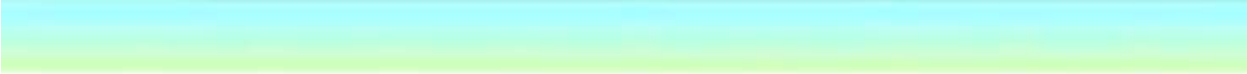




## What is Computer Vision Syndrome (CVS)?

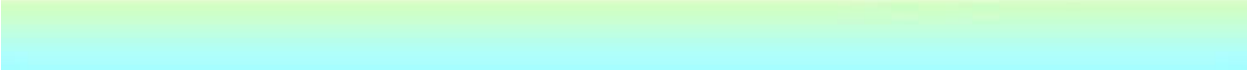
Computer Vision Syndrome (CVS) is the general term used to describe a variety of vision related symptoms that may be aggravated by regular use of a computer for two or more hours a day.





## **Impact of CVS**

CVS affects mental and physical well-being and impacts productivity



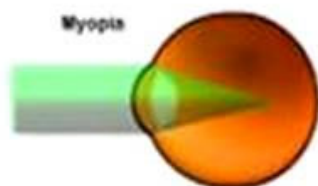
## What are the symptoms of CVS?



Double vision



Dry eye



Temporary nearsightedness



Photophobia: decreased tolerance to light



**Headaches**



**Eye strain**



**Redness and Watering of eyes**



**Neck and back aches**

## What causes these symptoms?

- Characters (pixels) on computer screen do not have well defined edges. They are brightest at the center and diminish in intensity towards the edges.
- This makes it very difficult for eyes to maintain focus.
- Extensive focusing does not give much opportunity to the eye muscles to move and this leads to eye strain, burning, tired – eyes feeling.

## **Other factors which cause CVS**

- Computer users have a very fixed posture.
- Constant gazing at a near distance at the monitor (which leads to convergence fatigue).
- The upper body remains fixed for very long period of time.
- The eye muscles do not get much opportunity to move.
- Uncorrected visual defects

**Lack of image clarity**



## Glare from reflections and lights



The primary source of glare on computer screens is overhead office lights or direct light coming through windows and bouncing off computer screens

## **Infrequent blinking**

- Normally a person blinks 15 times/min, but while working on a computer, the blink rate comes down to 5 times /min because of continuous staring at the screen.
- Blinking is critically important for spreading of tears to form an even film on the eye surface and also in refreshing this tear film.
- Thus in the absence of adequate blinking, eyes become dry and irritated.

## How can a person find out whether he is at a risk for CVS?

According to AOA (American Optometric Association), anyone who exceeds two hours of computer use a day is at a risk for CVS.

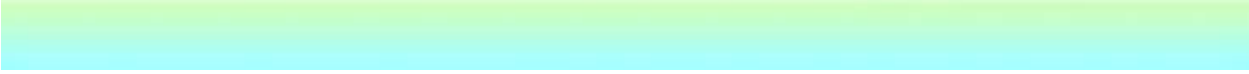




## What can be done to minimize CVS?

- To begin, anyone who suspects CVS, should have a

**Thorough eye exam by an ophthalmologist.**

- Apart from this, a few additional steps can help reduce CVS
- 

## Blink more often

Computer users should make a conscious effort to blink more often:

- They should try out the suggested formula  
**20: 20: 20**
- **Every 20 mins: for 20 seconds: blink 20 times**

OR

**BLINK EVERYTIME U HIT THE  
“ENTER” KEY OR MOUSE CLICK**

## Adjusting height of the seat

**Adjust the height** of the desk or chair so that the middle of the computer screen is about 20 degrees below eye level.



## Screen distance

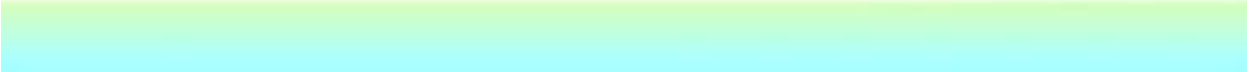
The screen should be at a distance of 16-30 inches from the eyes





## **Avoid air drafts**

Also avoid sitting in front of an airconditioner facing its air draft while working on a computer.



## Reduce glare

- Direct the overhead lights away from computer screens
- Position your monitor so that all windows are to the side rather than to the back or front.
- Adjust window blinds so that sunlight is away from screen and your eyes.

Install an anti-glare optically coated glass filter on the computer screen



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## Take breaks

Computer users can reduce fatigue by taking breaks from work and can benefit from taking a five minutes break for every 30 minutes of work.



## Use lubricating eye drops

- Lubricating eye drops are meant to provide moisturizing relief to your eyes, which have become dry and irritated by working for long hours on the computer.
- Lubricating eye drops help in soothing the eyes and relieving irritation, redness & the eyestrain.
- Lubricating eye drops can be used as often as you want, especially the newer ones, which are safe to the eye enabling their frequent use.