

9011 - Ergonomic Symptoms and Solutions



Symptoms: Eyestrain, which includes dry eyes, blurred vision, bloodshot eyes and sore, tired eyes

Solutions:

1. Position the monitor 18"-28" from the eyes (approximately an arms length).
2. Position the monitor at a right angle to the window to minimize glare and reflection.
3. Tilt the monitor so that light sources do not reflect onto the screen.
4. Consider the use of an **Anti-Glare Filter** to minimize glare and reflection or a monitor hood to block out a direct light source.
5. Adjust the brightness and contrast buttons on your monitor to maximize crispness and clarity. The use of a separate **Task Light** will provide light where needed for reading and writing.
6. Lower the lighting level when working on the computer (approximately half of that used for reading and writing).
7. Locate documents at the same height of the monitor or in-line to the monitor to minimize eye refocusing. Consider the use of a **Document Holder** to position your reference material as close to the monitor screen as possible.
8. Blink frequently to moisturize the eyes.
9. Take periodic eye rest breaks such as focusing on a distant object and cupping the eyes.

20-20 RULE: When working at the computer it is a good idea to focus your eyes off the screen and on to a distant object every 20 minutes allowing the eyes to rest. Focus off the screen for approximately 20 seconds.

Symptoms: Neck and Shoulder strain

Solutions:

1. Position the monitor in a straight-ahead position rather than to the side. This will encourage a neutral head and neck position.
2. Position the top of the monitor at or slightly below eye level so that the head and neck remain in a neutral position. The use of **Monitor Risers** offers a quick and easy way to add height to your computer monitor.
3. Position the document at the same height and distance to the monitor or between the keyboard and the bottom of the monitor for in-line viewing. In-line **Document Holders** are recommended for the best results.
4. Avoid cradling the telephone headset between the head and shoulder. Consider the use of a telephone headset or speakerphone.
5. Posture follows the eyes; position reading material on an inclined surface with the use of a slant board to encourage an upright upper body posture.
6. **RELAX and ROLL** - Relax your shoulders and let your head roll forward, chin to chest. Slowly rotate your head in a circle without straining your neck. Repeat five times. Relax. Then rotate in the opposite direction and repeat five times. Try not to raise your shoulders as you do this exercise.

Symptoms: Arm and Shoulder Strain

Solutions:

1. Position frequently used items within your 'near reach zone' as to minimize arm extension and shoulder strain.
2. Position yourself close enough to the keyboard and mouse so that your elbows are by your side and arm extension minimized. The use of a **Keyboard Arm & Platform** may provide the height, angle and distance adjustments needed.
3. Adjust chair height or work surface height (use **Desk Risers** or an **Adjustable Tables**) for the task being performed: The arms should be at a comfortable open angle (100° to 110°) while keying. The reading and writing surface is typically 1 1/2" - 2" higher than keying height, thereby allowing the forearms to rest comfortably on the work surface and back and shoulders in a comfortable position.



Forearm Supports can also be used to provide postural support and freedom of movement while performing repetitive motion tasks.

4. **FUNKY CHICKEN** - Place your fingertips on your shoulders, elbows pointing out to the sides. Pull your elbows back as far as you can. Push your elbows forward and try to touch them together. Repeat 10 times. Now, keeping your fingertips on your shoulders, lift your elbows up and then push them down to your sides, as if you're trying to fly. Repeat 10 times.

Symptoms: Lower Back pain

Solutions:

1. If using an adjustable chair, position the backrest so the lower back is supported. If using a non-adjustable chair, then consider the use of a **Back and Seat Cushion** for support as needed.
2. **DO THE TWIST** - Sit erect in a stationary chair with both feet flat on the floor. Look straight ahead. Slowly tilt your torso to the right as you reach around behind yourself with your right hand. Grasp the top right corner of your chair with your right hand. Complete the stretch by moving your left hand as close as possible to your right hand. Stretch as far as you can and hold it for 15 seconds. Repeat four to six times, twisting left and right, aiming to turn the body a little farther each time.

Symptoms: Leg strain or pain

Solutions:

1. Lower chair height or provide a **Footrest** so that feet are resting comfortably and the legs are at a right angle with the knees slightly lower than the hips.
2. **BALLET BENDS** - Stand with your feet comfortably apart, your toes turned slightly outward. Hold the back of a chair if you need support. Keep your back straight and slowly bend your knees over your toes. It's important not to extend your knees beyond your toes in order to avoid stress on the knees. Straighten, by pushing up through your feet.

Symptoms: Wrist pain, tingling and numbness in the fingers and pain extending up the arms

Solutions:

1. Check your keying and mousing position so that your shoulders are relaxed, arms at a slightly open angle (100° to 110°), elbows by your side, and the wrists straight with fingers arched while keying. A **Keyboard Arm & Platform** will aid in this adjustment. When positioned properly, the keyboard should be placed above laptop level to allow your arms to tilt downward while leaving your elbows at a comfortable open angle (100° to 110°). A slightly negative keyboard tilt will encourage a neutral wrist position. To avoid a positive tilt, make sure the legs on the back of the keyboard are in a lowered position.
2. Adjust your chair height or keying surface to achieve the correct keying position. The keying surface can be adjusted by using **Desk Risers, Keyboard Arm & Platform** or **Adjustable Tables**.
3. Position the mouse on the same surface and directly adjacent to the keyboard. For those that do not use the 10-key frequently, a **Mouse Bridge** offers a low cost solution to positioning the mouse directly over the 10-key portion of the keyboard, thereby minimizing arm extension while mousing.
4. Take periodic rest breaks and stretching exercises to minimize extended periods of repetitive keying and mousing tasks. **Stretch Break Software** is available to remind you to take periodic breaks by performing a series of low-impact stretches.
5. Arch fingers and float hands across the keys while keying. Avoid planting the hands and wrists on a **Wrist Rest** while keying.
6. **REACH OUT AND TOUCH YOUR FINGERS** - Do each hand individually. Touch the tip of your thumb to the tip of each finger in turn, making the circle as round as you can. Straighten your fingers in between touching each finger.