



## Risk Management & Safety Office

### A Dozen Things You Should Know about Eyestrain

1. 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 eyestrain.

2. In VDT (Video Display Terminal) workstations, the principal factors affecting the ability to see well are:

- glare
- the luminance (brightness) difference between what is being looked at and its immediate environment
- 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

3. Watch out for direct glare. 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.

4. Reflected glare, such as on computer screens, sometimes causes eyestrain. But its worst effect may be causing you to change your posture to an uncomfortable one, in order to see well.

5. 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. This problem occurs mainly on screens with light letters on a black background.

6. How much light is right? It depends on your age, the quality of the print you're reading, and other factors. There should be plenty of light for easy reading, but too much can, depending on the person, cause eyestrain.

7. 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!!!

8. If you gaze at something too long, your eyes can tire. Eyes need to focus at different distances from time to time. It's a good idea to follow the "20/20 rule" --- every twenty minutes, look twenty feet away for twenty seconds.

9. If two objects are only a couple of inches different in their distance from the eyes, the eyes actually do NOT have to refocus to look from one to another.

Greater distance differences, however, can overwork the eyes if you have to look from one object to another frequently -- as when typing from printed copy and looking at the screen. In general, keep viewed objects at about the same distance if you have to look back and forth a lot.

10. Can computer work cause nearsightedness? Rarely, according to optometrists. It's more likely that computer work makes you realize that you need glasses.

11. 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.



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### A Dozen Things You Should Know about Eyestrain

12. 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.

13. Bifocal wearers often experience sore necks and shoulders because they have to tip their heads back to see the computer screen.

- Lower the screens as much as possible --- if it sits on the CPU, move the CPU.
- If necessary, remove the monitor's tilt-swivel base (consult a computer hardware person first) to gain a couple additional inches.
- Lower the work surface that the monitor sits on.