

# Computer Vision Syndrome in Kids



## Impact of Computer Use on Children

According to the American Optometric Association (AOA), parents should consider these issues concerning their children's use of computers:

**Children have a limited degree of self-awareness.** Prolonged activity without a significant break can cause eye focusing problems and eye irritation. These problems may occur as the eyes' focusing system "locks in" to a particular target and viewing distance. In some cases, this may cause the eyes to be unable to smoothly and easily focus on a particular object, even long after the original work is completed.

**Children are very adaptable.** As a result, children often work in an unhealthy situation — such as with glare on the computer screen — and might not even think about changing the computer arrangement or surroundings to achieve more comfortable viewing. This can result in excessive eye strain. Also, children often accept blurred vision caused by nearsightedness (myopia), farsightedness (hyperopia) or astigmatism because they think everyone sees the way they do.

**Children are not the same size as adults.** Most computer workstations are arranged for adult use. Therefore, a child using a computer on a typical office desk often must look upward at a higher angle than an adult. Since the most efficient viewing angle is slightly downward about 15 degrees, problems using the eyes together can occur.

**Use of computers with less than optimum lighting.** The lighting level for the proper use of a computer is about half as bright as that normally found in a classroom. Increased light levels can contribute to excessive glare and problems associated with adjustments of the eye to different levels of light.

## Five Tips for Preventing Computer Vision Syndrome

According to the American Optometric Association (AOA), parents should be knowledgeable of the five tips for preventing Computer Vision Syndrome (CVS) in children:

**1. Have the child's vision checked.** Before starting school, every child should have a comprehensive eye exam, including near-point (computer and reading) and distance testing. Parents and teachers should be aware of any behavior that indicates potential problems, such as eye redness, frequent rubbing of the eyes, head turns, or complaints of blurriness or eye fatigue.

**2. Strictly enforce the time limit a child uses a computer.** Enforce the 20/20 rule: Break every 20 minutes for 20 seconds.

**3. Check the height and arrangement of the computer.** Workstations should be arranged to suit a child — not an adult. A good solution that benefits all is by having an adjustable chair that can be raised for the child's comfort, since it's more difficult to lower the monitor. The recommended distance between the monitor and the eye for children is 18-28 inches. Viewing the computer screen closer than 18 inches can strain the child's eyes.

**4. Check the lighting for glare on the computer screen.** Windows or other light sources should not be directly visible when sitting in front of the monitor. When this occurs, the desk or computer may be turned to prevent glare on the screen. Sometimes glare is less obvious and in this case, holding a small mirror flat against the screen can be a useful way to look for light sources that are reflecting off of the screen from above or behind. If a light source can be seen in the mirror, the offending light should be moved or blocked from hitting the screen with a cardboard hood attached to the top of the monitor.

**5. Reduce the amount of lighting in the room to match the computer screen.** A smaller light can be substituted for the bright overhead light or a dimmer switch can be installed to give flexible control of room lighting. In other cases, a three-way bulb can be turned onto its lowest setting.

