1. **Background**
   The examination & procedures related to ophthalmology involves close interactions with the patient. This document outlines the preventive and response measures to be observed to minimize and avoid the spread of COVID-19 in eye care facilities.

2. **Scope**
   These guidelines are aimed to minimize the spread of Covid-19 infection among Ophthalmologist, Ophthalmic assistants/technicians, nurses, support staff, patients and their attendants.
   Eye care facilities in containment zones shall remain closed. Only those outside containment zones will be allowed to open up.

3. **Basic preventive measures**
   Persons above 65 years of age, persons with comorbidities, pregnant women and children below the age of 10 years should be encouraged to stay at home, unless they are patients themselves. All eye care facilities may advise all visitors/staff/patients accordingly.

   The basic preventive measures include simple public health measures that are to be followed to reduce the risk of COVID-19. These measures need to be observed by all (patients, staff and visitors) in these places at all times.

   i. Physical distancing of at least 6 feet to be followed as far as feasible.
   ii. Use of face covers/masks to be made mandatory.
   iii. Practice frequent hand washing with soap (for at least 40-60 seconds) even when hands are not visibly dirty. Use of alcohol-based hand sanitizers (for at least 20 seconds) can be made wherever feasible.
   iv. Respiratory etiquettes to be strictly followed. This involves strict practice of covering one’s mouth and nose while coughing/sneezing with a tissue/handkerchief/flexed elbow and disposing off used tissues properly.
   v. Self-monitoring of health by all and reporting any illness at the earliest to state and district helpline.
4. **All eye-care facilities shall also ensure the following:**

i. Tele-counselling and teleconsultation should be encouraged to lessen patient visits and/or appointment system can be followed to call patients needing examination/eye investigations/procedures.

ii. The screening of patients for Cataract and other eye diseases in outreach areas may be undertaken only after duly following social distancing, hand hygiene and personal protective measures. Remote consultations by the NGOs in vision centres is also to be encouraged. The identified patients may be called to the base hospital by appointment for cataract surgery, so that backlog of cataract does not build up.

iii. **Collection/retrieval of eye balls/Corneas from home settings is allowed with all precautions being taken to prevent spread of infection to retrieval technicians and to the recipient of corneas. Corneas may be utilized for therapeutic as well as optical purposes.**

iv. Specific markings may be made with sufficient distance to manage the queue and ensure social distancing in the premises.

v. Entrance to hospital/clinic to have mandatory hand hygiene and thermal screening provisions.

vi. The staff manning these entry points should ensure appropriate personal protection as entailed in guidelines already issued. (available at: [https://www.mohfw.gov.in/pdf/AdditionalguidelinesonrationaluseofPersonalProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVIDareas.pdf](https://www.mohfw.gov.in/pdf/AdditionalguidelinesonrationaluseofPersonalProtectiveEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVIDareas.pdf))

vii. The patients should be queried about Covid-19 like symptoms and contact history.

viii. A daily list of all HCW, patients and their attendants & any hospital visitors with their mobile numbers and IDs should be maintained (for contact tracing if needed in future)

ix. For preliminary screening of patients, the flow chart as attached in Annexure-I should be followed and patient should be examined accordingly.

x. Posters/standees/AV media on preventive measures about COVID-19 to be displayed prominently.

xi. Any shops, stalls, cafeteria etc., outside and within the premises shall follow social distancing norms at all times.

xii. Number of people in the elevators should be restricted, duly maintaining social distancing norms.

xiii. For air-conditioning/ventilation, the guidelines of CPWD shall be followed which emphasizes that the temperature setting of all air conditioning devices should be in the range of 24-30°C, relative humidity should be in the range of 40-70%, intake of fresh air should be as much as possible and cross ventilation should be adequate.

xiv. Effective and frequent sanitation within the premises shall be maintained with particular focus on lavatories, drinking and hand washing stations/areas.

xv. Proper disposal of face covers / masks / gloves left over by visitors and/or employees should be ensured in the premises, in accordance with the Bio-Medical Waste Management Rules.

xvi. Encourage app-based mobile phone check in & payment along with digital prescription of glasses and medicines to prevent long queues.

**Protocols for OPD Services**

i. Promote digital or app-based registration system.

ii. Triaging by an ophthalmologist/ trained ophthalmic personnel may be done either through telephonic conversation to determine the emergency/non-emergency nature of
the eye problem and Covid-19 status of the patient and an appointment given accordingly to avoid rush of patients.

i. Emergency cases as listed at Annexure-II should be given priority.

ii. Only one Attendant is to be allowed with one patient.

iii. Social distancing of at least 6 feet to be followed at all times as far as feasible in the queue or in doctor’s chamber.

iv. Modify process flow (like unidirectional flow of patients) in OPD to minimize people’s movement inside the premises and also to reduce time spent during the hospital visit.

v. Seating arrangement to be made in such a way that social distancing is maintained.

vi. OPD premises should be disinfected with 1% hypochlorite frequently and after all the patients have been seen.

vii. Cleaning and regular disinfection (using 1% sodium hypochlorite) of frequently touched equipment such as Trial Frame, Trial Lenses, etc. used in the OPD must be ensured.

viii. The chinrest/headrest/table top etc. of equipment must also be disinfected after each patient is seen.

ix. Equipment like slit lamp should have a Plexiglas/breath shield to avoid contact with droplets from patient’s breath. This sheet should also be disinfected after seeing any patient.

x. While performing any contact procedure like Tonometry, Gonioscopy, Keratometry, A-Scan, B-Scan, UBM, OCT, FFA etc., the instruments should be cleaned with 70% alcohol swab before and after every new case.

xi. Eye drops should be put in the patient’s eye by a nursing/paramedical staff with a no touch technique (ask the patient to pull down his/her lower lid or pull it down with a swab stick).

Protocols for Ward

i. Patients and attendants should be screened before entering the wards.

ii. Only one attendant per patient can be allowed.

iii. Patients to be kept in the ward duly maintaining adequate distancing.

iv. Regular sanitization of ward (with 1% sodium hypochlorite solution) should be done frequently at least twice in a shift. Instrument sterilization after seeing each patient needs to be done as per the manufacturer’s protocol.

v. In case a Covid-19 patient with Eye condition is to be admitted, a separate room or an isolation ward should be used.

Protocols for OT Services

i. Pre-surgical Covid-19 test on patients is not mandatory, but a thorough history taking & examination must be done to ensure that patient has minimal probability of having COVID infection.

ii. No routine procedure/surgery to be done in a Covid-19 suspect/confirmed case.
iii. Appropriate PPE as per MOHFW guideline should be worn by OT staff.
iv. The OT tables, floor and equipment should be properly disinfected after each use.

Protocols for Hospital Staff

i. The duty roster of all HCWs including doctors, nurses and paramedical workers should ensure effective social distancing.
ii. Inform your immediate superior if you develop any symptoms/signs of COVID like infection.

5. In case of a suspect or confirmed case in the premises, the protocols for attending to suspect or confirmed case and disinfection available at:

   https://www.mohfw.gov.in/pdf/GuidelinesonpreventivemeasurestocontainspreadofCOVID19inworkplacesettings.pdf shall be followed. These include:

i. Place the ill person in a room or area where they are isolated from others.
ii. Provide a mask/face cover till such time he/she is examined by a doctor.
iii. Immediately inform on premise nodal officer and the state or district helpline.
iv. A risk assessment will be undertaken by the designated public health authority (district RRT/treating physician) and accordingly further action be initiated regarding management of case, his/her contacts and need for disinfection.
v. Disinfection of the premises to be taken up if the person is found positive.
Patient Flow Chart

Patients attending ophthalmology clinic

Screen for fever, Covid-19 like symptoms, contact and/or travel history

Yes

Ocular emergency

Yes

Designated ophthalmologist & clinic staff equipped with personal protective gear to see the patient in a designated isolated examination room

No

Refer the patient for medical care

No

See the patient in regular ophthalmology clinic with routine universal precautions
Emergencies in Ophthalmology Practice

Urgency in eye cases is determined by the potential risk to vision, Eye & life and impact on the quality of life if left untreated. Based on these criteria the Ocular Emergencies are listed below:

- Injury to the eye (chemical, thermal, mechanical)
- Sudden loss of vision
- Acute pain in the eye
- Acute red eye
- Acute onset of eyelid lesions
- Acute onset of double vision or sudden onset of drooping of the eyelid
- Acute onset of coloured halos, photophobia, floaters or flashes of light
- Acute onset of discharge from the eye/eyes
- Acute or subacute (days to weeks) onset of bulging of the eye
- Retinal Detachment, Retinal Tear, Fresh CNVM, Viral Retinitis, intraocular Infection, Non traumatic perforation of Eyeball even in absence of vision loss