

CONSTRUCTIVE IDEAS

Innovative ideas to reduce soft tissue injuries in the construction industry



Awkward posture and excessive force

Two common risk factors for musculoskeletal injuries (MSI) are:

- Awkward posture
- Excessive force

What is an awkward posture?

Awkward postures can occur when stretching, reaching, twisting, and/or balancing. Smaller muscle groups are often required to maintain these postures.

What is considered excessive force?

A force is excessive when the active muscle group is working beyond its limits. This imbalance often occurs with smaller muscle groups.



Together, awkward postures and excessive force combine to create a risk factor greater than either individually.

Photos courtesy of Gordon Harkness (WorkSafeBC) and California OSHA.

Task: Overhead Concrete Drilling

Risk factors:

- Holding a heavy hammer drill overhead
- Applying force to control a power tool



Task: Concrete Finishing

Risk factors:

- Bending over at the waist with arms reaching forward
- Applying force to pull a board toward the body



Task: Overhead Installation

Risk factors:

- Holding a drill overhead with arm outstretched
- Applying force away from the body with the arm only

