Protect Yourself from Patient Handling Injuries: Know How to Lift and When to Lift

By Adrienne Nova, PT, DPT, CEEAA

on June 27, 2021

Categories: Geriatrics, Nursing, Occupational Therapy, Physical Therapy, Professional and Performance



Would it surprise you that just over half of the long-term care rehabilitation therapy personnel surveyed in a recent study "rarely" or "never" used mechanical lifts for patient handling?¹

Considering these clinicians are musculoskeletal experts with a background in body mechanics, perhaps the choice to manually lift is not surprising. But the injury statistics are striking.

While ergonomic-related incidents resulting in worker's compensation claims were highest among nursing aides in this study, the frequency of back pain was equivalent to the therapy personnel at just under 50 percent. Plus, the overall claim rates and expenses for therapy personnel and nurses were also similar—and high.

To avoid costly injuries, nursing and therapy staff alike need to pay closer attention to both how and when they choose to lift.

How to Lift

Understanding and applying some key body mechanic principles is essential to avoid injury when performing patient handling.

- Posture-stay neutral
 - The soft tissue structures around your spine are safest and appropriate muscle recruitment is maximized when you maintain your low back slightly extended in lumbar lordosis.
- Weight shift-no "BLT"s
 - The combination of spinal *bending and twisting when lifting* is a nightmare for your spine. Instead, move by shifting weight from foot to foot.
- Center of gravity-stay close

- The torque on your body increases when your distance from the lifted object or person increases. Keep your center of gravity (typically just below the belly button) close and avoid excessive leaning or reaching.
- Breathe in, breathe out
 - The important thing is to remember to breathe, but breathing out when lifting can help maximize your effort.

Want to learn more about applying these principles to patient handling and mobility tasks? Be sure to check out Andrew Opett's MedBridge course, "Principles of Mobility and Function for Rehabilitation Professionals."

When to Lift

Mobilizing patients is part of the job description for both nursing and therapy staff. But is there a safe limit?

For starters, evaluate whether you can push, pull, or slide to minimize the strong effects of gravity. When possible, have the patient initiate the movement; this is a great way to maximize their participation so that they feel in control.

Determining how an individual patient can safely participate with a mobility task is an important area for caregiver training by therapy personnel. Part of this determination is knowing when to recruit additional help or employ a mechanical lift.

According to Dr. Thomas Waters with the National Institute for Occupational Safety and Health, the recommended weight limit for manually lifting is only 35 lbs.²

Unless you work in pediatrics, many of your patients likely weigh at least three to four times this amount. It is important to note that Dr. Waters cautions against applying this limit to the handling of patients who are unpredictable or combative. In this case, a mechanical lift may be your best choice.

Unfamiliar with using a mechanical lift in your workplace? Check out the equipment tips on UCLA's Safe Patient Handling Program webpage.

As a healthcare community, we simply cannot accept the current injury trends among therapy and nursing staff. We need to set our egos aside and realize that even perfect body mechanics can only protect us so far, even under predictable settings. We also need to proactively communicate in order to make sure that we are on the same page when it comes to how we are handling our patients. Practically, this could occur in the form of caregiver training, patient care meetings, and/or employee education, such as MedBridge's compliance education.

In order to best protect our patients, we must first protect ourselves.