

Computer Users: Learn to Baby Your Eyes

Long hours staring at a terminal can lead to vision problems, if you're not careful

May 18, 2007



(HealthDay News) -- There are few professions left that don't use computers in some way, just as there are few households that don't consider the family computer an essential appliance.

But all those hours online can take a toll on your eyes, experts warn.

"An increasing number of people are on the computer huge numbers of hours during the day," said Dr. Kerry Beebe, an optometrist in Brainerd, Minn., and spokesman for the American Optometric Association (AOA). "It does seem that particular visual demand can be tough to handle if there's anything less than perfect going on with your visual system."

Studies have shown that eyestrain and other vision problems can occur in as many as nine out of 10 people using video display terminals at work, according to the AOA.

The most common symptoms are eyestrain, blurred vision, double vision, excessive tears, dry eyes and excessive blinking or squinting. Visual problems also can result in physical problems such as headaches and neck or shoulder pain.

"Some people will have all of those and some just a few," Beebe said. "But anytime anyone comes in with those symptoms, we automatically ask, 'What are you doing much of the day?' They often spend many hours on a computer."

The radiation put out by a computer screen has nothing to do with these symptoms, although that's a common myth, said Dr. Jeffrey Weaver, director of the AOA's clinical care group.

"People are often asking about ultraviolet radiation, but any UV radiation from a computer screen is minimal," Weaver said. "If no one's getting a tan from using their computer, then it's not a matter for concern."

But if you're having eye trouble during or after computer use, you should have your eyes examined, Beebe said.

"Many times people will have a focusing problem or a refractive error where simply wearing glasses while using the computer will take away those symptoms," he said.

You should also take frequent short breaks, every half hour or so, Beebe and Weaver said. During those breaks, which can last just a minute or two, you should fix your eyes on a distant object to help refresh your vision.

"Just looking across the room or out a window can help a lot in keeping your focus relaxed," Beebe said.

The brightness of the monitor should be adjusted to an intensity comfortable to the eyes, according to the AOA. That means not too bright or too dim.

Next, you should adjust the contrast between the characters on the monitor and the background so the letters are easily read.

Finally, minimize reflected glare on the monitor by using window shades or curtains and dimmer switches on lights. Bright light sources also should be removed from the peripheral vision.

"Most offices tend to be way too bright for computer use," Weaver said.

To further reduce glare, position the monitor perpendicular to windows or other bright sources of light. You can also buy an anti-glare screen for the monitor, or wear tinted glasses, according to the AOA.

Dry eyes are another common complaint, for two reasons. Offices tend to be dry environments, and when people are reading a computer screen they tend to blink less. To combat dry eyes, take frequent breaks and keep artificial tears -- lubricant eye drops -- handy at your desk, Weaver said.

You can also prevent eyestrain by positioning the monitor in an ergonomically correct position, according to the AOA. The monitor should be located 16 inches to 30 inches from your eyes, depending on how large the screen is and how good your vision is. Most people find it most comfortable to watch a screen 20 inches to 26 inches away.

The top of the monitor should be slightly below your eye level, the AOA said. The center of the monitor should be 10 degrees to 20 degrees below your eyes, or about 4 inches to 9 inches below your eyes at a distance of 24 inches.

And don't forget to rearrange things when it's your child's turn to use the computer. In many situations, the computer monitor will be too high, the chair too low and the desk too high. Your office should have an adjustable chair that can be raised for the child's comfort.

Weaver said technology is evolving to help prevent eyestrain and vision problems.

Monitors have improved their contrast and resolution, and LCD screens, in particular, are proving easier on the eyes. Monitors also are including glare-reduction filters to keep reflections from causing eyestrain, he said.

"They seem to be easier on the eyes, although there's not a lot of objective evidence to say that they are," Weaver said.

More information

To learn more about computers and eye care, visit the [University of Virginia Health System](#).

SOURCES: Jeffrey Weaver, O.D., director of the American Optometric Association's clinical care group; Kerry Beebe, O.D., optometrist in Brainerd, Minn., and spokesman for the American Optometric Association; the American Optometric Association, Alexandria, Va.