

Blue Light Impact on Workers

Blue light is in the visible spectrum of light with a wavelength of 380 to 500 nm. Daily exposure to blue light occurs from natural sources such as the sun as well as from LED and electronic devices used at home, work and other daily experiences. Exposure to blue light from electronic devices in the evening hours has been linked to changes in melatonin levels and circadian rhythms. Thus, reduction of night time use of electronic devices is recommended by health professionals to improve sleep performance. Scientific literature is lacking evidence of eye damage due to blue light from electronic devices. In the absence of studies on long term exposure to electronic devices, some eye professionals are indicating that use of blue light blocking glasses is desired because it is "unknown" yet what the impact (if any) will be to eyes for the generations that are just now experiencing increased use of electronic devices over their lifetime.

Due to the current lack of scientific evidence that blue light exposure in the workplace can cause eye damage, departmental purchase of glasses to filter out blue light for individuals is not currently recommended.

What can be done to reduce potential eye strain?

- 1. Hydrate your eyes or blink! Put a reminder at your workstation reminding you to blink.
- 2. Set eye-to-screen distance of 18 to 30 inches.
- 3. Tilt the top of monitor screen slightly further away from eyes than the bottom of the screen.
- 4. Follow the **20-20-20** rule: for every **20** minutes viewing a screen, look away from screen for **20** seconds at a distance of at least 20 feet away.
- 5. Reduce glare by avoiding facing a window or having a window at your back. Some privacy filters for monitors, in addition to reducing glare, can also reduce blue light. For example, 3M Privacy Filter Model PF240W1B states a 35% reduction. Be sure to read the fine print.
- 6. Try configuring your monitor or computer to reduce blue light through settings or programs.

References

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