Safe Patient Handling Stats and Facts

DID YOU KNOW?

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.

Hospitals have high rates of nonfatal occupational injuries and illnesses. On average, U.S. hospitals recorded 6.4 work-related injuries and illnesses for every 100 full-time employees in 2013, compared with 3.3 per 100 full-time employees for all U.S. industries combined. In 2013, 34 percent of recorded hospital worker injuries nationwide that resulted in days away from work were associated with patient interactions. Safe patient handling programs can reduce injuries such as musculoskeletal disorders (MSDs). Reducing injuries not only helps workers, but also will improve patient care and the bottom line. If your hospital is considering developing or refining a comprehensive safe patient handling program to protect workers and patients, having the right data, evidence, examples, and tools can help ensure success. OSHA has developed a series of online resources to help you develop and implement safe patient handling assessments, policies, procedures, programs, training, and patient education in your hospital.

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.

One major source of injury to healthcare workers is musculoskeletal disorders (MSDs). In 2017, nursing assistants had the second highest number of cases of MSDs. There were 18,090 days away from work cases, which equates to an incidence rate (IR) of 166.3 per 10,000 workers, more than five times the average for all industries. This compares to the all-worker days-away from work rate of 30.5 per 10,000 workers.

These injuries are due in large part to overexertion related to repeated manual patient handling activities, often involving heavy manual lifting associated with transferring, and repositioning patients and working in extremely awkward postures. Some examples of patient handling tasks that may be identified as high-risk include: transferring from toilet to chair, transferring from chair to bed, transferring from bathtub to chair, repositioning from side to side in bed, lifting a patient in bed, repositioning a patient in chair, or making a bed with a patient in it.

Sprains and strains are the most often reported nature of injuries, and the shoulders and low back are the most affected body parts. The problem of lifting patients is compounded by the increasing weight of patients to be lifted due to the obesity epidemic in the United States and the rapidly increasing number of

older people who require assistance with the activities of daily living.

The consequences of work-related musculoskeletal injuries among nurses are substantial. Along with higher employer costs due to medical expenses, disability compensation, and litigation, nurse injuries also are costly in terms of chronic pain and functional disability, absenteeism, and turnover. As many as 20% of nurses who leave direct patient care positions do so because of risks associated with the work. Direct and indirect costs associated with only back injuries in the healthcare industry are estimated to be $20 billion annually. In addition, healthcare employees, who experience pain and fatigue, may be less productive, less attentive, more susceptible to further injury, and may be more likely to affect the health and safety of others.

Industries where patient handling tasks are performed include:

- 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.

Some examples of areas of a facility that may be identified as high-risk include: bathing rooms, extended care wings, and diagnostic units (e.g., radiology, emergency department, spinal unit, orthopedics department).

Given the increasingly hazardous biomechanical demands on caregivers today, 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 management commitment to implement a safe patient handling program and to provide workers with appropriate measures to avoid manual

handling; worker participation in the assessment and implementation processes and the evaluation and selection of patient handling devices; a 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.

Hazards and Solutions (Transfer, Repositioning, and Lifting Devices)

Acute Care and Long Term Healthcare Workers

- **Safe Patient Handling Tools and Resources.** OSHA has developed a series of online resources to help hospitals develop and implement safe patient handling assessments, policies, procedures, programs, training, and patient education.
- **Beyond Getting Started:** A Resource Guide for Implementing a Safe Patient Handling Program in the Acute Care Setting. Association of Occupational Health Professionals in Healthcare (AOHP), (2014). This resource guide addresses patient handling with the goal of providing the necessary tools for occupational health professionals to implement a safe patient handling program.

The OSHA Hospital e-Tool specific modules that address safe patient handling include:

- A Patient Handling Program module

- An Ergonomics module
- A Patient Handling Controls module
- An Awkward Postures module
- Nursing Home eTool. OSHA, (2000). Assists employers and employees in identifying and controlling the hazards associated with nursing homes and residential care facilities.
- Guidelines for Nursing Homes: Ergonomics for the Prevention of Musculoskeletal Disorders(PDF). OSHA, (Revised 2009). These guidelines provide recommendations for nursing home employers to help reduce the number and severity of work-related musculoskeletal disorders (MSDs) in their facilities.
- Safe Lifting and Movement of Nursing Home Residents. U.S. Department of Health and Human Services (DHHS), National Institute for Occupational Safety and Health (NIOSH) Publication, No. 2006-117, (November 2006). This guide is intended for nursing home owners, administrators, nurse managers, safety and health professionals, and workers who are interested in establishing a safe resident lifting program. This guide also presents a business case to show that the investment in lifting equipment and training can be recovered through reduced workers' compensation expenses and costs associated with lost and restricted work days.