



# Blue light and screen time guide for educators and parents

Strategies to help maintain children's eye health in a digital world



Increased technology use in schools has led to a significant rise in screen time among students, with daily averages of 4-6 hours for 8-12 year-olds and up to 9 hours for teenagers.<sup>1</sup> 80% of a child's learning is through the eyes, yet 1 in 4 children in the U.S. has a vision problem.<sup>2</sup>

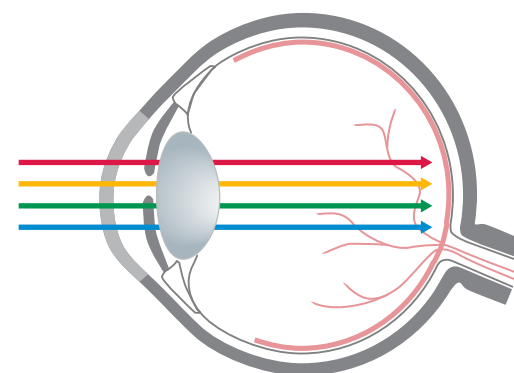
Children may be at higher risk for vision issues than adults, in part because their still-developing eyes absorb more blue light from digital devices.<sup>3</sup>

Additionally, children may hold digital devices closer to their faces more often than adults would, potentially leading to a higher amount of blue light exposure. Studies suggest excessive blue light may produce oxidative and phototoxic damage to cells in the cornea and retina of the eye.<sup>4</sup>

continued

## What is blue light?

Digital devices, such as laptops, tablets and phones, emit blue light, which is a low wavelength, high-energy energy light that may increase the likelihood of vision problems.<sup>5</sup>



Visible light is transmitted to the retina from natural and artificial light sources, between the range of 400-700 nm.

## Symptoms of too much screen time

A recent survey of educators and parents found that 85% are somewhat to very concerned about the impact of digital devices on student's eyes and health.<sup>6</sup> Part of that concern stems from the growing use of devices for learning, homework and projects.

The health impacts of excessive screen time and blue light may contribute to:

- Dry, irritated eyes
- Trouble sleeping
- Blurred vision
- Reduced attention span
- Irritability and difficulty concentrating<sup>7</sup>

**Educators and parents praise comprehensive vision care**

**62%**

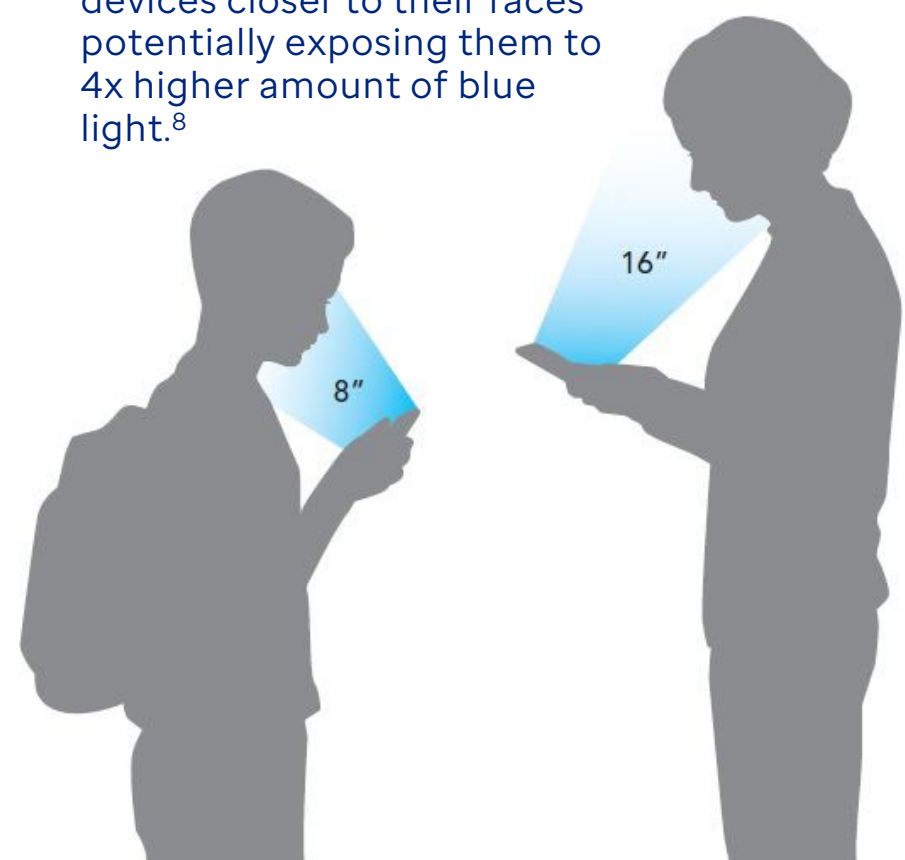
of teachers ranked a vision insurance plan that includes blue light filtration solutions as No. 1 in a recent survey.<sup>6</sup>

## Helping maintain children's eye health

Healthy vision is supported by a holistic approach, including awareness, education and blue light mitigation solutions, together with exams to detect and treat vision problems. Some practical approaches to help encourage good eye health for children\* are to:

1. Keep computer screens at least 30 inches away from eyes.
2. Look for warning signs of eye health issues, such as squinting while looking at screens, discomfort or dizziness.
3. Promote comprehensive eye exams.
4. Consider adding blue light screen protectors to digital devices, such as an Eyesafe® Blue Light Screen Protector, to help reduce blue light exposure.
5. Consider adding a "student eye protection" option to the vision plan, helping provide coverage for blue-light-blocking eyewear.

Children often hold digital devices closer to their faces potentially exposing them to 4x higher amount of blue light.<sup>8</sup>



# Some parents and educators report concern about blue light exposure

A recent survey of over 1,000 educators and parents revealed:<sup>6</sup>

- 61% believe schools have a responsibility to protect students from blue light exposure on the digital devices they issue.
- A vision insurance plan that includes blue light filtration solutions was ranked No. 1 by 62% of teachers in the survey. The benefits teachers most expect from blue light mitigating solutions include improved eye health (66%), sleep (55%) and concentration/ focus (48%).
- By providing blue light mitigating solutions for their children, primary benefits expected by parents include improved eye health (70%) and sleep quality (56%).

## Digital eye strain



**5 hours**

is the average amount of daily screen for 8 to 12 year olds.<sup>9</sup>

In addition to playing outside, **children often spend a great deal of time playing on digital devices and watching television.**

## Vision and learning



**1 in 4**

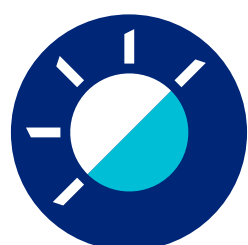
school-age children are affected by vision problems.<sup>10</sup>

**65%** of people are visual learners.<sup>11</sup>

**93%** of parents are concerned about the impact of screen time on children's eyes.<sup>6</sup>

## Myopia

Myopia or nearsightedness is the inability to see far off objects clearly, and it is on the rise.



Getting outside and away from digital screens may reduce the risk of nearsightedness.<sup>12</sup>

**~42%** of Americans are nearsighted - nearly twice the percentage from 50 years ago. <sup>13</sup>

# Product solutions that may help maintain eye health

Some new vision benefit programs\*\* may offer a variety of options for supporting a healthier learning environment, including discounts for:

## Laptop and computer monitors

Built-in technology reduces blue light at the source while maintaining color integrity.

## Screen protection

A filter is applied to a device to reduce blue light without changing the screen color or brightness.

## Eyewear

Eyewear with anti-reflective coating may help prevent potentially harmful reflective glare and reduce the risk of digital eye strain.\*\*\*



## Educators and parents may consider products that meet industry standards for low blue light

UnitedHealthcare Vision offers guidance on display types from leading brands that meet blue light emissions, toxicity and color performance requirements – all guided by the latest health research and input from leaders in health care.<sup>14</sup>



# Find out what UnitedHealthcare Vision can do for children's eye health in connection to screen time at [eyesafe.com/uhc](https://eyesafe.com/uhc)

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<sup>1</sup> American Academy of Child and Adolescent Psychiatry (AACAP), Screen Time and Children, No. 54; Updated May 2024

<sup>2</sup> The Cooper Institute, Vision and Learning are Linked: What You Need to Know, August 2023

<sup>3</sup> University of California-Davis Health, How blue light affects your eyes, sleep, and health, August 2022

<sup>4</sup> Coughnard-Gregoire A, Merle BMJ, Aslam T, Seddon JM, Akin I, Klaver CCW, Garhöfer G, Layana AG, Minnella AM, Silva R, Delcourt C. Blue Light Exposure: Ocular Hazards and Prevention-A Narrative Review, Ophthalmol Ther. 2023 Apr;12(2):755-788. doi: 10.1007/s40123-023-00675-3. Epub 2023 Feb 18. PMID: 36808601; PMCID: PMC9938358.

<sup>5</sup> University of California-Davis Health, How blue light affects your eyes, sleep, and health, August 2022

<sup>6</sup> Eyesafe Screen Time and Blue Light Survey of Educators and Parents, 2022

<sup>7</sup> Eyesafe, What is Blue Light, Updated May 2023

<sup>8</sup> Eyesafe, How to Save Your Eyes in the Digital Age, 2ed., January 2022

<sup>9</sup> Office of Children's Mental Health, Healthy Screen Time in a Digital World, April 2022

<sup>10</sup> University of Utah Health, Kids' Eye and Vision Problems: What School Screenings Might Miss, July 2024

<sup>11</sup> Lindner, Jannik, Gitnux Report 2024, The Impact of Visual Learner Statistics on Learning Behaviors, July 2024

<sup>12</sup> Harvard Health Publishing, Curbing Nearsightedness in Children: Can Outdoor Time Help?, December 2022

<sup>13</sup> American Academy of Ophthalmology, Eye Health Statistics, September 2024

<sup>14</sup> Eyesafe, Eyesafe® Standards for Blue Light Management and Color Performance for Display and Accessory Products, updated August 2024

\* The content is not intended to be a substitute for professional medical advice, diagnosis or treatment. Talk with your health care provider about any questions you may have regarding a medical condition. \*\* Coverage may be available to eligible beneficiaries with qualified vision plans underwritten or administered by UnitedHealthcare Insurance Company or its affiliates. Administrative services provided by MARCH® Vision Care Group, Inc. or their affiliates. \*\*\* Pending availability.

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