

# National Programme for Control of Blindness



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# Definition of Blindness

- Blindness is defined under following headings (**NPCB**):
  - Simple Definition: Inability of a person to count fingers from a distance of 6 meters or 20 feet
  - Technical Definition: Vision 6/60 or less with the best possible spectacle correction
- For International comparison, **WHO** has defined blindness at the level of 3/60 or inability to count fingers at a distance of 3 meters or 10 feet

# Revision of Categories of Visual Impairment

## Presenting distance visual acuity

Category		Worse than	Equal to or better than
Mild or no visual impairment: 0			6/18
Moderate visual impairment: 1		6/18	6/60
Severe visual impairment: 2		6/60	3/60
Blindness: 3		3/60	1/60*
Blindness: 4		1/60*	Light perception
Blindness: 5		No light perception	
	9	Undetermined or unspecified	

\*Or Count fingers (CF) at 1 metre.

Ref: W.H.O.

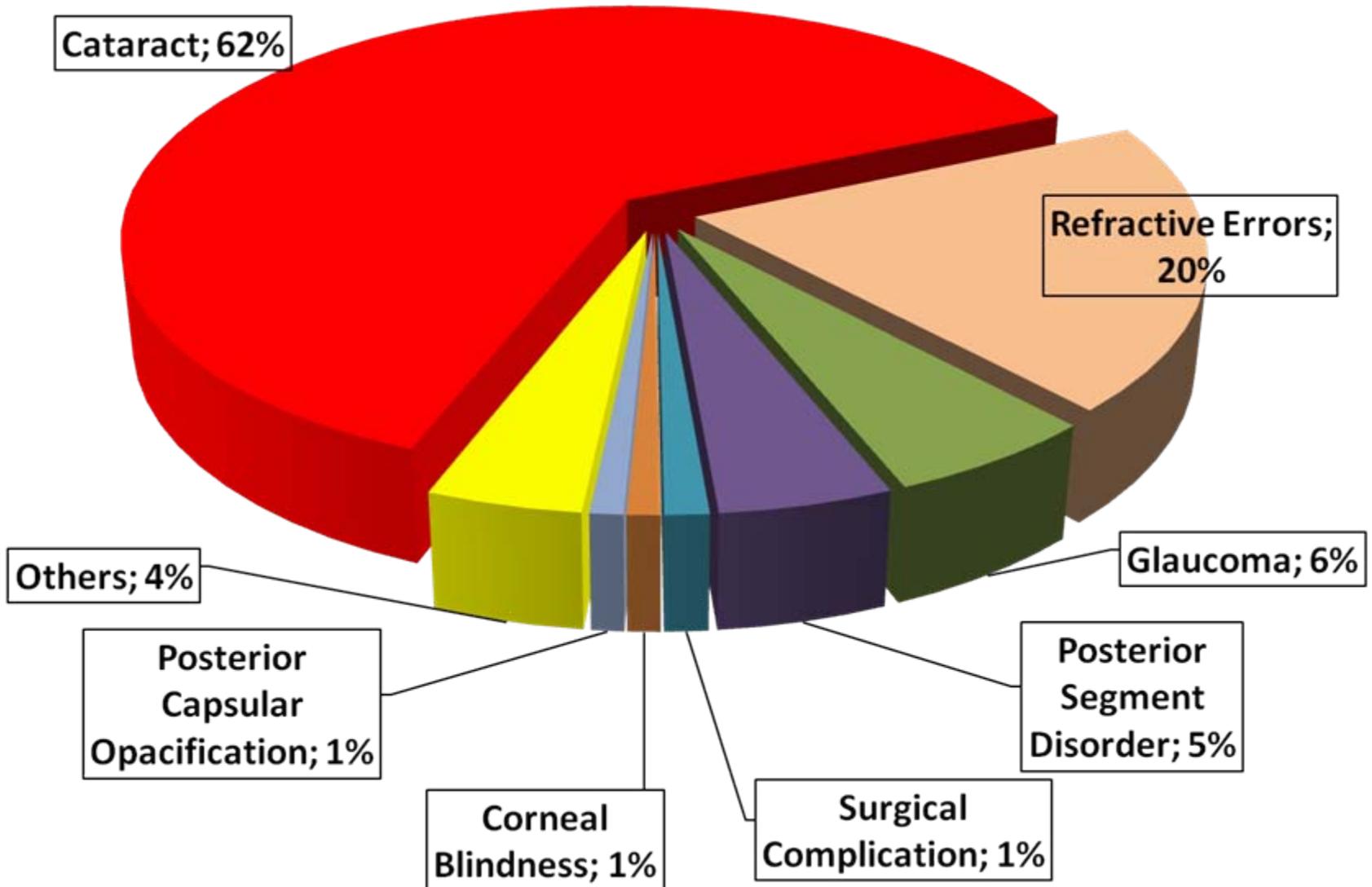
# Types of blindness

- **Curable blindness:** That stage of blindness where the damage is reversible by prompt management e.g. cataract
- **Preventable blindness:** The loss of blindness that could have been completely prevented by institution of effective preventive or prophylactic measures e.g. xerophthalmia, trachoma, and glaucoma
- **Avoidable blindness:** The sum total of preventable or curable blindness is often referred to as avoidable blindness.

# Magnitude of Problem in India

- Estimated prevalence of blindness (2004):  
11.2 per 1000 population
  - 0.1 per 1000 population : 0-14 years
  - 0.6 per 1000 population: 15-49 years
  - 77.3 per 1000 population: 50 years & above
- Female (12.2 per 1000 population) > Male (10.2 per 1000 population)

# Causes of Blindness in India



# National Programme for Control of Blindness

- Launched in year 1976
- 100% centrally sponsored programme
- Incorporates the earlier Trachoma Control Programme (started in 1968)
- Goal: To reduce the prevalence of blindness from 1.4 to 0.3%

# Revised strategies

Based upon the finding of the survey conducted during 1998-99 & 1999-2000:

## 1. To make the NPCB more **comprehensive** by

- strengthening services for other blindness like corneal
- blindness,
- refractive errors in school going children ,
- improved follow up service of cataract operated persons and
- treating other causes of blindness like glaucoma

## 2. To shift

- from eye camp approach to a **fixed facility**,
- from conventional surgery to IOL implantation for **better quality** post operative vision.

3. To **expand the world bank project activities**

like constructions of eye OTs, eye wards at distt. Level, training of eye surgeons, modern cataract surgery & supply of eye equipments.

4. To **strengthen participation** of voluntary organizations in the programme & to earmark geographic areas to NGOs and govt. hospital & improve the performance of govt. units.

5. To **enhance coverage** of eye care services in tribal & underserved areas through identification of bilateral blind patients, preparation of village wise blind register & giving preference to bilateral blind patients for cataract surgery

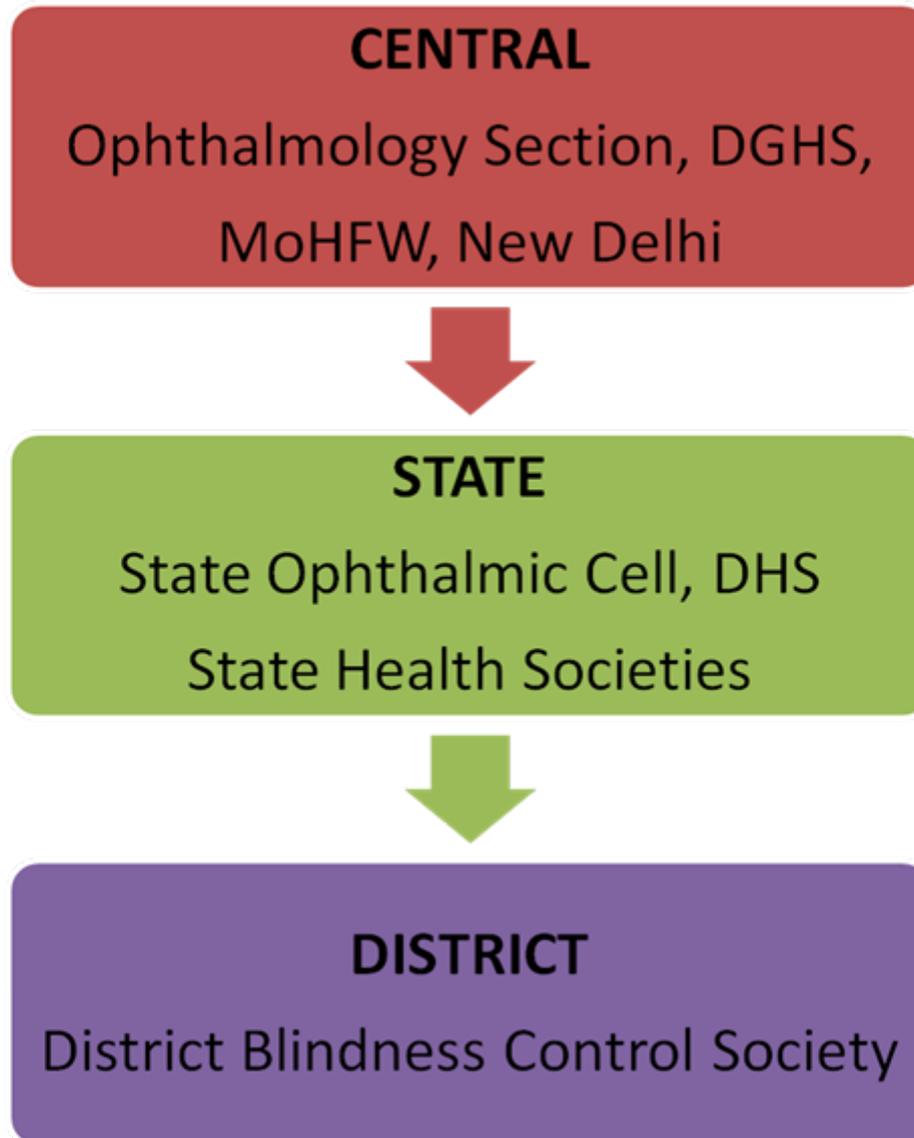
# Objectives

1. To reduce backlog of blindness through identification & treatment of blind.
2. To develop eye care facility for every district.
3. To develop human resources for eye care services
4. To improve quality of service delivery
5. To secure participation of civil society & private sector

# Infrastructure Development for Eye Care

Item	Current achievement
Strengthening of PHCs	5,633
Centre Mobile Units	80
Strengthening of District Hospitals	445
Upgrading of Dept. of Ophthalmology in Medical Colleges	82
Establishment of Regional Institutes	11
Ophthalmic Assistant training centers	39
District Mobile Units	341
State Ophthalmic Cells	21
Establishment of DBCSs	604
Eye Bank (Govt.)	166
Paramedical Ophthalmic Assistants posted	4,881

# Organizational Structure for NPCB



# Service Delivery & Referral System

## Tertiary Level

Regional Institute of Ophthalmology  
Centre of Excellence in Eye Care, Medical Colleges



## Secondary Level

DH, NGO Eye Hospital



## Primary Level

SDH/CHC; Mobile Ophthalmic Units;  
PHCs; Link workers/Panchayats

# Activities

1. Cataract operation: IOL implantation has been emphasized.
2. Involvement of NGOs
3. Civil works: Construction of eye wards, OTs & dark room were undertaken in 7 states under World Bank assisted project
4. Training to eye surgeons, PHC MO, ophthalmic assistant, ophthalmic HWs
5. Commodity assistant like sutures & IOLs, slit lamps, A-scans, Yag lasers, keratometers are procured centrally & distributed to states & DBCS

6. IEC

7. MIS

8. Monitoring & evaluation rapid assessment surveys, beneficiary assessment survey, visual outcome surveys

9. Collection & utilization of donated eyes:

Nearly 20,000 donated eyes are collected per annum

10. School Eye Screening Programme :

First screening by trained teachers.

Children suspected to have refractory errors are confirmed by ophthalmic assistants.

Corrective spectacles are prescribed or provided free of cost to poor

# New Initiatives

- Dedicated eye wards & eye OTs in DH & SDH as per demand.
- Appointment of Ophthalmic surgeons & O.A. in new DHs & SDHs.
- Appointment of O.A. in PHCs
- Appointment of Eye Donation Counselors in eye banks
- Grant-in-aid for NGOs for management of various eye diseases
- PPP
- Special attention to NE States
- Telemedicine in Ophthalmology
- Vitamin A supplement and MMR vaccination through DBCS funds.

- **World Bank assisted cataract blindness control project (1994-2002):**
  - Implemented in 8 states.
  - 15.35 million operations had been done against 11 million target.
  - IOL implantation had been increased from 3% in 1993 to 75% in 2002.
- **Danish assistance to NPCB (1998-2003) :**
  - Funds were utilized for the training , development of MIS, supply of equipment.

# **Vision 2020: Right to Sight**

A global initiative has been taken to reduce avoidable blindness by 2020.

India also has committed to this initiative.

# Plan of action

## 1. Target diseases:

Cataract, Refractive Errors, Childhood Blindness, Glaucoma, Diabetic Retinopathy.

## 2. Human resource development

## 3. Infrastructure development:

Proposed 4-tier structure includes:

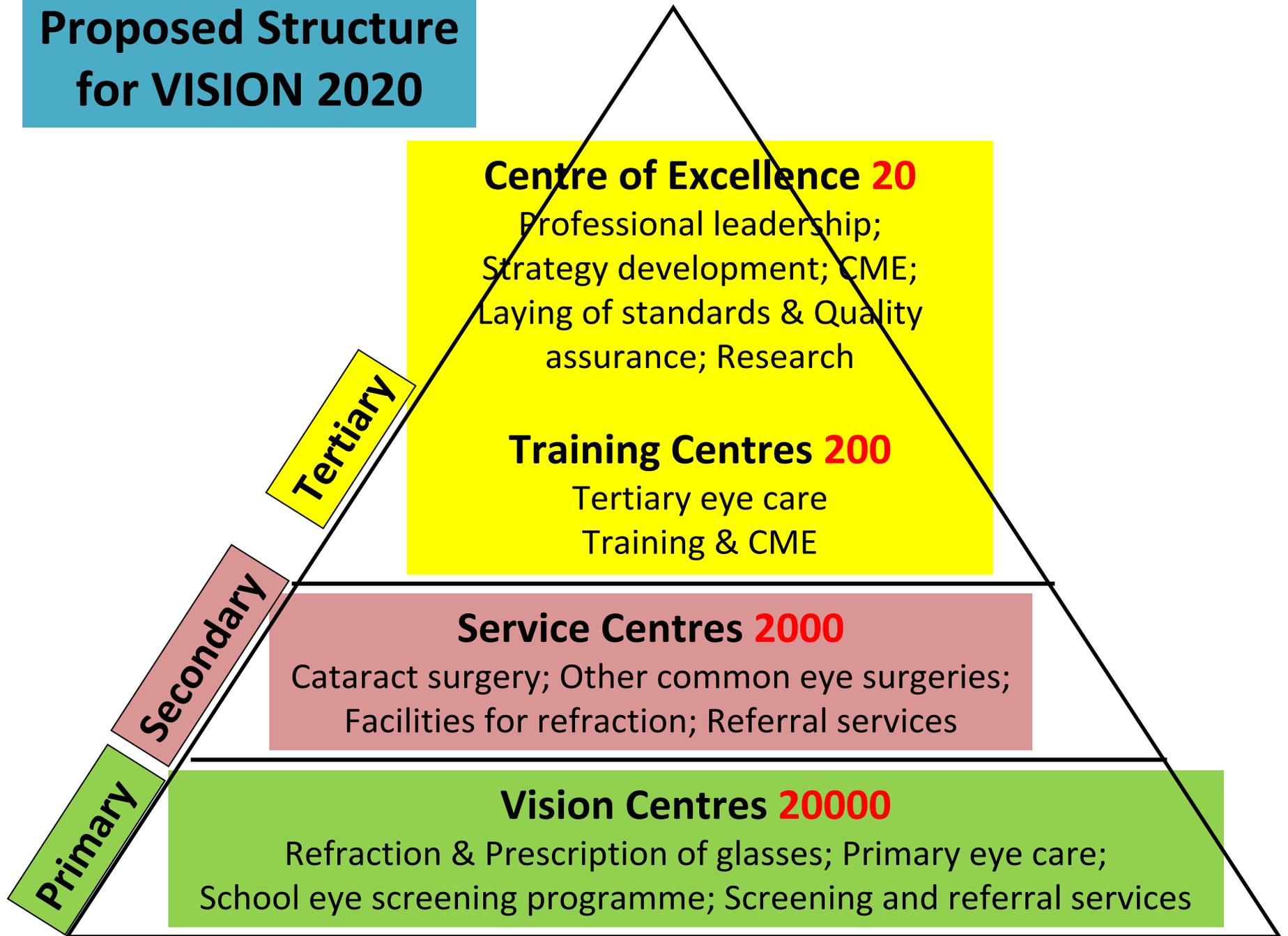
Centres Of Excellence (20),

Training Centres(200),

Services Centres(2000),

Vision Centres(20,000).

# Proposed Structure for VISION 2020



## Centre of Excellence 20

Professional leadership;  
Strategy development; CME;  
Laying of standards & Quality  
assurance; Research

## Training Centres 200

Tertiary eye care  
Training & CME

## Service Centres 2000

Cataract surgery; Other common eye surgeries;  
Facilities for refraction; Referral services

## Vision Centres 20000

Refraction & Prescription of glasses; Primary eye care;  
School eye screening programme; Screening and referral services

## ***Prevention & control of childhood blindness:***

1. Strengthening school eye screening programme
2. Increase in collection of donated eyes
3. Developing pediatric eye units

## ***Targeted intervention for underserved population***

1. Setting up vision centres
2. Active village registry
3. Active involvement of NGOs , panchayats, & community

- ***Global Elimination of Blinding Trachoma:***

Trachoma still endemic in 46 countries. There are 146 million active cases of the disease.

Almost 6 million people are blind or visually disabled as a result of trachoma.

***SAFE strategy:***

**S** – Surgery

**A**- Antibiotic use

**F**- Facial cleanliness

**E**- Environment improvement

**Thanks...**