle strains. Many healthcare workers sustain reoccurring, short-term and long-term issues including arthritis and chronic back pain.

Manually handling any heavy item is risky, but humans are often an awkward shape, move independently and can be unpredictable patient's sudden movements can cause even the best planned maneuver to go wrong, resulting in staff and patient injury.

Rates of musculoskeletal injuries from overexertion in healthcare occupations are among the highest of all U.S.

industries. Data from the Bureau of Labor Statistics (BLS) show that in 2014, the rate of overexertion injuries averaged across all industries was 33 per 10,000 full time workers. By comparison, the overexertion injury rate for hospital workers was twice the average (68 per 10,000), the rate for nursing home workers was over three times the average (107 per 10,000), and the rate for ambulance workers was over five times the average (174 per 10,000). The single greatest risk factor for overexertion injuries in healthcare workers is the manual lifting, moving and repositioning of patients, residents or clients, i.e., manual patient handling.

### **Patient Handling Ergonomics**

Occupational safety and health programs have fostered research to identify injury risk factors and safety interventions to prevent injuries during patient handling. Evidence-based research has shown that safe patient handling interventions can significantly reduce overexertion injuries by replacing manual patient handling with safer methods guided by the principles of 'Ergonomics.' Ergonomics refers to the design of work tasks to best suit the capabilities of workers. In the case of patient handling, it involves the use of mechanical equipment and safety procedures to lift and move patients so that health care workers can avoid using manual exertions and thereby reduce their risk of injury. At the same time, patient handling ergonomics seeks to maximize the safety and comfort of patients during handling.

It is clear the healthcare industry must rely on technology to make patient handling and movement safe. Patient transfer and lifting devices are key components of an effective program to control the risk of injury to patients and staff associated with lifting, transferring, repositioning or movement of patients.

**Essential elements of such a program include the following:**

- Management commitment to implement a safe patient handling program
- Provide workers with appropriate measures to avoid manual handling; worker participation in the assessment and implementation processes evaluation and selection of patient handling devices;
- thorough hazard assessment that addresses high risk units or areas.
- investment in equipment.
- care planning for patient handling and movement
- training for staff; and program review and evaluation processes.

The education and training of healthcare employees should be geared towards assessment of hazards in the healthcare work setting, selection and use of the appropriate patient lifting equipment and devices, and review of research-based practices of safe patient handling.

The use of assistive patient handling equipment and devices is beneficial not only for healthcare staff, but also for patients. Explaining planned lifting procedures to patients prior to lifting and enlisting their cooperation and engagement can increase patient safety and comfort, and enhance their sense of dignity.

## **WHY IS EVERYTHING ELSE WRONG**

The underpinning of a thoughtful lifting program is it:

- avoid an annual patient handling where possible.
- Plan patient maneuvers
- Train and evaluate

## **TRANSFER REPOSITION AND LIFTING SERVICES**

Once this accomplished, the transfer, reposition and Lifting Services can be implemented successfully. industries where patient handling tasks are performed included:

- Long-Term Care (includes facilities that provide skilled or non-skilled nursing care);
- Acute Care – (includes hospitals, out-patient surgical centers, and clinics);
- Home Healthcare workers; and
- Others – such as physical therapists, radiologists, sonographers, etc.

**Mechanical lifts** should be available in all situations where the patient or resident cannot bear weight on at least one leg.

The adequate number, variety, and placement of mechanical lifts will need to be determined by the committee undertaking an ergonomic analysis of the workplace.

**Training** needs should also be assessed by the committee. Are new employees receiving proper training and orientation regarding safe transfer techniques, patient or resident assessment, and the proper use of mechanical lifts. Are current staff receiving on-going in-service training and refresher training’

Employees should also be informed about the importance of appropriate footwear and clothing. Proper footwear that is slip resistant and clothing that allows unrestricted movement can significantly reduce the chance of injury in transfers. Jewellery such as necklaces or bracelets can become a hazard if the patient grabs at these objects during a fall.

## **THE DESIGN AND LAYOUT OF A FACILITY IS CRITICAL IN REDUCING RISK FACTORS FOR CAREGIVERS AND CLIENTS.**

- The space and design of the patient or resident’s room (including the bathroom) must allow for the free movement of the caregiver, resident, lifting devices, walkers, and wheelchairs.
- The layout and space must also enable the caregiver to use proper body mechanics and transfer techniques.

- Furniture should be of sufficient height to safely effect transfers. Furniture and equipment, in particular beds, should be **adjustable** to best insure safe client handling.
- Arms and legs on wheelchairs should be adjustable and removable. Cushions on wheelchairs should be secured so they cannot slip.
- Grab bars should be sufficient in number and placement to aid transfers in the bathroom.
- Commode chairs should have removable arms and leg and foot rests. A well-designed chair should be stable with a lap belt for clients.
- Geriatric chairs should, as well, have removable arm and foot rests to effect transfers.
- Bed rails should be light to allow operation by the caregiver with only one hand to reduce physical exertion.
- Lighting should be adequate to accomplish necessary tasks. Lighting that is too bright however can cause optical strain and stress.
- Colours and black and white contrast that aide the visual perception of the elderly can reduce the chance of accidents during transfers or if the client is ambulatory.
- Wet, highly polished, or otherwise slippery floors can contribute to slip and fall hazards.
- The Proper Approach to the Patient Transfer or Lift
- In addition to the physical layout of the workplace, equipment, staffing, and workload, the approach to the transfer or lift is a key element to reducing caregiver injuries.
- Proper documentation and communication should inform the caregiver of the client's abilities, transfer needs, physical stability, and tendency if any, towards aggressive acts.
- The caregiver should anticipate what actions would be necessary if the client loses balance or falls.

- The procedure for the transfer should be clearly communicated and understood by any other staff assisting and the patient or resident.
- The caregiver should assess the client, even briefly, before every transfer.
- The client should be transported the shortest possible distance by the lifting device. The mechanical lifting device should not be used to transport the patient or resident outside the room.
- In transfers, tighten your abdominal muscles, keep your back straight, and use your leg muscles to avoid injury.
- Do not rotate or twist the spine. Move your entire body in the direction of the transfer.
- Never grab the client under his or her armpits as this could injure the client.
- Position yourself close to the client and assure footing is stable.
- Try to maintain eye contact with the client and communicate while the transfer is in progress.
- Never allow the client to grasp you around the neck as this could result in injury.
- Agree on the timing of the transfer with the client and other caregiver(s) and count together.
- Assure that the path of the transfer or lift is clear from obstructions and that furniture and aids that the client is being transferred to are properly placed and secure.

## **No-lift Policy**

A no-lift policy would state that all manual handling tasks are to be avoided where ever possible. No-lift policies successfully reduce the risk **only if** the organization has the infrastructure in place (e.g., technical solutions, lifts, equipment) to support the initiative. Training is also necessary for caregivers to recognize the risk in activities, and how to follow appropriate steps to move or transfer a

patient safely.

### **Types of lifts include:**

- wheeled hoist/portable floor lift,
- stationary hoist/fixed lift,
- ceiling track complete with motor,
- sit/stand lifting aid, and
- bath lifts.

Hospitals, long term care facilities and private homes use mechanical lifting systems to move or reposition patients/clients with mobility issues. Client lifting poses an injury risk to the attendant, however because the task cannot be eliminated, engineering solutions were created in the form of mechanical lifts.

Mechanical lifting systems have been the source of injury, and even deaths, to clients and attendants, mainly related to the malfunction, failure, or misuse of patient lifts. This hazard alert focuses on the hazards to attendants (workers).

### **An Ergonomic Safe Patient Handling Program Needs to be Developed**

The main reason is to reduce musculoskeletal injuries among direct caregivers. The physical stresses and exertion involved in caring for nursing home and hospital patients has caused rising numbers of back injuries and other musculoskeletal problems.

Musculoskeletal injuries include damage to muscles, ligaments, tendons, nerves, bursae, joints, and cartilage, including intervertebral discs. Symptoms of damage can include:

- Pain and/or swelling.
- Numbness, burning, or tingling sensations.
- Loss of mobility around a particular joint or joints.

These injuries generally result from the long-term cumulative



physical effort of patient transfers as well as acute effects, which result from incidents during transfers. They may also develop from a “peak load”. Peak loads occur when a onetime task or event is performed that requires the body to perform above its capacity.

Registered nurses, registered practical nurses, and health care aides experience injury and disability from musculoskeletal injuries.

An ergonomic approach to patient handling that is part of an overall program to reduce musculoskeletal injuries can benefit caregivers and employers alike.

**In general, a safe patient handling program will involve the following steps:**

- Management approval and commitment to develop and implement a patient handling program.
- Development of a joint program by management, workers, union (if present), health and safety committee, etc.
- Perform a needs analysis.
- Create and standardize patient assessment criteria.
- Develop decision trees to standardize actions.
- Determine which controls are needed to implement specific tasks or patient needs.
- Institute a “no-lift” policy, where possible.

## **NEEDS ANALYSIS**

The **needs analysis** should include to review and document, on an on-going basis, the causes of injuries that occur during patient handling. The impact of caring for aggressive patients and residents also needs to be analyzed. It should document the number of injuries and all the relevant details needed to eliminate hazards and develop work practices that will ensure prevention.

The committee performing the needs analysis should be

representative of all areas, shifts, and all groups of employees who have experienced musculoskeletal injuries or those who are likely to be handling patients as part of their work.

An important tool in conducting the needs analysis is a survey to obtain the input of the employees. A written questionnaire that can be completed anonymously can ask for details regarding hazards and proposed solutions. Questions can include workload, jobs, tasks and work environments that the employees perceive as high risk. Many times, these surveys will highlight problems not normally found through other sources.

### **Assess the Work Environment**

Conduct a site visit to observe each work environment or area. The goal is to evaluate injury data and to match it to equipment and space issues, physical layout, storage availability, maintenance or repair issues, and staffing.

### **Workload Factors**

The committee will need to carefully analyze the number of patients or residents assigned to staff members, the number and duration of tasks required for these specific clients, and the time allotted to caregivers in order to fairly gauge workload. Excessive workloads are hazardous to clients as well as to caregivers.

### **Patient Transfers and Patient Lifts**

A critical issue in ergonomic patient handling is the distinction between a patient or resident transfer and a lift.

A transfer is a dynamic effort in which the client aids in the transfer and is able to bear weight on at least one leg.

A lift involves moving a client who cannot bear weight on at least one leg. Lifts should always involve mechanical lifting

devices.

Injuries to caregivers during patient and resident transfers usually occur when a patient transfer suddenly becomes a patient lift. Assessment of the client's capabilities therefore becomes a critical component of any ergonomic patient-handling program. Clients who suddenly lose their balance must be identified to determine whether two caregivers are necessary to affect a transfer or whether a mechanical device is necessary.

The relative sizes of the caregiver and the client must be considered when one is determining the need for additional staff to aid in a transfer or the need for a mechanical lift. The weight and height differences may dictate the necessity of mechanical assistance.

Proper body mechanics alone cannot prevent injuries. Only 3 percent to 25 percent of hospitals have 'comprehensive' safe patient-handling programs.