

***How does digital eye strain affect our vision and our overall health?***

- Common symptoms of digital eye strain include headaches, blurred vision, dry eyes, neck and shoulder pain, and eye irritation. These symptoms may be caused by: poor lighting, glare on a digital screen, improper viewing distances, poor seating posture, uncorrected vision problems, and a combination of these factors.
- Typically, the extent to which individuals experience visual symptoms often depends on the level of their visual abilities and the amount of time spent looking at a digital screen. Many of the visual symptoms are only temporary and will decline after stopping computer work or use of the digital device. However, some individuals may experience continued reduced visual abilities, such as blurred distance vision, even after stopping work at a computer. If nothing is done to address the cause of the problem, the symptoms will continue to recur and perhaps worsen with future digital screen use.

***How does screen time impact children specifically?***

- Increasing screen time is usually accompanied with a lack of outdoor time and more sedentary lifestyle. The more time children are inside reading, studying and using their electronic device(s), the less natural light the eye is receiving to develop properly. To help protect their eyesight, it is recommended that children partake in anywhere from one to three hours of outdoor activity a day.
- Findings from the American Optometric Association’s Eye-Q Survey revealed that **one in four parents report having a child who has been diagnosed with myopia (nearsightedness), with 75% diagnosed between the ages of 3 and 12 years old.** Even though the tendency to develop myopia may be genetic, individuals who spend considerable time engaged in “near” activities, like reading, working at a computer or using hand-held electronics, may be more likely to develop the condition.

***Any tips parents can do to help alleviate symptoms?***

- Maintain a comfortable distance from the device. To avoid bringing the device closer to your child’s eyes, use the zoom feature that allows them to see small print and details. Most computers are better suited at arms-length. Ergonomically, you want the top of the monitor to be about eye level. This puts the eyes in a slightly downward gaze which is preferred for close viewing.
- Reduce the glare on the device by adjusting device settings or using a glare filter to decrease the amount of blue light reflected from the screen. Most phones have blue light filtering features, but even certain apps have settings that can be adjusted.
- If a child is working on a computer or using a digital screen for an extended period of time, they should take regular breaks throughout the day. Ideally, you want them to try an activity or perform a task in which their eyes don’t have to focus on something up close. An easy rule to help alleviate eye strain while using a digital device or doing close work is the 20-20-20 rule; take a 20-second break to view something 20 feet away every 20 minutes.
- While these tips can be helpful, the best way to determine one’s individual eye health and vision safety needs is to consult with a doctor of optometry. That’s because problems in any part of the visual pathway can cause eye strain. Comfortable viewing of any screen requires good vision, adequate focusing, good eye alignment, healthy eye structures, and a long list of other things that are thoroughly checked during a comprehensive eye exam.

### ***How often should children get comprehensive eye exams?***

According to the American Optometric Association's (AOA) evidence-based clinical pediatric guideline, parents should begin eye care early, as early intervention is key to combatting the growing number of children struggling with eye and vision problems.

- Infants should receive a comprehensive baseline eye exam between the ages of 6 and 12 months, immediately after the critical period when the eye undergoes rapid and profound changes and is therefore most vulnerable to interference with normal development.
- Preschoolers should receive at least one in-person, comprehensive eye exam between the ages of 3 and 5 to prevent or diagnose any condition that may have long-term effects.
- School-aged children (6 to 18 years) should receive a comprehensive exam prior to entering the first grade and annually thereafter.

### **Additional Potential Topics:**

#### *Blue light blocking sunglasses*

- Blue light glasses block a percentage of blue light entering the eye with a special coating that reflects some of the blue light away from the eyes. However, tinted lenses that completely block blue light from the eyes, such as red tinted glasses, are not recommended, as the eyes still need blue light, both physiologically and for color perception.
- Some patients report advantages of using blue light glasses but, the fact is, there is not enough science to support or deny their benefit at this time.
- With or without blue light glasses, practicing eye-friendly screen habits is a guaranteed way to reduce your eye strain and the effects of computer vision syndrome. This can include practicing the 20-20-20 rule, taking a break from your screen every 20 minutes to look at something 20 feet ahead of you for 20 seconds.

#### *Vision screening*

- Children's eyes go through rapid changes – a time when routine comprehensive eye exams are critical to ensuring good vision health. Traditional vision screenings, such as those offered at schools and pediatrician offices, are a limited process and can't be used to diagnose an eye or vision problem, but rather may indicate a potential need for further evaluation.
- Vision screenings tend to focus on distance visual acuity (VA) – but they do not measure how well the eyes focus up-close, work together or move efficiently – skills necessary for academic achievement.
- Parents of children who “pass” a vision screening are often given a false sense their child's eyes are healthy, when they may have a serious, undiagnosed eye or vision condition. In fact, these screenings **provide less than 4%** of the information generated during a comprehensive eye exam and **they miss up to 75% of children with vision problems**. These children are less likely to receive timely treatment for their vision problem, allowing the impairment to become worse and to have a greater impact on their health and development.

*AOA Talking Points: Children & Digital Eye Strain*  
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- Children often don't know how they should see or feel, and so may not report if something is wrong. The bottom line: the sooner eye problems are identified and addressed, the better the outcome in childhood and beyond.