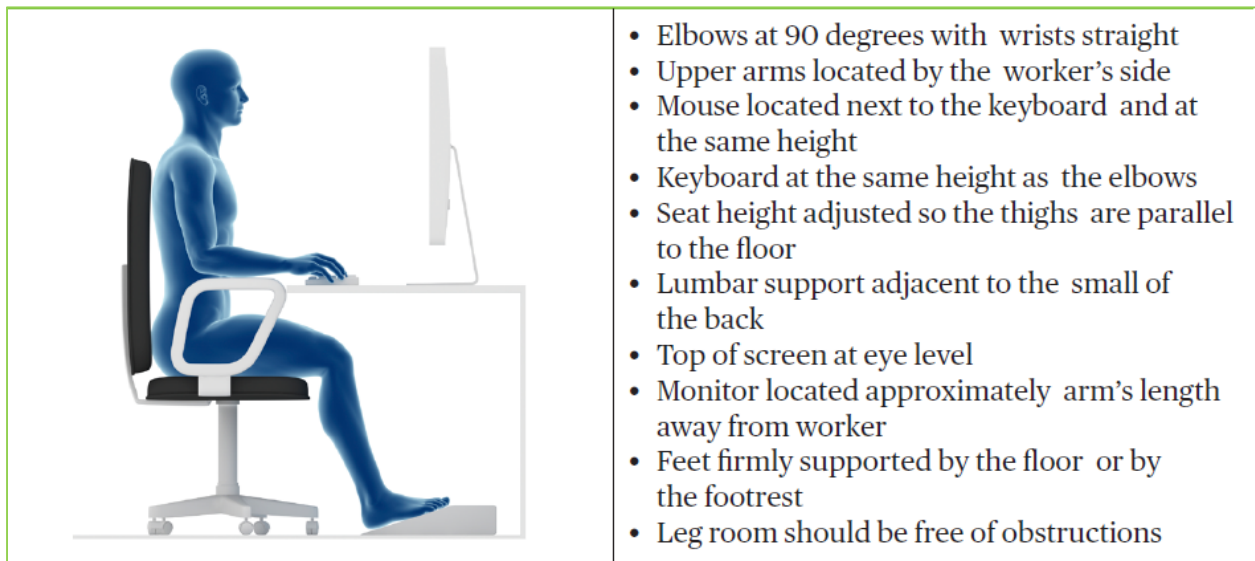


## Ergonomics for Telecommuters

The same ergonomics principles that are applied to a traditional office, shown in the Office Ergonomics Workstation Model below, should be applied at home in a designated workspace. When working from home, an employee may be inclined to make do with the furniture they have at hand—from the kitchen table and chair to a makeshift desk or card table in a bedroom. The result is often pain and discomfort.

The body functions best when it is in a neutral posture—located around the joint's midrange of motion for most body parts. A posture significantly outside this neutral range, termed an awkward or extreme posture, is inefficient and requires muscles to work near their maximum capacity which may result in increased fatigue rates and musculoskeletal disorders (MSDs). Unfortunately, awkward postures are inherently designed into laptops—a common tool for many telecommuters. If the laptop is positioned so the upper extremities are in neutral postures, then the screen is too low and the neck will be bent forward (flexed) in an awkward posture. If the laptop's screen is positioned higher to keep the neck neutral, then the upper extremities are placed in awkward postures with shoulders shrugged and forearms slanted upwards.



## Comfort Tips for Computer Users at Home

It's important for employees to apply good ergonomic practices, even when they are not in a traditional office environment. Ergonomic risk from working at a computer can be reduced with proper posture, good work habits, and appropriately adjusted equipment. The following tips should help minimize potential risk factors and maximize your personal comfort.

### Table/Desk

- Use a desk between 28-30 inches in height
- Allow for adequate leg room with a minimum of 18-inch depth and 24-inch knee width
- Desks should provide depth to place the monitor at least 18-20 inches from the user
- If a desk is not available, use a dining table with a height adjustable chair
- Refrain from using lap desks for long periods of time
- Refrain from working off of a kitchen countertop
- Refrain from sitting on the floor and working

### Chair

- If possible, use an adjustable chair with the following features:
  - Pneumatic height adjustment
  - Lumbar back support
  - Height adjustable seat back with locking function
  - Adjustable depth seat pan
  - Padded armrests that are height and depth adjustable with rounded edges (Optional)
- Consider sitting on a small, moderately firm pillow in order to place the seated elbow height at the level of the keyboard and mouse
- A thin pillow can be used to provide additional support to the lower back
- Refrain from sitting on very soft couches; they do not support the body evenly during extended sitting
- Stand, stretch, and/or walk after sitting every two hours

### Keyboard/Mouse

- Utilize an external keyboard and mouse when using a laptop for prolonged periods
- Ensure the mouse is next to the keyboard
- Ensure that keyboard and mouse cord length are adequate and free of tangles
- The keyboard and mouse should be near the edge of the table
- Avoid planting the wrists during keyboard and mouse use
- Use a small rolled up towel as a palm support when typing

### Monitor

- Position the monitor directly in front of the body at roughly arm's length away
- Dual monitors should be positioned at more than an arm's length and positioned in an arc
- Large monitors should also be positioned at more than an arm's reach

- The top two-thirds of the monitor(s) should fall within eye level
- Use a small box, reams of paper, books, etc., to raise the height of the monitor(s) or laptop
- Position monitors away from direct sunlight

## **Office Accessories**

- A footrest is often needed to support the feet when your chair is raised to work at the desk height
- Consider a headset or headphones if you are on the phone for more than two hours per day
- Use a document holder to position reference documents
- View documents at/or close to the same height as the monitor
- Use a small box, reams of paper, or phone book to support feet
- Use speakerphone for long or frequent calling
- Angle a clipboard near the monitor to hold reference documents

## **Lighting**

- Change the orientation of the workstation if glare or reflection is present
- Task lighting can be used to highlight documents and desktop areas
- Lamps with diffusers or shields can help to reduce glare
- Light from lamps should not directly face the eyes
- Avoid facing windows without shades or curtains