

# FACT SHEET



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## ERGONOMICS AT HOME

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Exposure to work related musculoskeletal disorder risk factors doesn't stop at your office door. Spending all of this extra time at home may mean an increase in projects around the house. Make sure you know the risk factors and don't become an injured weekend warrior.

### MANUAL MATERIAL HANDLING

Home improvement projects are a great way to spend some time when stuck at home, but remember to try to limit load weights to no more than 25 pounds. For heavier and bulky items, ask for help. Be aware that even loads weighing less than 25 pounds can be an awkward shape or unstable and may require assistance as well. For example, rather than carry mulch or sand bags, use a wagon or wheel barrow. If bags must be carried, purchase smaller bags or use 5-gallon buckets to transfer smaller loads. If moving mulch, stone, and other ground covers from one large pile to another area, be careful not to overload the wagon or wheelbarrow. Remember to bend at the knees, and use a pivot step when shoveling.

### PAINTING

When painting above shoulder level, stand on a ladder to bring the painted area closer to between thigh and chest height. Consider engineering controls such as extension poles, bent angle brushes, and cushioned roller handles to reduce reaching, non-neutral wrist postures, and mechanical compression. Do not hold the paint can in your hand while painting. Use a smaller container, shelf, paint hook, or cart to support or minimize the weight of the can and eliminate bending down to the floor.

### CARPENTRY

To minimize non-neutral postures, elevate your work to waist level. If you are working at a work bench, arrange frequently used, heavier tools within easy reach and lighter and less frequently used tools further away. When working at floor level, use knee pads or a cushioned mat to reduce knee compression. Use power tools whenever possible to minimize repetition and force. Make sure the power tools are well-maintained, have anti-vibration features, and are designed to allow the user to maintain a neutral posture. Use the lightest tool that is appropriate for the task and a cushioned grip to reduce force and compression on the hand.

### GARDENING

Gardening requires frequent bending, stooping, and kneeling; often these are static positions held for long periods of time. This can place stress on your back and knees. Consider using a garden kneeler to provide a cushioned and stable surface for kneeling, as well as a padded stool or wagon as a seat instead of squatting or stooping. For shovels, look for handles that encourage a neutral grip. Choose a shovel that is light weight and has a smaller shovel head to decrease the weight being lifted. Use gardening tools with cushioned, curved, or bent-angle handles to maintain a straight neutral posture at the wrist. If you have a history of knee or back pain but still want to enjoy gardening, look for gardening tools such as trowels, hoes, and cultivators that have 32-inch handles to minimize the need for bending and kneeling. For an administrative control, space out similar activities over several days, take breaks, and change activities frequently.

### **ORGANIZING**

Convenience dictates we keep items as close as possible to the place they will be used. Convenience shouldn't be the only consideration. Store heavy items between waist and shoulder height to maintain neutral posture when retrieving items. Store medium-weight items just above or below the heaviest ones, but never higher than eye level or below the knees. Lightweight items, such as snack boxes, should go in those cabinets above the head or below the knee. Besides, reaching up high might burn an extra calorie or two.

### **PLAYING INSTRUMENTS**

Playing music can be a great way to relax, but unfortunately the muscles and tendons working when you're playing are not relaxed at all. Repetitive motion and non-neutral postures frequently combine with long-duration practice sessions can result in discomfort and injury. For example, wind instruments that are held away from the body require non-neutral, sustained, elevated shoulder and arm postures. String instruments require repetitious and sometimes forceful movements of the fingers. Make sure to take frequent breaks, and be aware of how your body is positioned. For example, try to lower your arms so that your side provides some support when playing a wind instrument. Make sure you are in a chair that fits you and supports the positions required for playing your instrument. When possible, use engineering controls such as thumb supports or an instrument support post or strap to offset some of the weight of the instrument.

### **GAMING**

Sometimes people have a good set up for their work computer and monitor, but when they switch to the leisure activity of playing video games, all of the good computer work postures and positioning go out the window. Use a stable and supportive seating surface, and try to hold the controller in a neutral wrist position. Be aware of your duration. Make sure to stand up, stretch, and take regular breaks to change position and rest your eyes.