



Loss Control Insights

Vehicle Ergonomics

When your job requires traveling, your car becomes your workspace and it is important to adjust the car features to fit you, just as you would adjust an office workstation. For car ergonomics, the key risk factors are awkward body postures and static duration (sitting for prolonged periods). Adjusting the car features for comfort is important to help reduce the potential for musculoskeletal disorder injuries.

Posture

Posture is an important risk factor for the driver. When a driver's hands are on the steering wheel and the shoulders are in a forward posture, there is added stress on the shoulders and upper back. When sitting in a car, it is important to maintain the natural curves of your back and to minimize bending, twisting, reaching and excessive neck movement. Familiarize yourself with the adjustability and location of the adjustment controls in your car or rental vehicle and perform a few basic adjustments each time you start driving.

Car Seat

- Move the seat forward until you can easily and fully depress the accelerator and brake pedals
- Adjust the seat cushion tilt angle so that the thighs are supported along the length of the cushion, avoiding pressure behind the knees
- Adjust the backrest so it provides continuous support along the length of the back and is in contact up to shoulder height. Avoid being too reclined as there will be excessive forward bending of the head and neck, extended reaches and visibility issues
- Properly adjust the headrest to support your head and reduce the risk of injury in the event of a collision. Position the top of the headrest in line with the top of your head. The distance between the headrest and the back of your head should be as small as possible
- Use extra lumbar support (back pillow) if necessary. Be sure the support does not over exaggerate the curves of your back

Steering Wheel

Adjust the steering wheel for easy reach (elbows should be slightly bent, ensure clearance between thighs and knees, and make sure your view of the display panel is not obstructed)

Mirrors

Adjust rear view mirror and side mirrors so you have an unobstructed view of all mirrors while sitting comfortably against your seat, without having to lean forward or to either side

Rest Breaks

Pull over and get out of your car when you feel tired or at least every two hours for a break of at least 15 minutes. Change your position by stretching your legs, back, neck and arms or by going for a walk

Change Positions

Try to change your driving position by shifting positions within the seat, or by re-adjusting the seat when stopped

Glare

Use sunglasses and/or adjust sun visors to reduce eyestrain and awkward postures due to the sun. Ensure the sun visors do not obstruct your view of the road

Avoid:

- Static and awkward postures (holding the same position for extended periods of time – more than 20 minutes, or slouching, leaning to one side, extended reaching, etc.)
- Twisting and leaning to one side
- Leaning forward, slouching and letting the lower back flatten
- Reaching with arms outstretched
- Prolonged leaning on your elbows
- Sitting on items in your back pockets (e.g. wallet)
- Using your laptop in your car, even when safely parked (never use your laptop or other electronic devices – cellular phone, personal digital assistants, etc. – while driving)
- Sitting with legs fully extended or excessively bent

Cargo Storage and Retrieval

The first choice for storing materials should be in the trunk or back of the vehicle. If in the back of a van, make sure the cargo is adequately secured to prevent movement during normal driving or in the event of a collision. If you must store things in the back seat, put them on the floor, or secure them with the seat belt.

Retrieving items from the trunk or vehicle floor can put you in awkward body postures and at risk for injury, such as a strained back. Before placing something in the storage area, think about how you will get it out. Use a cargo net, storage container or file box to control your materials and keep it near the back of the vehicle for easy removal.

Follow these best practices to minimize your risk of injury:

General:

- When you stop driving and first get out of the vehicle, stretch and work your muscles before starting to lift or remove things
- Do not try to remove or lift more than you can handle safely. Get help when needed
- Do not try to carry too many loose objects in your arms. Use a folding cart, tote bin, canvas bag or other container with handles to carry all of your materials. If need be, make multiple trips to keep the weight low

Car Trunk:

- Stand facing the trunk with knees slightly bent. Do not bend at your waist. Keep your back straight and push your buttocks out
- Brace your knees against the back of the vehicle. Use your legs and hips to lower yourself down to the object
- Slide objects close to you before lifting
- Grasp the object firmly with both hands, breathe in and prepare for the lift
- Remove heavy objects in stages; first slide towards you, then lift onto the edge of the trunk; finally, lift and remove
- Look forward and lift upwards, following your head and shoulders. Exhale as you lift
- Hold the load close to your body with your back straight and stand fully upright before turning around
- For **light** objects, use the one hand "golfer's lift." Place one hand on the side of the vehicle to support your upper body, keep your back straight and raise one leg straight out behind you as you lean down to pick up the object. To lift, push down with your hand as you lower your leg. Keep your back straight and breathe out as you lift

Car Backseat:

- Place one knee on the seat for support if you have to lean in
- Slide objects close to you before lifting
- Grasp the object firmly with both hands, breathe in and prepare for the lift
- Look forward and lift upwards, following your head and shoulders. Exhale as you lift
- Hold the load close to your body with your back straight and stand fully upright before turning around

Cargo Van:

- Unload items from the side and back first
- For items deeper inside, enter into the van and carefully push the items closer to the side or back doors

- Avoid extended reaching and back bending when unloading
- Consider installing a roll-out rack that will extend outside the vehicle and allow you to get materials from deeper in the vehicle while standing outside on the ground