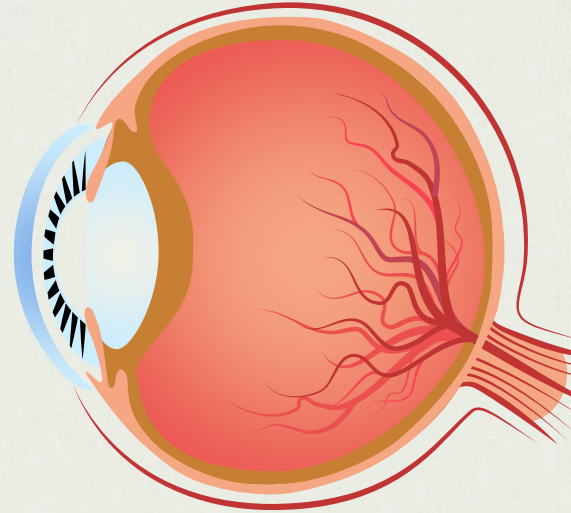


THE VISION EQUATION

Screen time, age and eye wellness

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The Eye Centre, Mumbai, India



Computer vision syndrome

What is it?

- A group of eye and vision problems caused by prolonged digital screen use



Symptoms:

- Tiredness
- Watering
- Itching
- Redness
- Intermittent blurring
- Drowsiness
- Inability to tolerate bright light

Computer vision syndrome



Eye health over 40 – normal changes

01

Need for more light

02

Difficulty in
reading/ doing
close work

03

Problems with
glare

04

Changes in colour
perception

05

Reduced tear
production

Presbyopia

What is it?

- Is a gradual loss of your eyes ability to focus on nearby objects
- It is a natural aging process
- Usually becomes noticeable in the early 40s and continues to progress till 65

What can you do?

- Wear corrective lenses
 - Which could be bifocals or progressive lenses



Warning signs of eye health problems

This is also the time in life when your risk for developing a number of eye and vision problem increases. The following symptoms could be the early warning signs of a serious eye health problem:

Fluctuating vision	Frequent changes in how clearly you can see maybe a sign of diabetes or hypertension (high blood pressure). These chronic conditions can damage the tiny blood vessels in the retina, the light-sensitive layer at the back of the eye. This vision loss can sometimes be permanent.
Seeing floaters and flashes	Occasionally, you may see spots or floaters in your eyes. In most cases, these are shadowy images of particles floating in the fluid that fills the inside of the eye. Although they can be bothersome, spots and floaters typically don't harm vision. They are a natural part of the eye's aging process. But if you suddenly see more floaters than normal, along with bright, flashing lights, see your doctor of optometry immediately. This could be a sign that you have a tear in your retina, and it could detach. This should be treated immediately to prevent serious loss of vision.
Loss of side vision	Losing peripheral or side vision may be a sign of glaucoma. Glaucoma occurs when the optic nerve is damaged and no longer transmits all visual images to the brain. It often has no symptoms until damage your vision has begun.
Seeing distorted	Straight lines that appear distorted or wavy or an empty area in the center of your vision could be signs of age-related macular degeneration (AMD). The disease affects the macula, which is the part of your retina that is responsible for central vision. The disease causes a blind spot in the middle of your field of vision. Regular eye examinations and early diagnosis and treatment of eye diseases can help you preserve good vision throughout your life.

Common eye diseases and conditions

01

Age-related
macular
degeneration
(AMD)

02

Cataract

03

Diabetic eye
disease

04

Glaucoma

05

Dry eye



Age-Related Macular Degeneration (AMD)

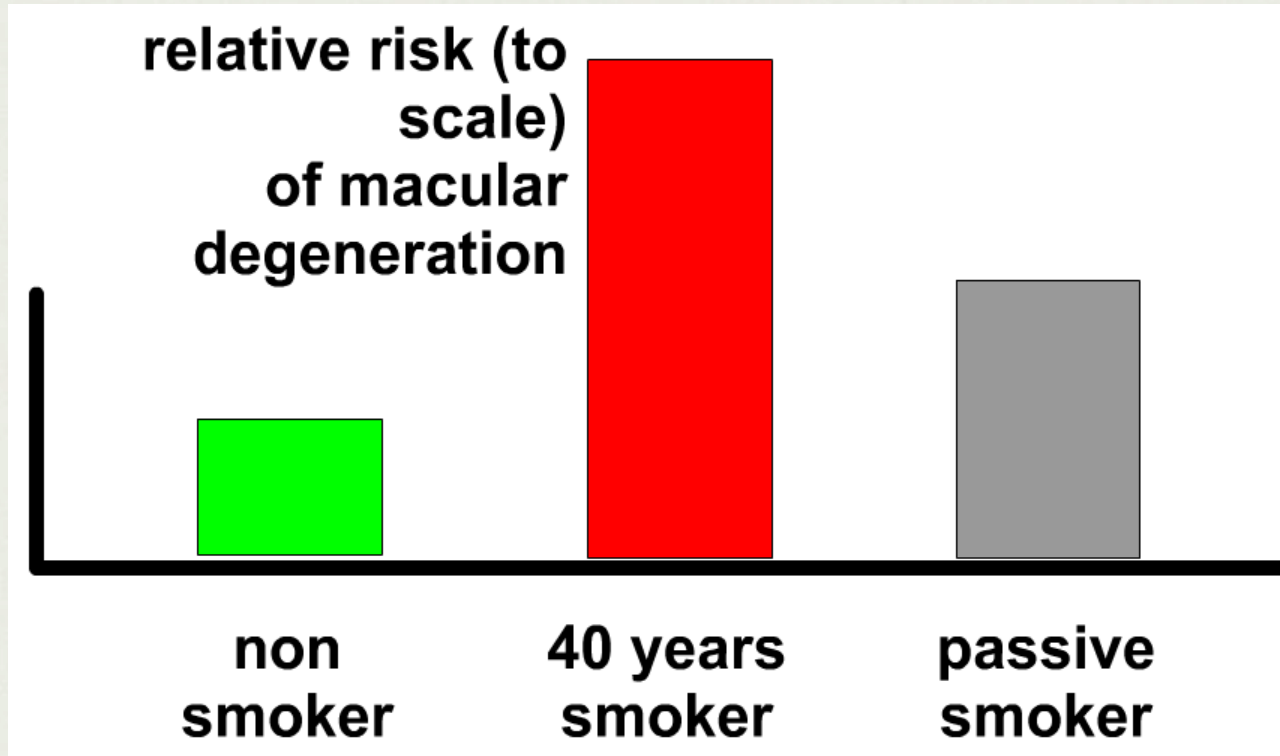
What is it?

- Common among people aged 60 or older.
- Can damage the macula, which is needed for sharp, detailed central vision.

Who is at higher risk?

- The greatest risk factor is age.
- Other risk factors
 - Smoking.
 - Family history.
 - Obesity.
 - Race. Caucasians are more likely to lose vision from AMD.

Risk of macular degeneration



Vision after macular degeneration





Age-Related Macular Degeneration (AMD)

Treatment options:

- Special vitamins/minerals supplement formulation.
- Laser surgery.
- Eye injections.
- Photodynamic therapy.





Cataract

Normal, clear lens



Lens clouded by cataract

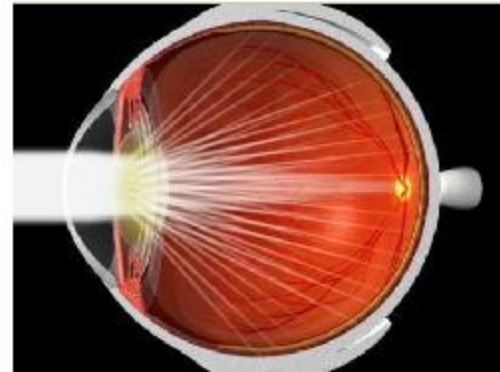
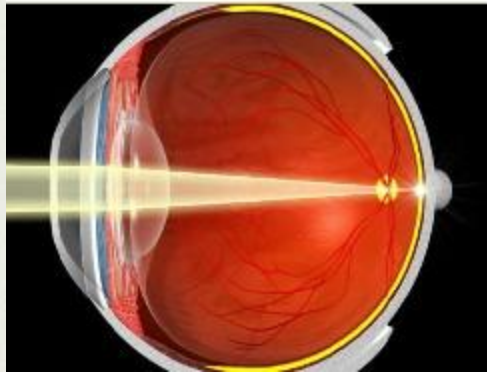


Symptoms

- Cloudy or blurred vision
- Colours that may not appear as bright as they once did
- Glare
- Poor night vision

A cataract is an opacity of the normally clear lens which may develop as a result of aging, metabolic disorders, trauma or heredity

Vision during Cataract





Diabetic eye disease

What is it?

- A group of eye problems associated with diabetes
- Diabetes retinopathy is a leading cause of vision and blindness

Symptoms

- No early warning signs or symptoms

Treatment options

- Laser treatment
- Surgery

Who is at higher risk?

- People with diabetes
- The longer someone has diabetes, the more likely it is he or she will get diabetic retinopathy.

Prevention:

- Early detection and timely treatment can reduce the risk of vision loss
- Regular eye check up
- Regular blood sugar monitoring
- Adequate control of blood sugar levels

Vision after Diabetic Retinopathy

Normal Vision

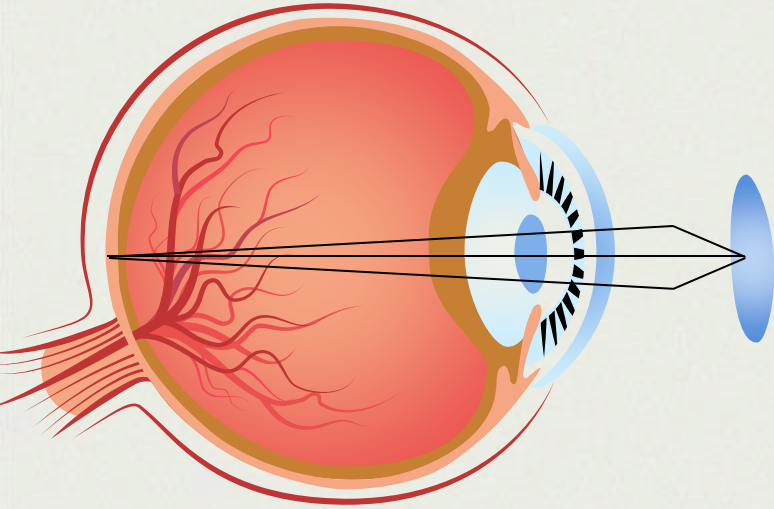


Vision with Diabetic Retinopathy



Glaucoma

What is it?



- A group of eye diseases that can damage the optic nerve in the eye.
- Glaucoma can develop in one or both eyes.
- Primary open-angle glaucoma is the most common form.

Glaucoma

Who is at higher risk?

- African Americans over age 40.
- Everyone over the age of 60, especially
- Mexican Americans.
- People with a family history of glaucoma.

Vision with Glaucoma

NORMAL VISION



EARLY GLAUCOMA









ADVANCED GLAUCOMA



EXTREME GLAUCOMA



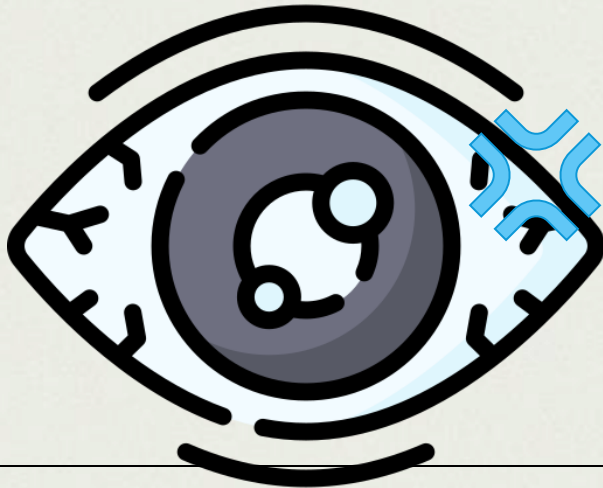
Symptoms of Glaucoma

SYMPTOMS OF GLAUCOMA		
		
Extreme Headache	Distorted Vision	Eye Reddening
		
Severe Eye Pain	Vomiting	Halos Around Lights

Glaucoma

What can you do?

- People at higher risk should get a comprehensive dilated eye exam every one to two years or as instructed by your eye care professional.



Symptoms:

- No early warning signs or symptoms
- No pain
- Loss of side vision

Treatment options:

- Medications, usually eye drops.
- Laser or conventional surgery

Dry eye

What it is?

- The eye does not produce tears properly.
- Tears evaporate too quickly.
- Inflammation of the surface of the eye
may occur along with dry eye.

Who is at higher risk?

- Women often experience dry eye more than men.
- Dry eye can occur at any age.
- Older adults frequently experience dryness of the eyes even in normal conditions.
- Prolonged use of digital appliances – like computer and phone

Dry eye

Symptoms :

- Stinging or burning of the eye.
- Feeling as if sand or grit is in the eye.
- Episodes of excess tears following dry eye periods.
- A stringy discharge from the eye.
- Pain and redness of the eye.
- Episodes of blurred vision.
- Heavy eyelids.
- Decreased tearing or inability to shed tears when crying.
- Uncomfortable contact lenses.
- Decreased tolerance to any activity that requires prolonged visual attention.
- Eye fatigue.

Treatment options :

- Using artificial tears, prescription eye drops, gels, gel inserts, and ointments.
- Wearing glasses or sunglasses.
- Getting punctal plugs.

A close-up photograph of a woman's face during an eye examination. She is looking slightly to the left. A transparent phoropter is positioned in front of her eyes. A bright, warm light source is visible at the bottom center, creating a lens flare effect. Her hands are raised, with fingers spread, in front of her face. The background is softly blurred, showing hints of a clinical setting. There are some colorful, out-of-focus circular shapes on the left and right edges of the frame.

Get your eyes examined

Everyone aged 50 or older should have a comprehensive dilated eye exam.

Your eye care professional can tell you, how frequently you need to have one.

When to get your eyes checked:

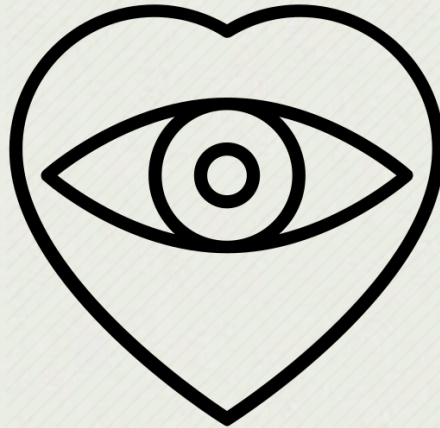
Patient Age (Years)	Asymptomatic / Low-Risk	At-Risk
18 through 39	At least every 2 years	At least annually, or as recommended
40 through 64	At least every 2 years	At least annually, or as recommended
65 and older	Annually	At least annually, or as recommended

Eye donation

Let your eye live on...

Eye Donation – Seeing Beyond Life

- Every year, millions lose their sight due to corneal blindness.
- Eye donation is a simple act that can restore vision and transform lives.



Facts about **eye donation** :

- Eye donation means donating your corneas after death to help restore sight
- Only the cornea (clear front part of the eye) is used in transplants
- Donation is done within 6 hours after death
- Anyone can donate – regardless of age, gender, or medical history
- The consent of the next of kin is essential for removing the eyes after the person's death
- It is therefore important to share your wish to donate eyes with your family members when one is alive
- No cost to the donor's family
- Eye donation does not delay funeral rituals

Information of Red cross:

Red cross Thailand facilitates eye donation and below are the contact details:

Phone number:

- 022564039
- 022564040

Website:

- <http://www.redcross.or.th>

THANKS!

DO YOU HAVE ANY QUESTIONS?

