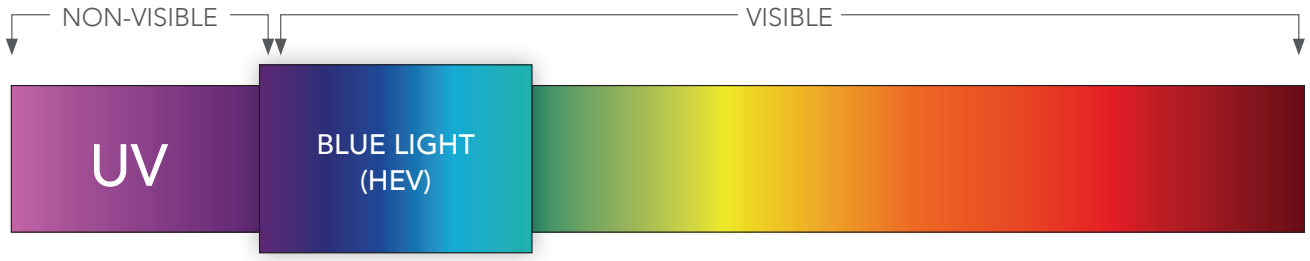
What is BLUE LIGHT?

More than 80 percent of Americans report using digital devices in the hour before going to sleep, which has been shown to disrupt sleep patterns by increasing alertness to the brain.

Blue light, also known as high energy visible (HEV) light, is a type of light with short wavelengths emitting a higher energy. Blue light penetrates deep into the eye, so exposure may result in:

- Damage to the retina exposing the eye to hidden spikes in intensity
- Long-term vision problems such as age-related macular degeneration (AMD) and cataracts
- Suppressing the natural release of melatonin, disrupting sleep

Aside from sunlight, digital screens – like those of TVs, computers/ laptops, smart phones and tablets – are the most common source of individuals' blue light exposure.



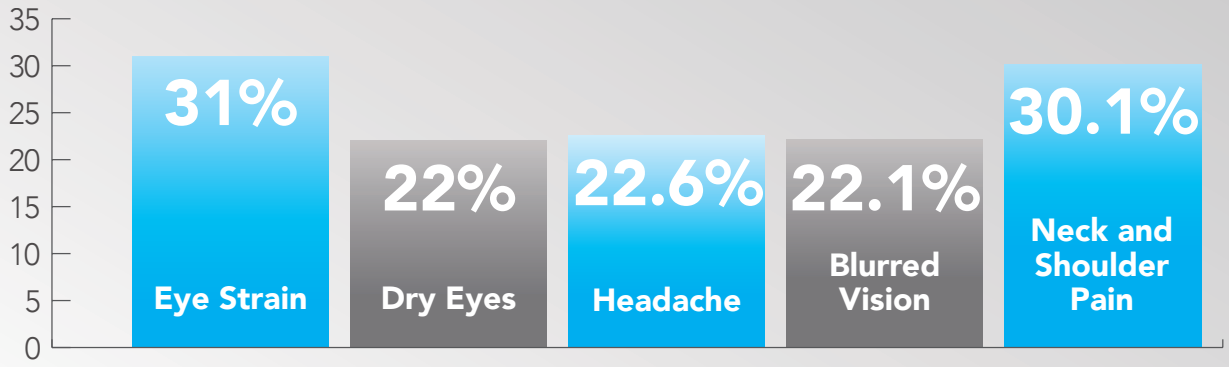
How Does Digital Eye Strain Come Into Play?

With an increase in digital technology, there has been an increase in blue light exposure. In turn, many individuals suffer from the physical eye discomfort after screen use for longer than two hours at a time, also known as digital eye strain.

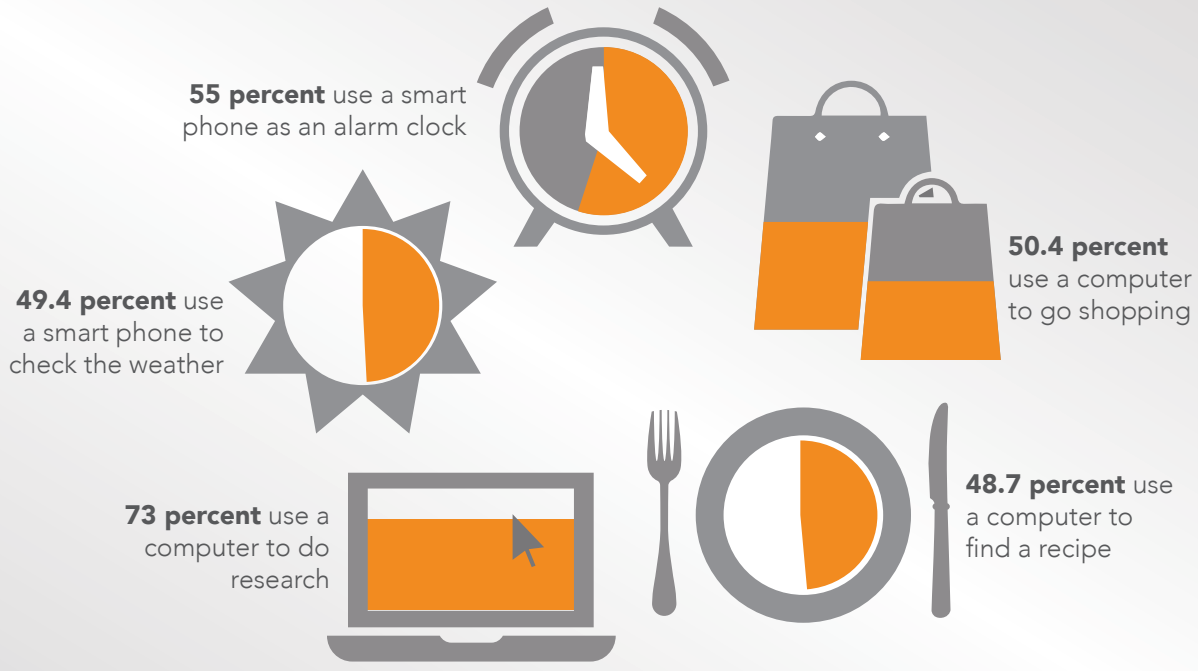
More than 87 percent of Americans report using digital devices for more than two hours per day, and 52.2 percent report using two digital devices simultaneously.

What Is the Impact?

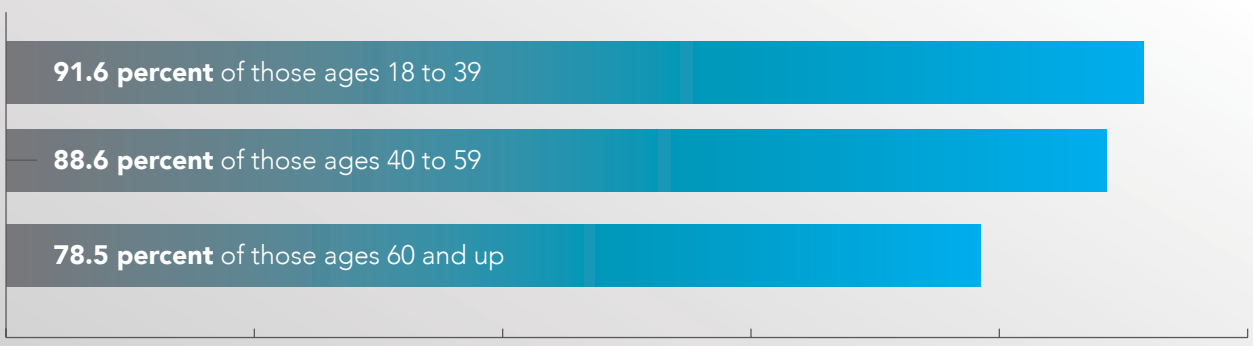
Americans report experiencing the following symptoms of digital eye strain:



Americans are becoming increasingly digitized, with more of our daily tasks moving online. For example:



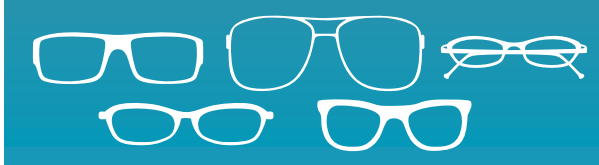
The following age groups state they use digital devices for more than two hours per day:



What Can Be Done to Reduce Exposure to Blue Light?

Eyewear is available with lenses featuring blue light-filtering capabilities – that reduce the negative effects of blue light – as well as anti-reflective or anti-glare properties. This technology can help minimize the negative effects blue light has on the body's circadian rhythm, which can hinder a good night's sleep. This technology also reduces the symptoms of digital eye strain.

However, individuals don't have to sacrifice style for function when it comes to eyewear. These specialized lenses can be incorporated into virtually any pair of frames, so individuals can choose eyewear that complements their personal look, while meeting their eye health needs.



The Vision Council recommends individuals and their child(ren) visit a local eyecare provider to discuss their digital habits and what eyewear solutions are available to relieve the symptoms of digital eye strain and reduce exposure to blue light.

68.5 percent of Americans report they have not discussed their digital device usage with their eyecare provider, and **73.5 percent** reported they did not know eyewear can be used to protect the eyes from the short- and long-term effects of digital eye strain, as well as blue light exposure.

Effect on Children

76.5 percent of Americans report their child(ren) gets more than two hours of screen time per day. And **55.6 percent** report their child(ren) experiences one of the following after being exposed to more than two hours of screen time:

- Headaches
- Neck/shoulder pain
- Eye strain, dry or irritated eyes
- Reduced attention span
- Poor behavior
- Irritability

While **78.3 percent** of parents are somewhat or very concerned about the impact of digital devices on their child(ren), only **29.1 percent** report taking their child(ren) for an annual eye exam as part of back-to-school preparation.

THE VISION COUNCIL