

# COMPUTERS and Your Children's Eyes

Extended computer use puts children at  
increased risk for early myopia

By Brandie Shaw



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Children in the 21st century are introduced to computers as early as the pre-school level, either at home or in school. According to the American Optometric Association (AOA), 90% of school-age children have access to a computer. In the future, computer skills will undoubtedly become necessary for many (if not all) children. As they grow older, children will be able to navigate system applications much better than their parents, and will be prepared for jobs that require computer-based skill sets. Unfortunately, however, this extended computer use puts our children at increased risk for many of the same eye problems that affect adult users.



Vision problems that were less prevalent among children years ago are becoming more common due to the growing use of computers and video games. Today 54 million children spend more than four hours a day on the computer doing homework, chatting with friends or playing games. Staring at a computer screen for long periods forces the child to focus more closely than he or she would on a book, and is therefore more likely to cause eye strain. As a result, children complain of headaches, blurred vision, tearing or dry eyes. Together, these symptoms are referred to as “Computer Vision Syndrome” (CVS).

Some studies have linked excessive computer use to myopia (nearsightedness) in children, as well. Signs of nearsightedness include headaches, sore eyes, squinting and fatigue when looking at objects more than a few feet away. Often, children don’t realize they are having trouble seeing because they think that everyone sees the same way they do. All school-age children should have comprehensive eye examinations to make sure that they are seeing clearly and that their eyes are healthy.

After the eye exam, take a look at how the computer workstation is set up. The family computer is often set up for an adult. The chair may be too low, the desk too high or the monitor and keyboard too far away for a child. When the station is set up this way, it can encourage the child to sit in an uncomfortable

position for extended periods of time, contributing to CVS.

It is best to position the monitor 18 to 28 inches away from the child and about 15 degrees lower than his or her eyes. Using an adjustable chair may be easier than adjusting the monitor for each user. Also, make sure that the light in the room isn’t brighter than the screen itself, and that no lights are shining directly on the screen. Glare can cause eye strain for both children and adults.

Children tend to take fewer breaks from the computer than they do from reading, putting greater demands on their eyes. Parents should make sure that their children take frequent breathers. The AOA recommends the “20/20 rule.” Every 20 minutes, the child should take a break for about 20 seconds. This will allow the eyes to refocus at a different distance and the eye muscles to relax.

The computer can open up whole new worlds for children, giving them access to information that they wouldn’t otherwise have and helping to build important skills. The computer can aid homework assignments and engage imaginations. As long as the proper precautions are taken, the side effects of extended computer use can be easily reduced or eliminated.

*Sources: American Optometric Association, All About Vision Web site*