

Health tip: Digital eye strain

Digital eye strain, also known as Computer Vision Syndrome, describes a group of eye-and vision-related problems that result from prolonged computer, tablet, e-reader, and cell phone use. In most cases, symptoms of DES occur because the visual demands of the task exceed the visual abilities of the individual.¹

Facts to know¹

- Up to 65% of adults have experienced digital eye strain symptoms
- The usage of digital devices continuously for two hours is adequate to bring about digital eye strain
- Dry eye is a major risk factor for visual fatigue and other symptoms of digital eye strain
- Continuous staring at the screen leads to a decrease in the blink rate, causing dry eye-related problems

Causes²

- Poor lighting
- Glare on the computer screen
- Improper viewing distances
- Poor seating posture
- Uncorrected vision problems (farsightedness and astigmatism)
- A combination of these factors

Symptoms²

- Headache
- Blurred vision
- Double vision
- Burning, itchy, dry, or tired eyes
- Loss of focus
- Fatigue
- Neck pain
- Shoulder pain



People who wear eyeglasses or contact lenses may have difficulty when using screens.² For instance, they may:

- Tilt their head at an odd angle because glasses not designed for computer use
- Bend towards the screen to see more clearly
- Use incorrect postures that may cause muscle spasms or pain in the neck or back



Prevention and recommendations²

Fortunately, digital eye strain is preventable. Consider these guidelines to help avoid developing the signs and symptoms associated with this condition.

- Control lighting and glare
- Establish proper working distances. The computer screen should be 15 to 20 degrees below eye level, or about 4 to 5 inches as measured from the center of the screen and 20 to 28 inches from the eyes
- Keep proper posture while sitting or standing
- Wear glasses that meet the demand of the job (lens design, lens power, lens tints or coatings)
- Follow the 20-20-20 rule. Look into the distance for 20 seconds every 20 minutes at least 20 feet away from the computer or digital device
- Use an adjustable copyholder

Sources:

1. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9434525/>. October 2022. Accessed February 2024.
2. American Optometric Association. <https://www.aoa.org/healthy-eyes/eye-and-vision-conditions/computer-vision-syndrome?sso=y>. 2024. Accessed February 2024.