**What is cornea?**
Cornea is the glass like covering over the pupil of the eye.

**Why does the cornea get damaged?**
The cornea usually gets damaged because of infections or injuries of the eye or poor nutrition especially in childhood.

**How can eyesight be restored?**
Persons who have lost their sight because of damage to the cornea can hope to regain it with corneal grafting.

**Are there any synthetic substitutes for the cornea?**
So far no substitutes have been developed for the cornea.

**Who can pledge his eyes for donation after death?**
Any person can donate his/her eyes without consideration of age, sex or social status. Those who wear glasses, have had a successful eye surgery or suffer from some systemic disease can also donate their eyes.

**Are any costs involved in eye donation?**
No fees are charged from the family. The Eye Collection Centre will rush a doctor to the donor's home. This is a free service in the public interest.

**Can the eyes be removed at home?**
The eyes can be removed at home or any other place where the body is kept after death.

**Does the recipient have to pay for the eye that is used for grafting?**
Services by the government and voluntary sector are provided free of charge. Donated eyes are never bought or sold.

**What are the moral and religious views on eye donation?**
Religious leaders throughout the world have voiced their support for eye donation as an expression of the highest humanitarian ideas.

**Procedure for Eye Donation**
Enquire about the nearest Eye Collection Centre/Eye Bank. This is likely to be located at a Medical College or Eye hospital in your area. Contact the one nearest you (by phone or a personal visit) and they will register your pledge and provide you with an Eye Donation Card.

It is preferable if all members of the family pledge their eyes together. However an individual can also pledge his/her eyes at any time in his life.

The eyes of a deceased person can also be donated whether he has pledged his eyes in his life or not. Under law, relatives of the deceased can donate his/her eyes provided he/she has never spoken against eye donation.

---

**MAKE EYE DONATION A FAMILY TRADITION**

Your eyes after death need not perish.
Help blinds to see, donate eyes after death.

---

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Nirman Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.

Dial 1919 in Delhi (MTNL Toll Free No. for Eye Donation 24 hrs.)
Deficiency of Vitamin A in the body results / causes various diseases. If left untreated, the condition results in total blindness among children.

**CAUSES**
- Poor intake of vitamin A rich food like green leafy and yellow vegetables, fruits etc., by expectant and nursing mothers and infants.
- Frequent diarrhoeas.
- Measles and other respiratory infections.

**EARLY SIGNS**
- The Infant's skin and eyes appear dry and wrinkled.
- White portion of the eye appears lusterless and dull.
- Grey elevated patches called bitot spots appear on the white portion of the eye.
- Poor vision in dim light and at night.
- The condition is curable at this stage if the patient is referred to the Doctor and treated promptly.

**PREVENTION**
Expectant and nursing mother should eat adequate Vitamin A rich food (green leafy vegetables etc.)

**TREATMENT**
- Vitamin A Prophylaxis doses are given to the expectant and nursing mothers and infants. The schedule is as under for the children.

<table>
<thead>
<tr>
<th>Dose</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST DOSE</td>
<td>9 months with Measles Vaccine</td>
</tr>
<tr>
<td>SECOND DOSE</td>
<td>1 ½ Years with DPT Booster Vaccine</td>
</tr>
<tr>
<td>THIRD DOSE</td>
<td>2 years</td>
</tr>
<tr>
<td>FOURTH DOSE</td>
<td>2 ½ years</td>
</tr>
<tr>
<td>FIFTH DOSE</td>
<td>3 years</td>
</tr>
</tbody>
</table>

- Primary Health Centers also treat such patients.
- All infants should be breastfed from the very first day of their birth.

Vitamin A deficiency disorders are preventable. Vitamin A prophylaxis is given free of cost in all primary health centers. Avail this facility and avoid childhood blindness.

---

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Nirman Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.

BREAST MILK IS THE BEST FOR YOUR BABY; START WEANING FOODS IN TIME
Refraction Error, when left uncorrected, is the most common cause of visual impairment. It is caused due to abnormal size and curvature of the eyeball.

TYPES OF REFRACTIVE ERRORS

(1) **Myopia or near sightedness.**
Persons with myopia have blurred distant vision. Children with myopia are not able to perceive their problem. It increases until the age of 20 or so. The condition can be corrected by concave / minus spectacles.

(2) **Hypermetropia (Far sightedness)**
Persons with hypermetropia have difficulty in seeing both distant & near objects. The condition can be corrected by using convex / plus spectacles.
When left uncorrected, such persons feel eyestrain and headache while doing close work.

(3) **Astigmatism**
In this condition, a blurred distorted image falls on the retina. It causes strain. This astigmatism condition is treated by wearing cylindrical glasses.

(4) **Presbyopia**
After the age of 40, a person may find difficulty to see near objects clearly. This is because the plasticity of the lens decreases. The defect can be corrected easily by wearing spectacles.

PREVENTION

Refraction errors cannot be prevented. However, they can be corrected with early detection and by wearing appropriate glasses regularly. There are mass screening programmes for detection of refractive errors among school children.

PARENTS/TEACHERS CAN IDENTIFY THE REFRACTIVE ERRORS IN CHILDREN BY OBSERVING

- Hazy Vision.
- Complaints of headache while doing near work.
- Squeezing of the eyes while watching the distant objects.
- The child not taking interest in studies. It may be a sign of Refractive errors.
- Copying from other children's books instead of blackboard.

**Refractive Errors have no cure. But correction is sure by appropriate glasses**

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Nirman Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.

ALL RELIGIONS ENDORSE EYE DONATION
Prevent "Eye" Injuries

Most of the eye injuries are usually preventable. They occur frequently and can happen anywhere. It is estimated that 80-90% of all eye injuries are preventable. 40-45% out of them occur in and around the home. In children, eye injuries can occur at home, school or play ground and also during the festivals of Deepawali, Dussehra and Holi. Retinal burns can occur while viewing the solar eclipse with naked eye. They should always be aware of the best ways to protect their eye sight. Hence, prevention is the first and most important step for avoiding eye injuries. The following preventive measures can be taken at home, at play and during the festivals to save eye sight.

AT HOME
- Items of daily use like sharp edged toys, knife, needle, scissors etc., should be kept away from children. These objects can sometimes cause serious injuries when they come in contact with eyes.
- Make sure that all spray nozzles are directed away from you before you press down on the handle.
- Read instructions carefully before using detergents, ammonia or harsh chemicals. Wash your hands thoroughly after use.

AT PLAY
- Many toys with pointed or sharp ends and games like guli-danda, boxing can prove dangerous. Remember to pay attention to the age of a child while selecting a toy or a game.
- Avoid projectile toys such as dart, pellet guns etc. These can hit the eye from a distance.
- Supervise children when they are playing with toys or games that can be dangerous.
- Teach children the correct way to handle potentially dangerous items such as scissors, pencils, bows and arrows.

DURING FESTIVAL
- Don't give crackers to small children.
- Don't stand too close to fireworks.
- Don't ignite fireworks indoor.
- Adult supervision is essential.
- Wear eyeglasses or goggles for protection
- Place a bucket of water nearby to put out fire.
- Use herbal colours. Avoid use of chemicals in Holi.
- If chemicals falls in the eyes wash with plenty of water.

Blunt and perforating eye injuries needs urgent attention. Do not ignore eye injuries. Avoid self treatment at all costs.

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Niran Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.
Cataract

Cataract is a major cause of blindness in India. The condition is caused mainly due to ageing. Cataract is the opacity of the transparent lens of the eye. If clouded, prevents the light to pass through lens and reach retina for image formation. The factors responsible for cataract, are old age, eye injuries, inflammation, diabetes, and prolonged use of steroids. Children may also have cataract since birth, due to the infection passed on to them by their mother during pregnancy.

**SIGNS AND SYMPTOMS**
- Gradual loss of vision.
- Both eyes are involved at varying stages.
- The lens of the eye turns grey.
- The patient has hazy or double or multiple vision.
- There is no pain.
- The patient has to change his spectacles frequently.

**PREVENTION**
Cataract formation cannot be prevented. However, blindness due to cataract can and must be avoided through timely surgical intervention.

**TREATMENT**
- Medication of any kind cannot cure or delay cataract formation.
- Surgical removal of the clouded lens and replacement by Intra Ocular lens (IOL) can restore normal vision.
- Cataract surgery is simple. It is normally done under local anesthesia.
- Cataract surgical services are available free of cost in government hospitals and many Non-Governmental Institutions.

**POST-OPERATIVE CARE**
- Protect the operated eye from bright sunlight, dust, smoke and jerks
- Wear dark glasses.
- Put eye-drops / ointments as advised by operating surgeon.
- Get eyes checked by Eye-Surgeon after one week of the surgery and again after 6-8 weeks for refraction.
- There are no diet restrictions.

*Cataract formation cannot be prevented by any means. Blindness due to cataract can and must be avoided through timely surgical intervention.*

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Nirman Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.

JEETE JEETE RAKT DAAN - JAATE JAATE NETRA DAAN
Trachoma is an infectious disease. It affects eyelids. Later, when eyelashes turn inside, causing damage to the cornea. It is found in certain pockets of the States of North India like Haryana, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Gujarat etc.

SIGNS AND SYMPTOMS

- Sandy sensation in the eyes
- Raised granules on the conjunctiva
- Usually both eyes are involved
- In-turned eye-lashes
- Discharge from eyes

PREVENTION

- Personal hygiene is the best prevention against trachoma
- Keep environment clean
- Remove all fly-breeding situations in and around the home.
- Maintain personal hygiene and facial hygiene.
- Keep separate towel, linens etc. for each member of your family and keep them clean.
- Wash your face with clean water several times in a day.
- Avoid physical contact with the person who has trachoma.

TREATMENT

- Trachoma is curable. Apply Antibiotic eye ointment on the advice of Eye Doctor.
- Wash your face frequently.
- Surgical removal of in-turned eye lashes

ADOPT ‘SAFE’ STRATEGY

S - Surgery of in turned Eye lashes.
A - Antibiotic (Medicine & eye Ointment)
F - Frequent face wash
E - Environmental sanitation

Personal Hygiene & Environmental sanitation is the best method of TRACHOMA prevention.

National Programme for Control of Blindness
Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India,
Nirman Bhavan, New Delhi - 110 011

For further information, contact: Nearest Primary Health Centre, Government Hospital, Medical College and NGO Hospital.

LEPROSY IS NOT A CONTAGIOUS DISEASE