



Overhead work refers to completing work tasks when the workers hands are above shoulder height. Job tasks that require overhead work are 2-3 times more likely to have shoulder related injuries.

Higher lifetime exposure to overhead work and the workers age strongly relate to increased shoulder injury risk.

### Key Messaging

Overhead work is a known Musculoskeletal Injury (MSI) risk factor, as such, whenever possible it should be eliminated or reduced as much as allowable.

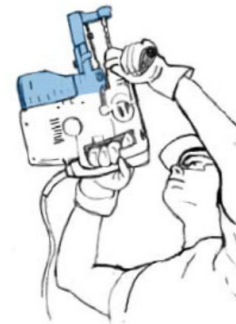
Careful job design and evaluation can help reduce the injury risks. When completing overhead work, try to avoid reaching far from the body, and keep the upper arm below 60 degrees of elevation.

Whenever possible, avoid high precision tasks, and apply forces in line with vertical motion, and rest often.

Limit the amount of time spent working overhead, and avoid lifting, holding and positioning heavy or awkward objects with raised arms.

Look at the tools for the job, are there bit extensions, or other items to keep yourself in a more neutral position while still completing the task at hand?

Utilize ladder and aerial work platforms to bring yourself closer to the work where possible.



### Reducing the MSI Risk

There are four main factors to modify the effects of overhead work, and reduce the risk of injury:

**Task Design** – the direction of hand force creates the most risk during overhead work. Changing the direction of the force can be a method to reduce injury.

**Fatigue Accumulation** – an elevated arm, combined with gripping tools increases fatigue development within the shoulder. Decreasing the tool weight, and duration of the task, decrease the risk of a shoulder Musculoskeletal Injury (MSI).

**Bone Motion** – Overhead work may cause reduction in the space between the shoulder blades. To reduce this impact, try to keep all overhead work below 60 degrees of elevation.

**Muscle Capacity** – overhead work fatigues muscles more quickly than non-overhead work. Overhead work renders overhead muscles less effective, generally causing the worker to use more force. To reduce impact, more resting periods are required.



### Discussion

What are some job tasks that could be changed to reduce or eliminate overhead work?

Is there any equipment or procedures that could be used to lessen the impacts of overhead work?