

#1-02

Ergonomics – Eye Strain

Teachable Moments

Eyestrain means different things to different people. It can be experienced as burning, tightness, sharp pains, dull pains, watering, blurring, double vision, headaches, and other sensations, depending on the person. If you have any eye discomfort caused by viewing something, you can call it eye strain. In workstations with computer video screens the principal factors affecting the ability to see well are:

- glare
- contrast between what is being looked at and its immediate surroundings
- the amount of light
- the distance between the eye and the screen and document
- the readability of the screen and document
- the worker's vision and his or her corrective lenses

Direct glare involves a light source shining directly into the eyes — ceiling lights, task lights, or bright windows. To determine the degree of direct glare, you can temporarily shield your eyes with a hand and notice whether you feel immediate relief. Reflected glare, such as on computer screens, sometimes causes eyestrain.

The most overlooked cause of eyestrain in offices is contrast — usually, a dark screen surrounded by a bright background such as a window or a lit wall. The best solution is to find a way to darken the area around the screen.

How much light is right? It depends on age, the quality of the print being read, and other factors. There should be plenty of light for easy reading, but too much can, depending on the person, cause eye strain.

Eyes are strained more by close viewing than by distant viewing. The "right" distance for computer monitors and documents depends entirely on how clearly they can be read at a given distance. The general rule is to keep viewed material as far away as possible, provided it can be read easily.

If you gaze at something too long, your eyes can tire. Eyes need to focus at different distances from time to time. Follow the 20/20 rule — every twenty minutes, look twenty feet away for twenty seconds.

In general, keep viewed objects at about the same distance if you have to look back and forth a lot.

Sometimes eyestrain is just a case of dry eyes. Lowering the monitor can help. Looking downward means more of the eye surface is covered by the eyelid, and two other things happen: the eyes unconsciously blink more, and they produce more lubrication.

People who need bifocals should consider other options besides bifocals. Two good ones are:

- Computer glasses that focus at the right distance for the computer screen.
- Wearing contact lenses — corrected for computer or reading distance in one eye, and for far distance (if needed) in the other eye.

Take Away: Eye strain can be caused by a variety of factors. Experiment with some of the issues discussed above to try to find relief. Managers should work with an employee suffering eye strain to find an appropriate solution.