

YOUR BODY AT WORK



Properly assessing and modifying your work set up as needed can help you to work more safely and **efficiently, and at the same time minimize your joint pain** and reduce limitations. Some employers offer work station ergonomic assessments. If your workplace has a Human Resources department, check with them to see if a work station assessment is available to you. You can also follow the tips below to help create a work set up that reduces strain on your joints.

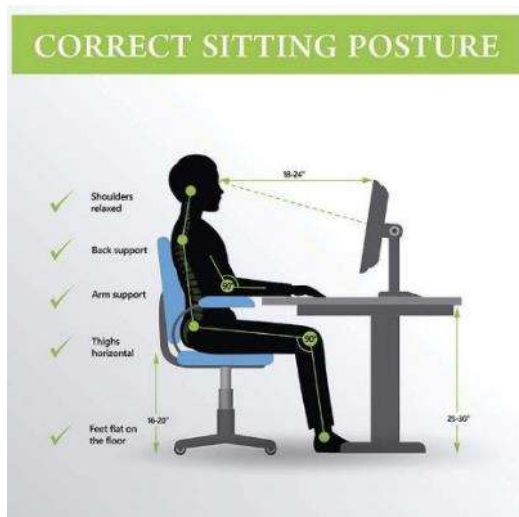
Source: The Arthritis Society, Don't Let Arthritis Boss You Around

Some of the most common at-work issues faced by people with arthritis are sitting, using a computer, standing, lifting and driving.

SEATED WORK

A common misconception is that sitting is easy on the body, but it is in fact especially difficult if you have to do it for long periods of time. Good posture is key to staying on top of pain, but remember, staying in one position without breaks is taxing on your body, no matter how good your posture is. Keep moving.

Here are some tips to maintain good posture while you are sitting:



CHAIR: When most of your work is done seated, find or request a comfortable chair that supports your lower and mid-back (with the backrest in the small of your back), as well as your thighs and buttocks. If the lumbar (lower back) support is inadequate, use a small rolled towel.

WORK SURFACE: Make sure your chair is at a comfortable distance from the computer, cash register or any other item that you will use often. Reaching strains your muscles and joints. Use a telephone headset to reduce the amount of neck side bending required to hold the phone receiver



SHOULDERS: Sit upright with square shoulders. Your shoulders should be relaxed but not slumped. **Hold your shoulders in the same position when you're sitting as you would when you're standing.** Your hips and knees should be at 90 degrees.

HEIGHT: Adjust the height of your chair if necessary so your feet are flat on the floor – you don't want them dangling. If you can't lower your seat, use a footrest. (Tip: Use one or two packages of printer paper wrapped in tape.) Your hips should be slightly higher than your knees.

TILT: The chair seat should be level or sloping slightly upwards at the front — never downwards.

ARMRESTS: Check that your armrests are at the right height — if you have to hunch your shoulders then **the armrests are too high, but if your elbows don't reach then they're too low.** Some people find that removing the armrests altogether can make a chair more comfortable.

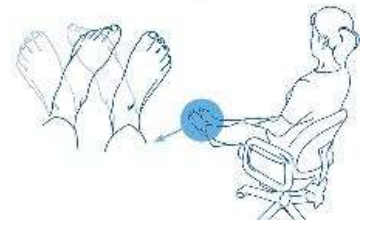
REPOSITION: Change your body position often. Stand up or stretch if you have been sitting for a long time, or slightly adjust the tilt of your chair towards the back for a while. If you need to, use a timer to remind yourself to switch positions.

STRETCH & ACTIVATE YOUR JOINTS: When you move your body, you feed your joints. Your cartilage depends on joint movement to absorb nutrients and remove waste. Cartilage, ligaments and bone also become stronger and more resilient with regular use. There are lots of simple stretches and exercises you can do even while remaining at your desk.

TOP TEN EXERCISES YOU CAN DO AT WORK

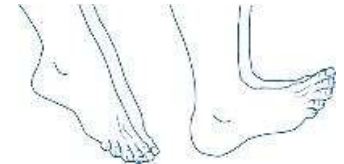
1. Ankle circles

Sit upright in a chair with feet stretched out in front. Rotate feet in one direction. Repeat in opposite direction.



2. Heel/toe lift

Sit forward on a chair with feet flat. Lift heels, keeping toes on the floor, then lift toes. Hold for three seconds then return feet to flat position.



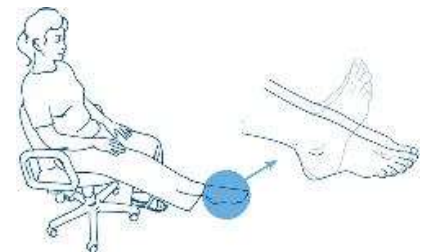
3. Knee raises

Sit on the edge of a chair or stool with your back straight. Lift your knee as high as you can without bending your back. You can help get your knee higher with your hands if necessary. Keeping your abdominal muscles tight, slowly lower your leg back to the starting position. Anyone who has just had total hip replacement should wait three months before attempting this exercise.



4. Leg lift with ankle movements

Sit upright with your back supported. Slowly straighten your knee. With the knee slightly bent, bend your ankle to point the toes straight ahead. Then reverse to point your toes toward the ceiling. Repeat.



5. Shoulder stretches

Sit or stand with forearms pressed together in front of your body. **Then, bring your elbows back to the "hands up" position, with palms facing forward.** Finally, stretch arms overhead as far as possible, keeping your elbows in line with the side of your body.



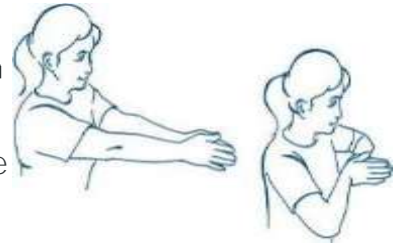
6. Forward arm reaches

Sit or stand with arms at your side, elbows bent and thumbs pointed back toward your shoulders. Stretch arms overhead. If one of your arms is weak, you can help it by placing your hand under the elbow and assisting the arm to the overhead position. Finally, lower arms slowly to the start position.



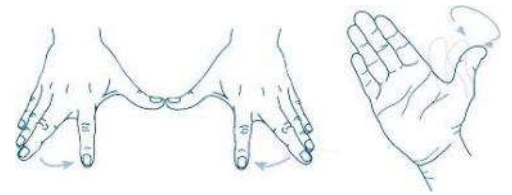
7. Shoulder squeeze and wrist stretch

Put your palms and fingers together. Hold your arms stretched out together in front. Pull your hands in toward your chest, making your elbows bend to each side. Press palms together as you move them closer to your body and squeeze shoulder blades together.



8. Finger walk and thumb circles

Sit with your hands on a table or desk, fingers pointing ahead. Slide your thumbs toward each other. Then slide each finger one at a time toward the thumb. After the little finger has completed the "walk", lift your hands and put them down straight. Then, move your fingers toward the thumb.



9. Hip and calf stretch

Stand with arms supporting you against a wall. Place one foot in front of the other and keep your feet apart (shoulder-width) and pointing forward. Keep your shoulder, hip, knee and ankle in a straight line. Keep shoulder and hips square and tighten your abdominal muscles. Move forward, bending only at the ankles and keeping weight on the heel of your back foot.



10. Walking

Take a walk every day. Walking allows you to stretch your back and leg muscles, as well as other joints that can become stiff from sitting.



COMPUTER WORK

Many of us spend the majority of our time at work using a computer. Making sure it's set up properly will save you a lot of pain and fatigue.

ARMS & WRISTS: Keep your wrists straight when using your keyboard. Palm or wrist supports should only be used when resting, NOT when you are typing. Your elbows should be at a relaxed 90-degree angle to the keyboard, and your back should be straight.

MOUSE: Place the mouse as close as possible to the keyboard. If you have shoulder problems and use a keyboard with a number pad on the right, consider learning to mouse with your left hand so you reach less and cause less strain.

MONITOR: Position the top of the monitor approximately 2-3" **above seated eye level** (if you wear bifocals, lower the monitor to a comfortable reading level). Sit at least an arm's length away from the screen and then adjust the distance for your vision.

Source: <https://ergonomics.ucla.edu/office-ergonomics/4-steps.html>

LAPTOPS: Laptops have notoriously bad ergonomics. If you position the keyboard to be in the right place, you'll strain your neck looking down at the screen, and the smaller size of the keyboard puts strain on your wrists and shoulders. If you use a laptop more than occasionally, place it on a box or on stacked blocks of printer paper to bring the screen up to eye level, then plug in a proper keyboard and mouse.

"Mild arthritis can be aggravated by the wrong workstation, and addressing that now controls our long-term costs."

Deanna Matzanke, Scotiabank

STANDING WORK

There are many types of work that require long periods of standing. Constant standing is tiring for the body and can be hard on the joints.

Following are tips to help you improve your standing position at work:

HEIGHT: Adjust the height of your workstation to match your body size and activity or task. Adjustability ensures that you are able to carry out your work in a well-balanced body position. If your workstation cannot be adjusted, try to use a platform to raise yourself if you are shorter, or use a box or riser on top of the workstation if you are taller.

Precision work, such as writing or assembly of electronics, should be done 5 cm above elbow height, with elbow support.

Light work, such as assembly line or mechanical jobs, should be done about 5-10 cm below elbow height. Heavy work demanding downward force should be performed from 20-40 cm below elbow height.

WORKSPACE: Organize your workspace to allow easy and comfortable movements. There should be enough room to move around and change your body position. Built-in foot rails or portable footrests allow you to shift your body weight from one leg to another, while elbow supports for precision work help reduce tension in the upper arms and neck. Controls and tools should be positioned so that you can reach them easily without twisting or bending.

SIT WHEN POSSIBLE: If you can, try to sit when possible, so you can perform your job either standing or sitting. The seat must be at a height that suits the type of work being done. If your type of work can **only be done standing, find somewhere you can rest or lean occasionally. This increases the number of possible body positions in a given day and gives you more flexibility.**

THE FLOOR: Keep work areas clear of tripping hazards. Level, nonslip floors are preferred. Concrete or metal floors are hard on your body, so consider asking for an anti-fatigue mat.



CHANGE IT UP: There are two important benefits you get from a variety of body positions while standing: 1) The number of muscles involved in the work is increased, which equalizes the distribution of loads on different parts of your body. This results in less strain on the individual muscles and joints used to keep you upright. 2) Changing your body position also improves blood supply to the working muscles.

FOOTWEAR: Select the most supportive footwear you can. Our [Daily Living learning module](#) has details about what to look for.

Source: Adapted with permission from the Canadian Centre for Occupational Health and Safety - http://www.ccohs.ca/oshanswers/ergonomics/standing/standing_basic.html

“I work in a lab at a workbench. With some benches, I need to stand a lot. So, because of my knee arthritis, I actually have to sit. I need to get a stool and sit for a bit. This is okay. Otherwise, I just cannot do my job properly.”

Janelle, working full time with osteoarthritis

LIFTING

One of the biggest causes of back injury, especially at work, is lifting or handling objects incorrectly. Learning and following the correct method for lifting and handling objects can help you to prevent back pain.

THINK BEFORE YOU LIFT: Plan out where the load is going to be placed and use appropriate handling devices where possible, like a hand truck or trolley. Can you slide the object instead of lifting it? Can you get help with the load? For long lifts, such as **from floor to shoulder height, consider resting the** load mid-way on a table or bench to change your grip on it.

KEEP IT CLOSE: Keep the load close to the waist for as long as possible while lifting in order to keep your upper back straight. Keep the heaviest side of the load next to the body so that the load is supported by your leg muscles as opposed to your arms. If it is not possible to closely approach the load, try to slide it towards yourself as much as possible before trying to lift it.

STANCE: Your feet should be apart with one leg slightly forward along the load if it's on the ground. This will help to keep your balance. Be prepared to move your feet during the lift to keep your posture stable. Try to avoid wearing overly tight clothing or unsuitable **footwear such as heels or flip-flops** when lifting heavy loads.

GET A GRIP: Where possible, hug the load close to your body. This may be better than gripping it tightly with your hands.

BACK STRAIGHT: **Don't bend your back when lifting. A slight** bending of the back, hips and knees at **the start of the lift is better than completely rounding the spine. Don't bend your back any further than** that while lifting, which can happen if your legs straighten before starting to raise the load.

DON'T DO THE TWIST: Avoid twisting your back or leaning sideways while lifting, especially when your back is bent. Keep your shoulders level and facing the same direction as your hips. Turn your body by moving your feet rather than twisting and lifting at the same time.

HEADS UP: Look ahead, not down at the load once you are holding it securely.

BE SMOOTH: **Don't jerk or snatch the load, as this can make it hard to keep control of the load and can** increase your risk of injury.

KNOW YOUR LIMITS: **Don't lift or** handle more than you can easily manage. There is a difference **between what you can lift and what you can safely lift. If you're in doubt, get help.**

ADJUST AFTERWARDS: **If you need to position the load precisely, put it down first, and then slide it into** place.

Source: [National Health Service –Safe Lifting Tips -http://www.nhs.uk/Livewell/workplacehealth/Pages/safe-lifting-tips.aspx](http://www.nhs.uk/Livewell/workplacehealth/Pages/safe-lifting-tips.aspx)

DRIVING TIPS



Sitting for long periods of time puts a strain on the body. Driving makes this worse by keeping you in a set **position from which you can't frequently shift your posture**. It also requires you to extend and exert your arms and legs, while subjecting you to both up-and-down motions from uneven driving surfaces and side-to-side movement while turning. Acceleration and deceleration also exert pressures on your body.

Source: [Canadian Centre for Occupational Health and Safety: https://www.ccohs.ca/oshanswers/ergonomics/driving.html](https://www.ccohs.ca/oshanswers/ergonomics/driving.html)

“Some days my job involves a lot of driving and I do much better and feel better when I schedule a 5-minute break every 1.5 to 2 hours to stop, get out and walk and stretch.”

- Bob, living with inflammatory arthritis

ADJUSTING YOUR CAR

Check your car manual to familiarize yourself with all the ways your car is adjustable. You might be **surprised by some of the features you haven't yet discovered**.

Steering wheel

Steering wheels can be adjusted for height or tilt for easy reach. The center of the steering wheel should be about 25- 30 cm (10-12 in) from your breastbone. The closer you are to the airbag, the higher the possibility of injury if the airbag deploys, even if you are wearing a seatbelt.

If your steering wheel can be tilted up and down, tilt it so the center of the steering wheel is pointing to your chest, not your head and neck or your stomach. This will position the airbag properly. Make sure your arms are also in a comfortable position — not too high or too low.

A padded steering wheel cover can make things easier on your hands.

Mirrors

Correctly position your mirrors to prevent you from having to twist around too much, while still enabling you to see the road properly.

Seatbelt

In some cars, the top attachment of your seatbelt can be raised or lowered. Experiment to find a position that puts the least amount of pressure on any painful joints, like your shoulders.

Seat height

Raise the seat as high as you can while still being comfortable. This will provide the best visibility through the windows. You should be able to see at least 76 mm (3 in) over the top of the steering **wheel. You don't want to be so low that you** need to crane your neck, or so high that you have to hunch your shoulders.

Seat cushion length

If possible, adjust the seat length so that the back of your knees are about 3-6 cm (1-1/4 to 2-3/8 in) from the front of the seat.

Seat forward/back

Move the seat forward until you can easily push the pedals through their full range with your whole foot, not just your toes. You may have to readjust the seat height for optimum control.

Seat cushion angle

If possible, tilt the seat cushion until your thighs are supported along the full length of the cushion **without there being pressure at the back of your knees. Experiment with the angle you find most comfortable. If you have lower back pain you might find it more comfortable if your knees are slightly** lower than your hips, but too extreme an angle may cause you to clench muscles to keep from sliding forward.

Seat back

Adjust the backrest until it supports the full length of your back when you are sitting upright. If you are leaning too far back, you may end up bending your head and neck forward, which may cause muscle **fatigue, neck or shoulder pain or tingling in the fingers.**

Lumbar support

If possible, adjust the lumbar (lower back area) support up and down, and in and out, until you feel an even pressure along your back from the hips to shoulder height. The seat back should feel comfortable and there should be no gaps or pressure points in the back-support area. If necessary, keep a small cushion or rolled towel in the car for this purpose.

Headrest

Raise the headrest (head restraint) until the top of it is level with the top of your head. If the headrest can be tilted, adjust the angle until it is practically touching the back of your head when you are in a sitting position.

Source: [Canadian Centre for Occupational Health and Safety:](http://www.ccohs.ca/oshanswers/ergonomics/driving.html)
<http://www.ccohs.ca/oshanswers/ergonomics/driving.html>

GETTING IN AND OUT OF YOUR VEHICLE

- If you have pain in your hips, getting in and out of a vehicle can be a problem because of the twisting and turning involved.
- The easiest approach is to back yourself into your car, sit down, then swing your legs into a forward-facing position. Do the reverse to get out.
- Use the interior handles on the door, or ceiling, to balance yourself and distribute pressure evenly, over more joints.
- If you are getting out of a high seat like a truck cab, avoid jumping, and if there is a running board, use it.

There are a number of aids you can use if getting in and out of a vehicle is a problem for you:

- Consider having swivel seats installed to make the process easier.
- A simple beaded seat cover can make long drives more comfortable and also make getting in and out of your car easier.
- If you have cloth seats, consider buying a vinyl seat covering to make sliding or swiveling your body easier.
- Running boards or step bars can be installed to make the step in or out of your car a more manageable distance.

MORE DRIVING TIPS

Gripping

If you have trouble gripping a steering wheel or gear shift, try using golf or weight-lifting gloves. They are designed to provide a non-slip grip. A steering wheel cover will also increase the size of the steering wheel making gripping easier.



Gas Cap Help

Keep a disk-shaped rubber jar opener in the car — you can use it to make twisting off the gas cap easier.

Car Keys

If you have trouble turning your car key, here are a number of strategies to try:

- Build up the key grip with duct or electrical tape.
- Trade in your keys for a keyless fob and starter that remotely unlocks your car and starts the engine.
- Purchase a ready-made key grip adapter like the one shown, which transfers the grip from your **finger tips to your whole hand.**

BUYING A NEW VEHICLE

If you are considering buying a new vehicle, you may want to look for these features:

- Automatic transmission
- Remote key starter
- Running boards and assist handles on sport utility vehicles and vans
- Adjustable steering wheel (up and down and telescoping)
- Fully adjustable seats (height, distance from pedals, tilt and lumbar support)
- Adjustable pedals
- Padded steering wheel
- Easy-to-grasp controls within easy reach
- Dashboard-mounted and push-button ignition switch
- Seatbelts that are easy to reach, lock and release
- Cruise control
- Easy-to-use door handles
- Easy-to-adjust mirrors and sun visors
- Easy-to-access trunk or rear door
- Shorter turning radius for ease in maneuvering

Source: The Arthritis Foundation: <http://blog.arthritis.org/living-with-arthritis/arthritis-friendly-car-shopping/>