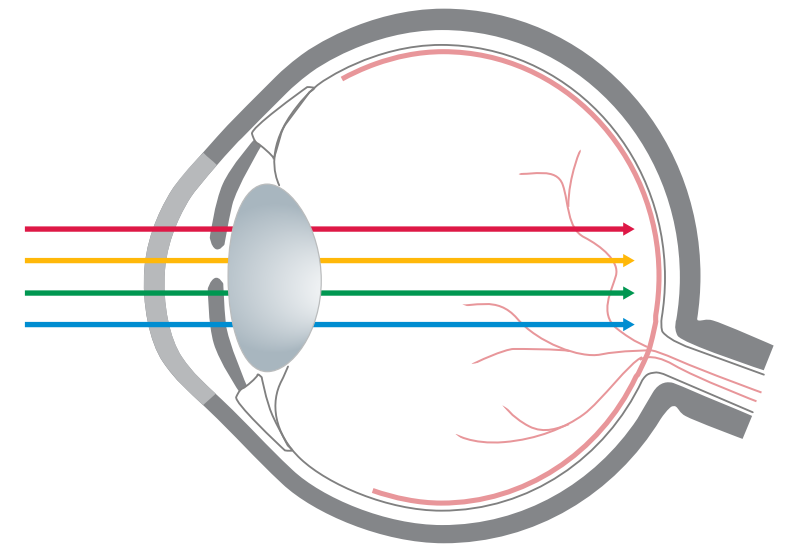




# Screen time, blue light and eye health



Many people are spending more time in front of digital devices such as smartphones or laptops, due in part to a greater reliance on remote work and school amid the COVID-19 pandemic. This increased use of digital devices means additional exposure to blue light, which may have negative effects, impacting eye health and sleeping patterns.<sup>1</sup>



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

## Blue light and health



**13+ hours**

are spent on digital devices per day since COVID-19 emerged.<sup>2</sup>



Blue light at night can be particularly disruptive for sleep, causing the suppression of melatonin.<sup>3</sup>

**Nearly 8 in 10** eye care professionals estimate that blue light is impacting not only patients' eyes but their overall physical and mental health.<sup>4</sup>

## Digital eye strain



**Over**

**50%**

of computer users may experience digital eye strain.<sup>5</sup>

Digital eye strain, which results from prolonged screen time, may contribute to:<sup>6</sup>

- Sore, tired eyes
- Dry eyes
- Headaches
- Neck, shoulders or back pain

## Potential benefits of blue light filtering

Blue light filtering technology, either built-in to the display hardware or added as an accessory to existing devices, may help reduce potentially harmful blue light. Potential benefits most often cited according to eye care providers include:<sup>4</sup>

**71%** expect sleep improvement.

**69%** anticipate improved eye and vision care.

**45%** predict increased morale and mood.

**56%** predict greater satisfaction with their overall care.

<sup>1</sup> International Journal of Ophthalmology, 2018, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6288536/>  
<sup>2</sup> Eyesafe, 2020, <https://eyesafe.com/covid-19-screen-time-spike-to-over-13-hours-per-day>  
<sup>3</sup> Harvard Medical School, 2020, <https://www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side>  
<sup>4</sup> Employer and Eye Care Provider Screen Time Survey 2020  
<sup>5</sup> BMJ Open Ophthalmology, 2018, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6020759>  
<sup>6</sup> American Optometric Association, <https://www.aoa.org/healthy-eyes/eye-and-vision-conditions/computer-vision-syndrome>