

**Protocol for
Clinical and
Non Clinical Staff
during COVID-19
Pandemic
(Version – 2)**

August, 2021



This document enlists the Protocols for the staff working at various Clinical and Non Clinical areas of the hospital during COVID-19 Pandemic

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PREFACE

In early December 2019, an outbreak of coronavirus disease was caused by a Novel Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). It was observed for the very first time in Wuhan City, Hubei Province, China. On January 30, 2020 the World Health Organization declared the outbreak as a Public Health Emergency of International Concern. The perceived risk of acquiring the disease has led the governments and health care organisations across nations to institute a variety of control measures.

In most cases people exposed and infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer may more likely develop serious illness.

The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads. One should protect self and others from infection by wearing mask, maintaining six feet physical distance and washing hands after each contact or using an alcohol-based hand rub frequently.

The mode of transmission COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important to practice respiratory etiquette (for example, by coughing into a flexed elbow).

Health workers are exposed to occupational hazards that put them at risk of disease, injury and even death in the context of the COVID-19 response. Mitigating these hazards and protecting the health, safety and well-being of health workers requires comprehensive measures for infection prevention and control, occupational health and safety, health workforce management.

At L.V. Prasad Eye Institute being a super speciality eye care organization sensing the need of the hour specific COVID appropriate protocols were developed for each of the functioning departments, in terms of appropriate Personal Protective equipment, patient and staff work flow, using various equipment and performing various invasive and non-invasive procedures.

The protocols were developed not only for the tertiary level eye care centre, but also for the secondary and primary eye care centres operated by LVPEI at rural areas located in the states of Andhra Pradesh, Telangana and Karnataka.

These protocols were reviewed by domain experts during their developmental stages and are also tested on ground practically for its effectiveness.

The COVID-19 service protocols developed by LVPEI can be used and referred to as a guide for health care workers working in eye care setup at various levels of care (Tertiary / Secondary / Primary) and implemented as needed.

The success of this document lies in its effective implementation by continuous monitoring.

Hope the readers will find this document useful and take away and implement necessary learnings from this document.

COVID PANDEMIC IN INDIA

The **COVID-19 pandemic in India** is a part of the COVID -19 pandemic which has spread worldwide caused by SARS-CoV-2).

The first case of COVID-19 in India, was originated from China as reported on 30 January 2020.

The first cases of COVID-19 in India were reported from Kerala.

Lockdowns were announced in Kerala on 23 March. The country went under lockdown on 25th March 2020.

In mid-May 2020, half of the cases reported were from five cities. The recoveries exceeded active cases from June 2020 for the first time.

The new infection rates started to drop in September, along with the number of new and active cases. Daily cases peaked mid-September with over 90,000 cases reported per-day which came down to below 15000 daily counts in January 2021

A second wave began in March 2021 which was much larger than the first wave.

Our country's vaccination program was started on January 2021, and by April 2021 3-4 million doses could be administered per day, which helped reduce the number of cases

COVID PANDEMIC AND LVPEI RESPONSE

The entire world is currently preoccupied with one threat – the threat to one's life! This novel microbe has already dealt a devastating blow to many countries in the world with near total cessation of normal activity in the rest. Sadly, this new plague has become the equalizer in the world.

At LVPEI too, we were no different, preparing for this challenge and eventually suspending most activities barring emergency services. The fundamental objective was to make sure that our patients and staff get the utmost protection against the risk of this infection. The entire planning was made and implemented to this end. All the patient care services were limited to emergency cases. The entire team was vertically split into three groups covering all cadres, with each group providing service for two days a week. All the members of the staff belonging to high risk categories were asked to work from home entirely. Similarly all stipulated guidelines were followed for the handling of the patients.

Our main focus was on preparations to resume all our activities in the post-COVID period. Intensive plans were developed, SOPs were created to ensure safety of patients and staff, all cadres of staff were given appropriate training online, and a calendar was finalized. The lockdown period has provided opportunities to clear the backlog, increase productivity in areas such as education and research, and make bigger contributions in these areas. Hundreds of lectures were prepared for professional education, and online teaching was conducted to most cadres of staff. There was also an opportunity to streamline many of the activities.

The low cost Visor (full protective gear for face) developed by our technology group was provided to all our staff, in addition to several other hospitals and front line workers like the police. Multiple donors contributed to this project and we are grateful for their gesture.

Our teams in our rural network of secondary and primary care vision centers reached out to thousands of our patients offering support for any distress in their families. A few hundred families who went into a situation of financial distress were supported by voluntary contributions by staff in those centres - indeed a heart-warming gesture! As we are now part of those rural communities, our staff felt that it is our responsibility to help in alleviating any hardship in those communities.

Our Rehabilitation group continued their activities online with various forms of support to our clients. They have also helped those in financial distress by identifying donors who provided funding for these families. Over 200 families were touched through this mechanism. These gestures of our teams in our rural network and the rehabilitation group made us proud.

A BRIEF STRUCTURE OF THIS DOCUMENT

1. The document prepared on Pandemic Protocol for Clinical and Non Clinical Staff during COVID-19 Pandemic is segmented in the following way:
2. Protocols for various departments as per COVID guidelines categorised under
3. COVID Protocols for Individuals performing specific functions in the hospital
4. Secondary Centre Protocol for COVID-19
5. Vision Centre Protocol Post COVID-19
6. General Policies and Protocols
7. COVID-19 Annexures
8. Resources and Links

COVID Protocols for Various Departments

Protocol for Security department

Role:

- It shall be ensured that only authorized persons enter the Institute
- It shall be ensured that no one with fever enters the institute
- Complete security of the premises shall be ensured.
- At queue areas it shall be ensured that there is no unruly behaviour
- All visitors to be guided about COVID-19 guidelines



All staff to follow general safety guidelines all the time while at work
(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Face mask (Cloth mask all the time; Surgical mask if handling patient closely)
- Visor
- Gloves (Plastic) while handling papers/wheelchairs/parcels/patients
- Uniform
- Shoes

Protocol to follow before starting work:

- Hands to be washed with soap and water/sanitize hands
- Appropriate PPE to be worn
- All surfaces to be cleaned including security desk, chair telephone, handles, Gate grill etc.
- It shall be made sure that the following items are: Sanitizing solution (for surfaces), hand sanitizer; couple of plastic gloves, Government pamphlet about helpline number etc.

While handling patients/visitors:(Main Gate)

- The patient / visitor to be greeted with Namaste
- Only one attendant will be allowed with patient except when one is not enough to handle a vulnerable patient
- The patient shall be stopped at the main gate for the screening and necessary COVID safety guidance will be given.
- The Physical distancing norms (6feet) shall be followed.
- Non-contact method for temperature check will be conducted for anyone entering the premises.
- Clinical Staff to be checked at rear entrance (near coffee day counter).
- Non-clinical staff and Sight savers to be checked near GPR building entrance.

- All people in car will be checked inside car only at the main gate. They will be asked to wear mask before getting down from the car.
- People on foot will stand on designated spots at the main gate and have temperature checked. Everyone will be asked to wear mask,
- If any visitor or staff has temperature beyond the normal range, cough, cold , they shall not be allowed to enter and shall be asked them to leave the queue and shall be advised to send them to general hospital. If in doubt, doctor/administrator shall be called can talk to them on phone. Phone number available on poster at the gate.
- Crowd in the hospital facility and gate area shall be avoided.
- Baggage to be kept near the gate in baggage room
- Patient/attendant shall be informed to t cover their mouth and nose with mask all the time. They shall be informed to buy the mask at pharmacy
- No surface shall be touched needlessly, and they should not to loiter around and maintain physical distances from other patients and staff at all times.
- Patient/attendant must be guided not to spit/ clean nose/ litter etc. and not to stand at unauthorized areas in the premises.
- Patient/attendant must be guided to maintain social distance and stand in the designated slots.
- Outside security will also make sure the patients or attendants are not roaming around, or creating crowd at any place.
- Drivers will wait in the cars and extra attendants can wait in the shed area at proper social distances. Toilets near shed will be used by them.
- There will be no night emergency. The EOD to be informed if a patient comes at night

At the Check in gate:

- The patients to be allowed inside the building only through the check-in point near pharmacy only.
- Sight savers will enter from the ramp in GPR building
- Patients coming only for medicines (pharmacy) /and or glass-pick up (Opticals) to be directed to these areas and ensure they leave and not enter rest of building.
- Every visitor shall be asked to use hand sanitizers while entering the triage area.
- The patient shall be allowed in one by one into the triage areas for the doctor triage consultation.
- Gloves shall be used while holding vulnerable patients.
- Gloves shall be used while handling wheelchairs.
- Wheel chair shall be maintained properly and shall be cleaned using appropriate cleaning solution.
- After Triage, the patients shall be guided to the appropriate clinic. Only those with a coloured slip from Triage doctor will be allowed inside
- The clour codes used are as follows : Green for ground floor clinics, Yellow for level 1 clinics, and Purple for level 2 clinics
- All Surgical patients with surgical appointment slip, will be guided to Fourth floor admission office directly.
- All COVID suspected patients will be given a red coupon and hand covers and will be shifted to designated ISOLATION room. Do not go near or touch these patients, but guide them to wait inside the isolation room.

At checkout Gate:

All Patients should leave through main VSPC gate and not pass through triage area.

All clinical staff should leave from rear gate

All non-clinical staff should leave from GPR building

Sight Savers will leave through ramp only

Ensure all staff deposit Visors at exit gate in designated bins.

DOs:

Appropriate PPE shall be worn all the time

Physical Distancing shall be maintained all the time

Only one attendant with patient is allowed

Patients or attendants are clearly instructed to keep face covered with face mask in place all the time.

Any documents/parcels are touched only with gloved hands and sanitized immediately after each contact.

Strict adherence to hand and face hygiene and social distancing is followed all the time

Clean all surfaces once in two hours.

DON'Ts:

Absolute **"NO"** for following actions:

Hand shake gesture shall be avoided with anyone

patient or patient articles shall not be touched with bare hand

No patient shall be interacted without PPE

Patients shall not be allowed to come closer to counter

Patients shall not be allowed to crowd at any area.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

Visor shall be removed without touching front surface and shall be cleaned with gloved hands.

It shall be stored with front surface facing up

The gloves shall be removed and discarded in Red bin

Hands shall be washed with soap and water.

Cloth mask (triple layered) shall be worn while returning home.

Protocol for Triage Center

Role:

- The risk of the patient shall be understood by using the COVID questionnaire
- The services needed by the patient shall be understood at triage and as per protocol. The need of extreme discipline by the patients in terms of infection control practices set by the institute while on campus.



**All staff to follow general safety guidelines all the time while at work (Refer main document)
Additional guidelines as per the role are:**

- The following PPE should be worn Face mask (N 95)
- Visor
- Gloves (Plastic) while handling papers
- Apron
- Shoes

Protocol before starting clinical work:

- PPE shall be worn
- All surfaces including desk, chair handles, computer screen and keyboards shall be cleaned
- The following items shall be ensured are available on each desk: Paper tray (for patients to put papers), sanitizing solution (for surfaces) and hand sanitizer and box of plastic gloves
- Hands shall be sanitised before attending patients

While handling patients:

Only one attendant is with the patient The patient shall be greeted with “Namaste” gesture only. The patient and attendant are asked to stand in demarcated squares maintaining 6 feet distance Both patient and attendant shall be asked to cover face all the time.

The patient shall be informed that -

- a) The patient will be asked a set of questions related to COVID;
- b) The patient need to understand that they should answer honestly and best to their knowledge
- c) This activity is conducted to ensure their own safety and safety of others.

The patient are spoken to in a language using the language in which they are most comfortable

The patient shall be asked the following set of questions in their language -

- a. History of fever, cough, running nose, headache vomiting or diarrhoea in past 14 days;

- b. History of fever, cold, sore throat and cough in recent past among people living with the patient;
- c. History of contact with a known patient of COVID;
- d. Visit to a mass social gathering in past 14 days;
- e. Residence in areas identified as red zone;
- f. Prior history of hospital visit;
- g. Any advice on home quarantine in past 28 days.

The patient shall be asked about their reason for visit and based on symptoms or previous consult determine the services patient needs.

While handling papers patients shall be asked to drop in the tray and pick up papers with gloved hands. The papers shall be returned immediately after work is done.

The patients shall be guided to the appropriate clinic.

A slip shall be handed over to the patient (Ex: Green for ground floor clinics, Yellow for level 1 clinics, and Purple for level 2 clinics).

This will help security to guide patients to reach respective reception areas.

All COVID suspected patients will be given a red coupon and hand covers and will be shifted

- In case a COVID suspect or positive case is identified the concerned doctor is informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

DO's:

- Patients shall be greeted with Namaste gesture only
- It shall be ensured that patients are maintaining social distancing all the time. demarcations on floor shall be used to guide the patients to wait
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Key board shall be touched only after sanitizing hands
- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time
- The biomedical waste discard policy shall be followed. (Annexure)
- All surfaces shall be cleaned once in two hours.
- Personal writing instruments (Pen/pencil etc) shall not be shared with patient. A separate one shall be kept in tray for the patient to use in case needed. It can be tied to the tray or a suitable place for avoiding loss. The patient should be informed that talking should be minimal for everyone's safety and smiling gesture shall be used to communicate whenever needed and possible

DON'Ts:

Absolute **"NO"** for following actions:

Hand shake gesture shall be avoided with anyone

patient or patient articles shall not be touched with bare hand

No patient shall be interacted without PPE

Patients shall not be allowed to come closer to staff

Patients shall not be allowed to crowd at any area.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

Visor shall be removed without touching front surface and shall be cleaned with gloved hands.

It shall be stored with front surface facing up

The cap shall be removed and discarded in Yellow bin

The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.

The gloves shall be removed and discarded in Red bin

Hands shall be washed with soap and water.

Cloth mask (triple layered) shall be worn while returning home.

Protocol for Front desk

Role:

- To conduct check in and check out of patients
- Take special consent for COVID (Ref Annexure)
- Collection of charges to be done (cashless, credit card or cash)
- Facilitate patients to Diagnostic services when required.



All staff to follow general safety guidelines all the time while at work (Refer main document)

Additional guidelines as per the role are:

The following PPE should be worn:

- Face mask (Triple layered mask)
- Visor
- Gloves (Plastic) while handling papers
- Covered Shoes

Protocol before starting clinical work:

- PPE shall be worn
- All surfaces including desk, chair handles, computer screen and keyboards shall be cleaned
- The following items shall be ensured are available on each desk: Paper tray (for patients to put papers), sanitizing solution (for surfaces) and hand sanitizer and box of plastic gloves
- Hands shall be sanitised before attending patients

While handling patients:

- Patient shall be waiting on designated circle
- Only one person shall be accompanying patient
- 6 feet distance shall be maintained
- The patient and attendant shall to cover face all throughout
- The information shall be collected verbally
- While handling papers the patient shall be asked to drop articles in tray and move immediately in work.
- The cashless transaction shall be preferred.
- The cash and card shall be handled with gloved hands only
- The card swiping machine shall be wiped with alcohol swab after each use.
- The keyboard shall be cleaned every two hours using sterilium.
- Hand sanitization of patient and attendant before entering shall be ensured and especially before and after touching the digital signature material
- Digital pen etc. to be sanitized with alcohol wipes

DOs:

- Patients shall be greeted with Namaste gesture only
- It shall be ensured that patients are maintaining social distancing all the time. demarcations on floor shall be used to guide the patients to wait
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Key board shall be touched only after sanitizing hands
- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time
- The biomedical waste discard policy shall be followed. (Annexure)
- All surfaces shall be cleaned once in two hours.
- Personal writing instruments (Pen/pencil etc) shall not be shared with patient. A separate one shall be kept in tray for the patient to use in case needed. It can be tied to the tray or a suitable place for avoiding loss. The patient should be informed that talking should be minimal for everyone's safety and smiling gesture shall be used to communicate whenever needed and possible

DON'Ts:

Absolute '**NO**' for following actions:

Hand shake gesture shall be avoided with anyone

patient or patient articles shall not be touched with bare hand

No patient shall be interacted without PPE

Patients shall not be allowed to come closer to staff

Patients shall not be allowed to crowd at any area.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

Visor shall be removed without touching front surface and shall be cleaned with gloved hands.

It shall be stored with front surface facing up

The cap shall be removed and discarded in Yellow bin

The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.

The gloves shall be removed and discarded in Red bin

Hands shall be washed with soap and water.

Cloth mask (triple layered) shall be worn while returning home.

Protocol for Optical department

Clients walk into optical outlets for many reasons such as to collect prescriptions, make spectacles, sunglasses, over the counter readymade glasses, general enquiry and spectacle services.

Touchpoints where there is a chance of contamination:

Initial contact - Welcoming customer:

1. Handshake to be avoided and greeting with folding hands "Namaskaram" shall be followed.
2. Hand disinfection with Sterillium to be done for those who walk into opticals.
3. Social distancing shall be maintained
4. Greet patients with warm smiles and and, minimal talk.
5. Cooperation of customers is solicited.
6. Patient/child/attendant who enter shall be ensured to have a proper face mask that they keep on properly throughout the stay in the store.
7. Poster is put up in the optical outlet to educate the patients on the COVID-19 safety precautions

Optical Equipment:

- Pupilometer- is used for measuring IPD's of the clients. Pupilometer rests on the nose on the clients and forehead bar touches the patients.
 - Nose pads and forehead bar of the Pupilometer to be sterilized with alcohol swabs before and after every use.
 - Two trays are kept: one after use and another after cleaning. First one marked with a red mark on which machine is placed after touching patient. After cleaning, it is placed in green marked tray.
- Lens meter-
 - The lens meter is cleaned with alcohol swabs after using to verify the power details of the customer present glasses.
- Scales and other measuring tools-
 - All the tools used on the patients for measurements are cleaned with alcohol swabs.

Frame/sunglass trials:

- Separate frame trays are used for each customer during the process of the frame selection, all the frames tried by the customer will be put in the RED tray and then sterilized as per the frame sterilization protocol and then put back into the display for other customers to try.
- It should be placed in green tray till it dries, before putting back on the shelf.
- Shelf cleaning is done once at the end of the day.
- If order is booked the frame selected will be cleaned as per the frame sterilization protocol and sent to stores and lab for further processing.

Handling cash:

- Currency notes are considered as fomites which may contain bacteria and virus.
- All the customers would be encouraged to use the following payments methods in the order:
- Online digital payments using LVPEI UPI.
- Card payment - Opticals staff to sterilize hands with 70% alcohol based hand rub (Ex: Sterillium) after handling the customer's credit or debit card on the POS machines. It is ensured that hands are totally dry before touching anything.

- Cash - Optical staff to sanitize the hands every time before and after they handle any currency. Finger licking should be avoided totally while counting cash.
- Cash box cleaning: at end of the day.

Frame service:

- Staff to hand sanitize after handling customers own/used frames or spectacle cases during servicing of spectacles.
- Patient shall be let to open their spectacle case themselves and place spectacle/case in a red tray and not on any table/optical area surface.
- Tools used for replacing old nose pads are sanitized with 70 % alcohol based sanitizers and optical staff shall sanitize their hands after handing over the frame to the customer before going up to take next task.

Optical Stores:

- Main functions of Optical Stores include to receive orders from outlets for processing, lenses from vendors, send ready orders to outlets and dispatch orders by post or courier.

Orders:

- Orders from outlets are sanitized as per the protocol in the outlet before sending to stores for processing.
- To be on the safe side, the orders received in the box are sterilized again with Frame cleaning protocol and spectacle box is cleaned with alcohol based solution.
- All the orders received are placed in a RED tray, once cleaned they will be left in the GREEN tray to dry. Once dried will be placed in designated location till the lenses are received for the orders.

Lenses from Vendor:

- Lens delivery personnel gets screened at the entrance for any signs of COVID-19, like temperature.
- The delivery person shall wear mask and be in the designated area with physical distancing
- Optical staff count and verify the orders received for correctness and sanitize their hands with alcohol based sanitizer.
- External delivery personnel is not allowed into the optical stores or lab and will be restricted to the room in front of the lab dedicated to receive the goods from Vendors.

Dispatching ready orders:

- Once the orders are ready to be sent to outlet or to be dispatched by courier, they will be kept in designated ready orders area in the room in front of the lab.
- Person who collects the orders sterilizes hands before touching the orders and checks for the correctness of the orders and collects them.

Courier dispatch orders:

Once the entire spectacles batch are ready for dispatch, they will be sterilized as per the frame sterilization protocol and packed in the courier box ready for dispatch.

Couriers are collected by the courier pick up person who will be restricted only to the vendor room in front of the lab.

Courier pick up personal will be asked to sterilize hands with alcohol based sanitizer immediately after entering the room before touching the orders.

They will always use mask and have temperature checked before entry.

India Post-dispatch order:

- As a process one of the persons from the optical stores will be visiting the post office on a daily basis and submits the orders in post office.
- Initially when the number of orders are less [<2], post office visit will be minimized to 2 visits per week.
- All protocols for personal hygiene measures, physical distancing shall be followed at the post office and no objects to be touched unnecessarily in the public space

Once the staff visiting the Post Office reached back to office, he will be washing hands with soap water thoroughly Lens Edging Facility [Fitting Lab]:

Staff in the lab neither will have direct contact with any external person nor will handle goods directly from the vendor, in case if he has to do so he will follow the stores protocol in receiving lens from the vendor.

They will maintain social distancing, talk minimal and maintain all personal hygiene measures.

All work tables will be kept clean at end of the day.

All the orders when ready will be cleaned as per the frame cleaning protocol and handed over to optical stores to dispatch to respective location.

Frame Sanitization protocol:

The cleaners normally used for frames in the store have an ethanol or propanol concentration level lower than those target levels and using directly denatured alcohol in high concentrations could damage a lot of frames based on different material combinations used to manufacture frames and sunglasses.

Luxottica a leading frame manufacturer has suggested 0.5% Hydrogen Peroxide solution in common water to spray on the clean cloth before wiping it on the frames. 12volumes (3,6% peroxide concentration) mix 6 part of water with 1 part of hydrogen peroxide or 10 volumes (3,0 % peroxide concentration), mix 5 part of water for each part of hydrogen peroxide and pour in spray bottles.

Staff Protocols:

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.
- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.
- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Phones are sanitized as per protocol. Touching things needlessly is to be avoided. Keyboards/mouse etc are cleaned if used by different people. Hand hygiene protocol is followed while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and shall not sit on bed/sofa etc. with same clothes. Have a bath before touching kids/ family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc.) that were exposed outside.
- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that

is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination

- All loose hair, especially women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, esp. ladies should try to wear shoes rather than open sandals. No or Minimal rings/watches/ bangles/earrings/necklaces etc. shall be worn as these can get contaminated and difficult to clean.



- Optical staff wearing – Mask,Gloves,Caps and Protective eye wear.

Facility Protocols:

- Cleaning of doors, table tops, furniture, cupboard handles, floor, windows etc shall be done three times a day: morning, lunch time and at time of closure.
- The chairs etc are to be placed appropriately for social distancing.
- Number of patients/attendants will be allowed at a time to the outlet, will depend on space and staff. In general not more than 2 clients, attendants only if necessary. The patients shall be let to wait in waiting halls leaving their phone number so that staff can call one by one instead of let them wait in corridors.
- The doors of the store shall be kept open all the time. Especially when a child comes in, extra help will be needed to ensure that child's hands are sanitised and the child is not running around/touching things
- Protocol for spray cleaning of the optical room after closing all materials in case a covid-19 positive patient/staff had visited the store and information is known later: Same like any other dept is undertaken for sanitization activity.

Protocol for Surgical Admission office

Staff:

- Counsellor

- Nurse/Nursing assistant

Role:

- Admission of surgical patients
- Completion of consent
- Collection of charges for surgery and providing necessary bills
- Wrist band is put up for identifying patient and surgical site
- They are guided to change in appropriate attire
- Patient is shifted to OR



All staff to follow general safety guidelines all the time while at work, additional guidelines as per the role are:

PPE: For Counsellor

- Face mask (Triple mask)
- Visor
- Gloves (Plastic) while handling patient and papers
- Shoes

PPE: for Nurse/Nursing assistant

- Face mask (N95)
- Visor
- Gloves (rubber)
- Shoes

Protocol Before starting clinical work:

- PPE shall be worn
- All surfaces including desk, chair handles, computer screen and keyboards to be cleaned
- It shall be ensured that the following items are available in each room: Plastic Tray (for patients to put papers), sanitizing solution (for surfaces) , hand sanitizer and box of plastic gloves
- Hands shall be sanitised before attending patients

While handling patients:

- 6 feet distance shall be maintained
- Only one attendant per patient is ensured
- Both patient and attendant shall cover the face all the time.
- Tasks involving closer interaction must be carried out by Nurse/nursing assistant
-
- Nurse shall record temperature for both patient and attendant using non-contact thermometer
- Counsellor shall be completing Consent process. Digital pen etc. to be sanitized with alcohol wipes
- Counsellor to complete cash collection with gloved hands
- Nurse/Nursing assistant to put wrist band after identifying the surgical site
- Nurse/Nursing assistant to guide patient to change room with instruction to put removed clothes in a paper bag
- Nurse to escort the patient to surgery room and asking attendant to wait in waiting area
- Ensure compliance with face and hand hygiene.
- In case a COVID suspect or positive case is identified the concerned doctor is informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

After completion of surgery:

- The Discharge summary is printed and handed over to the patient after proper verification
- The patient is instructed on use of medicine and information about next appointment
- The wrist band is removed and discarded in yellow bin
- The surfaces are cleaned before bringing next patient

DOs:

- Patients shall be greeted with Namaste gesture only
- It shall be ensured that patients are maintaining social distancing all the time. demarcations on floor shall be used to guide the patients to wait
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Hand sanitization of patient and attendant to be ensured before entering and especially before and after touching the digital signature material
- Pen for signing consent to be sanitized immediately. Preferably a separate pen can be attached to a tray with string

- Cash or card shall be handled with gloved hands only
- Nurse/Nursing assistant should be wearing PPE
- Knobs of the door shall be cleaned between each use by trained housekeeping staff (The keyboard shall be touched only after sanitising hands)
- Strict adherence to hand and face hygiene and social distancing shall be followed all the time
- All surfaces shall be cleaned once in every two hours

DON'Ts :

Absolute **“NO”** for following actions:

- Patients shall be greeted with Namaste gesture only
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Key board shall be touched only after sanitizing hands
- The second patient shall be sent for change only after cleaning knobs and cloth hanger of the changing room
- The patients or attendants shall not be allowed to crowd the place

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use. The guidelines for using N95 mask as mentioned in this document shall be followed.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.
- The face and hand hygiene shall be followed at all the times
- Physical distancing shall be followed at all the times

Protocol for Low Vision and Rehabilitation (Front Desk)

Role:

- Check in and check out of clients
- Collection of charges (cashless, credit card or cash)
- Triage counseling



PPE:

- Face mask (Triple mask)
- Visor
- Gloves (Plastic) while handling papers
- Shoes

Before starting reception work:

- PPE is worn
- All surfaces are cleaned including desk, chair handles, computer screen and keyboards
- It is made sure that the following items are available on each desk: Paper tray (for patients to put papers), sanitizing solution (for surfaces) and hand sanitizer and box of plastic gloves
- Hands to be sanitised before attending patients

While handling patients:

- Patient shall be waiting on designated circle
- Only one person shall be accompanying patient
- 6 feet distance shall be maintained
- The patient and attendant shall to cover face all throughout
- The information shall be collected verbally
- While handling papers the patient shall be asked to drop articles in tray and move immediately in work.
- The cashless transaction shall be preferred.
- The cash and card shall be handled with gloved hands only
- The card swiping machine shall be wiped with alcohol swab after each use.
- The keyboard shall be cleaned every two hours using sterilium.
- Hand sanitization of patient and attendant before entering shall be ensured and especially before and after touching the digital signature material
- Digital pen etc. to be sanitized with alcohol wipes

DOs:

- Patients shall be greeted with Namaste gesture only
- It shall be ensured that patients are maintaining social distancing all the time. demarcations on floor shall be used to guide the patients to wait
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Key board shall be touched only after sanitizing hands
- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time
- The biomedical waste discard policy shall be followed. (Annexure)
- All surfaces shall be cleaned once in two hours.
- Personal writing instruments (Pen/pencil etc) shall not be shared with patient. A separate one shall be kept in tray for the patient to use in case needed. It can be tied to the tray or a suitable place for avoiding loss. The patient should be informed that talking should be minimal for everyone's safety and smiling gesture shall be used to communicate whenever needed and possible

DON'TS:

- Absolute '**NO**' for following actions:
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No patient shall be interacted without PPE
- Patients shall not be allowed to come closer to staff
- Patients shall not be allowed to crowd at any area.
- Providing verbal guidance to patients having mobility issues is ensured, however they should not be touched or held
- Sighted guide technique shall not be used.

Additional instructions to clients with blindness, severe visual impairment

- The mobility cane is disinfected at reception before attending any services
- Bags and belongings are left only in the designated place
- Touching/exploring objects should be avoided as far as possible unless important for training
- The clients shall be waiting in the lounge until called for services
- In case a COVID suspect or positive case is identified the concerned doctor is informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

Staff Protocols:

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.
- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.
- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Phones are sanitized as per protocol. Touching things needlessly is to be avoided. Keyboards/mouse etc are cleaned if used by different people. Hand hygiene protocol is followed while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and shall not sit on bed/sofa etc. with same clothes. Have a bath before touching kids/ family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc.) that were exposed outside.
- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination
- All loose hair, especially women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, esp. ladies should try to wear shoes rather than open sandals. No or Minimal rings/watches/ bangles/earrings/necklaces etc. shall be worn as these can get contaminated and difficult to clean.
- The staff shall not enter the Non Clinical areas.
- The cafeteria facility shall be used on the ground floor according to the team timings notified. The GPR building , 5th floor eating facility shall be used if food is brought from outside.

Protocol for Anaesthesiology

General Guidelines:

The following protocol should be followed for all *high suspects* (Positive Travel history, history of contact to positive case, is in a quarantine period, reports are awaited) and Covid 19 positive patients: They should be sent to central hospital where such patients are taken care of, with proper precaution of isolation. These patients should not be taken up for surgery in an isolated eye hospital.

- Have a dedicated OT
- Where possible, plan surgery under CNB or PNB / TIVAs and try avoiding GETA / LMAs
- Drugs and disposables needed for anaesthesia and anticipated extra monitoring / CL, AL, Transducers etc. should all be there.
- Dedicated OPTHAL machine for designated OT should be there. Post procedure, appropriate cleaning should be carried out. Use alcohol rub instead of sterile Jelly. Use sterile sleeves for the OPTHAL Machine.
- Xray Chest is required for all GA patients.
- No Nebulization to be done in OR.
- Temperature check should be done for every patient before entering in to the OR
- Each patient shall be monitored for 14 days to ascertain history of fever or respiratory symptoms.

For patients undergoing surgery under local anaesthesia or General Anaesthesia

- All standard pre-operative protocols should be followed as practiced by the eye centre.
- Min 6 feet distance to be maintained among patients and between patients and healthcare worker. Stringent Hand hygiene and Contact precaution policies to be followed
- Temperature must be recorded for all patients using non-contact thermometer in addition to other vitals before administering any anaesthesia. If above 99⁰, it should be reported to respective coordinator for further probing and if positive history is there, it should be updated to the HIC coordinators and patients are sent to designated hospital. Patient are immediately shifted to an earmarked isolation area
- Experienced person to administer anaesthesia to minimize failures...supplementations....conversions....Complications (HS, TS, LAST etc. needing emergent ABCs...!
- Ensure patient is wearing mask all the time till point of GA/surgery
- Instruction / verbal communication to be done from a distance to the patient /attendant

Inside OR for LA:

Only single use oxygen tubes to be used

Gloves shall be used along with other PPE

Plastic drapes of size that prevents spillage of body fluid on surgeon/anaesthetists/staff or floor should be used

Minimum staff to be encouraged for maintaining log of each staff in OR handling the patient

After surgery for LA:

All disposable supplies shall be removed and discarded carefully.

Each patient shall be monitored for 14 days to ascertain history of fever or respiratory symptoms.

For patients undergoing surgery under GA. inside the OR:

- All employees in GA OR must wear N95 mask and face shield (prepared in-house), besides disposable gown over the scrub suit /Linen gown wrap-around, and shoe covers and caps and GLOVES.
- It is preferable to use cuffed tubes to reduce aerosol generation. Preferably LMAs should be avoided in suspected or positive cases as flows are high and aerosol generation is high.
- Preferably single use or ETO sterilized circuits, laryngoscopes, endotracheal tubes etc. ET tubes and first filter must be discarded. HME filter (First one) should be discarded for every case. Second one should be discarded at the end of the day.
- Circuits and other items can be re-sterilized
- Any item re-used should be handled carefully while preparing for sterilization. Immerse laryngoscope and endotracheal tubes in hypochlorite based solution immediately after use. Items shall not be left on any other surface. (Careful Handling is must)
- Plastic drapes of size that prevents spillage of body fluid on surgeon/anaesthetists/staff or floor shall be used.
- Minimum staff to be encouraged for maintaining log of each staff in OR handling the patient
- Gloves should be used during whole procedure
- Protective acrylic box (made in house) should be used wherever feasible during general anaesthesia.
This Aerosol containment box - to be cleaned with D-125 solution using gloves.
- No one shall enter the OR for 15 minutes after the GA patient is moved out.. Once the cleaning process done, next case will be shifted.
- During intubation/extubation process only three staff should be inside the OR. One anesthetist, technician and one more staff if needed for any other help.
- Transparent plastic covers should be used to cover monitors, Boyle's apparatus and other equipment - .
- The touch screen monitors and equipment should be operated with sterile buds
- The caps are available for circuits. It should be indented from stores for usage whenever needed..
- Sodalime should be changed at the end of the day if enough filters are available. If not sodalime should be changed for every case,
- Atrovyn nasal drops, inhalers should be discarded after use for every patient or it should be given to the patient if they need it post op.
- Full gloves (heavy duty) should be used while cleaning the suction jars or other anaesthesia equipment.

Handling of the items related to GA cases:

Resterilization to be done for:

- Laryngo scope handles (disinfected with alcohol base sanitiser)
- Laryngo scope blades (sterilization to be done in-autoclave)
- 3. Stylet, bougie, Megile forceps (sterilization to be done whenever possible, if not should be cleaned with alcohol based sanitiser (Ex: sterilium) clean with sterilium)
- Head rings and arm boards should be disinfected with alcohol based sanitiser (Ex: sterilium) after every case.
- Face masks, open circuits, closed circuits, airways, L-connectors, Etco-2 connectors, sample line, reservoir bag, and circuits should be sent for sterilization.

- Pulseoxymeter, ECG cable, B P Cuff, temperature probe, stethoscope (disinfect with alcohol based sanitiser (Ex: sterilium))

The following shall be discarded:

- ET tubes
- LMA's
- Air filters
- Local oxygen tubes
- Suction catheters

During recovery:

Staff attending cases operated under GA must have proper PPE: N95 mask, face shield, cap, disposable gown/Linen gown, and plastic disposable shoe covers each of which must be discarded properly before moving out of the room.

Single use suction and oxygen tubes should be used

All oxygen masks must be ETO sterilized.

Gloves shall be used all the time

Patients' face should be turned away from the staff when handling / escorting

Minimal talking is encouraged

Each OR must be terminally cleaned between cases.

Each OR should have a separate air handling units.

Opening OR door between cases shall be minimised. All anaesthesia and surgical supplies shall be ensured and kept before shifting patient into OR.

Air handling unit should be switched off before opening door.

UV light to be left open after cases are over.

TECHNICAL CONSIDERATIONS FOR ANAESTHESIA:

AIRWAYMANAGEMENT – INTUBATIONS & EXTUBATIONS (Planned Surgeries):

Following personnel are allowed in OT at the time of Intubation & Extubation:

Experienced anaesthesiologist

- Junior anaesthesiologist / Fellow
- Anaesthesia Technician (Equipment to be ensured for Plan A and Plan B is around)
- GDAs, to be allowed, once patient is extubated, stabilized and about to be transferred
- Other OT staff is allowed after patient is intubated and general contact exposure precautions are carried out.
- Any additional nurse/doctor for help is allowed in OR during handling difficult situation

INTUBATION / EXTUBATION / STERILIZATION:

- PPE to be donned
- Glycopyrrolate to be used to minimize secretions and suctioning
- All emergency drugs as per LVPEI protocol are freshly loaded, labelled with current date.
- Two large transparent plastic cover that extends beyond the width of OT Table and from Head end of table till abdomen is made available for use.
- Machine checks, ventilator settings to be done
- Pre-oxygenation for 3-5 minutes USING CLOSED CIRCUIT to be done
- flows more than 10 L and emergency Flush knobs to be avoided
- BAINS CIRCUIT SHOULD NOT BE USED

- HME filters to be kept at ETT, proximal to catheter mount and at I and E limb ports at Circle absorbers / Soda lime canister
- Plastic Cover to be put above the ANAESTHETIC face mask
- Modified RSI with OPA, if difficult airway, otherwise, RSI. Before the Face mask is removed, the expiration phase should be allowed to get over completely, to minimize aerosol puff
- POST pre-oxygenation the face mask should be worn and circuit (Anchored, to prevent slipping off), to be kept below the plastic cover
- Appropriate Laryngoscope and ETT to be used
- The anaesthesia technician will give the ETT with connected catheter mount / HME Filter (Well supported). The tube to be inserted till the black mark and the number should be checked and should be fixed to the upper jaw.
- Post Intubation the closed circuit should be connected to the HME filter and the capnometry to be checked.
- auscultation to be avoided
- Post fixing the ETT, plastic cover to be removed and disposed in the appropriate colour coded Bin and Anaesthetic face mask, OPA and VLS blade are kept on the tray for disinfection.
- The pt gown to be discarded and disposed off. The patients face, Neck and Chest are cleaned with alcohol rub without touching eyes and eyelid area. Change of Soda-lime to be done after ALL the surgeries of that day are over. However, HME Filters, minimizes the aerosol transmission to canister. This is done as there is no defined use of LOW FLOW Anaesthesia FOR ALL.
- Soda-lime to be changed after ALL the surgeries of that day are over. However, HME Filters, minimizes the aerosol transmission to canister. This is done as there are no defined guidelines and so far
- Before extubation, all the staffs are asked to move out of OT except the anaesthetist's assistant and anaesthesia technician.
- If patient requires ET Suction, Closed ET Suction to be used
- At the end of the case, again a fresh plastic is used, to cover the face and chest, awake extubation to be planned (Adequate recovery to be ensured from NMBA), ETT is removed with catheter mount and HME Filter and the face mask is connected, adequate recovery is ensured and all the disposables are discarded...plastic cover, ETT, catheter mount,
- Post extubation, the Hudson's mask is connected. Plastic cover is removed from the
- face and chest....only after cough subsides...if at all the pt coughs!
- Again, the patient's face, neck and chest is cleaned with alcohol rub.
- Ensure that eyes of patient are protected from alcohol rub.
- Once stable, the GDAs are called and the patient is transferred out to the designated areas. The designated area in LVPEI WILL BE POST – OPERATIVE Recovery area
- Post patient transfer, OT sterilization is done using recommended cleaning agent - Surface cleaning and Fogging and contact time of at least 60 minutes to be allowed, before the next patient comes in!
- Anaesthesiologist has to supervise the cleaning of Anaesthesia equipment (Workstation, Monitors, laryngoscope and blade and monitor, Cleaning of
- Monitor cables, pulse-oximeter probe with ecoshield) and Nurse will supervise the cleaning of OT and Surgical equipment.
- The Anaesthetic face mask, Bougie, Stilette is cleaned by soap and water and dried, then alcohol rub is used. Following this, they are sent to ETO sterilization

PPE – Donning:

- Leggings / Gum boots are worn

- Hands are washed and large cap is worn (Female)
- Hand-rub is used, powder free gloves are put on
- N 95 mask is put on using the elastic bands. The front and inner surface of face mask are ensured not to be touched.
- The mask is applied in a way that it is tight fit and there are no air leaks. If leaks are there, Transpore is used to seal them (considering that the user is not allergic to plaster fabric)
- Triple layered surgical mask is worn over N 95 mask and it is tied behind neck, it is ensured that entire front surface of N 95 mask is covered with three layered surgical mask.
- Hand rub is applied and wrap around surgical gown is put on and tied laterally...not in front.
- 2nd pair of gloves are put on
- NOW THE ANAESTHETIST IS READY FOR INTUBATION OR EXTUBATION

PPE – Doffing (removing):

- Once patient is extubated and stable / about to be shifted, doffing is done as follows:
- Hand rub is used and the top gloves are removed holding it inside out
- The plastic drape is removed from around the neck, the rear knot is untied and without touching the front side, it is crumpled and discarded into the bin. When using the modified garbage bag plastic cover, it should be removed from arms first and then over the head without touching the outer side.
- Hand rub to be used, the surgical gown is untied, and without touching the front side, it is discarded in the bin
- Surgical Face mask is removed, the front area of the mask is not touched, the mask is untied or break the strings, and then discarded
- Hand rub is applied, leggings are removed and discarded in the bin
- Hand rub is applied
- N 95 mask is removed using elastic band, and is put in zip lock, it can be used for the next case
- the Hand rub is applied and three layered surgical mask is worn
- It is ensured that BMW (PPE) is discarded as per the laid out norms and route.

DON'TS:

- Absolute '**NO**' for following actions:
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No interaction with patients without PPE
- Keyboards shall not be touched without sanitising hands.
- Crowd shall not be made in the tea room. Only two persons shall be allowed in the tea room. Social distancing, hand hygiene and respiratory etiquette shall be made in the tea room.
- Crowding shall be avoided at the tea room and other desks.
- No movement shall be done in OT and other areas and no talking shall be allowed
- No crowding shall be allowed in changing room / toilet areas / CSSD / Stores windows etc
- Hand hygiene, physical distancing and respiratory etiquette shall be maintained at all the times

Staff Protocols:

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not to report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.

- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.
- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Phones are sanitized as per protocol. Touching things needlessly is to be avoided. Keyboards/mouse etc are cleaned if used by different people. Hand hygiene protocol is followed while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and shall not sit on bed/sofa etc. with same clothes. Have a bath before touching kids/ family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc.) that were exposed outside.
- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination
- All loose hair, especially women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, esp. ladies should try to wear shoes rather than open sandals. No or Minimal rings/watches/ bangles/earrings/necklaces etc. shall be worn as these can get contaminated and difficult to clean.
- The staff shall not enter the Non Clinical areas. The cafeteria facility shall be used on the ground floor according to the team timings notified. The GPR building , 5th floor eating facility shall be used if food is brought from outside.

ACCIDENTAL EXPOSURE TO PATIENT'S SECRETIONS / MAJOR VOMITUS:

- Hoping the exposure has occurred with PPE on...! Then there is no need to worry. Any breach or torn gowns shall be ruled out.
- Optional:: Since most of the anaesthesiologists at LVPEI are aged over 50 years, they should take Tab HCQS 400 mg Two tab 8 Hrs apart and need be, the dose shall be repeated after 2-3 weeks. (as per ICMR guidelines)
- Post doffing, hands should be washed / exposed area with soap and water and then with alcohol rub
- HIC Committee coordinator to be informed
- The anaesthesiologist may need to go for two weeks quarantine, take HCQS if not taken earlier and watch for the following symptoms, if so, anaesthesiologist may have to test for SARS Cov 2 virus and start the therapeutic regime (The local coordinator to be contacted mentioned above for more information):
- Fever – 99%oFatigue – 70%
- Dry cough – 59%oAnorexia – 40%oMyalgias – 35%oDyspnoea – 31%
- Sputum production – 27%; others: loss of smell and taste

Protocol for Inpatient Ward

Role:

- To provide nursing care to admitted patients
- To provide Intravenous and other Injections to Day care Patients
- To maintain and check daily all emergency supplies and protocols
- To Participate in Code Blue alerts
- PCA to assist in logistics, moving patients to various areas and keeping rooms ready



All staff to follow general safety guidelines all the time while at work

Additional guidelines as per the role are:

PPE to be worn:

Nurses Being close to patients, they are at high risk and following PPE is advised

- Face mask (N 95 or equivalent)
- Visor
- Shoes
- Cap
- Linen Gown when conducting any invasive procedure
- Disposable gown, full PPE during Code blue/COVID-suspect handling

PPE for PCA to be used:

Triple surgical mask

Visor

Gloves

Should maintain social distance and not touch patient/patients belongings/ beds etc. except with gloved hands.

Protocol:

Before starting Duty:

- The PPE shall be worn.
- Hand sanitization to be done frequently.
- After reaching work station, each one will make sure all supplies are in place specially those necessary for protection against infection viz unsterile gloves, box of tissue papers, sterillium, alcohol swabs, Lemoniser spray for cleaning chair/stools/table tops. Sterile eye pads and buds, Scissors, tape, well labelled eye drops etc.
- It shall be ensured that all instruments like trays, scissors, torch/ etc, are sanitized.
- All surfaces (chair units, stool, slit lamp, desk, key board, mouse, computer monitor etc. are cleaned with specified cleaning solution before starting work.
 - Same should be repeated after each patient examination. Lemoniser spray solution in spray bottles to be sprayed on chair and stools as well as desks and alcohol swab for key board and mouse and Torch/Scissors.

While handling patients:

- 6 feet distance to be maintained
- Only Namaste and smile to be used to greet
- Only one attendant is ensured along with patient
- Hand sanitization of patients and attendants is ensured
- Patients and attendants are asked to maintain 6 feet distance
- Both patient and attendant to cover face all the time and maintain hand sanitization, Physical distancing and minimum talking for safety of all.
- Any COVID suspected patients should be directed to isolation room and monitor arrival of team. It shall be made sure that appropriate code is announced. One should not go close to the patient.
- Non-contact Temperature monitoring of all patients and attendants every 6 hourly to be done, if any high temp is measured it should be alerted to the treating physician

- While giving IV or IM Injections or eye drops, patient and nurse must not talk as far as possible. The medication to be kept on a tray rather than giving in the hand.
- It shall be ensured that patients keep social distance and are not allowed to mix with one another.
- The patient must not sit in common areas but remain in their rooms. It should be ensured that they wear masks and follow hand sanitization protocols at all times.
- If patients are to be seen at OPD, they should be brought to the OPD one at a time. Only 4 people will be allowed in a lift at any given point of time with each facing the wall of the lift.
- PCA/Nursing staff must not touch the patients without wearing gloves.
- Hand sanitization to be done before and after coming to the ward.
- No talking should be encouraged while on the way towards OPD
- Canteen tables and chairs must be sanitized after each use. Every patient and every staff to maintain physical distancing as masks will be down at that time.

DO's

- PPE to be worn properly
- Patients to be greeted with Namaste gesture
- Only one attendant is allowed with patient
- Patients or attendants are clearly instructed to keep face covered with face mask in place all the time.
- Patients should not mix with each other in common areas
- Strict adherence to hand and face hygiene and physical distancing is ensured all the time

DON'Ts:

- Absolute '**NO**' for following actions:
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No interaction with patients without PPE
- Patients should not be allowed to come closer at the counter
- No crowding to be allowed

Removing PPE:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.
- Physical distancing to be maintained all the time.

Admission, Infrastructure and work Policy:

- General policy to avoid any admissions unless absolutely essential. Details of every admitted patient has to be informed to campus Director, justifying need for admission.
- Total Five rooms to be kept ready and others to be sealed for future use in case these get contaminated. Three large sized individual rooms, one pediatric and one central emergency room to actively function. Other rooms not to be opened or touched for anything
- Reduced staff presence to daily one administrator, two nurses and one patient care assistant. Divided into three groups A, B, C.
- Nurses Duties assigned: Day Nurse works 12 hours from 8 am to 8 pm - She will be attending to the admitted patients, emergency admissions and any Code-Blue situations, besides administering daycare injections like IV Methylprednisolone/Mannitol etc. Night Nurse works from 8pm to 8 am. She covers the Emergency night admissions and any medical emergencies.
- Doctors are encouraged to see the in-patients in the ward itself, one by one and not take to OPD except for any emergency diagnostics. Slit lamp, tonometer are already in the ward. The mobile Indirect ophthalmoscope can be brought to ward.
- One Administrator nursing Staff daily to take care of logistics -Emergency crash carts check, check Ambulance, any incidence and patient safety reports including code blue, supplies etc. Education on COVID 19 protocols are conducted for the staff, patients and Attendants. Coordination to be done with the campus Director, Team lead clinician and Non-clinical campus administrator of the day to implement any on the spot changes. Mental support to be provided to all staff members in the ward.
- The Institute Nursing Head in addition to managing all the above, also to impart regular infection control and safety COVID-19 related education online to her staff. Also she will be making daily phone calls to all colleagues especially who were asked not to come for duty, and finding out about family well- being, safety/health status and talking to them about the safety precautions at home. This is done to reduce anxiety levels and foster team spirit and spirit of togetherness.
- Protocol to be strictly followed for code blue especially sanitization of BP apparatus/ stethoscope etc after using (will provide details)
- PPE for biomedical waste discard policy is strictly followed

Staff Protocols

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not to report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.
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- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination
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- The staff shall not enter the Non Clinical areas. The cafeteria facility shall be used on the ground floor according to the team timings notified. The GPR building , 5th floor eating facility shall be used if food is brought from outside.

Protocol for Biochemistry Laboratory

Sl. no		Before lockdown	During lockdown	After lockdown																																
1	Number of samples	January 4555 February 4350 March till 20 th 2879	March 21 st till April 20th 87	Expected to be above 3000/m																																
2	Parameters tested	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Hb</td></tr> <tr><td>FBS</td></tr> <tr><td>PPBS</td></tr> <tr><td>RBS</td></tr> <tr><td>BI Urea</td></tr> <tr><td>Creatinine</td></tr> <tr><td>Ser Electrolytes</td></tr> <tr><td style="color: red;">LFT</td></tr> <tr><td style="color: red;">Lipid Profile</td></tr> <tr><td style="color: red;">Ser Calcium</td></tr> <tr><td style="color: red;">CRP</td></tr> <tr><td style="color: red;">RA</td></tr> <tr><td style="color: red;">HbA1c</td></tr> <tr><td style="color: red;">Ser ACE</td></tr> <tr><td style="color: red;">Serum Homocystiene</td></tr> <tr><td style="color: red;">Urine Spot microalbumin</td></tr> <tr><td>BT/ CT</td></tr> <tr><td>CBP</td></tr> <tr><td>ESR</td></tr> <tr><td>CUE</td></tr> <tr><td>ECG</td></tr> </table>	Hb	FBS	PPBS	RBS	BI Urea	Creatinine	Ser Electrolytes	LFT	Lipid Profile	Ser Calcium	CRP	RA	HbA1c	Ser ACE	Serum Homocystiene	Urine Spot microalbumin	BT/ CT	CBP	ESR	CUE	ECG	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Hb</td></tr> <tr><td>FBS</td></tr> <tr><td>PPBS</td></tr> <tr><td>RBS</td></tr> <tr><td>BI Urea</td></tr> <tr><td>Creatinine</td></tr> <tr><td>Ser Electrolytes</td></tr> <tr><td>BT/ CT</td></tr> <tr><td>CBP</td></tr> <tr><td>ESR</td></tr> <tr><td>CUE</td></tr> </table> <p style="color: red; font-size: small;">Parameters in red not done as it will not be cost effective to do these parameters when number is very less. Also these are not needed for acute emergency care and can be done later, except L FT occasionally</p>	Hb	FBS	PPBS	RBS	BI Urea	Creatinine	Ser Electrolytes	BT/ CT	CBP	ESR	CUE	As sample number goes up processing of special parameters will be resumed , starting once a week ,then twice a week and finally everyday
Hb																																				
FBS																																				
PPBS																																				
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3	Machines used	Imola fully autoanalyzer Stat Faxsemiautoanalyzer ABX Pentra XL 80 ABX Micros ES 60 ST 200 plus electrolyte analyzer	Stat Fax semi autoanalyzer ABX Micros ES 60 ST 200 plus electrolyte analyzer Smaller machines used to avoid wastage of electricity, reagent etc/ as number of tests are very	Processing in Imola will start once sample number goes up > 15/day All other machines are already in use																																

			few	
4	IQC	Hematology daily 3 level controls Biochemistry daily 2 level control Electrolytes daily 2 level controls Special parameters daily 1 level control	Hematology repeatability Biochemistry repeatability Electrolytes 3 level control on the day required New controls not reconstituted as they expire within 1 week of reconstituting and will be wasted	As before lockdown
5	EQC	Hematology every month with RIQAS Biochemistry monthly once with CMC Vellore	Hematology every month with RIQAS... Sample not received in April due to lockdown Biochemistry monthly once with CMC Vellore	As before lockdown
6	ILC	Special parameters once in 3 months with Elbit labs Hematology as required with Elbit labs	Hematology ILC in April with Elbit labs (As EQC sample has not come)	As before lockdown
7	Reagent / controls expiry Wastage	Nil	Only ALP kit will expire at April end with approx 50-60 tests remaining All other reagents and controls have long expiry and will be used up after lockdown ends	As before lockdown
8	Manpower used: In three	8 LAB TECHNICIANS 3 ECG TECHNICIANS	1 LAB TECHNICIAN 1 ECG	As number of patients increase

	<p>separate teams with three separate physicians : A, B, C</p>		<p>TECHNICIAN</p>	<p>work will need full capacity staff. Decision will be taken depending on patient number</p>
<p>9</p>	<p>Protocol change in sample collection /ECG</p>	<p>As detailed inCLS and Int Med SOP</p>	<p>Sample collection</p> <ol style="list-style-type: none"> 1) Making patient sanitize his/her hands before entering department 2) Cleaning gloves and hand rest with sanitizer in between patients 3) Wear mask of patient and technician 4) Avoid any attendant 5) No talking, use gestures, keep patients face away <p>ECG</p> <ol style="list-style-type: none"> 1) Making patient sanitize his/her hands before entering department 2) Mask to be worn by patient and technician. No attendants will be allowed 3) Cleaning couch with sanitizer in between patients / No bedsheet to be used or paper roll 4) No talking is encouraged, 	<p>To continue changes</p>

			gestures will be used and patients face is kept away	
10	PPE	Apron, Gloves	Apron --- consider full linen gown, Gloves, N 95 or equivalent Mask, Goggles or visor	Apron--- consider full gown linen, Gloves, N 95 or equivalent Mask, Goggles or visor

Protocol for Microbiology Department

Team A: Monday and Thursday, 8.30 am -5.30 pm

Team B: Tuesday and Friday, 8.30 am-5.30 pm

The laboratory will be closed on Wednesday and Saturday. Fellows will put samples in lab on those days. They will inoculate and incubate the plates.

The staff engaged in diagnostic work have been divided in to two teams as below:

Team A: (Microbiologist) Joveeta Joseph; (Technicians/Project fellows) Venkateswara Rao, Gowrappa, Vani, Anil, Jaishree

Team B: (Microbiologist) Savitri Sharma; (Technicians/Project fellows) Roshni Karolia, Balakrishna, Renuka, Tharusha, Esther, Lalit

Daily Surface disinfection and equipment decontamination in the laboratory

- All laboratory surfaces including furniture is cleaned with 1% solution of D- 125 by the technicians.
- Incubators and laminar flow hoods are cleaned using 70% alcohol by the technicians.
- Housekeeping staff will clean the floors and door knobs with Granadier (lemonizer) solution 1:60.
- The computer, and similar equipment are decontaminated with alcohol

Biomedical waste management

- Following processing of sample the masks and gloves are discarded in designated bins as per hospital BMW discard policy
- All laboratory-generated biomedical waste also is discarded as per BMW disposal for infected material.

Care of the laboratory Staff

- Any staff member with symptoms of fever, cough, cold is forbidden from reporting for work
- Mask and gloves are worn by the staff while handling samples
- Frequent washing of hands with soap and water is done
- Alcohol-based hand sanitizers (Sterillium) is used when not using gloves
- Access to the laboratory is strictly limited
- Social distancing is maintained
- Staff is discouraged from moving out into areas beyond their work place.
- Staff are encouraged to bring their food from home and eat in the designated area on the 5th floor.

Handling of samples

- As a general rule, LVPEI will not be handling any COVID-19 positive or COVID-suspected patients. Such patients in case they escape the Triage team and reach the OPD/OR will be isolated and sent to Gandhi hospital and its attached Sarojini Devi Eye Hospital per Govt. protocol, for any emergency eye problems. This is both for fresh and follow-up patients.
- NO samples will be collected at LVPEI from COVID-confirmed or suspected cases
- Every patient sample will be considered and handled as a COVID-19 asymptomatic carrier applying universal precautions.
- Microbiology team will not go to the clinics/OR/Clinical pathology lab. for collection of samples. All samples, including blood for serology will be left on a table near the glass door on 5th floor towards VSPC building and the technicians would be informed by phone.
- After decontamination of the box the samples will be brought to the laboratory and processed.

Requisition Forms

- All requisitions will be through EMR except samples received from secondary centres. Reports are also dispatched through EMR or email.

Research Team

Research Team of Microbiology has also been divided into Team A and B with the former reporting on Monday and Thursday and the latter on Tuesday and Friday based on the work involved.

Team A-Shivaji, Ranjit, Jayasudha, Prashanthi

Team B-Arunasri, Shalem, Abhilash, Spandita, Vani

Protocol for Pathology Department

Pathologists will be in two teams: Team A: Monday and Thursday and Team C: Wednesday and Saturday. There will be no cytology/pathology service on Tuesday and Friday.



Handling of FNAC/Cytology samples

- As a general rule, LVPEI will not be handling any COVID-19 positive or COVID-suspected patients. Such patients in case they escape the Triage team and reach the OPD/OT will be isolated (see policy document of raising COVID Suspect Code, for COVID-Isolation) and sent to Gandhi hospital and its attached Sarojini Devi Eye Hospital per Govt. protocol, for any emergency eye problems. This is both for fresh and follow-up patients.
- NO FNAC/ SURGERY/ BIOPSY/evaluations/procedures shall be conducted here for COVID-confirmed or suspected cases.
- Every patient sampled is considered and handled as a COVID-19 asymptomatic carrier.

When applied to cytology laboratories, these guidelines can be broadly stratified

1. Fine needle aspiration and sample transport (in Main OT and in OPD Plasty OT)
2. Sample processing in the laboratory
3. Sample discarding
4. Management of spills in the laboratory
5. Surface disinfection and equipment decontamination
6. Care of the laboratory staff
7. Reporting of the cytology samples

Requisition Forms

- At KAR and KVC centre request forms will be sent online through EMR. Report is also dispatched through EMR.
- From secondary centres where EMR is not available requisition must be sent through email or social media messenger (Ex: Whatsapp).
- Use of hard copy or handwritten requisition form is discouraged.

FNA in COVID-19 Era

- All FNA would qualify as close contact and has a potential for body fluid/blood spill.
- Use of a complete set of personal protective equipment (PPE) including disposable water resistant gown (HIV kit or similar gown), N95 mask, Visor/goggles; cap, shoe/covers and double gloves is MANDATORY. One set per patient.
- Persons who are not essential for the procedure should move out of the room.
- Patient alone, without attendant, should be in the room where sampling is done unless in a vulnerable category.

- All Instructions to be given from at least 6 feet distance and explain the procedure
- Patient must be directed to keep on the face mask, have hand sanitization, not to talk during the procedure and follow all other instructions. If it is essential to remove the Face mask of the patient for collecting samples, cover mouth and nose with a sufficiently large plastic cover or surgical drape, taped well.
- If possible, the face of patient to be turned away from the person taking the sample.
- Patient must not move during procedure should be instructed firmly before starting
- All precautions to be taken to avoid any needle stick/sharp injury
- No talking is ensured while collecting samples.

Sample Transport:

- The sample material should not be expelled from the needle hub as it causes aerosols.
- If there is no alternative to expelling the sample from the needle, the following should be done
- All persons, except person holding the sample syringe should leave the room or be at least two meters or more. Expulsion should be done very gently from the needle. The sample should be held far away from face.
- While making a smear it is recommended that slides are held as far as possible from oneself. It is inevitable that spraying of some aspirated material occurs on the table which should be sanitized as per procedure detailed below
- All PPE to be removed as per doffing guidelines and hand washing must be performed thoroughly for >20 s after the procedure.
- Air drying of smear should not be done by shaking or blowing air (creates aerosols). Air-drying of the smears will be preferably done in class II biosafety cabinets (BSCs).
- The used needles should be discarded as per BMW policy.

Sample processing in the cytopathology laboratory

- The samples should be collected in appropriately labelled, tightly-capped, sterile tubes/containers and sent to the cytopathology laboratory in one of the two ways:
- Biohazard zip-lock bags kept inside a leak-proof cryobox with a biohazard label are sent.
- OR A triple packaging system is used wherein the primary receptacle containing the sample is kept inside a second protective watertight and leak-proof receptacle which, in turn, is covered by a third receptacle to prevent any kind of physical damage to the secondary receptacle during transport.
- Only the trained hospital attendant should transport the sample to the laboratory. No attendant should handle sample
- Cyto technician should wear protective gear – disposable HIV kit gown, gloves, cap, N95 mask, and visors/ goggles. Fresh, unfixed specimens should be transported by hand, and NOT shipped with pneumatic-tube systems.
- All fresh cytology samples received in the laboratory should be considered potentially infectious with live virus and hence, universal precautions need to be followed while handling such samples.
- A number of steps involved in routine sample processing including the opening of the sample containers, removing tightly fitted caps of the tubes, diluting, shaking, vortexing, and centrifugation may lead to aerosol generation. Care should be taken to minimize the exposure to the aerosol generated during the sample processing by using adequate PPE and performing these steps in class II BSCs(biological safety cabinet)
- In case of non-availability of class II BSCs, and if centrifugation is absolutely necessary, the same should be undertaken using capped tubes. Following centrifugation, the lid of the centrifuge should be opened gently and the samples should be rested for full 5 min followed by gentle removal of the caps.

- Fixation of the cytology samples in alcohol-based fixatives (with alcohol concentration more than 70%) or formalin can lead to the inactivation of the novel coronavirus. However, if fixation is done using weaker alcohol-based fixatives, additional precautionary measures as indicated above need to be used.

Sample discarding

All the residual samples should be discarded in appropriate disinfectants with confirmed virucidal activity against enveloped viruses. These include 0.1% sodium hypochlorite solution, 0.5% hydrogen peroxide, 62–71% ethanol, quaternary ammonium compounds, or phenolic solutions

Use single use tubes and do not reuse.

Rarely if there is need for reuse, The sample tubes and containers should also be disinfected by adding in 0.1-1% hypochlorite solution (to be prepared fresh each day) or other disinfectant solutions as previously recommended, followed by discarding in separate biohazard waste bags labelled as COVID-19.

Management of sample spills in the laboratory

The decontamination of laboratory surfaces in the event of sample spillage will be done using D-125 solution and should be done immediately, following all precautions of managing a spill.

Surface disinfection and equipment decontamination.

All laboratory surfaces including furniture and door knobs must be sanitized every 2 hours with Granadier (lemonizer) solution 1:60. The computer peripherals, and similar equipment needs to be decontaminated with alcohol wipes.

Biomedical waste management

Following processing of sample the full PPE is to be discarded in the proper way (see main document) into appropriately designated bins as per hospital BMW discard policy

All laboratory-generated biomedical waste also to be discarded as per BMW disposal for infected material.

Care of the laboratory Staff

Lab technicians are divided into 3 teams A, B, C, Team A will come on Monday/Thursday; Team B on Tuesday/Friday and Team C on Wednesday/Saturday.

"Pathologists will be in two teams: Team A: Monday and Thursday and Team C: Wednesday and Saturday. There will be no cytology/pathology service on (Tuesday and Friday.)

Take all precautions while processing the samples since every sample is considered infected

Use proper method of donning and doffing of PPE.

Frequently and thoroughly wash hands with soap and water (for at least 20 secs) and follow good microbiological practices and procedures (GMPP)

Use Alcohol-based hand sanitizers when not using gloves. Use gloves all the time when handling samples.

Access to the laboratory should be strictly limited

Use gloves throughout

Reporting of the cytopathology samples

Non-sterile gloves while should be worn while reporting to avoid direct contact with the slides.

Microscopes to be sanitized by 70% alcohol/hand sanitizer solution before initiating the reporting

Independent reporting should be done rather than with the entire team of cytotechnologists

If reporting as a team, no more than three members at a multi-header station keeping at least 1-meter distance is recommended.

Digital report will be sent.

After removing gloves, at the end of reporting, all pathologists must wash their hands for >20 seconds and/or hand sanitizer application.

Storage and cataloguing of slides and blocks.

Once reporting of samples is done, the cataloguing of slides and blocks and their storage to be done as per regulations

Take adequate care using non-sterile gloves and face mask and visor while doing so.

Sampling/processing of histopathology samples

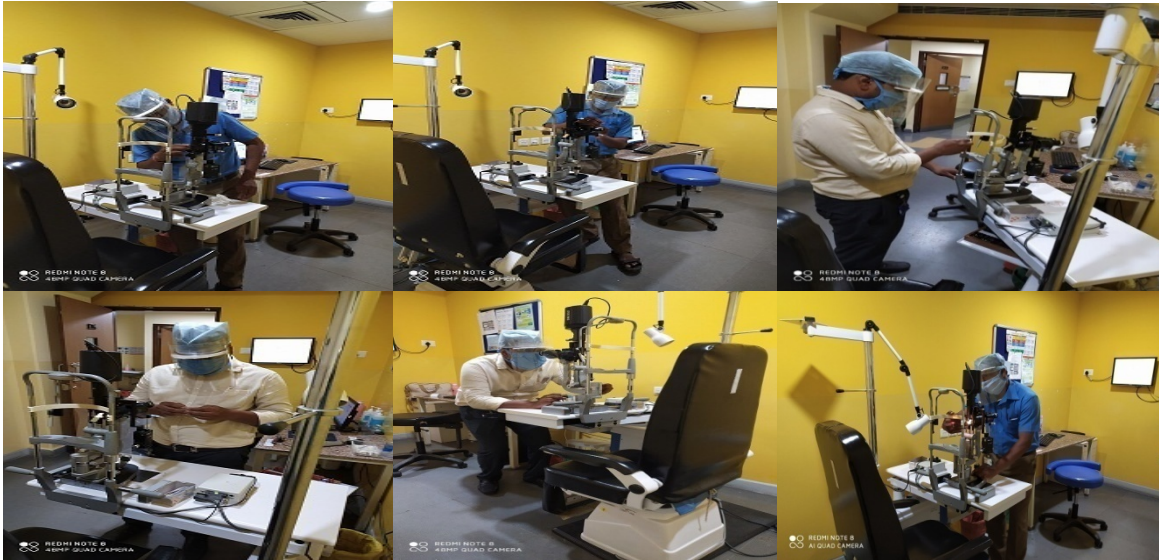
All the measures and precaution should be taken as described in handling of Cytopathology samples.

After surgery, the biopsy tissue should be immediately transferred to formalin solution without delay. During Covid -19 period and after that until unless treatment is available, fresh sample storage is discouraged.

Protocol for Biomedical Department

Role of Biomedical Personnel:

- Conduct preventive maintenance of all Biomedical Equipment
- Provide timely and good quality repair of any breakdown
- Ensure no wastage of materials/spare partsetc
- Coordinate with stores and supplying vendors for any spares/repairs etc



All staff to follow general safety guidelines all the time while at work
(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

Areas of work may include patients being around as in OPD and OT However in OR , when machine breakdown occurs. there is no direct close interaction with patients. Hence risk of transmission from aerosol/ airborne particles is moderate. Contamination from machines-fomites can happen. These employees will be in Yellow category except in (GA) OT.

The following PPE should be worn by the biomedical staff

- Cloth mask except when attending calls in OT (N 95 mask)
- Visor
- Institute/OT uniform
- Gloves when handling equipment
- Covered footwear

Protocol:

Immediately on arrival:

- The nose and mouth should be always covered with simple cloth mask unless the staff is entering clinics
- Safe distance to be maintained
- Work desk to be kept clean

While attending call in clinic areas:

- Visor and cap to be put on
- Gloves to be put on while touching surfaces of any equipment
- After completing the job the gloves are to be removed and discarded in red bin.
- Hands to be washed with soap and water whenever any object is touched.

While attending call in OT areas:

- Staff shall change to OT scrub suit
- N 95 mask and cap to be put on
- Visor to be put on
- Gloves to be put on while touching surfaces of any equipment
- Immediately after completing job the gloves to be removed and discarded in red bin.
- Hands to be washed with soap and water whenever any object is touched

Precautionary measures during repairs :

- When taking the instrument for repair the equipment to be cleaned with Sterillium or lemoniser as appropriate for disinfection. After repairs also the equipment to be disinfected before handing over to the user(s).
- Tools shall not be left all around. They should be placed in well defined covers/boxes/trays. If any surface is touched the staff should sanitise the hands immediately **and properly**

When Interacting with vendors or outside company people who come for repairs etc.

- It should be ensured that the vendor has no cough/cold/fever/sickness/has not been kept in isolation/quarantine and not had a family member with similar complaints
- Ensure 'non-contact' temperature has been checked at the gate
- Ensure the vendor is wearing face mask all the time
- Ensure hand sanitization of the vendor and physical distancing as much as possible
- The vendor should be restricted for any needless touching/moving around at all times.
- Only Namaste gesture to be used for greeting and handshakes to be avoided
- Gloves to be used while taking any papers/bills etc from the vendor
- Goods brought in by vendors must be properly sanitized before entry to clinical and other areas
- Minimum talking to be ensured for everyone's safety

DOs'

- Others should be greeted with Namaste and minimum talking to be encouraged for everyone's safety
- Gloves to be used before touching surfaces in patient care area.
- Hand sanitizing protocol are followed without fail during the work.
- Strict adherence to hand and face hygiene and physical distancing is ensured all the time
- Tools are cleaned properly

DON'T's:

Absolute **"NO"** for following actions:

Namaste is the only gesture to be used for greeting. and shaking hand to be avoided.

No materials/papers/tools to be touched without putting on gloves

The key boards /mouse should not be touched without sanitizing hands

Tools should not be left all over the place- They should be placed in proper areas where they do not get contaminated.

Protocol for Maintenance Department

Role of the Maintenance Personnel Technicians:

- Conduct preventive maintenance of all Facility utilities
- Provide timely and good quality repair of any breakdowns
- Ensure no wastage of materials/spare parts etc.
- Switch on and off appropriate utilities at appropriate time.
- Coordinate with stores and supplying vendors for any spares/repairs etc.



All staff to follow general safety guidelines all the time while at work

Additional guidelines as per the role are:

PPE to be worn:

Areas of work may include patients being around as in OPD and OT However in OR , when machine breakdown occurs. there is no direct close interaction with patients. Hence risk of transmission from aerosol/ airborne particles is moderate. Contamination from machines-fomites can happen. These employees will be in Yellow category except in (GA) OT.

The following PPE should be worn by the biomedical staff

- Cloth mask except when attending calls in OT (N 95 mask)
- Visor
- Institute/OT uniform
- Gloves when handling equipment
- Covered footwear

Immediately on joining the duty:

- The nose and mouth should be always covered with mask
- The hands to be washed with soap and water on coming to work and whenever any object is touched

For routine calls outside patient care area:

- The nose and mouth should be covered with appropriate mask
- Hand sanitization protocols to be followed and hand and face hygiene is maintained
- Hands are washed with soap and water after completing the task.

For attending calls in patient care area:

- The nose and mouth should be covered with appropriate mask
- Visor should be used before entering patient care area
- Gloves to be used if surface is likely to have been touched by patients.
- Hands to be thoroughly washed with soap and water after completing the task.
- Hand sanitization protocols are followed and face and hand hygiene are maintained

For attending calls in OT:

- Staff shall change to OT scrub suit
- N 95 mask and cap to be put on
- Visor to be put on
- The nose and mouth should be covered with appropriate mask
- Gloves to be put on while touching surfaces of any equipment
- Immediately after completing job the gloves to be removed and discarded in red bin.
- Hands to be washed with soap and water whenever any object is touched
- Hands to be thoroughly washed with soap and water after completing the task.
- Hand sanitization protocols are followed and face and hand hygiene are maintained

When Interacting with vendors or outside company people who come for repairs etc.

- It should be ensured that the vendor has no cough/cold/fever/sickness/has not been kept in isolation/quarantine and not had a family member with similar complaints
- Ensure 'non-contact' temperature has been checked at the gate
- Ensure the vendor is wearing face mask all the time
- Ensure hand sanitization of the vendor and physical distancing as much as possible
- The vendor should be restricted for any needless touching/moving around at all times.
- Only Namaste gesture to be used for greeting and handshakes to be avoided
- Gloves to be used while taking any papers/bills etc from the vendor
- Goods brought in by vendors must be properly sanitized before entry to clinical and other areas
- Minimum talking to be ensured for everyone's safety

DOs

- Others should be greeted with Namaste and minimum talking to be encouraged for everyone's safety
- Gloves to be used before touching surfaces in patient care area.
- Hand sanitizing protocol are followed without fail during the work.
- Strict adherence to hand and face hygiene and physical distancing is ensured all the time
- Tools are cleaned properly

DON'Ts:

- Absolute 'NO' for following actions:
- Namaste is the only gesture to be used for greeting and shaking hand to be avoided.
- No materials/papers/tools to be touched without putting on gloves
- The key boards /mouse should not be touched without sanitizing hands
- Tools should not be left all over the place- They should be placed in proper areas where they do not get contaminated.

Protocol for Canteen Service

Role:

- Provide food to all in a highly hygienic manner
- Maintain Hygienic cafeteria/canteen space



All staff to follow general safety guidelines all the time while at work
(Refer main document)

Additional guidelines as per the role are:

PPE:

- Face mask (Cloth mask)
- Visor
- Gloves (plastic) while on duty
- Shoes/ closed feet is preferable
- Caps

Protocol Before starting work:

- Temperature check for canteen staff to be done by security at entry daily if someone is staying on Campus. (cook etc)
- Hands to be washed with soap and water
- PPE to be worn
- Sufficient cleaning materials are ensured to be available for whole day at the area of work.
- All mops for cleaning tables are ensured to be well washed daily and available in all areas

DO's:

- All staff to wear Cloth masks from home all the time.
- LVPEI face shield to be used by everyone at time of entry. Face shield to be deposited back at exit, or kept at the dept as per institute policy guidelines.
- Face and mask not to be touched after being put on
- It should be ensured that the patients and staff are maintaining physical distancing at all the time.
- Physical distance to be maintained while serving food/making bills/answering queries to patients and staff
- Minimal talking to be ensured and do not move needlessly or touch things needlessly

- Patients or attendants are clearly instructed to cover face with face mask all the time (example while ordering food/paying bills) except while eating.
- Cash/cards to be handled only with gloved hands.

DON'Ts:

- Supply of any food/coffee to staff should not be done outside designated areas
- Room service to staff in their offices/ or to any meetings remains **suspended**
- No crowd should be allowed to form when supplying coffee/tea in OT. Only **two** persons are allowed at a time in the 'Tea Room'.
- No staff should enter clinical areas. Excessive movement is discouraged; work should be done silently with minimal talking
- Things should not be touched needlessly, and minimum handling of phones should be ensured. Phones should be sterilized as per protocol.

Cleaning Protocol:

- Grenadier(lemoniser) Solution – 1 :60 ratio for tables/chairs to be used
 - Cleaning of Door Knobs, handles etc are to be sanitized three times a day.
- Sterilium – Place Hand Sanitizer at all corridors and prominent entrances and exits.
 - Use whenever gloves are removed and before and after touching any surface
- Duopower – Floor cleaner to be used for floor mopping
- Heavy duty gloves to be used whenever cleaning any area
- Personal hand Hygiene, respiratory etiquette, use of masks to be ensured as per training given.
- Frequent hand wash to be ensured between work intervals: **with soap and water for 20 seconds.**- Hands to be washed if touched any surface or objects.
- **Gloved hands to be used while on duty**
- Staff to maintain social distancing strictly both at work, and at break times, in lifts etc. and also outside for safety of self and family.
- Only four people are to be allowed in the lift at a given time.

Protocol for Transport department

Role:

- To provide transport to patients as needed (ambulance)
- To provide transport to staff as needed
- To keep all vehicles cleaned and sanitized



All staff to follow general safety guidelines all the time while at work
(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Face mask (Cloth mask all the time; Surgical mask if handling patient in ambulance)
- Visor when coming close to patient, say while shifting into ambulance
- Gloves (Plastic) while handling patient papers/wheelchairs/patients/ ambulance doors etc.
- Uniform
- Shoes

Protocol Before starting work:

- Transportation staff to get their temperature checked by security
- Hands to be washed with soap and water/sanitized with sterillium
- PPE to be worn

Vehicle sanitization and usage:

- All the vehicle components, door handle, seats and belts must be cleaned after every use. Use lemoniser spray.
 - Physical distance to be maintained while interacting with the passenger or any other persons.
 - Ambulance must be cleaned with lemoniser solution after every use-
 - Gloves to be used while cleaning
 - Ambulance driver must clean vehicle and change clothes at the end of the shift.
 - Cell phone to be sanitised with alcohol wipes/alcohol rub
-
- All COVID-19 suspect/confirmed cases will be shifted through **Government ambulance** (as per Govt. protocol). LVPEI ambulance will not be used to shift such patients.

- In a very unusual or rare situation LVPEI ambulance will be used. Driver/accompanying persons and people shifting will all be in full PPE. **This will be rare.**
- **Thorough ambulance cleaning in such a situation will be monitored by the HICC. Head of Transport department will inform HICC and campus director IMMEDIATELY if ambulance was used in such a case.**

DON'Ts:

- Absolute “NO” for following actions:
- Handshake gesture to be avoided with anyone.
- Patients or patients’ articles should not be touched with bare hands.
- Patients should not be interacted without PPE
- Do not allow patients to come closer to the vehicles needlessly

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor to be removed without touching front surface and clean this with gloved hands
- It should be safely stored with front surface facing up
- Gloves to be removed and discarded in red bin.
- Hands to be washed with soap and water.
- Cloth mask to be worn while returning home
- Uniform to be removed and given for washing at the end of the shift

Protocol for Projects Department

Guidelines Part I

- Workers to be encouraged to stay home if they are sick. If Any fever/cough/cold is present for self or family would mean that they must not come to work
- If they are in containment Zone they must not come to work
- Each jobsite should have laminated COVID-19 safety guidelines and handwashing instructions in graphics / local language
- Workers should be insisted to wear masks over their nose and mouth to prevent them from spreading the virus.
- Workers are advised to avoid physical contact with others and employees/contractors/visitors are directed to increase personal space to at least six feet, where possible.
- Workers are trained on how to properly put on, use/wear, and take off protective clothing and equipment.
- Respiratory etiquette, including covering coughs and sneezes and using elbow is encouraged.
- Chewing Gutaka / Pan /Tobacco should be discouraged and they should be asked not to spit in open area. If they have to spit, it should be done in a closed plastic cover. The cover is then to be sealed in another plastic cover to be disposed in plastic garbage disposal (red bins)
- To the extent tools or equipment must be shared, workers should be instructed and provided to use alcohol based wipes to clean tools before and after use. When cleaning tools and equipment, Site Supervisor / Engineer should consult manufacturer recommendations for proper cleaning techniques and restrictions. 70% Alcohol/freshly made sodium hypochlorite i.e bleach or household disinfectant-cleaner (no plain cleaner) can be used
- In-person meetings (on site meetings) should be, as short as possible, the number of workers in attendance to be limited, and physical distancing to be used .
- Portable jobsite toilets to be regularly cleaned and disinfected . Hand sanitizer dispensers should be filled regularly. Frequently-touched items (i.e., door pulls and toilet seats) should be disinfected with disinfectant-cleaner solutions commonly used in households and toilets. (EPA approved to be checked on the label- they are good quality)
- Workers are encouraged to report any safety and health concerns.

Arrangements to be made at site.

Site gates are to be closed and manned by personnel from the site team. Every person attempting entry to the site is to be stopped and questioned to determine if site access can be permitted. The names and contact details of all workers / Supplier or other vendor to be recorded on daily basis for at least one month. This will help public health authorities trace people who may have been exposed to COVID-19 if one or more worker become ill shortly after the event.

- Staggered start and finish times to be introduced to reduce congestion/contact at all times
- Site access points to be monitored to enable physical distancing.
- Readily available hand cleaning facilities at entrances and exits to be ensured. This should be soap and water wherever possible or hand sanitizer if water is not available
- The emergency contact numbers are ensured to be provided by all Workers upon a return to work should a member from their household need to pick them up if they fall unwell with COVID-19 symptoms.
- Non-essential physical work that requires close contact between workers should not be carried out. All other work should be planned to minimise contact between workers.

- Break times should be staggered to reduce congestion and contact at all times. They should not have their lunch in groups.

If goods are received from a vendor: All material received should be kept in a designated place

After touching any material from a vendor, including goods/ paper work/bills/cash etc. hands to be washed with soap and water.

Outer surface of goods to be sanitised before moving them for usage. Hands to be washed after sanitizing any material

If employees become unwell on site

If an employee becomes unwell on site and believes they may have COVID-19, they must:

- Follow the guidance on self-isolation and not return to work until the period of self-isolation has been completed.
- If they're waiting to be picked up to go home, they should stay in a designated room at least 2 meters away from others and if possible a window for ventilation to be opened. If the weather permits, the person may remain outside but at least 2 meters away from others.
- If a person falls ill but confirms that they have not been near anyone confirmed to be infected by COVID-19, then the site does not need to close. The following guidance applies:
- Whilst the unwell person remains on site (waiting to be picked up to go home), they should be placed in a designated room at least 2 meters away from others and keep the place properly ventilated.
- They should avoid touching people, surfaces and objects and should cover their mouth and nose with a disposable tissue when they cough or sneeze and put the tissue in a bag or pocket then throw the tissue in the bin. If they do not have any tissues available, they should cough and sneeze into the crook of their elbow. Immediately wear a mask (site should keep cloth masks available).
- The area that person was working in to be cordoned off; and thoroughly cleaned with recommended disinfectants.

Guidelines Part II

Basic Infection Prevention Measures:

The Contracting agency should implement good hygiene and infection control practices, including:

- Promotion of frequent and thorough hand washing, including by providing workers, customers, and worksite visitors with a place to wash their hands. If soap and running water are not immediately available, alcohol-based hand rubs containing at least 70% alcohol are provided
- Workers are encouraged to stay home if they are sick.
- Respiratory etiquette, are encouraged including covering coughs and sneezes.
- Key points to be emphasized such as the importance of staying away from work even if they have only mild symptoms or have had to take simple medication (e.g. paracetamol, ibuprofen) which may mask the symptoms.

PPE to be worn:

- Face mask (cloth masks.)
- Gloves (heavy duty) while on duty
- Visor, if Social Distancing is practically not possible in some activities.

Protocol before starting work:

- Entry should be from a Separate gate. All workers to have temperature checked on arrival at work site
Name with Contact No. of Family member to be registered in case of Emergency with Supervisor/ Engineer.
- Supervisor / in charge to be informed if the worker or their family member have developed any symptoms of Cold, Cough, fever **previous** night or the worker have come in contact with a COVID positive/sick person.
- Hands to be washed thoroughly with soap and water as demonstrated by Supervisor for Min. 20 Seconds.
- While changing into work cloth, it should be ensured that the regular cloths are properly kept away and are not touched by other.
- PPE to be worn
- It shall be ensured that the workers tools and plants are properly washed under running water or are cleaned with soap water / disinfectants.

DO's:

- It shall be ensured that the worker goes to toilets designated for use and not use open space for the same. It shall be ensured that the workers at toilet are maintaining physical distancing all the time.
- All staff to wear Cloth masks from home all the time and continue to wear all time while working.
- Physical Distancing separation to be maintained during breaks and lunch. Home food to be brought from home.
- Own water bottle to be used and not to be shared
- Portable jobsite toilets to be regularly cleaned and disinfected . Hand sanitizer dispensers should be filled regularly. Frequently-touched items (i.e., door pulls and toilet seats) should be disinfected with disinfectant-cleaner solutions commonly used in households and toilets. (EPA approved to be checked on the label- they are good quality)
- All precautions to be taken by the worker to maintain their the good health by getting adequate sleep; eating a healthy diet, drinking water frequently and avoid Consumption of alcohol even after working hours are over.

DON'Ts:

- Eating / Chewing Pan / Gutkha/ Tobacco while at work and spiting in open area to be avoided
- Things should not be topuched needlessly, Minimum handling of phones to be ensured
- Co-workers or face should not be touched unnecessarily.
- Moving excessively to be avoided and work to be done silently with least talking.
- Any personal acquaintances / relatives should not be allowed to visit work site for any reason.

TIPS on Maintenance of PPE

The [use of face masks](#) is mandatory when working in closed spaces with other persons, or when it is not possible to maintain a safe distance from other people.

It is essential that workers use face masks properly so that they are effective and safe.

- It should fit properly, completely covering the face from bridge of nose to chin.
- Hands to be cleaned properly before putting the face mask on or taking it off.
- The cord or elastic at the back of the face mask to be touched when removing it, not the front.
- If the face mask is disposable, it should be done safely in a proper container.

- If reusable, the face mask to be washed as soon as possible after use with detergent in hot water.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor to be removed without touching front surface and this should be cleaned with sanitized hands
- It should be safely stored with front surface facing up
- Hands to be washed with soap and water.
- Cloth mask to be worn on face while returning home.

**COVID Protocols for Individuals performing
specific functions in the hospital**

Protocol for Supervisor in Counselling and Reception

Role:

The supervisor shall supervise activities at patient care area



All staff to follow general safety guidelines all the time while at work (Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Face mask (N 95/triple surgical mask)
- Visor
- Shoes

Before starting clinical work:

- Appropriate PPE shall be worn
- Team huddle shall be done with team at triage area keeping proper physical distancing (Front desk staff, counsellor, security staff and housekeeping staff)

While handling patients:

- 6 feet distance shall be maintained
- Greeting shall be done by “Namaste” gesture
- Only one attendant per patient is ensured
- Gloves to be worn if the patients’ articles need to be handled
- Compliance to protocols in lobby, front desk and counselling area shall be monitored
- Waiting areas shall be monitored to ensure that they are not crowded, and patients are sitting far apart
- Activities of housekeeping staff are monitored and compliance to cleaning of different areas are ensured.

- In case a COVID suspect or positive case is identified the concerned doctor is informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

DOs:

- Appropriate PPE shall be worn all the time
- Physical Distancing shall be maintained all the time
- Only one attendant with patient is allowed
- Patients or attendants are clearly instructed to keep face covered with face mask in place all the time.
- Any documents/parcels are touched only with gloved hands and sanitized immediately after each contact.
- Strict adherence to hand and face hygiene and social distancing is followed all the time
- Clean all surfaces once in two hours.

DON'Ts:

- Absolute '**NO**' for following actions:
- Hand shake gesture shall be avoided with anyone
- patient or patient articles shall not be touched with bare hand
- No patient shall be interacted without PPE
- Patients shall not be allowed to come closer to staff
- Patients shall not be allowed to crowd at any area.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.

Protocol for Optometrist and Allied Ophthalmic personnel

Those working in clinics

Role of optometrist:

- History taking and initial work up
- Refraction and glass prescription
- Assist clinicians in diagnostic



**All staff to follow general safety guidelines all the time while at work (Refer main document)
Additional guidelines as per the role are:**

PPE:

Being closely working with patients the risk of transmission is high. Therefore, they are advised following PPE

- N 95 equivalent face mask
- Visor
- Cap
- Hand gloves
- Shoe
- Apron

Protocol before clinics start:

- All the Optometrist should put on Personal protective equipment (PPE) before entering the clinic area.
- Following PPE shall be worn :
- Clean apron and shoes N95 mask and cap
- Visor
- After entering their room/rooms each one will make sure all supplies are in place specially those necessary for protection against infection viz unsterile gloves, box of tissue papers, sterilium, alcohol swabs, sterile buds, fluorescent strips, etc.
- all surfaces shall be cleaned (Ex: chair units, stool, slitlamp, desk, key board, computer monitor, trial frame) with specified cleaning solution before starting clinics. Same should be repeated after each patient examination. Sodium hypochloride solution in spray bottles to be sprayed on chair and stools as well as desks and alcohol swab for slit lamp, and key board.)
- Applanation tonometer probe disinfecting protocol should be followed before starting the clinic.
- The following are the steps for disinfecting the probe before starting the clinic –

- To make a disinfecting solution Sodium Hypochlorite and Distill water are mixed in the ratio of 1:10.
- In a 10 ml syringe – 1 (1 ml) part of Sodium Hypochlorite is put which is mixed with 10(10 ml) parts of distill water.
- Both the concentration are to be put into a clean sterile container (**note**, the Sodium hypochlorite solution is diluted by Distill water).
- Once the solution is ready, the tip of the probe can be dipped/put into the solution for about 3 minutes (this has to repeat every day at the beginning of the day at the end of the clinic).
- Between the patients seen, the probe can be cleaned with alcohol swabs.
- The solution has to be made every day and has to be discarded at the end of the clinic.

During clinic hours:

- Patients are to be brought from waiting area and maintain 6 feet distance.
- While assisting wheel chair patients it should be ensured that gloves are worn

Clinical assessment protocol:

- The following are steps of clinical examination. Highlighted with red font are compulsory steps
- History taking (Compulsory)
- Visual acuity recording (Compulsory)
- Objective and Subjective refraction to be done only if absolutely necessary.
- Cleaning protocol shall be followed for trial frame during and after refraction.
- Slit-lamp examination will be done by Ophthalmologists and Optometrist should not put patients on slit lamp.
- Applanation tonometry to be done only if requested by Ophthalmologist (except Glaucoma cases)
- In case a COVID suspect or positive case is identified. The concerned doctor to be informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.

DOs':

- Examination room and corridor doors are to be kept open to avoid unnecessary touching of the door handles keep rooms ventilated.
- Only one attendant with patient to be allowed
- Patients or attendants are clearly instructed to be seated with face mask in place all the time while in exam room.
- Hand sanitizing protocol are followed without fail during the examination and also in between patient examinations.
- Patients or documents are touched only with gloved hands and sanitized immediately after each contact.
- Computer key boards to be touched only after sanitizing hands
- Strict adherence to hand and face hygiene and social distancing to be followed all the time
- Slit lamp, chair handles and key board are cleaned in between patients.
- Room is prepared at the end of the day before leaving home.
- Biomedical waste Discard policy is strictly followed. (Annexure)

DON'Ts:

Absolute **"NO"** for following actions:

- Do not shake hands with patients. Namaste is the only gesture for greeting patients.
- Do not touch patients or patients' articles with bare hands.
- Do not interact with patients without PPE
- Do not touch key boards without sanitizing hands
- Do not bring the next patient without cleaning slit lamp and surfaces
- Do not make patients wait in corridors and crowd the place
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No patient shall be interacted without PPE
- Keyboards shall not be touched without sanitizing hands
- Next patient shall not be brought without cleaning slit lamp and surfaces
- Patients shall not be allowed to come closer to staff
- Patients shall not be allowed to crowd at any area.

Protocol for Diagnostics for Optometrists/Technicians and Ophthalmologists



- All patients and attendants shall use mask all the time
- One patient per investigation system policy shall be followed i.e. crowd shall not be created by calling multiple patients at a time.
- Attendants of patients to be allowed in the diagnostics area only where they are required (Example : Where the patient is in a wheelchair , Where patient's vision is very less or where the patient won't be able to manage alone; or for child/baby patients).
- Patients-attendants are informed not to touch any diagnostic equipment unnecessarily.
- Patients are informed to talk less and that there will be minimal conversation inside the lab.
- Attendant should sit only in designated area in diagnostic room

For Optometrist

To check message from requesting ophthalmologist for the possibility of any infectious patient in each case

Ensure the use of protective attachments provided for each machine.

Disinfection to be done using alcohol swabs after a patient is seen and before calling in the next patient for all machine interface parts that come in contact with patient/ user

Disinfection of hands by operating personnel after a patient is seen and before calling in the next patient

Intermittent washing of hands with soap to be done after every 5 patients or whenever suspected contact with an infected patient

Compulsory use of masks to be ensured when-ever inside diagnostics area or around patients

Use of gloves wherever direct contact with the patient is involved.

To dispose of disinfectant material properly as per Biomedical waste guidelines, also to be done by patients

For administration of lab

Daily Disinfection of lab (in evening) to be done Logs shall be maintained for Labs

Provision of disinfectants and protective gears to be maintained

Pre-decided dedicated position of machines to be maintained

A call system for patients is ensured

It is ensured that each patient requires a single visit to the laboratory even if multiple investigations are required

To ensure execution of all COVID-19 protocols of social distancing; hand hygiene, mask etc.

For doctors

The information for an “ill” or infectious patient should be always sent to the diagnostic person. Unnecessary investigation in the period of COVID to be avoided investigations are planned in such that only a single visit is required for each patient

Following is the protocol for each machine:

The Examiner should wear face mask and gloves compulsory while performing the investigations. VISOR shall be used wherever possible. If not possible, visor to be kept on the side properly without touching the outside surface. N95 mask shall be used as usual. Visor to be used again while talking to patient after the investigation has ended. . Visor shall be worn when leaving the diagnostics area. Points covered: Area of the machine to be repeatedly disinfected, protective “gear for machine”

Anterior/Posterior segment OCT: (confocal will not be done; Specular microscopy only if very essential)

Repeat disinfection: of chin rest, headband, seating area, hand holding appendages after every patient is seen , with alcohol swabs

Interval disinfection of lens area: every two hour based on usage

Cling-wrap cover : Wherever possible. The cling wrap to be cleaned after each patient is seen and to be discarded at end of the day. New one to be placed next day. If the cling wrap is already placed , then lens to be cleaned only in morning and evening after cling wrap removal.

Slit Lamp Photos

Needed only for Emergency patients and specific cases if any.

Disinfection of chin rest, headband, seating area, hand holding appendages after completing the investigation.

It shall be ensured that slit lamp barrier is in place if possible

Zeiss FFA, Optos, OCT cirrus, OCTA Topcon, Spectralis, Clarus:

FFA not to be done as far as possible

Repeat disinfection: of chin rest, head band, seating area, hand holding appendages with alcohol swab/sterillium in morning before beginning, after every patient and in evening before closing.

Interval disinfection to be done for console, entire seating area using isopropyl alcohol spray: every four hour

Physical modification: removable paper strips to be used at chin rest, head band, hand holding appendages,

The machine shall be covered with cling-wrap sheet wherever possible. Sheet to be cleaned after each patient and to be discarded at end of the day. New one to be placed next day. If there is a sheet, then lens to be cleaned only morning and evening.

B Scan, UBM:

UBM not to be done as far as possible

Repeat disinfection: of probe and immersion as applicable with alcohol swab/sterillium in morning before beginning, after every patient and in evening before closing.

Interval disinfection of console, entire seating area using isopropyl alcohol spray: every two to four hour or depending on machine use

Physical modification: disposable Head cap for the patient in each case if head touching is envisaged

ERG:

ERG not to be done as far as possible

Repeat disinfection: of seating area, chin rest- head band- hand holding area as applicable, contact lens and electrodes: with alcohol swab/sterillium in morning before beginning, after every patient and in evening before closing.

Interval disinfection to be done for console, entire seating area using isopropyl alcohol spray: as appropriate depending on use of machine

Physical modification: Sterile transparent plastic screen is put between patient and monitor for preventing patient to machine spread, to be changed depending on use of machine

HVF:

HVF may be avoided as far as possible

Repeat disinfection: of the seating area, chin rest, headrest, response button

Interval disinfection to be done for console and screen: every two hours or depending on usage

Physical modification: Sterile transparent screen for preventing the patient from machine spread: to be changed depending on machine usage

Materials for disinfection:

- Lens, machine console, screen, chin rest, etc: mSterilium, alcohol swabs
- Seating area: Spray based using lemoniser/grenadier
- Evening disinfection: Includes floors/seats etc as above

Protocol for Physicians

Roles:

Gives clearance for surgery and anaesthesia

Provides medical evaluation and treatment for systemic problems

Provides emergency care for medical emergencies

Helps with notifiable diseases and Infection control and safety protocols (designated person)

Identify and help in transfer and any first aid including psychological support to COVID-suspects including for staff members

Two full time and 3 part time physicians as before lockdown

Designated physician to attend all CODE BLUE-R calls

Designated physician attends to all CODE GREY calls

} Monthly roster will be made beforehand

PPE to be used :

- N 95 or equivalent mask
- Gloves
- Apron /gown
- Face shield (Visor)
- Covered footwear
- Cap

Please note: Full COVID protective PPE to be worn when attending a suspected (code grey) or CODE Blue-R call (see Code Grey COVID suspect and CODE blue-R protocol)

Protocol for examination of regular patient :

No attenders are allowed except with children, mentally challenged, disorientated, deaf and dumb patients

Patient to be seated at 1 meter distance

History taking to be completed before examining

Examination to be done swiftly / The examination time shall not exceed 15 minutes

The patient's face shall be turned away from the physician if possible during examination

After examination, the physician shall move away from the patient and then start talking/advising.

The attendant shall be called, if needed before talking to avoid duplication of giving advice

The gloves, table top, keyboard, mouse, stethoscope and thermometer shall be sanitised after examining one patient and before examining next patient using alcohol wipes

No bedsheet shall be put on examination couch / cot / The couch / cot shall be sanitised, specifically the rexine top shall be sanitised after examining one patient and before examining next patient using lemoniser spray

All GA patients to have pre-op chest Xray done and reported

DOs:

Examination room and corridor doors are to be kept open to avoid unnecessary touching of the door handles; keep rooms ventilated.

Only one attendant with one patient is allowed

Patients or attendants are clearly instructed to be seated with face mask in place all the time while in examination room.

Hand sanitizing protocol are followed without fail during the examination and also after examining one patient and before examining next patient

Patients or documents are touched only with gloved hands and sanitized immediately after each contact.

Key board is touched only after sanitizing hands

Strict adherence to hand and face hygiene and social distancing is followed all the time

Stethoscope, chair handles and key board etc. are cleaned after examining one patient and before examining next patient Biomedical waste disposal policy is strictly followed.

In case the physician is feeling sick Head of service is immediately informed who in turn will inform the campus head.

DON'Ts:

Absolute 'NO' for following actions:

- Patients shall be greeted with Namaste gesture only
- Only one attendant with a patient shall be allowed
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- Patient's documents are touched only with gloved hands and sanitized immediately after each contact.
- Key board shall be touched only after sanitizing hands

- The next patient shall be brought in only after cleaning the instruments and surfaces
- The patients shall not be made to wait in corridor and crowding at one place.
- The physician should not report to duty if sick
- The physician shall not visit other areas of the hospital including green zones without wearing appropriate PPE

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use. The guidelines for using N95 mask as mentioned in this document shall be followed.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.
- The face and hand hygiene shall be followed at all the times
- Physical distancing shall be followed at all the times
- Apron / linen gowns need to go for daily washing

Staff Protocols:

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not to report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.
- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.

- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Phones are sanitized as per protocol. Touching things needlessly is to be avoided. Keyboards/mouse etc are cleaned if used by different people. Hand hygiene protocol is followed while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and shall not sit on bed/sofa etc. with same clothes. Have a bath before touching kids/ family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc.) that were exposed outside.
- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination
- All loose hair, especially women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, esp. ladies should try to wear shoes rather than open sandals. No or Minimal rings/watches/ bangles/earrings/necklaces etc. shall be worn as these can get contaminated and difficult to clean.
- The staff shall not enter the Non Clinical areas. The cafeteria facility shall be used on the ground floor according to the team timings notified. The GPR building , 5th floor eating facility shall be used if food is brought from outside.

Protocol for Low Vision and Rehabilitation (Optometrists, Rehab Counsellors, Therapists)

Institute for Vision Rehabilitation, LVPEI

Protocol for Optometrists, Rehab Counselors, Therapists' staff:



PPE:

- Being closely working with patients the risk of transmission is high. Therefore, they are advised following PPE
- N 95 equivalent face mask
- Visor
- Cap
- Hand gloves
- Shoe
- Apron (only for optometrists).
- Therapists can wear apron or linen gown if they are in close contact with patient

Additional instructions to clients with blindness, severe visual impairment

- The mobility cane is disinfected at reception before attending any services
- The bags and belongings are left only in the designated place
- Touching/exploring objects shall be avoided as far as possible unless important for training
- The clients shall wait in the lounge until called for services

Protocol Before commencing the assessment or training:

- All the Optometrists/therapists/rehab counselors should put on Personal protective equipment (PPE) listed above before entering the clinic area.
- After entering their assessment / therapy room/rooms each one will make sure all supplies are in place specially those necessary for protection against infection viz unsterile gloves, box of tissue papers, sterillium and alcohol swabs etc.
- All surfaces shall be cleaned (chair units, examiner's chair, slit-lamp, desk, key board, computer monitor, trial frame, and therapy materials) with specified cleaning solution before and after attending each patient.

- Sodium hypochlorite solution in spray bottles to be sprayed on chair and stools as well as desks. The solution is prepared as per the protocol followed in other OPDs. The solution has to be made every day and has to be discarded at the end of the clinic. (one can use readymade lemoniser/Grenadier solution- it is available in stores)
- Trial frames will be cleaned with Sterillium after use.
- Spectacle cleaning solution or Liquid soap and water can be used for cleaning the trial lenses, non-illuminated hand-held magnifiers, spectacle magnifier, filters and stand magnifiers made with single lens system.
- Handles and other portions of assistive devices (eg: telescope) should be cleaned with sterillium or alcohol swabs. Lens surface should not be cleaned with the alcohol based disinfectant as it can spoil the device.
- For electronic gadgets such as iPad, computer tablet, screen for Sanet Vision Integrator (SVI), dab the sterillium on a microfiber cloth, then wipe it gently on the screen after every client.
- All other rehab materials to be cleaned with soap water
- Cleaning of doors, table tops, cupboard handles, floor, windows, railing, furniture etc. three times a day: morning, afternoon and at time of closure.
- Used things should not be kept back into place without sanitizing
- Sanitised and unsanitised items should not be mixed.
- Unsanitized/used items can be placed in a “red coloured tray’ till they are sanitized

During clinic hours:

- While escorting the patients from waiting area 6 feet distance to be maintained
- While assisting wheel chair patients one should make sure to wear gloves.

Clinical assessment protocol:

- The following are steps of clinical examination. Highlighted with red font are compulsory steps:
- Functional history taking (Compulsory)
- Best corrected visual acuity for distance(Compulsory)
- Objective and Subjective refraction to be done only if absolutely necessary.
- Cleaning protocol for trial frame shall be followed and trial lenses during and after refraction. (Please do these if new glasses are to be given. Prescribe glasses when needed)
- In case a COVID suspect or positive case is identified the concerned doctor is informed immediately while leaving the patient on seat without creating any panic.
- When such COVID patient is identified CODE GREY is raised and the patient is escorted by staff to isolation room near triage area where the patient is seen and / or treated by the concerned doctor / physician.

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor shall be removed without touching front surface and shall be cleaned with gloved hands.
- It shall be stored with front surface facing up
- The cap shall be removed and discarded in Yellow bin
- The N95 mask shall be removed without touching the front surface and stored in a paper bag for future use.
- The gloves shall be removed and discarded in Red bin
- Hands shall be washed with soap and water.
- Cloth mask (triple layered) shall be worn while returning home.

DOs':

- Examination/ room and corridor doors are to be kept open to avoid unnecessary touching of the door handles keep rooms ventilated.
- Only one attendant with patient to be allowed
- Patients or attendants are clearly instructed to be seated with face mask in place all the time while in exam room.
- Hand sanitizing protocol are followed without fail during the examination and also before each patient is examined
- Patients or documents are touched only with gloved hands and sanitized immediately after each contact.
- Computer key boards to be touched only after sanitizing hands
- Strict adherence to hand and face hygiene and social distancing to be followed all the time
- Slit lamp, chair handles and key board are cleaned in between patients.
- Room is prepared at the end of the day before leaving home.
- Biomedical waste Discard policy is strictly followed. (Annexure)

DON'Ts:

- Absolute "NO" for following actions:
- Hand shake gesture shall be avoided with anyone
- patient or patient articles shall not be touched with bare hand
- No patient shall be interacted without PPE
- Patients shall not be allowed to come closer to staff
- Patients shall not be allowed to crowd at any area.
-
- Key boards shall not be touched without sanitizing hands
- The next patient shall not be brought without cleaning the used trial lenses, assistive devices, therapy material and patient's chair.
- The patients shall not be made to wait in corridors and crowd the place
- Guidance shall be only provided verbally to patients with mobility issues , they shall not be touched or held.
- Sighted guide technique shall not be used.

Digital Audio Library

- The mic, table before and after recording shall be disinfected by each volunteer
- The client's data storage devices shall be disinfected (such as pen drive / external hard drive) before copying the content.

Vocational unit:

- Disinfect the tailoring machine and accessories after every single use
- Clients to be assigned the same machine for training

Staff Protocols:

- The team is divided into three groups Team A, Team B and Team C with designated days of working days in a week as per the Institute policy.
- Staff shall not to report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc.
- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.

- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Phones are sanitized as per protocol. Touching things needlessly is to be avoided. Keyboards/mouse etc are cleaned if used by different people. Hand hygiene protocol is followed while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and shall not sit on bed/sofa etc. with same clothes. Have a bath before touching kids/family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc.) that were exposed outside.
- Big bags/large purse etc. shall not be brought to Institute, Bags etc. should be left in car/scooter / at home or at security desk as per Institute policy. Put in your pocket or small purse The minimum that is needed inside LVPEI shall be carried in Pocket. Less items carried inside the institute ensures less contamination
- All loose hair, especially women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, esp. ladies should try to wear shoes rather than open sandals. No or Minimal rings/watches/ bangles/earrings/necklaces etc. shall be worn as these can get contaminated and difficult to clean.
- The staff shall not enter the Non Clinical areas. The cafeteria facility shall be used on the ground floor according to the team timings notified. The GPR building , 5th floor eating facility shall be used if food is brought from outside.

Protocol for Volunteers for Institute for Vision Rehabilitation

Role:

- Voice recording and editing books

PPE to be worn:

- Face mask
- Hand Gloves
- Socks

Protocol:

- Slots shall be booked (@ Vinay Kumar 68182832, mobile 99662 76128) for recording. NO in person service is provided to the clients if the volunteer :
- Have travelled Internationally in the recent past.
- If the client or their family members are having flu-related illness
- If the client age is of 60 years and above (especially with a history of systemic illness), or 18 years and below

The volunteer is allowed to come only twice a day in a week for recording. Slots can be chosen from the below combination. A color code sticker will be given accordingly, which the volunteer have to fix it in your ID cards.

- Monday/Thursday: Green sticker
- Tuesday/Friday: Red Sticker
- Wednesday/Saturday: Yellow Sticker

Upon arrival at the Institute, the volunteer will be subject to the COVID- 19 screening protocol of LVPEI.

- Those coming in cars will have a thermal check of all occupants without needing to get down from the car.
- The car occupants will also be asked to wear a face mask as soon as they get down of the car.
- If the volunteer is found to have a fever – he will be asked to return and see a physician. Only those found afebrile will be asked to get into the building.
- Security will ask the volunteer to follow social distancing and face hygiene.
- After COVID Screening, the volunteer shall show the ID card to the security person to enter inside the building. Security will permit the volunteer only to those days as per the colour codes given
- The volunteer will arrive at IVR Reception, and wait there for the confirmation by the receptionist to proceed for recording.
- Upon confirmation the volunteer shall proceed to the studio and follow the below protocols:
- Shoes shall be left on the rack, hands to be sanitised with sanitizers before and after entry, gloves shall be put on , (facemask should be on all the time) and then walked into the studio. While in the studio, the below protocols shall be followed
- Facemask is compulsory even while recording
- All the books shall not be touched, the books assigned for recording will be kept ready for the volunteers inside the studio
- The mic shall be avoided to be touched while recording
- The volunteer recording details will be entered by the staff (manual register will be removed)

- After completing recording collect your belongings, put your shoes on, disinfect your hands again and leave
- Other general suggestions
- It is recommended to carry hand sanitizers, other personal protective materials, water bottle, pen, pencil from home
- On reaching home, all dress worn to work must be discarded directly for washing and not sit on bed/sofa, etc. with the same clothes.
- Bath should be taken before touching kids/ family/fomites in the house. A watch on other materials (keys/ wallets/ purses/ lunch box etc.) should be kept that were exposed outside.
- Big bags/large purse etc. should not be brought to Institute, Bags, etc. should be left in car/scooter / at home or at the security desk as per Institute policy.
- The minimum that is needed inside LVPEI is carried. The more that is got inside the more difficult it will be to ensure no contamination.
- All loose hair, especially women must be tied up and not left loose/flowing. Cap can be worn if needed.
- Everyone, especially ladies should try to wear shoes rather than open sandals.
- Minimal rings/watches/ bangles/earrings/necklaces etc. shall be kept as these can get contaminated and are difficult to clean.
- Following measures are taken to ensure the safety of all volunteers, staff and students
- The mic, table shall be disinfect before and after recording by each volunteer
- Client's data storage devices shall be disinfected (such as pen drive / external hard drive) before copying the content.
- Sodium hypochlorite solution is sprayed on chair and stools as well as desks. The solution is prepared as per the protocol followed in other OPDs. The solution is made every day and discarded at the end of the day.

Protocol for Pre Op Nurse

Role:

Check in to be done and surgical checklist to be completed for patient safety

Nursing Care to Pre-op patients

Check out from OT and administer tablets if and as per prescription.



All staff to follow general safety guidelines all the time while at work

Additional guidelines as per the role are:

PPE:

- Face mask (Triple surgical mask)
- Face Visor
- Gloves (Plastic) while handling papers
- Shoes/covered footwear
- Cap

Protocol Before starting work:

- In addition to OT dress PPE shall be worn
- All surfaces to be cleaned including desk, chair handles, computer screen and keyboards
- It is to be made sure that the following items are available on each desk: Paper tray (for patients/staff to put papers), sanitizing solution (for surfaces) and hand sanitizer and box of plastic gloves
- Sanitize hands before attending patients

While handling patients:

- Patients to be made to sit on designated chair spaced apart. They should be informed not to talk or move needlessly
- Only one attendant will be allowed to accompany vulnerable patient; no attendant is allowed otherwise
- 6 feet distance is maintained
- Crowding is avoided in pre-op area. If it appears crowd, other suitable space is used to make the patient sit else they are escorted out to come at a later time Both patient and attendant are asked to cover face all through with mask
- Hand sanitization of patient and attendant is done before entering
- All necessary information are verbally collected from a distance.
- The surgical checklist is administered from a distance, without touching patient
- While handling papers like patient file, reports, ask staff/patient shall drop in the tray and pick up papers with gloved hands only.
- The surfaces and keyboard shall be cleaned once in two hours with sterillium
- When administering drops, a tissue paper shall be used with gloved hands to touch the lids; discard in yellow bin.
- When administering tablet/water use no touch methods shall be used

- One own writing instruments like Pen/pencil shall not be shared with others; if used should be sanitised before touching
- When administering I V line, linen gown shall be worn blood spill shall be avoided at any cost by placing plastic small sheet under patients arm.
- No nebulization shall be administered in OT
- No talking is encouraged when staff is close to the patient for example while administering tablets/injections/eye drops. All instructions to be given from a distance and then should go close only to administer with gloves on.
- When touching patient for BP/Pulse etc use shall be used. Hands should be sanitised with sanitiser after each touch.

DO's

- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time. PPE shall be maintained always
- Biomedical waste discard policy shall be strictly followed. (Annexure)
- All surfaces to be cleaned once in two hours.
- The patient should be informed that talking should be minimal for everyone's' safety and smiling gestures to be used wherever possible.

DON'Ts:

- Absolute **“NO”** for following actions:
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No interaction with patients without PPE
- Keyboards shall not be touched without sanitising hands.
- Patients shall not be made to wait in corridor and should not crowd at pre op area
- Staff personal articles (Ex: pen, mobile etc) shall not be share with patient . A separate one meant to be used by patients shall be kept ready in a tray for use.
- Crowd shall not be made in the tea room. Only two persons shall be allowed in the tea room. Social distancing, hand hygiene and respiratory etiquette shall be made in the tea room.
- Crowding shall be avoided at the tea room and other desks.
- No movement shall be done in OT and other areas and no talking shall be allowed
- No crowding shall be allowed in changing room / toilet areas / CSSD / Stores windows etc
- Hand hygiene , physical distancing and respiratory etiquette shall be maintained at all the times

Protocol for Anaesthesia technicians

Role:

Assist in General anesthesia

Assist in local and General anesthesia cases as circulating person

Maintain anesthesia Instruments

Clean and seal the reusable supplies

Work with Biomedical and audio-visual teams whenever needed for care of machines/computers etc.

Work with stores, CSSD and nurses in various areas of OT

Help in patient movement into and out of the OT surgical room including wheelchair

Help in movement of patients to toilets



All staff to follow general safety guidelines all the time while at work

(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- OT scrubs
- N95 or Equivalent mask all the time
- Cap
- Visor all the time
- Gloves (Plastic/unsterile) while handling papers/instruments/machines/patients
- Shoes/covered footwear
- Linen gown over the OT dress (unsterile)

Protocol Before entering OR:

- Shall Change to OR scrubs.
- Clean Disposable / cloth cap shall be put on along with N 95 mask, and visor
- Sleepers to be worn with shoe cover put on

Before starting work:

- Gloves shall be put on
- All surfaces to be cleaned including trolleys, chair handles, ECG Monitor wires/probes/ mouse and keyboards
- It shall be made sure that all items needed are available in OT for the day to day work.
- Ensure that all surgical supplies are available inside OT before starting surgery. Planning shall be done for none or minimal opening of OT door again and again as it causes turbulence
- Hands shall be sanitised/ Unsterile gloves shall be worn before attending patients
- Beds/trolleys must be touched only with clean gloved hands (unsterile gloves)

While arranging trolley:

- Gloves shall be worn Ensure all supplies required for the anaesthesia are available
- Minimal talking to be ensured when close to others.
- Gestures to be used as much as feasible.

While shifting patients:

- Gloves shall be put on
- Ensure patient is having mask covering face and nose.
- 6 feet distance to be maintained with colleagues and patients and attendants while shifting adult patients who can walk.
- Hand sanitization to be done for the patient they are held be hand Patients to be touched using only gloved hands All necessary instructions to be provided to attendants/patient from a distance.
- Patients shall be instructed not to speak during the procedure except when they have difficulty
- Personal articles shall not be shared with others if shared shall be sanitised before reusing Fresh Oxygen nasal tube to be used always

While assisting Anaesthetist:

- Ensure all PPE is in place before starting induction of anaesthesia.
- Ensure that other than anaesthetist, technician (yourself) and an additional assistant (if deemed necessary) no one is in OR.
- Once intubation is done other staff can be allowed to enter the OR.
- While handling papers like patient file, reports gloved hands only shall be used and should be sanitized after every use.
- Personal articles (Ex: pen) shall not be shared with others if shared shall be sanitised before reusing When giving I V line or / cleaning mouth/putting cotton in ears/removing patients 'mask and putting on oxygen mask etc. gloves should be used and shall be discarded after use.
- Blood spill to be avoided by placing plastic small sheet under patients arm.
- While working inside the OT, physical distance to be kept as much as possible from circulating nurse/anaesthetist/doctors whenever close work is not needed.
- Minimal talking to be encourages when close to others.
- Gestures to be used as much as feasible.

While handling Instruments and machines:

- All infection control protocols shall be strictly followed especially avoiding needle stick/sharp instrument injuries and it should be remembered that there is no COVID-19 prophylactic treatment.
- Nothing should be touched with bare hands. Gloved hands shall be used always including when shifting trolleys/machines etc
- Frequent hand-rub and hand wash to be used as needed
- Biomedical waste to be discarded strictly as per protocol
- GA/LA protocol shall be followed

DOs

- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time. PPE shall be maintained always
- Biomedical waste discard policy shall be strictly followed
- Attendant shall be informed that talking should be minimal for everyone's' safety and smiling gestures to be used wherever possible at patient step down area

DON'Ts:

- Absolute '**NO**' for following actions:
- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No interaction with patients without PPE
- Keyboards shall not be touched without sanitising hands.
- Patients shall not be made to wait in corridor and should not crowd at pre op area
- Staff personal articles (Ex: pen, mobile etc) shall not be share with patient . A separate one meant to be used by patients shall be kept ready in a tray for use.
- Crowd shall not be made in the tea room. Only two persons shall be allowed in the tea room. Social distancing, hand hygiene and respiratory etiquette shall be made in the tea room.
- Crowding shall be avoided at the tea room and other desks.
- No movement shall be done in OT and other areas and no talking shall be allowed
- No crowding shall be allowed in changing room / toilet areas / CSSD / Stores windows etc
- Hand hygiene , physical distancing and respiratory etiquette shall be maintained at all the times

Protocol for Scrub Nurse and Circulating Nurse

Role:

- Assist Surgeries/ set up trolley
- Maintain surgical Instruments
- Clean and seal surgical reusable supplies
- Work with Biomedical and audio-visual teams whenever needed for care of machines/computer etc.
- Work with anesthesia team sometimes when needed
- Work with stores and pre-op nurses
- Help in patient movement into and out of the OT surgical room



All staff to follow general safety guidelines all the time while at work (Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Surgical scrubs
- N95 or Equivalent mask
- Cap
- Visor
- Gloves (Plastic/unsterile) while handling papers/ when not scrubbed
- Shoes/covered footwear
- Linen gown over the OT dress (unsterile when not scrubbed)
- Disposable gown and full PPE dress with double gloves and visor when assisting surgeries that can cause blood and body fluid spill

Protocol before entering OR:

- Staff should change to OR scrubs.
- Cap is put on along with , N 95 mask, and visor
- Sleepers and shoe cover is put on

Before starting work:

- Gloves are put on
- All surfaces are cleaned including trolleys, chair handles, ECG Monitor wires/probes/ mouse and keyboards
- It is ensure that all items needed are available in OT for the day to day work.
- All surgical supplies are made ensured inside OT before starting surgery. None or minimalist opening of OT door is planned as opening door again and again causes turbulence
- Sanitize hands/ wear unsterile gloves before attending patients

- Beds/trolleys must be touched only with clean gloved hands (unsterile gloves)

While shifting patients:

- Gloves shall be put on
- Ensure patient is having mask covering face and nose.
- 6 feet distance to be maintained with colleagues and patients and attendants while shifting adult patients who can walk.
- Hand sanitization to be done for the patient they are held by hand. Patients to be touched using only gloved hands. All necessary instructions to be provided to attendants/patient from a distance.
- Patients shall be instructed not to speak during the procedure except when they have difficulty
- Personal articles shall not be shared with others if shared shall be sanitised before reusing. Fresh Oxygen nasal tube to be used always

While arranging trolley:

- It is to be ensured that there is no crowding in OR. Other than one circulating nurse, technician monitoring patients and surgeon others must be out of the OR.
- While setting up trolley, as much distance as possible is ensured from circulating nurse/OT technician
- Minimal talking to be ensured when working close to others. Gestures to be used as much as feasible.
- During GA intubation and extubation, only minimal persons' needed for anesthesia should be inside the room. Doctors, nurses and technicians will be monitored for compliance to using protective coverings and following all practices per new protocol.

While assisting surgery:

- Safe distance is maintained from surgeon and operating table
- Equipment is handled carefully so as to avoid injury with sharps.
- Spillage of body fluid or blood is avoided
- At the conclusion of the surgery used disposable instruments are discarded following biomedical waste policy.
- As soon as drape is removed the oxygen nasal tube is removed first and then the face mask is to be pulled back .
- Assisting team must handle patient with gloved hands wearing mask and visor only.

While handling Instruments and machines:

- All infection control protocols shall be strictly followed especially avoiding needle stick/sharp instrument injuries and it should be remembered that there is no COVID-19 prophylactic treatment.
- Nothing should be touched with bare hands. Gloved hands shall be used always including when shifting trolleys/machines etc
- Frequent hand-rub and hand wash to be used as needed
- Biomedical waste to be discarded strictly as per protocol
- GA/LA protocol shall be followed

DO's

- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time. PPE shall be maintained always
- Biomedical waste discard policy shall be strictly followed
- Attendant shall be informed that talking should be minimal for everyone's' safety and smiling gestures to be used wherever possible at patient step down area
- All surfaces to be cleaned once in two hours.

DON'Ts:

- Absolute **"NO"** for following actions:
- Patients or patient's articles should not be touched with bare hands.
- No interaction should be done with patients without PPE
- Key boards/mouse should not be touched without sanitizing hands
- No Assembling and crowding should not be done at any place including tea room.
- No moving around in OT area needlessly or talk needlessly

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor is removed without touching front surface and clean front surface with gloved hands
- It is safely stored with front surface facing up
- Cap is removed and discarded in yellow bin.
- Gloves are removed and discarded in Red bin.
- The N 95 mask is pulled down or removed without touching front or back surface and stored properly in a paper bag for future use.
- Hands are washed with soap and water.
- Regular cloth mask are put on while returning home
- Face and hand hygiene is maintained all the time
- Physical distancing is maintained all the time.

Protocol for Operating room practices for Ophthalmologists

Role:

- Doing Surgeries and other procedures like examination under Anaesthesia
- Counsel Patients and attendants in pre-op and post op areas

All staff to follow general safety guidelines all the time while at work (Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Surgical scrubs for OT only (same one not to be used in OPD)
- N95 or Equivalent mask ;
- Cap
- Visor when not doing surgery; during surgery goggles/prescription glasses or plain glasses are used
- Gloves (Plastic/unsterile) while handling papers/ when not scrubbed
- Shoes/ footwear cover
- Sterile linen gown during eye surgeries or EUA with procedures where blood/body fluid spill does not happen
- Disposable gown (HIV kit type or similar) when doing surgeries or procedures that can cause blood and body fluid spill (example plastic department , VR surgeries, MM graft etc.)

Protocol before entering OR:

- Shall Change to OR scrubs.
- Clean Disposable / cloth cap shall be put on along with N 95 mask, and visor
- Sleepers to be worn with shoe cover put on

Before starting work:

- Hand washing to be done on entering OT followed by sterillium sanitization
- Gloves are put on (unsterile)
- All surfaces are ensured to be cleaned including mouse and keyboards and any table that the surgeon is going to use
- It is ensured with the team that all items needed are available in OT for the day to day work.
- Team huddle is done for planning and ensuring compliance to all protocols.
- Social distance is maintained
- All surgical supplies are ensured to be available inside OT before starting surgery.
- Planning shall be done for none or minimal opening of OT door again and again as it causes turbulence
- Hands shall be sanitised/ Unsterile gloves shall be worn before attending patients
- /touching files/putting eye drops/checking on slit lamp/Indirect/EUA etc
- Beds/trolleys/pulse oximeter/BP cuff etc must be touched only with clean gloved hands (unsterile gloves)

While shifting patients/giving blocks:

- Gloves shall be put on
- Ensure patient is having mask covering face and nose.

- 6 feet distance to be maintained with colleagues and patients and attendants while shifting adult patients who can walk.
- Hand sanitization to be done for the patient they are held by hand. Patients to be touched using only gloved hands. All necessary instructions to be provided to attendants/patient from a distance.
- Patients shall be instructed not to speak during the procedure except when they have difficulty.
- Personal articles shall not be shared with others if shared shall be sanitised before reusing. Fresh Oxygen nasal tube to be used always.
- LA needles to be handled carefully so as to avoid injury with to self and others.
- Full focus should be made when handling and disposing needles. recapping to be avoided.

While arranging trolley:

- It is ensured that there is no crowding in OR. Other than one circulating nurse, technician (if needed) and surgeon all others must be out of the OR.
- While setting up trolley, distance is maintained as possible from circulating nurse/OT technician.
- Minimal talking when surgeon is close to others. Gestures to be used as much as feasible.
- During GA intubation and extubation, only minimal persons' needed for anesthesia should be inside the room.
- Doctors, nurses and technicians will be monitored for compliance to using protective coverings and following all practices per new protocol.

While conducting surgery/ Intravitreal Injections and other procedures:

- Visor to be removed and safety goggles/ prescription or Plano glasses are put on.
- Safe distance is maintained from assisting nurse/fellows/technicians as much as possible.
- Unsterile gloves are put on.
- Sterile linen gown and gloves are put on after scrub for surgeries that do not have any potential for blood and body fluid spills.
- HIV kit disposable gowns and double gloves to be used for surgeries where blood/body fluid spills are expected.
- Equipment are handled carefully so as to avoid injury with sharps to self and others. Full focus is there when handling sharps.
- Spillage of body fluid or blood is avoided. Especially one should be careful when squirting ringer/visco etc from syringes.
- At the conclusion of the surgery used disposable instruments should be discarded following biomedical waste policy.
- As soon as drape is removed the oxygen nasal tube is removed first and face mask is put back on the patient, with gloved hands.
- Assisting team must handle patient with gloved hands wearing the mask, visor and a linen gown.
- After completing surgery do hands wash to be done properly.
- Safety goggles to be removed. Goggles to be sanitized and reused. The N95 mask shall be continued to use. Own prescription/plano glasses should be sanitised and unsterile/plastic gloves to be put on.
- N 95 masks can be used for 4 usages, after a gap of at least 4 days. It should be stored for reuse.

While handling Instruments and machines:

- All infection control protocols shall be strictly followed especially avoiding needle stick/sharp instrument injuries and it should be remembered that there is no COVID-19 prophylactic treatment.
- Nothing should be touched with bare hands. Gloved hands shall be used always including when shifting trolleys/machines etc
- Frequent hand-rub and hand wash to be used as needed
- Biomedical waste to be discarded strictly as per protocol
- GA/LA protocol shall be followed

DOs:

- Ensure you are wearing appropriate PPE
- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time. PPE shall be maintained always
- Biomedical waste discard policy shall be strictly followed
- Attendant shall be informed that talking should be minimal for everyone's safety and smiling gestures to be used wherever possible at patient step down area

DON'Ts:

- Absolute “**NO**” for following actions:
- Patients or patient's articles should not be touched with bare hands.
- No interaction should be done with patients without PPE
- Key boards/mouse should not be touched without sanitizing hands
- No Assembling and crowding should not be done at any place including tea room.
- No moving around in OT area needlessly or talk needlessly

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor is removed without touching front surface and clean front surface with gloved hands
- It is safely stored with front surface facing up
- Cap is removed and discarded in yellow bin.
- Gloves are removed and discarded in Red bin.
- The N 95 mask is pulled down or removed without touching front or back surface and stored properly in a paper bag for future use.
- Hands are washed with soap and water.
- Regular cloth mask are put on while returning home
- Face and hand hygiene is maintained all the time
- Physical distancing is maintained all the time.

Protocol for Post-OP Recovery room and step-down nurses/PCA shifting patient to step-down

Role:

Nursing Care to topost op patients in recovery and step down areas

Check out is done from OT also medication is administered if any as advised.

Attend code Blue in OT area



All staff to follow general safety guidelines all the time while at work
(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- N95 or Equivalent mask all the time
- Visor
- Gloves (Plastic) while handling papers
- Shoes/covered footwear
- Linen gown over the OT dress
- Cap

Protocol before entering OR:

- Shall Change to OR scrubs.
- Clean Disposable / cloth cap shall be put on along with N 95 mask, and visor
- Sleepers to be worn with shoe cover put on

Before starting work:

- Gloves (unsterile ones) to be put on
- All surfaces to be cleaned including desk, chair handles, ECG Monitor wires/probes/ computer screen and keyboards
- It is to be made sure that the following items are available on each desk: Paper tray (for patients/staff to put papers), sanitizing solution (for surfaces) and hand sanitizer and box of plastic gloves
- Hands to be sanitised before attending patients
- Beds/railings must be cleaned every 4 hours with D-125 spray solution. It should be touched only with gloved hands

While handling patients:

- PPE to be ensured while attending patients in recovery room or step down area.
- While recovering patient with Oxygen mask, patients' face should be turned away from the staff and also the staff face/body should be kept as far as possible. Gloves shall be used and it should be changed after handling each patient
- 6 feet distance to be maintained with colleagues patients and attendants (in step down) when no intervention is being done.
- Crowding should be avoided in step down area and near the monitor desks.
- It should be ensured that both patient and attendant should cover face all through with mask, once awake
- All necessary instructions to attendants/patient to be verbally provided in step down area from a distance.
- While handling papers like patient file, reports gloved hands to be used only and should be sanitized after every use.
- The surfaces and keyboard to be cleaned once in two hours with sterilium
- When administering tablet/water No touch methods to be used. A tray to be kept ready for the patient with medicine and water glass from which they can pick up and take the medicine.
- The staff's writing instruments Ex: Pen / pencil should not be shared with others; if used sanitize before touching
- When giving I V line or / cleaning mouth/vomit etc gloves should be used and post usage should be discarded appropriately . Blood spill should be avoided by placing plastic small sheet under patients arm.
- No talking to be done when staff is close to the patient for example : administering medication /injections/eye drops. All instructions to be given from a distance first and then should be going close only to administer with gloves on.
- Hand sanitization of patient and attendant to be done in step down area. Attendant can help patient in this activity
- Patient should not move to other areas needlessly

DO's

- Self – discipline: Strict adherence to hand and face hygiene and social distancing all the time. PPE shall be maintained always
- Biomedical waste discard policy shall be strictly followed
- Attendant shall be informed that talking should be minimal for everyone's' safety and smiling gestures to be used wherever possible at patient step down area

DON'Ts:

Absolute **"NO"** for following actions:

- Hand shake gesture shall be avoided with anyone
- Patient or patient articles shall not be touched with bare hand
- No interaction with patients without PPE
- Keyboards shall not be touched without sanitising hands.
- Patients shall not be made to wait in corridor and should not crowd at pre op area
- Staff personal articles (Ex: pen, mobile etc) shall not be share with patient . A separate one meant to be used by patients shall be kept ready in a tray for use.
- Crowd shall not be made in the tea room. Only two persons shall be allowed in the tea room. Social distancing, hand hygiene and respiratory etiquette shall be made in the tea room.
- Crowding shall be avoided at the tea room and other desks.
- No movement shall be done in OT and other areas and no talking shall be allowed
- No crowding shall be allowed in changing room / toilet areas / CSSD / Stores windows etc
- Hand hygiene , physical distancing and respiratory etiquette shall be maintained at all the times

Procedure for Removing and cleaning/storing or discarding PPEs before going for breaks or finishing the day:

- Visor to be removed without touching front surface and it should be cleaned with gloved hands
- The visor shall be safely stored with front surface facing up
- The cap shall be removed and discarded in yellow Bin.
- The gloves to be removed and discarded in red bin
- The N 95 mask should be pulled down without touching front or back surface and store properly in a paper bag for future use.
- Hands to be washed with soap and water
- Regular cloth mask to be put on while returning home
- Face and hand hygiene to be maintained all the time
- Physical distancing to be maintained all the time

Protocol for Housekeeping Staff

Role:

- Cleaning Clinical and OT areas (including toilets) that are considered Infected areas.
- Special cleaning of COVID - ISOLATION room and body fluid spills



All staff to follow general safety guidelines all the time while at work

(Refer main document)

Additional guidelines as per the role are:

PPE to be worn:

- Face mask (Surgical Triple mask in clinical areas and OT; cloth masks in GPR building non-clinical areas.)
- Visor
- Gloves (heavy duty) while on duty
- Shoes/ closed feet in Clinical areas is preferable
- Linen gown when cleaning clinical areas like isolation room/ OT/Patient vomiting/helping patient with urination etc.

Protocol before starting work:

- Hand should be washed with soap and water
- PPE shall be worn
- It shall be made sure that sufficient cleaning materials are available for whole day at the area of work

DO's:

- It shall be ensured that patients in Toilet areas are maintaining social distancing all the time.
- Patients or attendants are clearly instructed to cover face with face mask all the time.
- All staff to wear Cloth masks from home all the time. Staff posted in non-clinical areas will continue cloth masks. Others will wear triple layer surgical masks.

- LVPEI face shield to be used by everyone at time of entry. Face shield to be deposited back at exit or stored at dept., as per institute policy guidelines. The face and mask should not be touched after being put on.

DON'Ts:

- Things should not be touched needlessly, minimum handling of phones to be ensured. Sterilize phones as per protocol.
- The housekeeping staff should not enter clinical areas or toilets when it is occupied by patient
- If duty is at non-clinical area, the staff should not move to clinical areas.
- Moving excessively should be avoided; Work should be done silently without any talking.
- Smiles and non-contact gestures to be used more often for communication. Cleaning Protocol:
- Grenadier (Lemoniser) Solution – 1 :60 ratio for tables/chairs to be used
- Door Knobs, Door frames, Tables, railings, handles, bed railings etc are to be sanitized three times a day.
- Hand Sanitizer 70 % alcohol based to be placed at all corridors and prominent entrances and exits.
- – Hand sanitiser to be used whenever gloves are removed and before and after touching any surface
- Duopower – Floor cleaner to be used for floor mopping thrice a day in clinical area
- Heavy duty gloves to be used whenever cleaning any area
- Personal hand Hygiene, respiratory etiquette, use of masks to be ensured as per training given.
- Frequent hand washing to be ensured between work intervals: with soap and water for 20 seconds.- Hands to be washed if touched any surface or objects. Goves to be used while on duty
- Staff to maintain Physical distancing strictly both at work, at break times, in lifts etc. and also outside for safety of self and family. Only four people will be allowed in the lift at a given time.
- Protocol for cleaning/disinfecting cleaning materials/ Storage of materials/ getting materials from stores/ managing the buckets etc to be followed.as per training by housekeeping Supervisors
- Minimum handling of phones to be ensured. Phones should be sterilised as per training. Touching things needlessly to be avoided
- The Housekeeping staff should be especially careful to follow all precautions while cleaning toilets. Any crowded place should be avoided.



LV Prasad Eye Institute



Resilience.....

Resurgence...

...

Revamping...

*... Eyecare for
everyone.....*

SECONDARY CENTRE
PROTOCOL for COVID -
19

**Manual of Procedures Handbook
of VVC Team**

**Gullapalli Pratibha Rao
International Centre for
Advancement of Rural
Eye care**

Patient workflow after lockdown

Reopening after lockdown will be in three phases (4-18 May, 18-31 May and 1st June onwards)

- Phase 1 – OPD: 40 patients (10-12/ hour); Surgeries: 5/day)
- Phase 2 – 50 patients per day (10-15/hour); Surgeries: 6 / Doctor / Day)
- Phase 3 – full-fledged OPD & Surgeries

Note: Number of patients is indicative and may differ from One SC to other based on seating capacity and other facilities.

The patient flow is divided into the following areas

- Patient at Main gate/Entrance
- Goes to reception
- Waiting hall
- Examination room (VT and Doctor)
- Advice / Counselling

Main gate/Entrance Security

- Hands to be checked for quarantine stamp on the palm
- Thermal temperature checking of everyone to be done – staff, patients, attendants, visitors – anyone who enters the premises
- The patients and their attendants are ensured that they have used the alcohol based hand rub or arrangements for hand wash with soap and water is made. (No attendant is to be allowed, unless the patient is a child or is disabled).
- Contact details of patients, attendants, and their ID card is noted down in a register

CEC/CBR staff

- The COVID-19 screening questionnaire is administered - If all answers are negative, then the CEC/CBR staff will direct patients to the Reception area
- Crowd to be managed at different level and if need arises, the CEC/CBR staff will go to Vision Centres

Reception: If possible, to have a barrier shield to reduce transmission of infection via aerosols.

Counsellor

- Only One patient should be called at a time. The patient is told to speak only when asked for, It should be ensured that the patient and / or attendant does not remove
- Entry of the data to be done in the EMR
- Aadhar card – to be handled with non-touch technique – The patient to be asked to hold it, the staff will check the address to see if patient is from s red zone or not and then the the Aadhar number to be noted down
- 70% Alcohol based hand rub (Ex: Sterilium) to be used after and before handling any patient
- 70% Alcohol based hand rub (Ex: Sterilium) to be used before touching computer, mouse or anything else if touched any article of patient Ex: Papers, Aadhar card, MRD identification card , pen etc
- The patient is directed to go the waiting hall – The patient is given the patient number and are asked to follow the physical distancing marking and sit on the designated chair.

Waiting hall

- No newspaper, magazines, brochures are to be kept at waiting halls during pandemic situation to reduce fomites and multiple surface contacts
- The chairs to be cleaned every day in the evening
- Examination room - VT

One VT per room, and no overcrowding to be allowed:

- While calling patients staff or patient should not talk to each other while coming to the examination room
- The VT should tell the patient to await his / her till he does their initial assessment
- One's own writing instrument should be used and should not be shared with anyone
- Open door policy should be followed and good air ventilation to be ensured without use of AC Two patients should not be seen at one room or have two different VTs in one room.
- Auto refractometer to be done while bringing the patients for examination. The chinrest, forehead band and the auto refractometer knob after should be cleaned with alcohol wipes the VT has seen the patient. A shield to be placed on auto refractometer for protection.
- Unnecessarily patient's head should not be touched, The patient should be told to bring his/her head forward and touch the head band
- The VT should read the patients file before he / she go out and call the patient – so that time is not spend reading the patients file when they are in the examination room
- The patient should be asked to sit in the chair, history to be taken in one go maintaining physical distancing
- Refraction and vision Protocol to be followed as mentioned in this document.
- Trial frame, Lenses to be cleaned which is used including pinhole, occluder with alcohol wipes. The equipment and lenses should not be kept in the set without cleaning
- Slit lamp examination – The patient should be made aware of the procedure and should be instructed not to talk while examination is going on –. It should be aimed to finish the examination as early as possible without missing any findings
- IOP measurement to be done – on case to case basis - ophthalmologist to decide
- Conjunctivitis patients – the doctor can be called and the patient can be examined in a separate room as per guidelines
- **Dilatation:** Anyone with 6/6 and N6 vision (including prebyopes), need not be dilated However, they would need a through clinical examination including checking of RAPD, same to be done for, follow ups where it is not needed, should not be dilated. The lower lid to be pulled down with Johnson bud and then the dilating drops should be put.
- Do not have patient for more than 10-12 minutes in your room if you are doing refraction. Do your workups faster, do not waste time during examination. See to it that you have all supplies in every room. Check this every day in the morning before you start OPD including Doctors room. Do not take patient from one room to the other room for any examination
- Clean everything with alcohol wipes / sterillium after you send the patient out. Do not tell the patient go to waiting hall/ reception, take them yourself in person and call the next patient.
- Take sterillium again before you start examination of the next patient.
- Syringing: Not to be done. ROPLAS to be checked by the doctors only

Doctor's room:

- Fundus to be seen in lying down position from head end – Indirect Ophthalmoscopy or with. +90/78 D lens. Use no touch technique. For indirect ophthalmoscopy, can use cotton swab stick to open the lids and throw it away.
- Gonioscope to be washed with soap and water after every use.
- Applanation tonometer prism to be cleaned with 70% isopropyl alcohol sterile wipes after every patient. The tonometer prism to be dipped twice daily for 5 minutes in 1:10 Sodium hypochlorite solution to disinfect the prisms
- Stop Contact Lens trial, direct ophthalmoscopic evaluation.
- BCL if needed – only if emergency (not for every patient with defect, post op pterygium, do not put) – to be placed in lying down, put anaesthetic drops and then to put the BCL from headend of the patient with forceps if possible. Ask the patient to pull the lower lid himself and the doctor to pull the upper lid with Johnson Bud
- Reduce follow up visits for all patients – do not call patients such as VKC, Allergic conjunctivitis, conjunctivitis patients for early follow ups, etc.
- In case of referrals, give them the violet referral slip and direct them – use your pen only, do not share the pen. Keep cleaning your pens between two patients if you are using more often.
- Do not prescribe NSAID to any patient
- Non-mydriatic fundus camera can be used to expedite the examination process

Diagnostics:

- Everything should be wiped clean between two patients – you may use 70% isopropyl alcohol sterile wipes for the same
- HVF – Clean trial frames, lenses, chin rest and the head band
- Keratometry – Clean the chinrest, headband after every patient – have a barrier between you and patient
- A scan – Do not go very close to the patients while doing A scans, clean probe between two patients
- No Phoropter/No Om device to be used during this period till guidelines are circulated
- Syringing: Not to be done. ROPLAS to be checked

Counselling/Checkout:

- Do not talk directly facing the patient. Can sit diagonally.
- Explain them all the details and schedule surgeries and send the patient out of the hospital - Patient should not be in the hospital after checkout or counselling is done.

Preop Investigations for surgery

- As far as possible, get physician fitness for all surgical patients.
- Do COVID Test for every patient. If not available, X ray Chest to see ground glass appearance – if present, do not do surgeries and direct them to Government hospital.
- Other investigations that can be done are CT chest, C-reactive protein and serum amyloid A
- ECG – clean the lids and wires after every ECG performed
- Routine RBS can be done at the centre with proper precautions
- BP measurement to be done in Wards
- Between two patients always take Sterillium

Inpatient wards:

- Temperature measurement with infrared digital thermometer
- ECG electrodes and wires cleaned with alcohol swabs
- History of COVID exposure-History of fever, cough, travel history, history of contact with any COVID patient – COVID -19 questionnaire
- Beds to be spaced out and if they are close to each other, have one patient every alternate bed, the empty bed should not be used by any one
- Wash the bedsheets after every use, the same bedsheets should not be used for the next day patients or any other patient
- Remove blankets from the Ward areas
- Whatever you do, keep using sterillium between two patients
- Do not put drops without taking sterillium for every patient. Put drops with 'no touch' technique.
- Measuring blood pressure – to be done
- No visiting hours
- Not to admit patients for medical treatments
- Try and do as many as day care surgeries.

Operating room Preop area:

- No two patients at one time in the Preop area
- To take sterillium before giving block
- To clean hands before touching computer, keyboard and mouse if you have touched patient

Operating Room

- All standard protocols of OR remain the same
- As far as possible, perform day care surgeries
- Before operating, COVID testing should preferably be performed. If COVID positive, refer to the Government hospital – Inform patient beforehand to inform you on phone if the test is positive
- Routine chest X-ray - to check for ground glass appearance
- A physician fitness to be obtained for every patient including ruling out airway pathologies, particularly underlying pneumonia.
- AHU with increase fresh air exchange. If possible, consider retrofitting dynamic UV and ultra-filters to HEPA, reduce turbulence in OR e.g. minimize opening and closing doors and moving machines.
- Choose the quickest possible surgical procedure
- Prefer topical anaesthesia over local anaesthesia
- No sac related procedures to be done
- Minimum number of staff in the OT
- Pulse oximeter to be put for all patients – and to clean this after every use
- Instruments used for one patient not to be used for next patients
- Nasal prongs – not to be reused – have adequate supply
- Intracameral antibiotics – you can prepare syringes and place it on a sterile trolley, have one syringe transfer to your surgical trolley before you start the case and touch the patient
- Trypan blue – Same as above
- Phaco tubings – not to be reused, autoclave those, try and do SICS more often as
- For phacoemulsification it should be assumed that phaco with excess BSS near the vibrating tip can generate aerosols. Considering there are a few reports of 2019-n-cov in tears, a clear plastic sheet over the surgical area to catch any generated aerosols is recommended. – One cassette per patient
- As practiced, scrub after each case and change all consumables after each case
- Protocol based disinfection of the OT should be done after each surgical procedure

Stores

- Stock taking of all materials (masks/ caps/visors/gowns/PPE/ sterillium/ cleaning antiseptics).
- Two cloth masks to each worker, disposable masks daily for those in yellow category and four N95 masks for those in red category. For N95, everyone in red category to receive four of them. If we use mask No 1 on day one, it can be reused on 5th day and one mask can be used maximum for 5 days each.
- One/Two visor for each employee every month.
- Four gowns for each in yellow and red category. These have to be changed daily and the first gown will be worn again on 5th day.
- Stock of at least five PPE per month per centre.
- Review monthly requirement and place order accordingly.
- While receiving any material to centres – keep the materials separate and wash hands after touching those. Same when the material is taken to OR.

Support Services:

Pharmacy:

Social distancing is to be maintained here too. – Have circles drawn on the floor to indicate social distancing. No overcrowding.

Cafeteria/Water dispensers

- The tap of water dispenser should be cleaned with alcohol wipes frequently by housekeeping staff (or may be CEC worker – but to wear gloves while cleaning this
- To use disposable glass – Not to touch these glasses with soiled hands, have the glasses separated before only so that patients do not touch many glasses while taking one

Biomedical waste disposal:

- Have all dustbins with covers as per local municipal norms.
- Waste disposal as per local municipal norms

Housekeeping:

- Not to come in close contact with patients
- To wipe clean the door knobs, handles of the rooms OPD areas, waiting hall, examination room, all surfaces – Two hourly in patient care areas
- Wheelchair to be cleaned after every use
- Floor to be mopped four times a day in the OPD rooms and waiting halls, corridors
- Bathrooms – to be cleaned along with basins, use separate cleaners for both

Guidelines for visual acuity assessment and refraction

- **Visual acuity assessment for distance:** Visual acuity for distance is assessed using standard illuminated Snellen's visual acuity chart in all subjects in an adequately illuminated room at six meters distance. Visual acuity is measured separately for both the eyes. If the patient is using spectacles VA is measured with spectacles.
- **Change:** L-Occluder should not be used, instead the patient should be instructed to close the non-testing eye with their hand (not fingers). Pinhole visual acuity is not required. At least one meter distance from the patient should be maintained while assessing visual acuity. **Near Vision assessment:** Near visual acuity is measured in all patients for each eye
- separately using standard near vision acuity card under adequate illumination. If the patient is
- using spectacles for near, near vision should be measured with spectacles.
- **Change:** VT should hold the near vision chart at a distance of 35-40 cm instead of patients. At least one-meter distance from the patient should be maintained while assessing visual acuity. VT should stand to do the procedure of assessing near vision so that he/she is at a higher level compared to that of the patient.
- **Objective and Subjective Refraction:** Objective and subjective refraction should be performed on all patients as per the VC protocol.
- **Change:** The Trial frame is cleaned with an alcohol wipe before placing it on the patient for refraction. Touching the forehead of the patient to measure working distance should be avoided. All the lenses used for neutralization should be placed on the desk and should be kept in the trial box only after cleaning each lens and occluder with alcohol wipes after subjective refraction. The trial frame also should be cleaned again.
- Retinoscopy barrier, similar to the slit lamp barrier should be used while doing retinoscopy used as shown.



- Based on the guidelines, prescribe and dispense spherical equivalent lenses wherever possible so that movement of lenses from Hyderabad to VC and other logistics can be minimized. Avoid oblique cylindrical axis and small cylindrical prescription as far as possible.
- **Lensometry:** If the patient is using spectacles, the power of the lenses is measured using a lensometer or through the hand neutralization method.

- **Change:** Use hand neutralization technique instead of lensometer to assess lens power. Clean the spectacles with hydrogen peroxide before giving it back to the patient. Clean the spectacles with hydrogen peroxide before giving it back to the patient.

Guidelines for Patients with Conjunctivitis

- Note: conjunctivitis is very rare in COVID positive patients. It is not a presenting symptom and the risk of transmission is in no way higher. However, this disease is extremely contagious, and we have been seeing several patients of late with adenoviral conjunctivitis. Our team can contract conjunctivitis. Or other patients who visit us can get affected. Hence these guidelines have been created for our and our patients' safety,
- Any examination should be carried out strictly after general triage: (screen for fever, cough, travel history, contact with travellers in family etc.)
- **History:** Suspect conjunctivitis if chief complaint is red eye, watery discharge, mild pain, mild to moderate lid edema and more than one family member affected. Vision is usually not affected.
- **Examination:** Examine with torch light, following all protocols of personal protection, wearing mask, plastic protective visor and gloves. Avoid slit lamp examination in mild cases. During slit lamp examination, don the PPE, use gloves, clean all surfaces after examination. Do not permit patient to touch any surface or door etc. Wash your hands thoroughly with
 - soap and water.

The patient should wear a mask and requested to not speak unless necessary, not to sneeze or cough during examination.

Do Not Check IOP And Defer Fundus Evaluation

- **Treatment:** Mild cases, no cornea involvement: prescribe topical lubricants, cold compresses, anti-inflammatory (Paracetamol 650 mg sos), sterile wipes, dark glasses. Ask the attender rather than the patient to buy the same from the pharmacy. (Pharmacy to be instructed regarding personal protection while dispensing medication)
- **Prophylaxis:** Explain personal hygiene, precautions and how to avoid spread to fellow eye and to family members
- **Follow up:** in mild cases, no need for follow up. Counsel the patient that the condition will worsen over the next one to two weeks before it gets better and to follow up only in case of photophobia, moderate to severe pain and decreased vision
- Doctor's number to be shared and the patient can be followed up via whats app.
- Follow up is required if the patient has subepithelial infiltrates, pseudomembranous conjunctivitis, severe forms, pediatric patients. Call them after two weeks. **NO NEED FOR ONE WEEK REVIEW.**
- Use of topical steroids: in cases with sub- epithelial infiltrates and pseudomembranous form, based on severity, **START FROM THE BEGINNING.** Can chose loteprednlol/fluometholone or prednisolone based on severity. Call these patients for follow up after 2 to 4 weeks.

Optical outlets Work Processes and sterilization protocol

- Final correction done on 20/04/2020
- Clients walk into optical outlets for many reasons such as to collect prescriptions, general enquiry, Window- shopping to check on the collection and spectacle services.

Initial contact - Welcoming customer:

- Avoid handshake and stick to greeting with folding hands "Namaskaram".
- Hand disinfection with Sterillium for those who walk into opticals. Maintain Social distancing.
- Give warm smiles and comfortable welcome, minimal talk,. You can put up poster in Telugu/English/odiya that our customers are welcome and we Give Best Service but will be talking less, using hand signs more and maintaining social distance due to COVID-19 situation.
- Also poster should mention that the Optical facility is using Best practices and sterilization methods to prevent any infection spread amongst customers. Cooperation of customers is solicited.
- Ensure every patient/child/attendant who enter have a proper face mask that they keep on properly throughout the stay in the shop.

IPD measurement:

- Pupillometer is used for measuring IPD's of the clients.
- Pupillometer rests on the nose on the clients and forehead bar touches the patients. Nose pads and forehead bar of the Pupillometer to be sterilized with alcohol swabs after every use.
- Keep two trays: one after use and another after cleaning. First one marked with a red mark on which machine is placed after touching patient. After cleaning, place it in green marked tray.

Frame/sunglass trials:

- Use separate frame trays for each customer during the process of the frame selection
- All the frames tried by the customer will be put in the RED tray and then sterilized as per the frame sterilization protocol and put back into the display for other customers to try.
- Can also place in green tray till it dries, before putting back on the shelf. Shelf cleaning once at the end of the day If order is booked the frame selected will be cleaned as per the frame sterilization protocol and sent to stores and lab for further processing.

Handling cash:

- Currency notes are considered as fomites which contain bacteria and virus.
- All the customers would be encouraged to use the following payments methods in the order:
- Online digital payments using LVPEI UPI.
- Card payment - Opticals staff to sterilize hands with Sterillium after handling the customer's credit or debit card on the POS machines. Ensure hands are totally dry before touching anything.
- Cash - Optical staff to sanitize the hands every time before and after they handle any currency. Do not lick finger while counting cash. Cash box cleaning: at end of the day.

Frame service:

- Staff to hand sanitize after handling customers own/used frames or spectacle cases during servicing of spectacles.
- Let patient open their spectacle case themselves and place spectacle/case in a red tray and not on any table/optical area surface.
- Tools used for replacing old nose pads are sanitized with alcohol based sanitizers and optical staff sterilized hands after handing over the frame to the customer before going up to take next task.

Optical Stores:

- Main functions of Optical Stores include receiving orders from outlets for processing, lenses from vendors, sending ready orders to outlets and dispatching orders by post or courier.

Orders:

- Orders from outlets are sanitized as per the protocol in the outlet before sending to stores for processing.
- To be on the safe side, the orders received in the box are sterilized again with Frame cleaning protocol and spectacle box is cleaned with alcohol-based solution.
- All the orders received are placed in a RED tray, once cleaned they will be left in the GREEN tray to dry. Once dried will be placed in designated location till the lenses are received for the orders.

Lenses from Vendor:

- Lens delivery personnel gets screened at the entrance for any signs of COVID-19, like temperature. Should wear mask and be in the designated area with social distancing
- Optical staff count and verify the orders received for correctness and sanitize the hands with alcohol-based sanitizer.
- External delivery personnel is not allowed into the optical stores or lab and will be restricted to the room in front of the lab dedicated to receive the goods from Vendors.

Dispatching ready orders:

- Once the orders are ready to be sent to outlet or to be dispatched by courier, they will be kept in designated ready orders area in the room in front of the lab.
- Person who collects the orders sterilizes hands before touching the orders and checks for the correctness of the orders and collects them.

Courier dispatch orders:

- Once the entire spectacles are ready, they will be sterilized as per the frame sterilization protocol and packed in the courier box ready for dispatch. Couriers are collected by the courier pick up person who will be restricted only to the vendor room in front of the lab.
- Courier pick up personal will be asked to sterilize hands with alcohol based sanitizer immediately after entering the room before touching the orders. They will always use mask and have temperature checked before entry. They will not touch any area.
- Indian Post-dispatch order: As a process one of the persons from the optical stores visits the post office on a daily basis and submits the orders in post office. Initially when the number of orders are less [<2], post office visit will be minimized to 2 visits per week.
- The person should follow all personal hygiene measures, maintain social distancing in the

post office and not touch unwanted objects in the public place. Once he reaches back to work washes hands with soap thoroughly.

Lens Edging Facility [Fitting Lab]:

- Staff in the lab neither will have direct contact with any external person nor will handle goods directly from the vendor, in case if he has to do so he will follow the stores protocol in receiving lens from the vendor.
- They will maintain social distancing, talk minimal and maintain all personal hygiene measures.
- All work tables will be kept clean at end of the day.
- All the orders when ready will be cleaned as per the frame cleaning protocol and handed over to optical stores to dispatch to respective location.

Frame Sanitization protocol:

- The cleaners normally used for frames in the store have an ethanol or propanol concentration level lower than those target levels and using directly denatured alcohol in high concentrations could damage a lot of frames based on different material combinations used to manufacture frames and sunglasses.
- Luxottica a leading frame manufactures has suggested 0.5% Hydrogen Peroxide solution in common water to spray on the clean cloth before wiping it on the frames. 12volumes (3,6% peroxide concentration) mix 6 part of water with 1 part of hydrogen peroxide or 10 volumes (3,0 % peroxide concentration), mix 5 part of water for each part of hydrogen peroxide and pour in spray bottles.

Staff Protocols:

- Local SC level planning HR need to be done
- Staff not to report if they have cough/cold/fever or close family member in same house has this problem or is in isolation/quarantine/red zone etc
- All staff to have temp check at arrival
- All staff to wear Cloth masks from home all the time along with LVPEI face shield at time of entry. Face shield to be deposited back at exit, as per institute policy guidelines.
- Staff to maintain social distancing strictly both at work and outside for safety of self and family.
- Other Best Hygiene Practices: Minimum talking. Minimum handling of phones. Sterilise phones as per protocol. Avoid touching things needlessly. Clean keyboards/mouse etc if used by different people. Hand hygiene while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and not sit on bed/sofa etc with same clothes. Have a bath before touching kids/ family/fomites in the house. Keep a watch on other materials (keys/ wallets/ purses/ lunch box etc) that were exposed outside.
- Do not get big bags/large purse etc to Institute, Bags etc should be left in car/scooter
- / at home or at security desk as per Institute policy. Put in your pocket or small purse the minimum that you need inside LVPEI. The more you get inside, the more difficult it will be to ensure no contamination.
- All loose hair, especially women must be tied up and not left loose/flowing. Cap can be worn if needed.
- Everyone, esp ladies should try to wear shoes rather than open sandals. Keep none or

minimal rings/watches/ bangles/earrings/necklaces etc as these can get contaminated and difficult to clean.

Facility Protocols:

- Cleaning of doors, tabletops, furniture, cupboard handles, floor, windows etc three times a day: morning, lunch time and at time of closure.
- Also the chairs etc to be placed appropriately for social distancing.
- Number of patients/attendants will be allowed at a time to the outlet, will depend on space and staff. In general, not more than 2 clients, attendants only if necessary. Let patients wait in waiting halls leaving their phone number so that staff can call one by one instead of let them wait in corridors.
- Keep doors open all the time. Especially when a child comes in, we need extra help that childs' hands are sterilized and child is not running around/touching things
- Protocol for spray cleaning of the optical room after closing all materials in case a covid-19 positive patient/staff had visited inside and later we get info about this: To be followed Institute's protocol like any other place in the Institute.
- SC protocols apply

General information

- **COVID-19 Symptoms:** The symptoms of COVID-19 appear within two to 14 days after exposure and include fever, cough, a runny nose and difficulty in breathing
- **COVID-19 Spread:** It primarily spreads through the respiratory droplets of infected people. If a person touches a surface or object that has been infected by the virus and then touches his own mouth, nose, or eyes, he/she may get infected. Currently, there is no treatment for COVID-19.

COVID-19 Prevention etiquette:

- Clean your hands often. Use soap and water, or an alcohol-based hand rub.
- Maintain a safe distance from anyone who is coughing or sneezing.
- Don't touch your eyes, nose or mouth.
- Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell. Inform the reporting authority.
- If you have a fever, a cough, and difficulty breathing, seek medical attention.
- Female VT / employees – tie hair and wear shoes
- Wear minimum accessories and jewelry – watch, rings etc.
- Avoid big bags, helmet into VC premises
- **Social distancing:** The WHO recommends that at least one metre (3 feet) distance between people at all times. This is because when someone coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain virus. This should be followed at times.
- **Arogya Sethu App:** All VTs should download the Arogya Sethu application developed by government of India in the smart phones and keep it active. This is mandatory.

Precautions to be taken when travelling to VC:

- Always carry pocket sanitizer / sterilium, wear face mask and glasses (power/plano)
- Avoid travelling in crowded vehicles
- Avoid shaking hands with anyone and use non-contact method of greeting
- Maintain safe / social distance with co passengers during travel in public transport
- Use of personal vehicle for safe travelling is highly recommended



LV Prasad Eye Institute



VISION CENTRE PROTOCOL **– POST COVID-19**

Manual of Procedures

Resilience.....

Resurgence.....

Revamping.....

*Eyecare for
everyone.....*

**Gullapalli Pratibha
Rao International
Centre for
Advancement of
Rural Eye care**

Procurement of supplies

Vision Technician should procure the consumable in adequate quantities from the secondary centre (“COVID-19 VC Supplies pack”). In addition to the regular consumables such as eye drops, the following supplies are recommended as a part of this pack. The stocks and refilled / indent requested keeping at least a week buffer is available.

N o.	Item	Quantity
1	N95 Face masks	4
2	Sterillium bottles (500 ml)	4
3	Lysol - Surface disinfectant solution (1000 ml)	1
4	Hydrogen Peroxide bottle (1000 ml)	1
5	70% Isopropyl Alcohol wipes / swabs (100/box)	4
6	OS Visors (LVPEI-made)	2
7	Plastic disposable gloves & Ziplock covers	1 +1 box
8	Disposable pens	5
9	Sketch Markers / Stickers / White tape (to mark seating on the benches/circles 3-feet apart in the dispensing area and also on the steps leading into the VC) & Ribbon	2
10	Liquid soap bottle + Refill (1000 ml)	1
11	Slit-lamp Barrier sheets (to be made at secondary centre) – (Video attached)	4
12	Transparent OHP Sheets for retinoscope barriers sheets (to be made at VC)	10
13	Two trays each (Red and Green) for optical dispensing; Two Bins for gowns and two N95 masks along with plastic covers	6
14	Spray bottles	2
15	Cloth Gowns / Surgical caps	2 +2
16	Buckets / Mops / Sponge / Lint-free cloth	As required

* Include IEC material / posters for display as applicable

If possible, VCC with the help of the SC team can prepare the “COVID-19 VC Supplies pack” with sufficient quantities of supplies and keep them ready for collection/distribution. The “COVID-19 VC Supplies pack” will be either collected from the SC by the VT or carried by the Optical Delivery person / VCC and delivered at the VC on the first day after the lockdown.

Preparation of the vision centre

- Before starting the services, on the first day after the lockdown, the VT should undertake the following activities in preparation to start patient care.
 - Remove the door curtains, if there any and store them
 - Cleaning all the surfaces with disinfectant and these include
 - The furniture including the chairs/benches, optical desk, the partition doors
 - The optical mirror used for frame selection
 - Desk in the examination room
 - Clean the clinical equipment
 - Clinical equipment such as trial frame and lens case, retinoscope, ophthalmoscope, slit lamp (around the oculars, chin rest, headrest, handles where the patient is likely to hold when doing the slit-lamp examination)
 - Clean examiner and patient stool
 - Clean the Tab and the case with the alcohol wipes (video available for demonstration)
 - Place the transparent plastic barrier sheet for slit lamp with the help of bio- medical person (video available for reference)
 - Place the transparent sheet barrier for retinoscope (as shown)
 - Preparing the waiting area (images attached for reference)
 - **Benches:** Please take a white tape and mark two feet lines with white tape
 - **Individual chairs:** Please mark 3 feet distance and place the chairs on the marks only
 - **Three seaters:** Mark on the back surface of first and the last chair
 - Preparing the dispensing area
 - Clearly mark circles of about one feet diameter at the other end of the display unit desk with about 100 cm between the circles (image is shown)

Dress code and Personal Protective Equipment (PPE)

for VT Vision Technicians are in direct contact with the patients hence come under Red Category.

* PPE can be removed and re-used after lunch / after a break. Please make sure that the exposed portion of the mask is not touched.

*** Temperature guns to be made available in VCs where there more 15 patients per day. Also need assistance from field assistants for these VCs; Temperature should assessed on all patinents.*

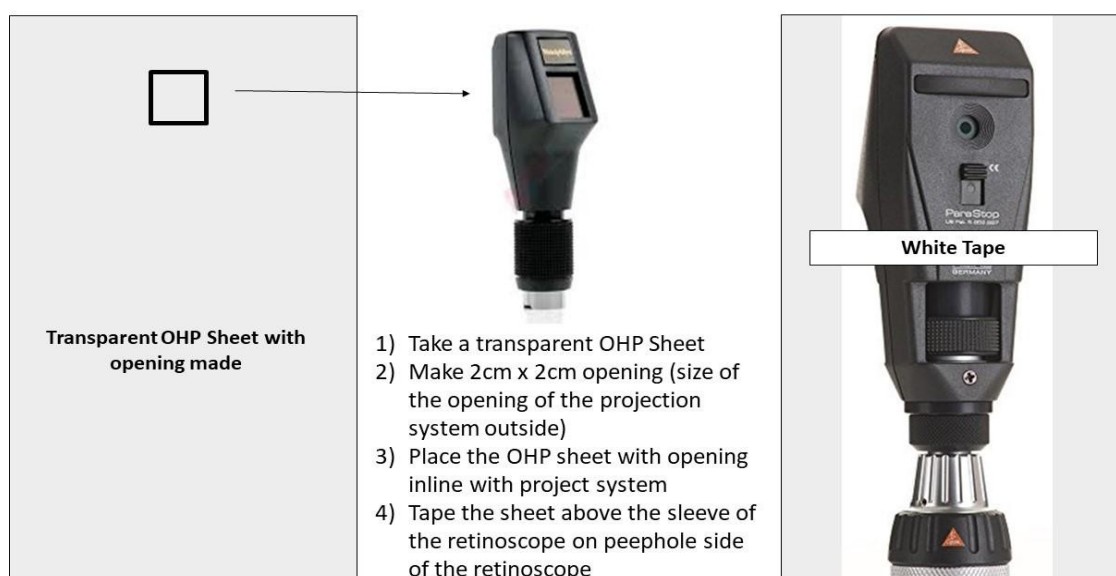
Clinical Examination protocol Pre-requisites:

- Mask and protective glasses at all times
- OS visor when dealing with patients at the entrance, while dispensing or communicating with the patient in the clinics
- Insist patients wear a mask or cover their nose and mouth with cloth/scarf
- Try to complete examination and counselling as quickly as possible
- The patient is greeted (non – contact method) and instructed to be seated on the patient's stool to start the eye examination.
- **Demography and History taking:** The standard protocol applies. Personal and demographic information is obtained. The patients are enquired about the presenting ocular complaints along with any relevant history of eye problems. Details of general health and systemic diseases along with the significant family history of eye problems are also recorded.
- **Change:** Questions are also on the recent history of fever, cold, cough and breathing problems in the last two weeks to the patients and also family members. Aadhar card number and mobile number (of self or next of kin) are mandatory.

Offer sterillium to the patient and demonstrate the hand rub technique to clean their hands after history taking

- **Visual acuity assessment for distance:** Visual acuity for distance is assessed using standard illuminated Snellen's visual acuity chart in all subjects in an adequately illuminated room at six meters distance. Visual acuity is measured separately for both the eyes. If the patient is using spectacles VA is measured with spectacles.
- **Change:** L-Occluder should not be used, instead the patient should be instructed to close the non-testing eye with their hand (not fingers). Pinhole visual acuity is not required. At least one-meter distance from the patient should be maintained while assessing visual acuity.
- **Near Vision assessment:** Near visual acuity is measured in all patients for each eye separately using standard near vision acuity card under adequate illumination. If the patient is using spectacles for near, near vision should be measured with spectacles.
- **Change:** VT should hold the near vision chart at a distance of 35-40 cm instead of patients. At least one-meter distance from the patient should be maintained while assessing visual

- acuity. VT should stand to do the procedure of assessing near vision so that he/she is at a higher level compared to that of the patient.
- **Objective and Subjective Refraction:** Objective and subjective refraction should be performed on all patients as per the VC protocol.
- **Change:** The Trial frame is cleaned with an alcohol wipe before placing it on the patient for refraction. Touching the forehead of the patient to measure working distance should be avoided. All the lenses used for neutralization should be placed on the desk and should be kept in the trial box only after cleaning each lens and occluder with alcohol wipes after subjective refraction. The trial frame also should be cleaned again.
- Retinoscopy barrier, similar to the slit lamp barrier should be used while doing retinoscopy used as shown.



- Based on the guidelines, prescribe and dispense spherical equivalent lenses wherever possible so that movement of lenses from Hyderabad to VC and other logistics can be minimized. Avoid oblique cylindrical axis and small cylindrical prescription as far as possible.
- **Slit-lamp examination:** Slit-lamp examination should be performed on all patients. The lids and lashes, conjunctiva, cornea, anterior chamber, iris, pupil, and lens of both eyes should be examined in detail. Any deviation from normal should be recorded and referred for further evaluation. The depth of the anterior chamber is assessed using the Van Herrick technique.

- **Change:** Slit lamp has a transparent barrier to prevent exposure. Avoid touching the eye of the patients during the examination. Headrest, chin rest and the handles should be cleaned alcohol wipes after every patient.
- **Applanation tonometry:** The intraocular pressure is recorded as a routine the VC. The probe of the tonometer should be cleaned with alcohol swabs after every use.
- **Change:** The following patients can be exempted from the IOP measurement. Among those whom IOP is to be measured, ask the patient to look up, use a cotton bud to pull the lower lid to and instill paracaine eye drops. Do not touch the eyes with your hands. Ensure that maximum possible distance is maintained while instilling the drops and fluorescein stain. Throw away the cotton bud after a single-use.
 - Patients less than 30 years of age
 - History of redness in the last 2-3 weeks
 - Patients with advanced cataract and other cases that are likely to be referred to SC
 - Distance vision 6/6 and N6 for near
- **Direct ophthalmoscopy:** Using a direct ophthalmoscope, the disc, macula, blood vessels, and central retina should be examined for abnormalities. The cup/Disc ratio should be examined and recorded on the case sheet.
- **Change:** Direct ophthalmoscopy can be avoided on all patients until further notice
- **Lensometry (if the patient is using spectacles):** If the patient is using spectacles, the power of the lenses is measured using a lensometer or through the hand neutralization method.
- **Change:** Use hand neutralization technique instead of lensometer to assess lens power. Clean the spectacles with hydrogen peroxide before giving it back to the patient.
- Teleophthalmology for the Anterior segment will be done as per the existing guidelines. Referral guidelines will remain the same.

Other devices and applications

Folding phoropter: Folding phoropter need not be done until further notice

OM device: Can be avoided until further notice

Fundus Camera: A breath barrier will be installed with the help of Forus team. Fundus photography will be done only in following cases.

- Patients with history of diabetes
- IOP >20 mm of mercury
- Shallow anterior chamber
- Vision not improving with refraction beyond 6/12 and clear media
- If a patient has RAPD

Important:

- Only a batch of 3-4 patients are ALLOWED inside the centre at all times, they are taken into the VC in a batch and will leave only when all of them are examined.
- Until that time, the entrance of the VC is closed using a rope or a ribbon
- No attendants are allowed into the VC.
- All patients should have their hands cleaned with sterillium as soon as they enter into the VC, before testing visual acuity and before frame selection
- Pre-screening of every patient using COVID-19 questionnaire is mandatory before entering into the VC
- Patients will be seated only in the demarcated areas while waiting for their turn
- VT should always use face mask, OS visor while communicating with the patient and plastic disposable gloves when handling cash
- Only one patient at a time in the examination room should be practiced
- Dispensing should be done only after the batch of 3-4 patients are completely examined, one after the other.
- The vision centre should be kept clean and tidy
- All the instruments / equipment should be kept covered when not in use

Guidelines for Spherical Equivalent prescriptions

Following are the guidelines for dispensing spherical equivalent prescriptions

- Please do not prescribe cylindrical powers unless it is at least 0.75 Dc or more and causing at least two-line reduction on the standard Snellen chart
- Prescribe a spherical equivalent if the cylindrical component of the prescription is less than or equal to half of the sphere, provided visual acuity of at least 6/12 is achieved
- For example, if the prescription is -2.0 / -0.50 X 90, prescribe -2.25 Ds only.
- Prescribe a spherical equivalent if the cylindrical component of the prescription is less than 1.0 Dc, provided visual acuity of at least 6/12 is achieved
- For example, if the prescription is -1.0 / -0.50 X 90, prescribe -1.25 Ds only

Guidelines for dispensing readymade spectacles

Following are the guidelines for dispensing readymade spectacles

- Unaided vision 6/12 in both eyes and need near addition only
- Distance power less than +/- 0.75 Sph or +/-1.00 cylinder and need near correction
- Prescribe a spherical equivalent and add it to near addition and dispense readymade glasses for near if unaided distance visual acuity is 6/12 or better

Spectacle Dispensing protocol

- Wear plastic gloves and mask while showing frames to patients and also while cash collection
- Keep a safe distance from patients all the time
- Avoid patients touching frames or lenses if not purchasing
- Avoid keeping hands-on display counters
- Clean the frames/lenses once shown to patients as per the guidelines (Two tray system).

VCC monitoring protocol

Roles and responsibilities General:

- Keep up to date information about situation in your VC areas
- Maintain the contact details of health department and call centre
- Take all the necessary precautions and maintain social distancing

- Avoid social gatherings, public meetings or participating in screening programs
- Avoid touching nose, mouth and eyes with your hands
- Make sure to clean or wash masks and gloves appropriately
- Use cloth or arms when you sneeze or cough
- Report immediately if you VTs of your respective VCs including family members are having a fever, a cough and difficulty in breathing.

Travelling to VC:

- Always carry sanitizer / sterilium, wear mask and cover face with scarf
- Use personal vehicle for safe travelling and avoid travelling in public transport
- Avoid shaking hands with anyone and use non-contact method of greeting
- Avoid travelling in Covid hotspots and red zone areas
- Check with VTs about availability of stocks before leaving for VC and carry insufficient stocks if any

Frequency of Visits:

- Visit at least twice a week to each VC and once a week for long distance VCs (>50 Kms).
- Talk to VTs and monitor virtually as frequently as possible.

General information

- **COVID-19 Symptoms:** The symptoms of COVID-19 appear within two to 14 days after exposure and include fever, cough, a runny nose and difficulty in breathing
- **COVID-19 Spread:** It primarily spreads through the respiratory droplets of infected people. If a person touches a surface or object that has been infected by the virus and then touches his own mouth, nose, or eyes, he/she may get infected. Currently, there is no treatment for COVID-19.

COVID-19 Prevention etiquette:

- Clean your hands often. Use soap and water, or an alcohol-based hand rub.
- Maintain a safe distance from anyone who is coughing or sneezing.
- Don't touch your eyes, nose or mouth.
- Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell. Inform the reporting authority.

- If you have a fever, a cough, and difficulty breathing, seek medical attention.
- Female VT / employees – tie hair and wear shoes
- Wear minimum accessories and jewelry – watch, rings etc.
- Avoid big bags, helmet into VC premises

Social distancing: The WHO recommends that at least one metre (3 feet) distance between people at all times. This is because when someone coughs or sneezes, they spray small liquid droplets from their nose or mouth which may contain virus. This should be followed at times.

Arogya Sethu App: All VTs should download the Arogya Sethu application developed by government of India in the smart phones and keep it active. This is mandatory.

Precautions to be taken when travelling to VC:

- Always carry pocket sanitizer / sterilium, wear face mask and glasses (power/plano)
- Avoid travelling in crowded vehicles
- Avoid shaking hands with anyone and use non-contact method of greeting
- Maintain safe / social distance with co passengers during travel in public transport
- Use of personal vehicle for safe travelling is highly recommended

C) GENERAL POLICIES and PROTOCOLS

Policies and Protocols 1: Protocol for starting operations when lockdown is over

Hospital Operations during staggered lock down (as on March till May 2020):

50 +/- 10 patients are seen and have operations only on ground floor using only one waiting area.

- Clinics are run in 8 exam rooms.
- Physician is available on the same floor.

Each patient and attendant is subjected to thermal screening at the main gate of the institute. It is performed by main gate security.

On arrival at the building the patients enter the building through portico (joining GPR building with VSP building).

The patients wait on yellow marked squares with 6 feet gap between the squares to maintain social distancing.

- The patients are given hand sanitiser before they pass through the security barricade.

Triage area comprises of two stations and every patients is assessed on the risk of being COVID positive.

Check in happens at designated check in counter also there is a dedicated check in counter for foreign patients.

Patients shall wait in waiting area on ground floor.

Clinical examinations are carried out at emergency OPD and fellow clinic areas



Plan of action to increase and regulate patient flow:

Immediately after the lock down is relaxed:

The goal is to increase OPD numbers to 250 - 300 patients which shall be spread in 6 clinics and or/specialities.

I. Infrastructure description:

SPECIALTY CLINIC

– The speciality clinic shall have one clinic for each speciality as follows :

- 1) Retina Clinic – Retina clinic to be manned by 2 retina faculty members at level 2
- 2) Glaucoma Clinic – To be manned by 2 glaucoma faculty members at level 2
- 3) Cataract Refractive Surgery Clinic – To be manned by 1 faculty member
- 4) Cornea Clinic – To be manned by 2 faculty members at ground floor
- 5) Paediatric Clinic – To be manned by 1 faculty member at ground floor

CHECK-IN/CHECK-OUT COUNTER –

Each floor shall have

- 2 check in/check out desks

COUNSELING ROOM

- Each floor will have

- 2-3 rooms for counselling.

DIAGNOSTIC FACILITY - Existing diagnostic facility on each floor will be used for diagnostic tests. Details on Diagnostics facility use is mentioned in the chapter related to diagnostics.

WAITING AREA - Each floor waiting area can provide

GENERAL - Seating arrangements would be made available for 60 people (30 patients if one attendant only is allowed) in the general waiting lounges and

SUPPORTER - 36 (18 patients) in supporter lounges.

In addition, the waiting area adjacent to fellow OPD provides waiting for 30 people and the second waiting area on level two provides waiting facility to 60 People.

SIGHT SAVERS - 4 families The waiting lounges across provides waiting for 400 people or 200 patients

The arrangement to ensure 6 feet distance is maintained between two people.



all floors

- **TRIAGE AREA**

The corridor between GPR building and VSP building have 6 triage counters within the glass partitions.

At any given point 12 patients can wait in the corridor (Out of 12 patients, 6 will be triaged while 6 will be waiting maintaining a physical distance of 6 feet.

At Sight saver area - near the glass door the fellow doctor on duty will complete triage activity.

- **ELEVATOR**

The elevator near rear security will be fixed to stop at level 2, 3 and 4

The elevators of the VSP building will carry patients to all levels. (Most patients going to level 1 can use staircase and those going to second floor will be allowed to enter in the lift)

The VSP elevators are to be used only in case a wheelchair patient need to move across the floors.



shall



⇒

⇒ **Not more than 4 people will be allowed to board the elevators at any time .**

- **INSURANCE COUNTER**

- Insurance counters will move from level 0 to level 2 at surgery admission counters.

- **SURGERY ADMISSION OFFICE:**

- Surgery admission office will be at the level 4 (existing surgical admission area)

Clinical and non-clinical areas of the whole premises will be clearly demarcated by appropriate means.

Non-clinical personnel who are at green zones will not enter Clinical areas.

II. Management of flow of patients at main gate:

Thermal checking by security

Patients walking through the main gate:

- Patients and attendants entering on foot will be asked to make a queue on marked circles only.
- They will be asked to wear mask and undergo temperature check using non-contact temperature guns.



Patients Entering Main Gate On/In Vehicle

- The patients coming in vehicle will have thermal check of all occupants without needing them to get down from car.
- The vehicle occupants will also be asked to wear face mask as soon as they get down of car.
- If patient or attendant is found to have fever - they will be politely asked to return back and see a physician.
- Only those found afebrile will be asked to get into the building.
- Security will ask all people entering the building to follow social distancing and face hygiene.
- Outside security will also make sure the patients or attendants are not roaming around or creating crowd at any place.

b. Before entering in triage area:

- Each patient with one attendant will be asked to make a queue on pre-marked squares maintaining social distancing.
- Each patient and attendant will be asked to wear mask. (mandatory)
- At the entry in triage area they will be provided with hand sanitiser.



- They will be guided on pre-marked circles and asked to wait until a triage officer is available to attend to them.



c. At triage area:

- The patient will stand on marked circles and will be assessed as to risk of being COVID positive.
- All enquiry/talking will happen across the glass partitions maintain safe distance. No patient/attendant will be allowed to come closer or inside the glass cubicles.
- Clinical triage officer will ask the history of
 - Residence of patient whether they are coming from areas identified as red zone;
 - History of fever, cough, running nose, headache vomiting or diarrhoea in past 14 days;
 - History of fever, cold, sore throat and cough among people living with the patient in past 14 days;
 - Contact with a known patient of COVID;
 - Visit to mass social gathering in past 14 days;
 - Prior history of visit to any other hospital;
 - Any advice on home quarantine in past 28 days.
- Those cleared will be handed over a slip (Green for ground floor clinics, Yellow for level 1 clinics, and Purple for level 2 clinics). This will help security to guide patients to reach respective reception areas.

All COVID suspected patients will be given a red coupon and hand covers and will be guided in to the isolation facility (current walk- in waiting area within triage area). Physician with full PPE will interview the patient and take further action (Annexure 2 protocol for dealing with COVID suspected patient)

- Minimal conversation when checking in the patient.
- Clean hands frequently with Sterilium and intermittently wash hands with soap and water.
- Ensure open doors and good air movement in whole work area.
- Keep the fans on and doors open
- Maintain social distancing at all times
- Clean your table, telephone, chair, attendant chairs, computer keyboard mouse, once in two hours

d. Reception area:

- The patients will be guided to reception area and wait in pre-marked waiting squares
- Maintain a distance of 6 feet and face mask.
- All interactions will be verbal for gathering information.
- In case they need to handle any article - plastic gloves must be used and discarded after handling.



- The staff has to remember that their role while checking in and checking out patients.
- Maintaining social distancing
- Make sure people do not crowd reception area

e. Clinic management: (Refer optometry and ophthalmology SOPs)

- The clinical examination will be carried out in exam rooms with one patient and attendant only.
- At no point of time patients or attendants should be waiting outside exam room or in corridor.
- Only minimum essential examination to be carried out.
- Try to finish all examination in single exam room visit. Make effort that patients are not needed to repeatedly brought into the room.
- Make sure patients are examined by a single or at the most two clinicians.
- Follow all hygienic protocols.
- Refer to SOP to be followed by optometrists and clinical faculty members.

f. Investigations:

- Refer to operating protocol for each instrument as detailed in HOS manual

g. Counselling: (For details refer counselling SOP)

- Only one patient and attendant to be allowed in a counselling room
- Most of the counselling will be done by the doctor. The counsellor needs to only explain the cost and package and fix date for surgery.
- Also the counsellor will guide them to physician.
- The counsellor shall also ensure :



- To avoid exposing many people to patients.
- Avoid touching patient's papers etc.
- Wear gloves if they need to handle articles belonging to patients.
- The desk and patient chairs to be cleaned after every patient interaction with sodium hypochloride solution.

h. Physician(Refer to relevant chapter)

i. Sight savers patients:

- The Sightsavers patients will enter and exit through the GPR building using ramp.
- Triage team will follow the triage protocol.
- Those cleared of triage will be guided to check in counter or asked to wait on sofas placed in atrium area.
- Following check in they will be guided into the waiting area.
- Waiting area to maintain physical distancing.

- Tables will be assigned to each patient and attendant.
- The patient and attendant shall be using the same seat throughout the course of stay in hospital.
- The furniture will be sanitised once the patient is checked out.

j. Check outs:

- All check out patients will be asked to leave premises through VSP building entrance.
- Includes surgical patients after surgery and all discharged in-patients.
- Those needing to buy medicine will be guided to pharmacy once out of VSP building.
- A helpdesk will be available to facilitate the same.
- Purchase for opticals will be done at the same floor where they are managed and finally checked out.
- Collection of opticals will be functional in afternoon only. Those who need to collect glasses will be asked to come during that hour only.

k. Surgical patients:

- Entry of the patients will be through through Triage area.
- Only one attendant is allowed.
- Patients are checked in at level four admission office.
- The patient shall change clothes at changing room provided: the used clothes to be placed in close bins for laundry
- Both patient and attendant to wear mask during all times and also sanitize hands
- Safe distancing is ensured
- Appointments are spaced out
- After check out the patients are asked to leave from VS building entrance
- Social Distancing is ensured
- Masks NOT to be removed at any of the following areas: The preoperative/block area/dirty corridor/sterilization.
- Housekeeping will clean the OR doors, wooden door handles and all aluminum doors every 3 hours (including bathroom, changing room and the door latches)



Dress code for local anaesthesia patients:

- Patients and attendants to wear face mask all the time
- Patients will be asked to bring their own clean gown with full front open.
- They change in changing area and gather their clothes with them
- After surgery they change and take away their used clothes.

l. Category of patients to be provided services:

From initial period till normalcy is attained:

- New patients who require emergency or urgent consult
- Teleophthalmology patients who are advised to visit hospital
- Follow up patients who need urgent attention and where delay can cause harm

m. Appointment template:

- The patients will be spread out throughout the day.
- Except emergency they will not be allowed in waiting areas within half hour of their scheduled appointments
- Morning slots to be preferably used for emergency with low numbers of booked appointments. Similarly, in afternoon 1 hour can be dedicated to clear emergency patients
- Goal will be to clear patients within an hour or so of them arriving on campus
- 25 slots with scope for 5 additional slots for each faculty members will be provided.

- If a patient misses appointment time by 45 minutes or more the appointment will be cancelled and will be given to someone waiting.
- If a slot cannot be filled within 1 hour of scheduled time it will get automatically cancelled. This will not be available for any booking.

n. Walk-in counter and shed area will be used for:

- Patients who come before time
- Extra attendant

Seating arrangements will be made such that social distancing is maintained. Everyone waiting in the area will be asked to cover faces and maintain strict hand and face hygiene.

o. In-patient

- Admission will be restricted to 1 patient per room to ensure isolation .
- Correct address and phone number for the patients are verified.
- Social distancing is ensured in case patient is admitted in general ward.
- All aseptic precautions are followed as per SOP.
- Temperature recording for both attendant and patient will be done every 6 hourly
- In case a patient develops symptoms suggestive of COVID the patient will be shifted to isolation room on 3rd floor and inform COVID team for further action. The staff who was handling the patient has to be in isolation instructions from COVID team to be awaited.
- Track of health of patients is kept 14 days after being discharged from the hospital.
- While sending patients in clinic for examination follow the instructions as mentioned in SOP.
- Social distancing to be maintained at ward. The cafeteria / table and chair to be cleaned after every use.
- Nursing station (tables, chairs, computer, mouse, keyboard, CPU, printer, fridge, needle destroyer, etc.) to be cleaned completely at the end of the day.
- Temperature record of patient and attendant to be taken.
- No visitor policy to be strictly followed.
- It shall be ensured that patient is not to loitering in common areas
- Mandatory face mask to be worn by both patients and attendant.
- Face and hand hygiene to be maintained.



Policies and Protocols 2: Protocol for Employee and Staff

I. Categorization:

The employees are classified under three categories as follows :

1. **Red:** The employees those who are directly handling patients (Example: Physicians, optometrists and AOP, Lab technicians, Nurses, house- keeping- they will be in direct contact with contaminated areas including toilets and clinical corridors and isolated rooms etc that they need to clean.
2. **Yellow:** The employees those who work in patient care area but are not involved in activities involving direct contact with them (Example : Security, reception staff, counsellors all except tele-counsellors,)
3. **Green:** The employees those who unlikely to come in contact with patients (Example: Accounts, tele-counsellors, maintenance team, biomedical staff, secretary)

II. Staff entry:

There will be two different entries and exit for employees – green through one and rest all through a different entry.

- All employees will be screened for temperature daily at both entry sites.



III. PPE: (For detailed PPE guidelines refer to respective SOP)



The PPE for each category will be as follows:

- **Green category employees** will be asked to
 - use mask (home-made) and visor while on work;
 - maintain social distancing and restricted movements only in safe areas.
- ⇒ Most operations can be in GPR building or peripheral buildings.

- **Yellow category employees will be:**

- provided with triple surgical masks, Visors, plastic or rubber gloves (in case they need to handle papers/wheelchairs/guide patient or help patient or open door say of isolation facility or toilet);

- **Red category employees will be**

- asked to use N95 masks, caps, visors, unsterile rubber gloves and apron/linen gown (to be washed daily) and scrubs.

⇒ Full PPE to be used whenever handling suspected COVID patients or expected blood body fluid spill

IV. Staff Postings in first two weeks:

- The team wise posting will be continued as is happening currently.
- In the first week existing posting roster will be followed. However, each member of the team will be asked to be present in person on campus. (Team A1, A2, B1, B2, C1, C2)
- Following which each team will come for work twice a week. (Group A on Monday and Thursday, B on Tuesday and Friday; C on Wednesday and Saturday)
- Sunday roster will be by turn for each team.

V. Operations Zone wise:



A. Operational guidelines for green zone workforce –

- Entry: all staff in green category will enter through GPR building entrance and will at no time enter VSP building.
- Temperature of each staff shall be checked and will allowed to enter only if it is within normal range.
- Attendance for the employees will be done at level level 2 and 5

Each one in green team will be asked to remain in offices and bring their food.

- Utilities will be identified and to be used exclusively by this category of employees only.
- The GPR building elevator will be used in case it is required.
- Each employee will be asked to wash hands before entering work area.

- Each staff to make sure the day starts with cleaning surfaces and surroundings and ends with again leaving clean surfaces for the next day teams. The cleaning of surfaces shall be followed by hand sanitizing
- Terrace of GPR building at 5th level will be available for lunch.
- Same gate will be used for entry and exit.

B. Operational guidelines for yellow zone workforce-

- Employees in yellow category will enter through rear gate of VSP building (Coffee day gate)
- At entry each employee will be subjected to recording temperature and checking team sticker on ID card.
- After swiping attendance the hands shall be sanitized before and after
- Before entering work area: washing /sanitising hands and wearing of PPE shall be completed.
- Immediately after entering work areas: cleaning of surfaces (consider covering surfaces with plastics that can be wiped repeatedly) and sanitisation of hands are done
- The staff shall move in designated areas only. The group will not be allowed to enter GPR building except on ground zero.
- The social distancing shall be maintained with hand and face hygiene.
- At the end of the day: sanitization of hands are done, PPE are removed, PPEs are cleaned before storing appropriately, hands are to be washed thoroughly
- Entry and exit are done through the same gate.

C. Operational guidelines for red zone workforce -

- Same as above.
- Strict adherence to PPE and personal hygiene to be maintained.

When Interacting with vendors or outside company people who come to institute for business

The vendor will be checked if he has no cough/cold/fever/sickness/has not been kept in isolation/quarantine and not had a family member with same complaints

Ensure non-contact temperature has been checked at the gate

Ensure vendor is wearing face mask all the time

Ensure hand sanitization of vendor and social distancing as much as possible

There shall not be any needless touching/moving around by vendor.

The vendor shall follow the following greeting protocols: Greet only with Namaste, no hand shakes

Gloves shall be used while taking any papers/bills etc from the vendor

Goods brought in by vendors must have proper sanitization before entry to clinical and other areas.

Talking shall be minimum for everyone's safety.

VII. Dos' & Don'ts for Employees:

- The staff shall not report to duty if they have cough/cold/fever or close family member in same house has the same health issue or is in isolation/quarantine/red zone etc
- All staff to have temperature check at arrival
- All staff to wear Cloth masks (double layered) from home all the time along with LVPEI face shield at time of entry.
- Face shield to be deposited back at exit, as per institute policy guidelines.
- Staff to maintain social distancing strictly both at work and outside for safety of self and family
- Other Best Hygiene Practices which needs to be followed are as follows: Minimum talking. Minimum handling of phones. Sanitisation of phones to be done as per protocol. Touching things to be avoided needlessly . Keyboards/mouse etc if used by different people shall be cleaned. Hand hygiene to be done while entering, exit and throughout the day.
- On reaching home, all dress worn to work must be discarded directly for washing and not sit on bed/sofa etc with same clothes.
- A full body bath to be taken before touching kids/ family/fomites in the house. A watch to be kept on other materials (keys/ wallets/ purses/ lunch box etc) that were exposed outside.
- Big bags /large purse shall not be carried to the institute . Bags etc should be left in car/scooter / at home or at security desk as per Institute policy.
- The minimum that is needed inside LVPEI shall be kept in pocket or a small purse. Less the material that is carried inside the institute less will be the chance of contamination.
- All loose hair, for men and women must be tied up and not let loose/flowing. Cap can be worn if needed.
- Everyone, especially men and women should try to wear shoes rather than open sandals.
- Minimal or no use of rings/watches/ bangles/earrings/necklaces to be worn as these can get contaminated and are also difficult to clean.

Policies and Protocols 3: Protocols for HR during COVID -19 pandemic

1. Staff categorization:

Refer to the 'Operations document as guidelines, LVPEI',

2. Staff entry:

Refer to the 'Operations document as guidelines, LVPEI',

3. Staff joining back from Travel:

- Staff who have travelled back to Hyderabad (from their hometown) and are in good health can report for duty only after one week of quarantine at home.
- On the day of arrival in Hyderabad: They should inform HR and their HOD about their arrival in Hyderabad by phone.
- A day prior to joining: They must contact physician ON PHONE (**Dr. Archana Bhargava 9849495480**) a day before joining who in turn will ensure that the person in home quarantine is fit to join his/her duties.
- On the day of joining back: The employee are advised to report in the HR Department on the day of their duty i.e., before they go and report in their respective department.
- In case of developing sickness during quarantine: Immediately, contact physician **on phone** about your illness who will guide the employee on the next level of actions.

Refer to the 'Guidelines for Staff joining back from Leave/ Travel at LVPEI', circulated on 5th June 2020

4. Staff protection (Prevention of infection):

a. While at work:

- The PPEs as prescribed for the respective department shall be used.
- Physical distancing, face mask and hand and face hygiene are to be followed all through the day.

b. In addition

- No hand shake or hugs to be exchanged.
- In –person meeting shall be avoided. If absolutely necessary prefer outdoor or open spaces rather than close rooms and maintain 6 feet distance. Mask and visor to be worn and maintained very strictly.
- Food and belongings shall not be shared.
- Frequently touched surfaces including key boards and telephones to be cleaned.
- Hand was to be done frequently for (40 seconds) with alcohol based hand sanitisers.
- Non-Clinical staff must not enter Clinical areas
- All loose hair, especially women, must be tied up and not let loose/ flowing

- All, especially ladies, should try to wear shoes rather than open sandals. It is also suggested to keep no rings/ watches/ bangles/ earrings/ necklaces etc., as these can get contaminated and are difficult to clean.
- Proper disposal of face covers / masks / gloves left over by visitors and/or employees must be ensured as per protocol

b. After work:

- The staff shall remain at home as much as possible.
- Just because the lock down is relaxed **personal visits shall not be made to visit families and friends. Outside person shall not be allowed at ones office space / work place as much possible.** Crowded places such as shopping malls, social functions etc. shall not be visited unless absolutely necessary.
- Even if it is absolutely necessary it is important to follow all hand and face hygiene practices and maintain safe distance. Social gatherings will put one at risk for acquiring infection.
- When using public transport one needs to make sure to cover face with good quality mask, maintain appropriate distance, and not to touch face. Hands to be washed with soap and water for 1 minute when one reaches the destination.
- This is applicable when one travels by cab. The face mask to be kept in place while sitting in cab. While travelling by cab one shall sit away from the driver and keep windows open / AC off and avoid any contact with the driver.
- Share cabs to be avoided as it is difficult to maintain physical distance.
- Travelling shall be avoided unless absolutely necessary. The travel information to be provided to the supervisor. *Refer to the 'Operations document as guidelines, chapter*

5. In case of Staff Illness:

- The illness shall be reported **BY PHONE ONLY** (even if you are in Institute) to the concerned dept incharge and HR
- One shall not move around in the institute / meet colleagues if he /she gets any symptoms at work. Phone only shall be used for communication. The protocol for reporting sick and staying at home should be followed.
- One should join work only after clearance from in house physician
- One need to obtain all instructions on phone.

Refer to the 'Revised Staff Leave Rules for 2020 at LVPEI' circulated on 15th June 2020

6. COVID -19 Surveillance at LVPEI

The Hospital Infection Control Committee (HICC) of LVPEI will monitor COVID-19 infection status of employees and visitors (patients/attendants) through the following system:

a. Staff: Any one with fever/cough/breathing difficulty/loss of smell/loss of taste/diarrhea should not report for duty and inform **the HR and their HOD on phone**. If the symptoms develop after coming to hospital they report **(by telephonic call)** immediately to the reporting supervisor/administrator/HOD and also to HR department and do as directed. **(physician contact only by phone)**

b. Staff: Non-contact Thermal screening on arrival to work: If temperature shows above normal range, the employee will not be allowed to enter and will have to return home. They can call the physician by phone and do as directed. This includes all hostel occupants also.

c. Patients /attendants and any other visitors: Non-contact Thermal screening will be done on arrival to premises. If temperature shows above normal range, the person will not be allowed to enter and will be directed to a fever hospital. The security will provide hospital contact numbers if required. Acute medical emergency will be handled and patient will be stabilized before transfer and care by staff well protected by PPE.

d. All admitted patients and attendants would have 6 hourly non-contact thermal screening done by inpatient staff. Also the nurses will watch for and report any other symptom or sign of sickness for the patients and attendants

Infection Prevention and containment Practices:

A series of protocols have been set up by HICC and QA departments to prevent COVID-19 infection of staff and also prevent patients infecting each other. The basic principle of these new protocols is on the premise that every entrant to LVPEI is an asymptomatic COVID carrier and can be a potential source of spread of Infection. This is due to the absence of robust testing methods and absence of vaccine or cure. Training on these protocols is being done. Checklists for monitoring and adding these to our internal audits are being put in place. Teams A and B of all staff is already in place to maintain continuity of operations.

7. Action to be taken on detection of COVID -19 case or suspect case (symptoms of fever/cough/cold/loss of smell/loss of taste/breathlessness/loose motions/blue discoloration of skin especially around lips)

- A watch to be kept for such symptoms/signs in patients/attendants/staff in OPD/In- patient ward/OT and in non-clinical areas. Make all staff (clinical and non-clinical) aware- posters all over are already in place detailing the most common symptoms

8. Action to be taken when a suspect COVID-19 HCW (LVPEI Staff) is identified:

Any HCWs (LVPEI STAFF) developing respiratory symptoms (e.g. fever, cough, cold/shortness of breath/ loss of smell or taste, loose motions) should be considered suspected case of COVID-19.

- The staff must not report to duty.
- If they develop the symptoms after reporting for duty, they must inform their HOD/HR/Physician/HICC (Dr. Mudit Tyagi /Dr. Savitri Sharma/Dr. Subhadra Jalali) by phone, avoid coming in contact with anyone and do as directed

- They must not panic as Team LVPEI will be fully with them during this condition
- HICC team/HOD and Physician should guide them and ensure full support and help them overcome anxiety.
- HOD will raise an incident report
- HOD will also inform physician, HICC member and Campus Director
- HCW will be isolated in institute Isolation room as above (if at work) and will be evaluated by the physician. Arrangement will be made to immediately refer such a HCW to COVID-19 designated hospital/testing facility for isolation and further management with information to the local health authorities, if the physician evaluation directs so.
- They will be immediately taken off the roster
- HICC will rapidly risk stratify (ref. Annexure I & II) other HCWs and other patients that might have been exposed to the suspect HCW and put them under quarantine and follow up for 14 days.
- If advised by the physician, all close contacts (other HCW and supportive staff) of the confirmed case may be put on Hydroxychloroquine chemoprophylaxis for a period of 7 weeks after taking the HCQ consent from each (ref. Annexure III)
- The back to work policy is given below (ref. Clause # 11)
- The head and team where HCW is posted will be kept informed of the decisions and status by the physician/HICC

9. Action to be taken when a confirmed COVID-19 patient/contact in quarantine is identified

- All patients at entry point will be asked whether they have history of COVID-19 in recent past.
- The back of the hand for all patients will be checked for any quarantine stamp.
- If a patient reports that he/she have tested positive for COVID-19 in recent past they will be isolated in institute isolation room for further enquiry by the physician
- The physician will determine if it is safe to examine the patient in the OPD for the eye problem.
- A gap of 14 days after discharge from the hospital where the patient was treated will be taken as safe.
- A patient identified with COVID-19 positive contact quarantine stamp will be isolated in the isolation room and local health authorities will be informed. Further action would depend on the instructions from the authorities.

10. Facility disinfection and sanitization:

HICC team will ensure the Facility disinfection and sanitization.

- Once a suspect/confirmed case is informed to the HICC, which will be conferred online immediately
- Standard procedure of rapid isolation, contact listing and tracking disinfection will follow

- The whole process should start immediately within an hour of event reported, and it shall be completed in less than 24 hours.
- Areas potentially contaminated, will be immediately barricaded by team leads (clinician and non-clinician in day time and EOD and ward sister in Night time)
- Once the workplace is disinfected, the remaining employees can re-join duty unless the workplace is specifically quarantined and prohibited for use.

11. Joining back for work after being on quarantine or a COVID-19 suspect or COVID-19 positive: Guidelines for LVPEI employees

a. After Quarantine

- People who have been self-quarantined, because they had contact with a confirmed case of COVID-19, can return for work after 14-day quarantine period is completed and they are free from any symptoms.
- For contacts who were found to live with a COVID-19 positive case the contact will return after 14 days of further quarantine from the date of recovery of the COVID-19 positive case

b. After mild symptoms that were strongly suspected of COVID infection (fever more than 38 degrees, cough), recovered at home and not tested

- Can return for work after remaining free from symptoms for 14 days.

c. Having no symptoms but tested COVID-19 positive

- Can return to work after 14 days have passed since the date of their first positive COVID-19 test; and if they have had no subsequent illness. and

d. After mild symptoms (fever, cough), recovered at home and tested COVID-19 positive

- Can return for work after remaining free from symptoms for 14 days.
- At present, re-testing of people who have experienced mild illness, and have recovered from COVID-19 is not recommended

e. After moderate to severe disease, tested COVID -19 positive and were hospitalized

- COVID-19 patients are usually discharged after two samples are negative. They can return to work after 7 days of further isolation at home.

f. After moderate to severe disease, tested COVID -19 negative, recovered at home

- Can return for work after remaining free from symptoms for 14 days.
- Home contacts can stay under home quarantine for 7 days of starting of symptoms in the patient and return for work if remain healthy with no symptoms.

12. Guidelines for Home quarantine and care of person in home quarantine:

(As per MoHFW guidelines,)

a. Eligibility for home isolation

- i. The person should be clinically assigned as a very mild case/ pre-symptomatic case by the Physician.
- ii. Such cases should have the requisite facility at their residence for self-isolation and also for quarantining the family contacts.
- iii. A care giver should be available to provide care on 24 x7 basis. A communication link between the caregiver and hospital is a prerequisite for the entire duration of home isolation.
- iv. The care giver and all close contacts of such cases should take Hydroxychloroquine prophylaxis as per protocol and as prescribed by the Physician
- v. The Arogya Setu App on mobile (available at: <https://www.mygov.in/aarogya-setuapp/>) should be downloaded and it should remain active at all times (through Bluetooth and Wi-Fi)
- vi. The patient shall agree to monitor his/her health and regularly inform his/her health status to the District Surveillance Officer for further follow up by the surveillance teams.
- vii. The patient will fill in an undertaking on self-isolation (ref: Annexure IV) as advised by MoHFW guidelines.

b. When to seek medical attention:

Immediate medical attention must be sought if serious signs or symptoms develop.

These could include

- i. Difficulty in breathing,
- ii. Persistent pain/pressure in the chest,
- iii. Mental confusion or inability to arouse,
- iv. Developing bluish discolorations of lips/face and
- v. As advised by treating medical officer

c. When to discontinue home isolation:

Patient under home isolation will end home isolation after 17 days of onset of symptoms (or date of sampling, for pre-symptomatic cases) and no fever for 10 days. There is no need for testing after the home isolation period is over.

d. Instructions for care-givers:

- **Mask:** The caregiver should wear a triple layer medical mask appropriately when in the same room with the ill person. Front portion of the mask should not be touched or handled during use. If the mask gets wet or dirty with secretions, it must be changed immediately. Discard the mask after use and perform hand hygiene after disposal of the mask.

- He/she should avoid touching own face, nose or mouth.
- Hand hygiene must be ensured following contact with ill person or his immediate environment.
- Hand hygiene should also be practiced before and after preparing food, before eating, after using the toilet, and whenever hands look dirty. Use soap and water for hand washing at least for 40 seconds. Alcohol-based hand rub can be used, if hands are not visibly soiled.
- After using soap and water, use of disposable paper towels to dry hands is desirable. If not available, use dedicated clean cloth towels and replace them when they become wet.
- Exposure to patient: Avoid direct contact with body fluids of the patient, particularly oral or respiratory secretions. Use disposable gloves while handling the patient. Perform hand hygiene before and after removing gloves.
- Avoid exposure to potentially contaminated items in his/her immediate environment (e.g. avoid sharing cigarettes, eating utensils, dishes, drinks, used towels or bed linen).
- Food must be provided to the patient in his/her room
- Utensils and dishes used by the patient should be cleaned with soap/detergent and water wearing gloves. The utensils and dishes may be re-used. Clean hands after taking off gloves or handling used items.
- Use of triple layer medical mask and disposable gloves shall be ensured while cleaning or handling surfaces, clothing or linen used by the patient. Perform hand hygiene before and after removing gloves.
- The care giver will make sure that the patient follows the prescribed treatment.
- The care giver and all close contact will self-monitor their health with daily temperature monitoring and report promptly if they develop any symptom suggestive of COVID-19 (fever/cough/difficulty in breathing)

e. Instructions for the patient:

- Patient should at all times use triple layer medical mask. Discard mask after 8 hours of use or earlier if they become wet or visibly soiled.
- Mask should be discarded only after disinfecting it with 1% Sodium Hypo-chlorite.
- Patient must stay in the identified room and away from other people in home, especially elderlies and those with co-morbid conditions like hypertension, cardiovascular disease, diabetes, renal disease etc.
- Patient must take rest and drink lot of fluids to maintain adequate hydration
- Follow respiratory etiquettes all the time.

- Hands must be washed often with soap and water for at least 40 seconds or clean with alcohol based sanitizer.
- Personal items shall not be shared with others.
- The room surfaces will be cleaned that are touched often (tabletops, door knobs, handles, computers/phones etc) with 1% hypochlorite solution or as advised.
- The patient must strictly follow the physician's instructions and medication advice.
- The patient will self-monitor his/her health with daily temperature monitoring and report promptly if he/she develops deterioration of symptoms, if any.

13. Closure of workplace

As per MoHFW guidelines,

"If there are one or two cases reported, the disinfection procedure will be limited to places/areas visited by the patient in past 48 hrs. There is no need to close the entire office building/halt work in other areas of the office and work can be resumed after disinfection as per laid down protocol.

However, if there is a larger outbreak, the building/block will have to be closed for 48 hours after thorough disinfection. All the staff will work from home, till the building/block is adequately disinfected and is declared fit for re-occupation.

Despite taking the above measures, if the primary source of infection could not be established and /or the hospital is still reporting large number of cases among patients and HCWs a decision needs to be taken to convert the non-COVID health facility into a COVID health facility under intimation to the local health department. "

Annexure I

Management of contacts:

Contacts are persons who have been exposed to a confirmed case anytime between 2 days prior to onset of symptoms (in the positive case) and the date of isolation (or maximum 14 days after the symptom onset in the case).

- a. The contacts will be categorised into high and low risk contacts (ref. TABLE) as detailed:

Risk profiling of contacts

High-risk contact

- *Touched body fluids of the patient (respiratory tract secretions, blood, vomit, saliva, urine, faeces; e.g. being coughed on, touching used paper tissues with a bare hand)*
- *Had direct physical contact with the body of the patient including physical examination without PPE*
- *Touched or cleaned the linens, clothes, or dishes of the patient.*
- *Lives in the same household as the patient.*
- *Anyone in close proximity (within 1 meter) of the confirmed case without precautions for 15+ minutes*
- *Passengers in close proximity (within 1 meter) in a conveyance with a symptomatic person who later tested positive for COVID-19 for more than 6 hours.*

Low-risk contact

- *Shared the same space (worked in same room/similar) but not having a high-risk exposure to confirmed case of COVID-19.*
- *Travelled in same environment (bus/train/flight/any mode of transit) but not having a high-risk exposure.*

b. The high-risk exposure contacts shall be quarantined for 14 days and undergo testing as per ICMR protocol.

c. The low risk exposure contacts shall continue to work and closely monitor their health for next 14 days.

Policies and Protocols 4: Guidelines at LVPEI for home quarantine and Isolation during COVID-19 pandemic

Quarantine: when person has been exposed to COVID +ive person /possibly exposed but not symptomatic and not COVID positive yet

1. The person shall remain in their own room The person shall not **meet ANYONE**
2. If any symptoms are seen , it shall be reported to the HOD / Pysician on phone
3. help should be taken to get food or any other essential items outside the dooesteps
4. On shall be keep busy with useful work and entertainment options
5. One shall keep in touch through phone / video call with family and friends.
6. The mask, gloves and physical distancing shall be followed if it becomes really essential to leave your room.
7. In case one has difficulty in quarantining at their own place they can ask the education administrator to help facilitate the stay and quarantine at LVPEI campusUse LVPEI quarantine facility if you have difficulty at your place. Contact ruksana@lvpei.org
8. Medication shall be taken as recommended by Physician.

Isolation: When person is COVID +ive, symptomatic or asymptomatic

- Very mild case/ pre-symptomatic case assigned by the Physician.
- A care giver should be available to provide care on 24 x7 basis.
- A communication and monitoring link between the caregiver and physician should be present
- Stay in a well-ventilated single-room preferably with an attached/separate toilet and meet no one.
- At all times use triple layer medical mask. Discard mask after 8 hours or earlier if wet
- Mask shall be discarded after disinfecting it with 1% Sodium Hypo-chlorite. Or, wrap in any paper and send to garbage after 5 days.
- Rest needs to be taken along with good food and sufficient fluids (about one glass every 2-3 hours; suggested options buttermilk, Lassi, Tea, Coffee, Lemon water, Coconut water, fruit juice like Mosambi-orange- or pomegranate juice; veg or non-veg hot soup, Rasam or kadha etc. and so onHands shall be washed often with soap and water for atleast 40 seconds and or cleaned with hand sanitizer
- Avoid sharing household items e.g. utensils, towels, newspapers-books, phone, TV remote etc.
- The surfaces in the room shall be cleaned that are touched often ex: (tabletops, door knobs, etc.) with any household cleaner-disinfectant solution (the label on solution-it should say cleaner-disinfectant and not cleaner only)
- the physician's instructions and medication advice shall be strictly followed.
- Health with daily temperature and pulse oximetry shall be self monitored and reported to physician.
- Recommended medication:- **on advice of physician only:**
 1. Tab. Vitamin C 500 mg BID
 2. Vitamin D 60KIU once weekly for 4 weeks
 3. Zincovit 1 tab once a day
 4. Dolo 650 1x SOS
 5. HCQ or others if advised

Instructions for care-givers:

Only one assigned family member (a young person with no co-morbidities) should take care of the COVID +ive person and should stay away from other family members

The caregiver should -

- Allow the ISOLATED person to self -help themselves if they are well/ mild symptoms and not severely ill. In such situation, items of use (like food, medicines etc.) can be left at the door and person can take it in themselves; clean their own utensils etc. and no one needs to enter the isolation room or exit the room.

Only if essential, another person should enter the room with following precautions:

- Triple layer medical mask, cap, gloves and visor shall be worn when in the same room with the ill person. The mask shall be discarded after use and hand hygiene shall be performed after disposal of mask .
- Hand Hygiene to be ensured following each contact with the ill person or the immediate environment.
- Disposable paper towels should be used to dry hands after washing. If not available, dedicated clean cloth towels can be used which can be replaced when wet Direct contact shall be avoided with body fluids. Disposable gloves needs to be used while handling the patient.
- Sharing any items with the ill-person shall be avoided (see above)
- Food to the ill person in the room itself if they are sick enough
- Utensils and dishes used by the patient shall be cleaned with soap/detergent and water, wearing triple layered mask and disposal gloves. The utensils and dishes may be re-used after washing and drying. Hands to be sanitised after taking off gloves or handling used items.
- It shall be ensured that the ill person follows the prescribed treatment.
- Hands , legs ,face, shall be washed and also hands needs to be sanitized and clothes to be changed after each visit to sick person's room
- Self-monitoring of own health and that of close contacts with daily temperature monitoring to be done and reported promptly if one develops any symptom suggestive of COVID-19 (Ex: fever/cough/difficulty in breathing. Loss of taste or smell, body pains-un-wellness, diarrhoea)

When to seek medical attention while in home isolation?

Immediate medical attention must be sought if serious signs or symptoms develop.

These include:

- i. Resting tachycardia >100/min.
- ii. Persistent fever
- iii. Loose motions and vomiting causing weakness and dehydration
- iv. Six min exercise induced deoxygenation.
- v. Difficulty in breathing, on exertion or at rest
- vi. Pain /pressure in the chest, on exertion or at rest
- vii. Developing bluish discolorations of lips/face and
- viii. Mental confusion or inability to arouse

When to discontinue home isolation/quarantine?

The effected person / care giver shall be in touch with physician on phone and do as directed by physician

Who will bear the cost of test and treatment from COVID infection, if needed?

Employees covered under ESI will need to avail the ESI benefits where the treatment is free; other employees have to pay for themselves. Dr Archana, as physician and LVPEI will provide all necessary support to guide. At other Campuses, the Campus Directors will guide.

For persons who have to pay themselves and are not covered by ESI: In case they need admission, LVPEI Chair will directly talk to the heads of these hospitals and facilitate admission. At Hyderabad, these hospitals can also provide Home based paid care for mild cases, if required:

1. KIMS 2. Star Hospital 3. Continental Hospital

Phone numbers:

Dr. GN Rao, Chairperson: 98492 14646

Dr. Archana Bhargava, Physician: 98494 95480

Campus Directors:

Dr. Prashant Garg (KAR and KVC Campus): 98495 93572

Dr. Merle Fernandez: (GMRV campus): 77300 20304

Dr. Suryasnath Rath (MTC Campus): 90400 10300.

Policies and Protocols5: Joining back for work after being on quarantine or a COVID-19 suspect or COVID-19 positive: Guidelines for LVPEI employees

After Quarantine

- People who have been self-quarantined, because they had contact with a confirmed case of COVID-19, can return for work after 14-day quarantine period is completed after the date of lack of symptoms in the contact, and they are free from any symptoms.

After mild symptoms (fever, cough), recovered at home and not tested

- Can return for work after remaining free from symptoms for 14 days.

Having no symptoms but tested COVID-19 positive

- Can return to work after 14 days have passed since the date of their first positive COVID-19 test; and if they have had no subsequent illness

After mild symptoms (fever, cough), recovered at home and tested COVID-19 positive

- Can return for work after remaining free from symptoms for 14 days.
- At present, re-testing of people who have experienced mild illness, and have recovered from COVID-19 is not recommended

After moderate to severe disease, tested COVID -19 positive and were hospitalized

- COVID-19 patients are usually discharged after two samples are negative. They can return to work after 7 days further isolation at home.

After moderate to severe disease, tested COVID -19 negative, recovered at home

- Can return for work after remaining free from symptoms for 14 days.
- Home contacts can stay under home quarantine for 7 days of starting of symptoms in the patient and return for work if remain healthy with no symptoms.

Policies and Protocols 6: Policy for Staff Joining Back from leave / Travel – COVID-19

We are well aware that as Healthcare Workers each one of us has a huge risk of spreading the disease. **It is important that we take utmost care and follow all the required safety protocols (in our life as well as the place of work) and avoid all forms of travel or social gathering.**

Any travel using public transport, especially without proper protection, increase the risk of contracting infection. Hence, we have developed the following Guidelines for the Staff who are joining back from Leave/ Travel and they are advised to follow this strictly. Any deviation from these protocols will affect the whole Institute and hence will be viewed seriously and a strict disciplinary action will be initiated. **It would be the responsibility of the respective HOD to implement this in their department and to ensure adherence of these guidelines by the team members.**

Guidelines

1. All who have travelled using public transport (Air/ Bus/ Train):
 - Inform respective HOD and HR immediately on returning back in Hyderabad.
 - Strict home quarantine for one week from the date of arrival in Hyderabad.
 - Join back after one week based on the duty roster as per the Team you are allotted.
2. Those using self-transport but driven by a driver:
 - Follow the same protocol as indicated in Point 1
3. Those using self-transport but self-driven:
 - Join the work immediately provided you are in good health and had no exposure to COVID risk during this visit. (Mass gathering, visit to hospital or coming in contact with person or community with COVID)
4. On the day of joining, staff should report in HR. Post this they will be sent to our Physician to provide fitness for joining. This is to ensure that the staff is not exposed to the risk.
5. Self-Declaration Form needs to be filled by the Staff and submitted in HR on the day of their joining.

In addition to the above, any staff having symptoms of cough/ cold/ fever must not come for duty and inform their respective HOD and the HR Department. The HOD should keep in touch with the staff concerned and Dr. Archana Bhargava for further action and care of the individual.

Every deviation, in this regard, be reported as Incidence Report to the Quality Team.

Policies and Protocols7: Protocol for Non-Clinical Administrative staff

All who are **unlikely to come in contact with patients** come under the Green Category. They include mostly the Non-clinical administrative staff:

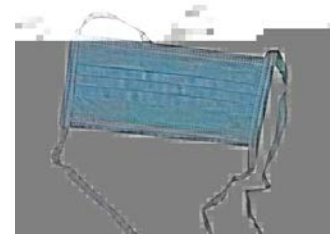
Role:

To comply with the respective departmental SOP and protocol.

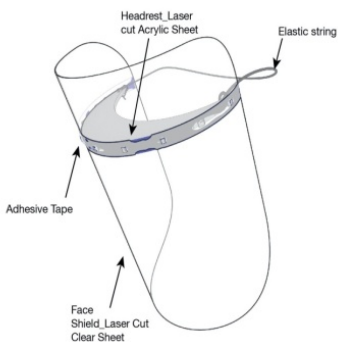
All staff to follow general safety guidelines all the time while at work (Refer main document)

Additional guidelines as per the role are:

PPE:



- Mask triple layered (home-made) should be worn on arrival and



- Visor to be worn upon entry

Protocol:

Before starting work :

- Hands to be washed before entering work area
Appropriate PPE should be worn The day shall be started by all surfaces including desk, chair handles , computer and keyboards
Hands to be sanitised.



cleaning



DOs:

Entry shall be only through GPR building entry

Everybody shall use "Namaste" gesture to greet when needed

Physical distancing shall be maintained and movements to be restricted only within "safe areas"

Swiping for Attendance shall be done only at level 2 and 5.

All members in the green team must remain in their respective offices and bring their own food. No eating at office space is allowed.

GPR elevator to be used , if required.

Terrace of GPR building will be available for lunch/meals and coffee/tea.

Physical distancing shall be maintained while eating especially is important as there will be no mask

Entry and Exit shall be done through the same gate

Hand hygiene to be ensured while entering, exit and throughout the day.

DON'Ts:

Absolute '**NO**' for following actions:

Shaking hands a greeting gesture to be avoided

Articles or things shall not be touched unnecessarily

Interaction with anyone shall

Key boards shall not be touched without sanitising hands.

One shall not linger or crowd in corridors, open or eating spaces.

Policies and Protocols 8: Dress code and Personal Protective Equipment (PPE)

Dress code:

- Regular uniforms
- Shoes mandatory for all
- Avoid watches and minimal or 'no use' of jewellery such as rings, chains etc.

PPE	Frequency of changing	Comment
Masks – N95	To be changed after 4 days of usage receive four of them. If we use mask No 1 on day one, it can be reused on 5 th day and one mask can be used maximum for 5 days each.	Four masks provided. Number them as 1,2,3,4 Mask on day one, it can be reused on 5 th day and one mask can be used maximum for 5 days each. Day 1-Mask 1; Day 2-Mask 2; Day 3-Mask 3; Dy 4-Mask 4; Day 5-Mask 1 and so on. Used masks should be stored in individual on ziplock covers
Surgical cap	Daily	Wash it after single use
Gloves (unsterile)	Daily	Discard after single use in a separate dustbin
Protective goggles /	Cleaned with hydrogen peroxide solution and to be re- used	One pair of goggles provided Those with refractive can continue with their glasses; Protective goggles can be worn on top of the spectacles
Visors	Monthly	To be cleaned daily Discard it after one month
Cloth gowns	Daily	Two gowns will be provided. Wash it after single use

- Place the used cloth gowns, surgical caps in separate bin (Red bin) and washed/cleaned ones in a different bin (Green bin). These bins need to be cleaned with hydrogen peroxide solution every week. Steps in donning and removing PPE is shown in the following pages.
- Throw used gloves and masks in a plastic cover placed in covered dustbin with foot opener.
- All these material should be discarded as per local municipal norms. Guidelines for using N95 Mask:

Policies and Protocols 8: Protocol for Visual Acuity and Refraction

As during any procedure done ofr Mask not to be removed by Patient

Visual acuity assessment for distance:

1. The L-Occluder shall not be used.. The patient should be instructed to close the non-testing eye with their sanitizedhand (not fingers).
2. Pinhole visual acuity is not required.
3. Atleast one-meter distance from the patient should be maintained while assessing visual acuity.

Near Vision assessment:

1. The near vision chart shall be held with gloved hands at a distance of 35-40 cm instead of patient holding.
2. At least one-meter distance from the patient should be maintained
3. The procedure of assessing near vision shall be done while standing so that one is at aHigher level compared to that of the patient.

Objective and Subjective Refraction:

1. The Trial frame is cleaned with an alcohol wipe before placing it on the patient for
2. Refraction.
3. The gloves is used
4. Touching the forehead of the patient should be avoided to measure working distance
5. All the lenses used for neutralization should be placed on the RED TRAY (or a tissue) and not placed anywhere.
6. Lenses etc. should be replaced in the trial box only after cleaning each lens with alcohol wipes after subjective refraction.
7. The trial frame, kept in red tray after use, also should be cleaned before making it ready for next patient.
8. Retinoscopes to be kept separately and not to be shared
9. Retinoscopy barrier, should be used while doing retinoscopy. The handle and the barrier sheet should be cleaned with alcohol wipe after each use.



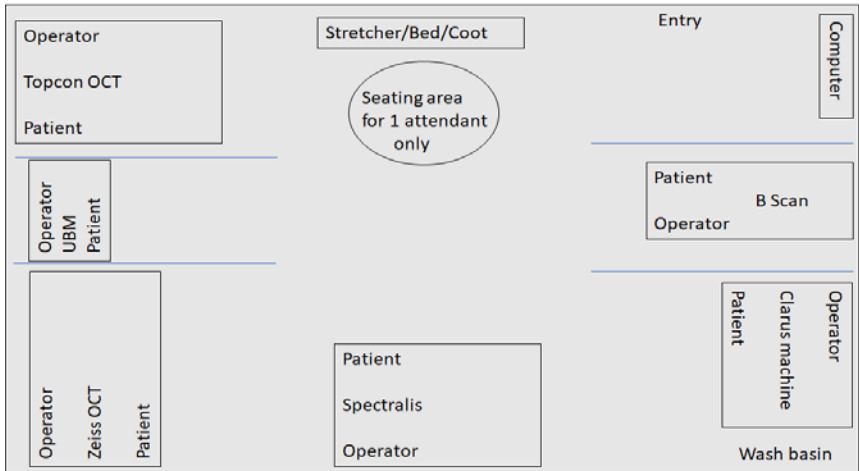
Policies and Protocols 9: Protocol for Prevention of communicable infections in retina diagnostic lab



Contents

- (A) Diagram of retina laboratory and instruments
- (B) Indications for investigations for ophthalmologists
- (C) Specific machine related modifications: see attached protocol of all diagnostics
- (D) General principles: see attached protocol of all diagnostics

Diagram based representation of the machines in the laboratory
 (Have moved UBM from its current position between spectralis and cirrus oct,
 So now there is ample space in centre to move about without close contact
 Blue lines depict the position of curtains curtains



Following is the protocol for each machine: Examiner should wear face mask and gloves compulsory while performing the investigations. Use VISOR wherever possible. If not possible, visor shall be kept to the side properly without touching the outside surface. The visor shall be worn again while talking to patient at end of investigation. Visor shall be worn when leaving the diagnostics area.

Indications for investigations for ophthalmologists:

1. Undilated and dilated photography to be kept minimum. Cases only being performed for documentation such as ARMD, other CNVM, DR, RD etc should be deferred. Retinitis cases, especially at the macula, can be photographed. Drawings can be used wherever possible. Same applies for auto fluorescence - defer as much as possible, unless required for diagnosis and management, such as SLC etc.
2. OCT - obvious CSR, macular edema, macular hole which are going to be deferred during 1st phase should not have OCT. Only cases where intervention is being planned, needs to be documented. Even here, pseudophakic CME, mild edema of DME, BRVO are at clinician's discretion. Visual acuity based treatment can be planned. CNVM new cases and follow up CNVM with fluid on last visit should get a repeat OCT. CNVM with no fluid documented for 3 months need not get OCT, unless there is new clinical sign of drop in vision, hemorrhage or exudation. Avoid OCT in dystrophy, dry AMD, ERM where no intervention is being planned. OCT shall not be advised in any stable case of any disease, as of now.
3. FFA shall be avoided in most cases, except where there is crucial diagnostic dilemma where leakage has to be seen. CSR which has not resolved and laser has to be planned. Diagnostic dilemma such in some cases of scleritis/ abscess. For doubtful NVE/ NVD it should be avoided. A good biomicroscopy to be done and shall be managed clinically.
4. B scan to be avoided in advanced cataract if pupil is nicely reacting to light. B scan to be avoided to evaluate endophthalmitis follow up - use I/O and anterior segment inflammation score. B scan can be done if there is suspicion of RD like hypotony or recently further reduced vision or increased inflammation.
5. ERG to be deferred in dystrophies.

The criteria to be revised whenever the situation gets better/ 'normalises'. This is the time to make most decisions on clinical evaluation.

VEP may be done for specific neurophthalmology situation where optic nerve and macular pathology need differentiation or for some ischemic retinal pathology where it is needed to decide intervention as in Ocular ischemic syndrome.

Policies and Protocols 10: Diagnostic Ready Reckoner

Glaucoma Diagnostics and instruments	When will we perform	How to clean/sterilize
HVF	Only emergency cases if it would help us to make a treatment decision	The Chin rest, head rest and response buttons to be cleaned with Alcohol wipes
	All glaucoma follow up HVF will be deferred	
Optic disc photos	Will be the primary investigation for new patients for documentation	Cleaning protocol similar to fundus photos
OCT for glaucoma	Will not be done unless needed	Cleaning protocol similar to fundus photos
YAG LASER	Will need to be done for YAG PI, YAG cap may be deferred	The lens should be cleaned with soap and water after every case and alcohol swab before use for a new patient
Tonometer	Will be done it for post op and follow up patients	To be cleaned using alcohol wipe between every case and with 1:10 sodium hypochlorite at the beginning and end of the day
Gonioscopy	New patients and only those indicated for follow up	To be cleaned with soap and water after every case and clean with alcohol wipe before performing the test
Cornea Diagnostics	When will we perform	How to clean/sterilize

and instruments		
SLIT LAMP PHTOGRAPHY	Only in cases where it will help with decision making, and to monitor disease progression, such as ulcers, trauma, corneal foreign bodies	Chin rest, head rest, knobs and control buttons: to be cleaned with Alcohol wipes or sterilium on tissue/ cotton
AS-OCT	Only in cases where it will help with decision making such as for surgery: DM detachment, graft detachment in lamellar keratoplasty	Chin rest, head rest, knobs and control buttons: to be cleaned with Alcohol wipes or sterilium on tissue/ cotton
Retina diagnostic lab		
B-SCAN	All indicated cases	The probe shall be thoroughly cleaned with alcohol wipes between every case. Maintain PPE including visor for operator and head cap for patient. Also perform interval disinfection after every 5 patients
OCT and OCTA	All indicated cases	The head/hand/chin rest shall be thoroughly cleaned with alcohol wipes between every case. PPE including visor to be worn, New plastic cling wrap for machine lens to be used daily, sterilize it after a patient is diagnosed and before diagnosing the next patient . Also interval disinfection of seating area and console after 5 patients to be performed
FFA and FAF	Will not do it unless needed for decision making	The head/hand/chin rest shall be thoroughly cleaned with alcohol wipes between every case. PPE including visor to be worn, New plastic cling wrap for machine lens to be used daily, sterilize it after a patient is diagnosed and before diagnosing the next patient . Also interval disinfection of seating area and console after 5 patients

		to be performed
Fundus photo	Will not do it unless needed for decision making	The head/hand/chin rest shall be thoroughly cleaned with alcohol wipes between every case. PPE including visor to be worn, New plastic cling wrap for machine lens to be used daily, sterilize it after a patient is diagnosed and before diagnosing the next patient . Also interval disinfection of seating area and console after 5 patients to be performed
ERG/VEP	not to perform unless needed without which one cannot treat	Chin rest, head rest, knobs and control buttons: to be cleaned with Alcohol wipes or sterillum on tissue/ cotton. PPE shall be maintained including visor for operator and head cap for patient. Also interval disinfection shall be performed after every patient
UBM	not to perform unless extremely essential for intervention	Probe shall be thoroughly cleaned . with alcohol wipes in between every case. The PPE shall be maintained including visor for operator and head cap for patient. Also interval disinfection shall be performed after every 5 patients

Policies and Protocols 11: Protocol for Patients with conjunctivitis

Note: Occurrence of conjunctivitis is very rare in COVID positive patients. It is not a presenting symptom and the risk of transmission is in no way higher. However, this disease is extremely contagious, and at LV Prasad several patients are seen of late with adenoviral conjunctivitis. The patient care staff can contract conjunctivitis. Also other patients who visit our hospital can get infected Hence the following guidelines have been created for our and our patients' safety,

Any examination should be carried out strictly after general triage: (screen for fever, cough, travel history, contact with travelers in family etc.)

1. **History:** Conjunctivitis to be suspected if chief complaint is redevye, watery discharge, mild pain, mild to moderate lid edema and more than one family member affected. Vision is usually not affected.
2. **Examination:** The patient shall be examined with torch light, following all protocols of personal protection, wearing mask, plastic protective visor and gloves. Slit lamp examination shall be avoided for mild cases
During slit lamp examination, the PPE shall be donned, gloves shall be used, all surfaces after examination shall be cleaned. Patient shall be discouraged to touch any surface or door etc. Wash your hands thoroughly with soap and water.
The patient should wear a mask and requested to not speak unless necessary, not to sneeze or cough during examination.

DO NOT CHECK IOP AND DEFER FUNDUS EVALUATION

3. **Treatment:** Mild cases, no cornea involvement: topical lubricants, cold compresses, anti-inflammatory (Paracetamol 650 mg sos), sterile wipes, dark glasses to be prescribed.
The attender shall be asked to buy the medicine / consumables from pharmacy rather than the patient (Pharmacy is instructed regarding personal protection while dispensing medication)
4. **Prophylaxis:** Personal hygiene is explained, precautions and how to avoid spread to fellow eye and to family members
5. **Follow up:** in mild cases, follow up is not needed. The patient is counselled that the condition will worsen over the next one to two weeks before it gets better and the patient shall follow up only in case of photophobia, moderate to severe pain and decreased vision
Doctor's number to be shared and the patient can be followed up via Suitable messaging or social media app (Ex: Whatsapp etc)
Follow up is required if the patient has subepithelial infiltrates, pseudomembranous conjunctivitis, severe forms, pediatric patients. The patient shall be called after two weeks. ONE WEEK REVIEW IS NOT NEEDED
6. **Use of topical steroids:** In cases with sub- epithelial infiltrates and pseudomembranous form, based on severity, the treatment shall be started from beginning. loteprednlol/fluorometholone or prednisolone based on severity can be chosen as preferred drugs for treatment. These patients shall be called for follow up after 2 to 4 weeks.

Policies and Protocols 12: Policy for N95 Mask usage

1. **Number of N95 Masks to be given to each employee:** 3 masks for 22 days

2. **Number of uses for a N95 mask:** Four uses, that means 3 masks are sufficient for 22 days use
3. **Gap required for each N95 mask between each use:** minimum 72 hours. No disinfection required.
4. **Table showing typical N95 mask usage pattern for a given month**

Typical N95 Mask usage pattern (Option 1) in a month for an employee coming 3 days in a week and two alternate Sundays in a month (considering all external factors being normal ex: no spill, damage to mask due to unavoidable reasons)											
Day of Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	
Date	1	2	3	4	5	6	7	8	9	10	
Mask to be used	Mask 1	Mask 2	Mask 3				Mask 1	Mask 2	Mask 3	Mask 1	
Usage frequency completed	1	1	1				2	2	2	3	
Day of Week	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Date	11	12	13	14	15	16	17	18	19	20	
Mask to be used					Mask 2	Mask 3	Mask 1				
Usage frequency completed					3	3	4				
											Current month/Next Month
Day of Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Date	21	22	23	24	25	26	27	28	29	30	31/1
Mask to be used	Mask 2	Mask 3	New Mask 1	New Mask 2							New Mask 3
Usage frequency completed	4	4	1	1							1

5. Mask preservation policy:

After each use keep each mask in its dedicated labeled /marked paper bag
 Or else there will be risk of contamination. Three paper bags to be made labeled 1, 2, 3.

6. Discard policy:

N95 mask needs to be discarded into yellow colored biomedical waste bin.

Please Note:

1. If mask is damaged, torn it needs to be discarded.
2. If mask become contaminated with body fluids, it needs to be discarded.

Policies and Protocols 13: BLS during COVID Pandemic

LVPEI BLS GUIDELINES DURING COVID PANEMIC are as follows →

Mask and double gloves to be worn

Patient responsiveness to be assessed

If unresponsive help to be called

Someone should be asked to dial "333" & announce "Code Blue or Code Blue R" to activate code blue team / and bring AED (Automatic External Defibrillator) & crash cart from "room no 25,155 VS building,255 at VS building,306 GPR Building" B

Briefly it should be seen if patient is breathing or not. Mask to be put on for patient C

Carotid pulse to be felt D

If not felt, chest compressions to be started E

Chest compressions to be given at the rate of at least 100/min but not more than 120/min, and at least 2 inch deep but not more than 2.5 inches

both hands should be interlocked and the heel of the hand placed on the sternum on the line joining the two nipples

Chest compressions to be given only / no rescue breaths mt. mor by mouth to mask

One round of CPR to be completed(30x 5 chest compressions)

AED machine is switched on / pads attached/ pads are plugged in /AED then assesses rhythm

If shock advised → The AED is charged

Mask is delivered and stayed clear

After shock or if shock is not advised → chest compressions should be given till CBT arrives

-
- In case of children below 12 years age only one hand is used for chest compression

In case of infants two thumbs or 2 fingers are used

Differences in ACLS Guidelines when CODE BLUE "R" is announced

The team work is managed with minimum possible personnel , person attending should be minimal to 3-4 when code blue r is announced

All persons in the team to wear appropriate ppe (Cap, N95 Mask, Visor, Double Gloves, Gown)

Patient to be covered with sheet before starting CPR / use aerosol box to cover patients face

When breaths are to be given face is uncovered temporarily

If patient has low SPO₂ , the patient to be paralyzed and intubated as soon as CBT arrives and start PPventillation

When using ambubag or ET tube should fix HMA filter between ambumask and bag and et tube and ventillator

If required, to use only portable suction apparatus which can be disinfected later after code blue is resolved

All used equipment and room to be disinfected as per protocol after each code blue event

Equipment to be added to crash cart and ERs (during covid pandemic)

Bedsheet 1

HMA filters 4

Soft suction catheters 4

PPE (4 kits)

Inj succinyl choline 2

Inj rocuronium 2

Aerosol box (one in each ER)

Code Blue Team composition Forcode Blue "R" (Only 4 Members)

SL NO	ROLE	DESIGNATION	NAME
1	Team leader	Physician ON CALL ACLS trained Fellow doctor	PHYSICIAN Fellow doctor on duty
2	CPR Provider	Fellow Doctors BLS trained support staff	Fellow Doctor on duty Rajesh Joseph Yohan Durga Prasad
3	Airway managers (intubation, suction, O2 administration, ventilation)	Anesthetist on duty	ANESTHETIST
4	IV Access & Drug administration + Monitoring ,Defibrillation& crash cart management	OT /lab Technician IPW Senior nurse	MrVenthan SENIOR NURSE
	Diagnostic team	Physician Anesthetist Fellow doctor	PHYSICIAN ANESTHETIST Fellow doctors on duty

Protocol for disinfection of ambu bag and Oxygen/ventilation delivery mask:

1. After use the ambu bag and mask are disassembled by a trained person washed with soap and water to remove secretions and contaminants, then put in a red bag and sent for autoclaving along with the mask at 134 Deg Celsius
2. The mask will be kept dipped in disinfectant solution (Glutaraldehyde 2% or Liquid chlorine bleach/water solution for 20 mins and then washed with soap solution and water . Allowed to dry and autoclave as above

Policies and Protocols 14: Protocol for Code Grey - COVID suspect Isolation

- On self-reporting or noted by any staff, first of all ensure that one are well protected by own N95 mask/visor/glove/overall before handling the situation.
- A mask to be handed over, at once (if not wearing one) to the patient suspect and physical distancing to be kept. The person not to be touched
- they should sanitize hands well.
- The person should be immediately isolated by directing to walk to the designated "ISOLATION ROOM" marked with BOLD Signage, on ground floor (KAR Campus) if clinical condition is stable. Physical distancing to be maintained and the patient should not be allowed to touch anything. Patient to enter from the Triage area side and wait at the designated area marked as "Patient". Attendant with mask, and hand sanitized as well can enter and sit in the designated chair "attendant" if needed.
- Isolation room is divided into two parts: one for entry-exit and seating of patient/attendant; other part for entry -exit of health care givers and area for donning and doffing (removing) full PPE. (Some LVPEI centres may have a single door, same can be used keeping physical distance and keeping door open and marking out two areas)
- After directing patient into isolation room (the staff should not enter the isolation facility but should only escort the patient), the physician to be called on phone informing about patient in isolation room by saying "Code Grey" and location of patient. No public announcement of this code will be done. There should be no panic/crowding/loud talk about the situation.
- Physician with full PPE will enter through security side glass door. No one else will enter the isolation area.
- There will be a transparent (glass or plastic / wooden boards/closed window/barrier) between the patient and physician. The physician will introduce themselves and take history and other necessary details and complete paper work (name/phone/address etc.) on mike if needed, while still in the Health Care Workerside of the room. After this, if any examination is REALLY essential, they will move for examining patient only if essential.
- Please note, possibly 15 mins is the cut off time for being in close proximity with patient, beyond which quarantine will be needed if patient is found positive. As little time as possible to be spent as is only essential for examination, if at all. Most of the patients will not need any examination, but only advice.
- Physician will assess whether the patient is stable through history, only rarely examination will be needed (as per protocol below) and explain situation to patient. If suspicion of COVID infection is confirmed or strong , counselling will be done without breaking barrier and patient will be handed over to Govt. authorities as per protocol.
- If any instrument is used (stethoscope/thermometer/ pulse oximeter/BP apparatus/urine receptacle etc.) these will be left in the room and will not be taken out without disinfection.
- If any first aid/stabilization is needed, physician will provide the same. If any additional person is needed (nurse etc.) on requisition by physician, they will enter through the security side door after putting on full PPE.
- If the clinical condition is not good (example patient is blue (short of oxygen), or gasping for breath, unwell cannot walk, or has collapsed/fainted) such patients should be immediately managed by announcing Code Blue R and managed by CODE BLUE Team as per CODE BLUE R protocol. Once stable, depending on condition, the patient to be shifted to the isolation room or to be sent to higher facility outside.

- Patient/attendant will not be allowed to move out of the isolation room. Drinking water bottle will be provided. They may use the toilet next door in ground floor which is near triage area, if essential.
- Physician with help of administrator and security personnel in CODE GREY TEAM will inform the local health authorities and police about the case and requisition shifting to a testing facility through Government ambulance (as per Govt. protocol). In a very unusual or rare situation LVPEI ambulance will be used. Driver/accompanying persons and people shifting will all be in full PPE.
- Paper work and other standard precautions as per our 'patient transfer protocol" will be provided while transfer.
- The internal medicine incharge to be informed by phone and incident report filed as per protocol after first taking care of the patient. The internal medicine incharge will inform the Quality team and Campus Director immediately. No incident report is required to be filed for patients who are cleared from CODE GREY suspicion. All details to be mentioned in the note book kept in isolation room.
- Administrator will Identify and report all persons who were close to or got exposed to the COVID-suspect. They will need Quarantine for 2 weeks. They will also need follow-up on phone to check for any symptoms of COVID. All these Primary contacts will need testing as per govt. guidelines. Primary contacts of this patient include other patients being managed in the same room or ward, healthcare workers who have attended to him/her, support staff who may have come in close contact, caretaker/visitors etc.
- Their details must also be shared with the local health authorities.
- CCTV footage may be needed to trace primary contacts
- All close contact staff (other HCWs and supportive staff) of the confirmed case (once confirmation is got from the Govt. testing facility) will be put on Hydroxychloroquine chemoprophylaxis for a period of 7 weeks, keeping in mind the contraindications of HCQ(Govt. Guidelines- will change as per ICMR guidelines)
- Thorough Disinfection procedures to be carried out at the facility and if applicable, the LVPEI ambulance (if rarely used) will be done as per protocol and under supervision of HICC member
- Ward supervisor will do daily check of isolation room for adequacy of supplies. (list to be collected from Dr. Archana). At least 4 full PPE kits must always be available at the site. One set should also be available with physician on duty and one set in the ward for the nurse.
- All discarded PPE will be discarded in Red and Yellow bins having closed lids, labelled as COVID waste, kept at the edge of the isolation room at the physician side.

Procedure for patient Evaluation in Isolation room:

- The history is taken and symptoms are asked from a distance. Can use mike/video chat if available.
- Following signs should be watched out for : High temp, Tachycardia, Tachypnoe, SPO2 low < 90%....all of which can be checked by multipara monitor placed in the isolation area
- Signs of Blocked nose, Sore throat, Cyanosis can be seen on video chat or from a distance in good lighting condition without breaking barrier.
- Physician will assess patient : If patient is stable, through history, rarely examination is needed and situation is explained to patient. If suspicion of COVID infection is confirmed or strong, counselling will be done without breaking barrier and patient will be handed over to govt authorities as per protocol

- Shock (low BP / unconscious breathless collapsed patient) ...will need CODE BLUE R and this should be announced as per usual protocol
- In CODE BLUE R is needed to be announced, the CODE BLUE R team will cover patient with plastic transparent sheet, start chest compressions and transfer patient on trolley to ER for the rest of the process. The ER and all used equipment including trolley will be disinfected later.

Protocol for Cleaning the COVID-Isolation room once contaminated:

- No one should be allowed to enter the room for 20 minutes after patient has left
 - House- keeping In-charge will accompany the house keeping lady to the area and be at the door to supervise cleaning after 20 minutes only
 - House- keeping lady will be provided full PPE during the cleaning process (Ex: disposable gown, cap, N 95 mask, visor, heavy duty gloves and shoe covers)
 - All furniture, door knobs, floor will be cleaned using 1% D-125 solution
 - All instruments (stethoscope/thermometer/ pulse oximeter/B P apparatus/urine receptacle etc.) will be disinfected with alcohol wipes and if needed UV rays. If they need to be removed, this will be done in closed biological safety box to area where they can be safely sanitized.
 - The room will undergo Bacishield (Composition: H2O2) fumigation by designated person only.. The house-keeping head will maintain log of the cleaning and fumigation process with timings. Room can be re-used after 30 minutes after fumigation.
- In case patient was isolated in any other area (say ward or OPD room or ER), same cleaning procedure will be carried out

COVID-19 Annexures

a) Forms and format

b) Posters Displays, Infographics

d) Policies

c) Sources

A) Forms and formats

Forms and Formats 1: Employee Self Declaration form



LV Prasad Eye Institute

Employee Self-Declaration Form

Date: _____

I, Mr. /Ms. _____ SAP No. _____ working
in _____ department, hereby declare the following:

01. I have travelled on _____ **(Date)** from _____
(Location & State) and reached Hyderabad on _____ **(Date)**
02. I have travelled by using own transportation i.e. **Car / Bike / Cycle**.

03. I have travelled by public transport **Train / Bus / Auto / Air**.
04. I have travelled **alone /with friends / with family / Unknown people**.
05. I or any of my family members **do have / do not have** symptoms such as Fever, Head Ache, Cold, Body Pains, Throat Infection, and Loss of taste or smell.
06. I or any of my family members have **visited/not visited** Hospital or Clinic in last 14 days.
07. I or any of my family members have **attended/ not attended** any mass **function (funeral/marriage/birthday /any social gathering etc.) of family/religious ceremony**.
08. I or any of my family members **have/ have not** got stamped or isolated by any government health authorities.
09. The area I travelled from is categorized as **Green/ Orange/ Red zone** as per government guidelines.

I, hereby also declare that the above furnished information is true to the best of my ability/ knowledge and is not altered. In case, Institute finds any discrepancy in the above mentioned data, Institute may take disciplinary action.

(Employee Name)

(Employee Signature)

Place:

Forms and Formats 2: Consent for Hydroxychloroquine(HCQ) use



L.V.PRASAD EYE INSTITUTE

(A Hyderabad Eye Institute Organization)

Kallam Anji Reddy Campus, L V Prasad Marg, Road No.2, Banjara Hills,
L V Prasad Eye Institute (KAR Campus)

Consent for use of Hydroxychloroquine (HCQ) as post exposure prophylaxis during COVID-19 pandemic

Employee Name :

Age :

SAP No :

Gender:

I am willing to use Hydroxychloroquine (HCQ) as post exposure prophylaxis. I am aware of the questionable efficacy of Hydroxychloroquine (HCQ) in preventing COVID 19 infection.

I have also been told about the possible side effects of using the drug but I still wish to take the medication all the same.

Signature / thumb impression of the Employee :

Date :

Forms and Formats 3: Undertaking format for self- isolation

Undertaking on self-isolation

(As per MoHFW) guidelines)

I _____ S/W of _____, resident of _____ being diagnosed as a confirmed/suspect case of COVID-19, do hereby voluntarily undertake to maintain strict self-isolation at all times for the prescribed period. During this period I shall monitor my health and those around me and interact with the assigned surveillance team/with the call center (1075), in case I suffer from any deteriorating symptoms or any of my close family contacts develops any symptoms consistent with COVID-19. I have been explained in detail about the precautions that I need to follow while I am under self-isolation. I am liable to be acted on under the prescribed law for any non-adherence to self -isolation protocol.

Signature _____

Date _____

Contact Number _____

Forms and Formats4:VCC Monitoring Visit Checklist 1

VCC Monitoring Visit Check list – COVID-19

Date :	Time of Visit :
Name of the VCC :	Name of the VC:

S. No.	Nature of Activity	YES	NO	Remarks
1	Proper understanding of protocols & guidelines			
2	Awareness about patient referral if suspected			
3	Cleanliness & Hygiene of the VC as per protocol			
4	Adherence to cleaning process as per guidelines			
5	VT wearing mask, visor and PPE			
6	Proper use of temperature gun			
7	Protective sheets for equipment in place			
8	Social distance maintained by patients			
9	Registering Aadhar Card details			
10	Adherence to documentation and register maintenance as per protocol			
11	Recording patients health conditions and filling up questionnaire			
12	Patients wearing mask and applying sterilium			
13	Appropriate distance maintained during patient examination			
14	Disinfecting of equipment and furniture after every patient check out			
15	Adherence to spectacle display and dispensing process			
16	Proper disposal of used items pre and post examination			
17	Availability of sufficient cleaning chemicals / solutions			
18	Availability of sufficient clinical items			
19	Availability of sufficient stock of sterilium, tissues & soaps			
20	Availability of sufficient housekeeping material			

Other Observations / remarks if any:

Signature of VCC _____:

Forms and Formats 5:VCC COVID-19 Questionnaire

To be administered before entering building

Name	<input type="text"/>	Age	<input type="text"/>	Gender	<input type="text"/>
Phone Number	<input type="text"/>	Aadhar Number	Card	<input type="text"/>	
Address / Village	<input type="text"/>				

Serial Number	Questions	Yes	No*
1	"Home quarantine" stamp can be seen on the palm?		
2	Measure and record the body temperature. Did the patient have a high temperature? Temperature value: (Normal range: 97.7–99.5 °F)?		
3	Do you have fever, cough, breathing issues or running nose?		
4	Do your family members or close contacts have these problems?		
5	Have you travelled to Corona outbreak areas in the last two weeks?		
6	Any of your family members/neighbors tested positive of COVID-19?		

B) Posters Displays, Infographics

Poster 1: Prevention Mirror for all HCW to check every time where I am!

Prevention Mirror for all HCW to check every time where I am!
Reduce your risks by following the protocols. If any patient is found positive, this is how assessment will be done.
Bottom lines in this table are equally critical



Approach to Exposure of health care workers

“Close contact” means being in contact with confirmed COVID patient with or without any mask or other protection for a duration of more than 20 to 30 minutes. Or someone who was in the same room with or without any mask, gown, gloves etc., where a COVID confirmed patient was also present for more than one hour.

Epidemiologic risk factor	Exposure category	Recommended Monitoring for COVID (UNTIL 14 DAYS AFTER LAST POTENTIAL EXPOSURE)	Work Restriction for Asymptomatic HCP
Prolonged close contact (more than 20-30 minutes) with a COVID patient who was wearing a face mask (i.e., with source control)			
HCP PPE : None	MEDIUM	Active	Exclude from work for 14 days after last exposure
HCP PPE : Not wearing a face mask or N95 mask	MEDIUM	Active	Exclude from work for 14 days after last exposure
HCP PPE : Wearing face mask ^B	LOW	Self, with delegated supervision	None
HCP PPE : Wearing face mask or N95 mask but not wearing gown or gloves ^{A,B}	LOW	Self, with delegated supervision	None
HCP PPE : Wearing all recommended PPE (Except wearing a face mask instead of an N95 mask) ^B	LOW	Self, with delegated supervision	None

Epidemiologic risk factor	Exposure category	Recommended Monitoring for COVID (UNTIL 14 DAYS AFTER LAST POTENTIAL EXPOSURE)	Work Restriction for Asymptomatic HCP
Prolonged close contact (more than 20-30 minutes) with a COVID patient who was NOT wearing a face mask (i.e., no source control)			
HCP PPE : None	HIGH	Active	Exclude from work for 14 days after last exposure
HCP PPE : Not wearing a face mask or N95 mask	HIGH	Active	Exclude from work for 14 days after last exposure
HCP PPE : Wearing face mask or N95 mask but not wearing eye protection ^B	MEDIUM	Active	Exclude from work for 14 days after last exposure
HCP PPE : Wearing face mask or N95 mask but not wearing gown or gloves ^{A,B}	LOW	Self, with delegated supervision	None
HCP PPE : Wearing all recommended PPE (Except wearing a face mask instead of an N95 mask) ^B	LOW	Self, with delegated supervision	None

HCP = healthcare personnel, PPE = personal protective equipment

A. The risk category for these rows would be elevated by one level if HCP had extensive body contact with the patients (e.g., rolling the patient)

B. The risk category for these rows would be elevated by one level if HCP performed or were present for a procedure likely to generate higher concentrations of N95 mask secretions or aerosols (e.g. cardiopulmonary resuscitation, extubation, bronchoscopy, nebulizer therapy, sputum induction). For example, HCP who wore a gown, gloves, eye protection and a face mask (instead of an N95 mask) during an aerosol generating procedure, would be considered to have a medium risk exposure.

Poster 2: Alcohol hand rub and hand hygiene technique!



Alcohol handrub hand hygiene technique – for visibly clean hands



1 Apply a small amount (about 3 ml) of the product in a cupped hand



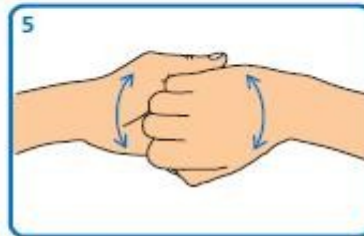
2 Rub hands together palm to palm, spreading the handrub over the hands



3 Rub back of each hand with palm of other hand with fingers interlaced



4 Rub palm to palm with fingers interlaced



5 Rub back of fingers to opposing palms with fingers interlocked



6 Rub each thumb clasped in opposite hand using a rotational movement



7 Rub tips of fingers in opposite palm in a circular motion



8 Rub each wrist with opposite hand



9 Wait until product has evaporated and hands are dry (do not use paper towels)



10 The process should take 15–30 seconds

Poster 3: Soap and water hand washing and hand hygiene technique!



Hand-washing technique with soap and water



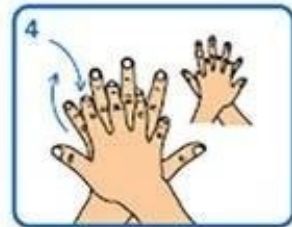
1 Wet hands with water



2 Apply enough soap to cover all hand surfaces



3 Rub hands palm to palm



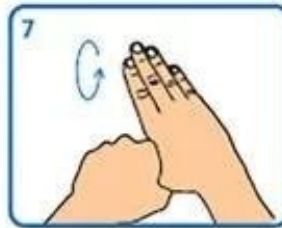
4 Rub back of each hand with palm of other hand with fingers interlaced



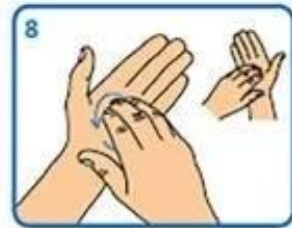
5 Rub palm to palm with fingers interlaced



6 Rub with back of fingers to opposing palms with fingers interlocked



7 Rub each thumb clasped in opposite hand using a rotational movement



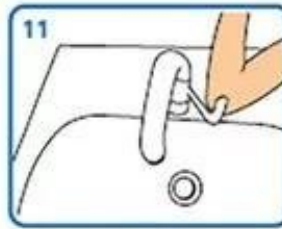
8 Rub tips of fingers in opposite palm in a circular motion



9 Rub each wrist with opposite hand



10 Rinse hands with water



11 Use elbow to turn off tap



12 Dry thoroughly with a single-use towel



13 Hand washing should take 15-30 seconds

Infographics 1 : COVID-19 Protocols : DOs and Donts

DO'S



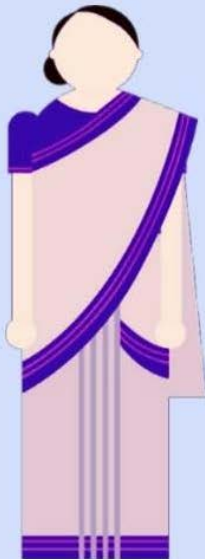
DONT'S



Social distancing



should be practised by everyone.
Assume you are exposed to the coronavirus.



- Maintain at least 6 feet distance from others
- Avoid handshake or any contact with people and sharing objects
- Most importantly, stay at home

**STAY HOME,
STOP THE SPREAD**



Precaution is our best defence against **Covid19**



Use common sense to stay healthy. Wash your hands a lot. Follow good hygiene practices. And, avoid touching or rubbing your nose, mouth and eyes.



LV Prasad Eye Institute

Do not rub your eyes!

Good eye care practices in times of **Coronavirus**



This will lower your risk of infection. If you feel an urge to itch or rub your eye or even to adjust your glasses, use a tissue instead of your fingers.

If you must touch your eyes for any reason — even to administer eye medicine — **wash your hands first with soap and water** for at least 20 seconds.

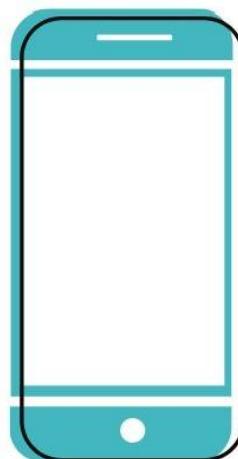


Let's clean your Smartphone (Covid-19)

Unplug your phone, turn it off and
remove its case

Dampen a microfibre cloth with water
& simple home-soap

Now gently rub the surface of phone with
the microfibre cloth



Keep in mind, not to get any moisture in
any opening of the phone

Finally, dry your phone with a clean,
dry microfibre cloth

Infographics 5 Surface Cleaning

All surfaces that could potentially be contaminated should be **cleaned** periodically. These include door handles, slit lamp handles, keyboard, mouse, computer, cell phones, tables and chair handles etc.



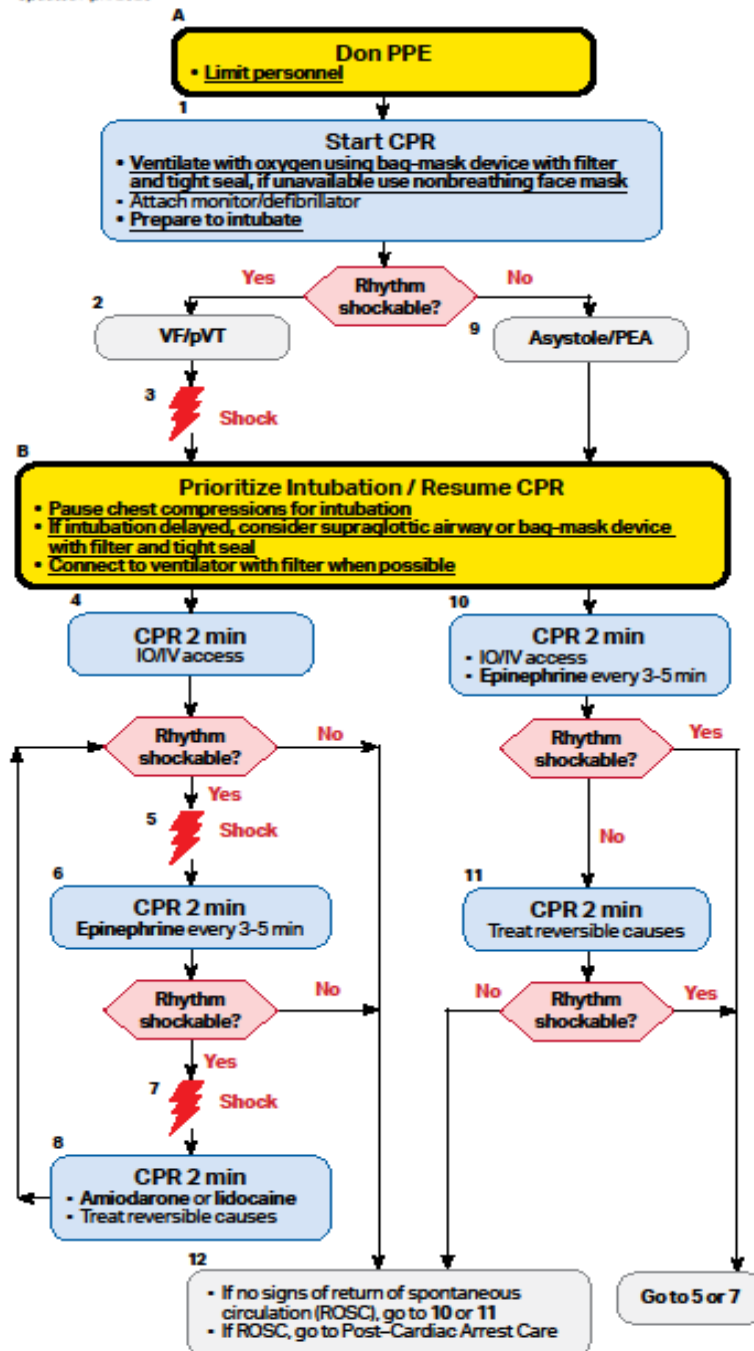
Stay safe from Corona Virus

Infographics 6: ACLS Algorithm for suspected COVID-19 patient.

Infographics 7: PALS Algorithm for suspected COVID-19 patient.

Pediatric Cardiac Arrest Algorithm for Suspected or Confirmed COVID-19 Patients

Updated April 2020

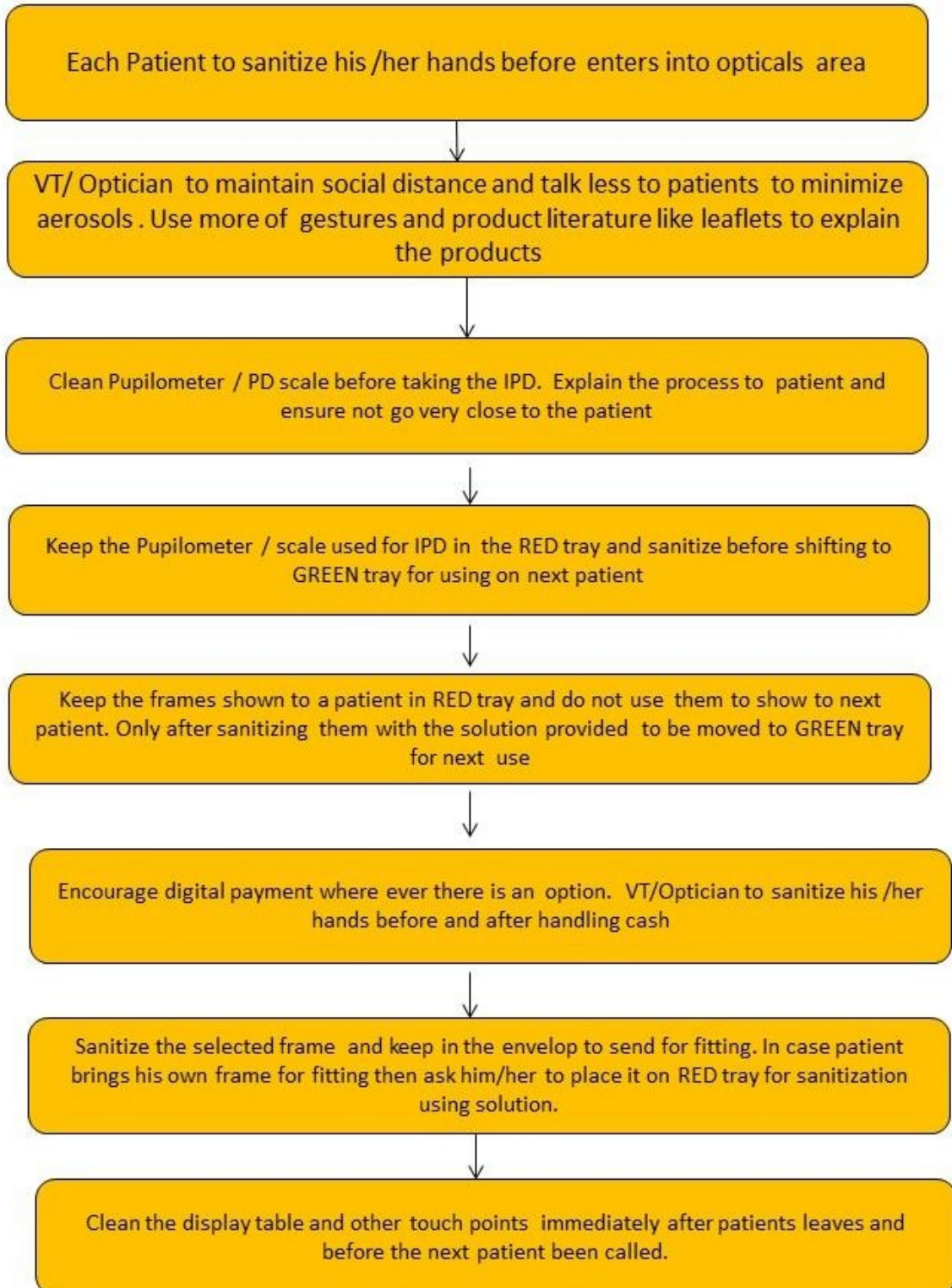


© 2020 American Heart Association

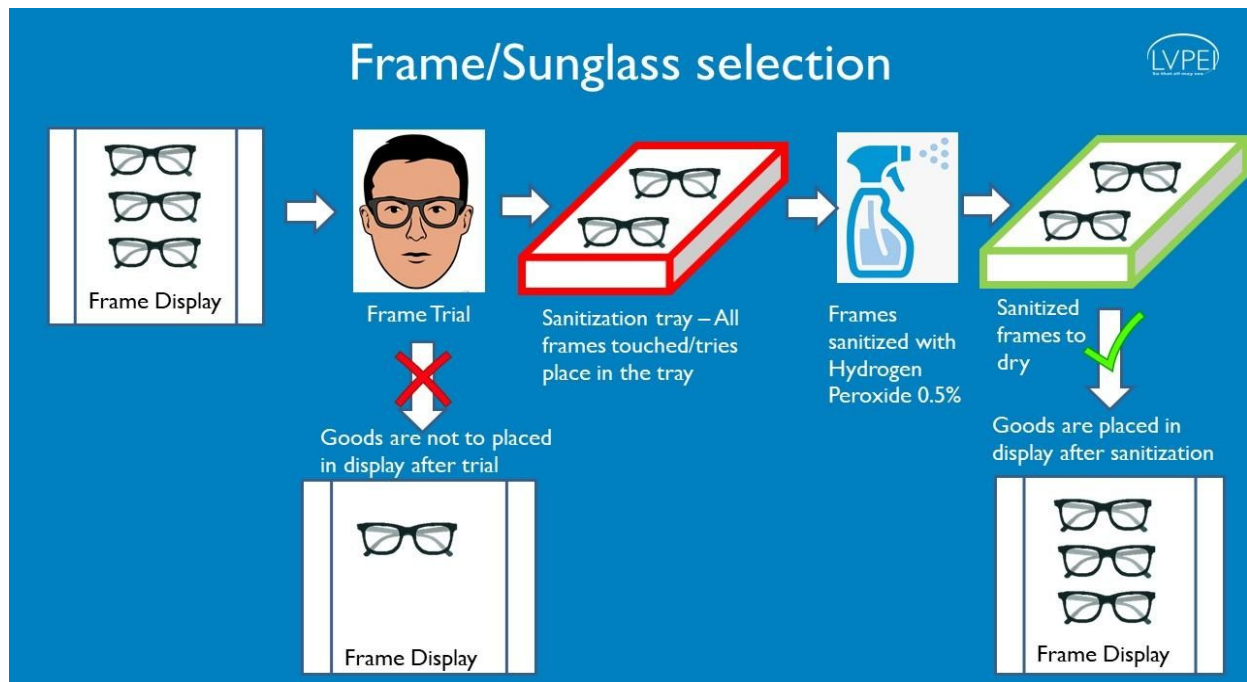
CPR Quality
<ul style="list-style-type: none"> • Push hard (2/3 of anteroposterior diameter of chest) and fast (100-120/min) and allow complete chest recoil. • Minimize interruptions in compressions. • Avoid excessive ventilation. • Change compressor every 2 minutes, or sooner if fatigued. • If no advanced airway, 15:2 compression-ventilation ratio.
Shock Energy for Defibrillation
<p>First shock 2 J/kg, second shock 4 J/kg, subsequent shocks ≥4 J/kg, maximum 10 J/kg or adult dose</p>
Advanced Airway
<ul style="list-style-type: none"> • Minimize closed-circuit disconnection • Use intubator with highest likelihood of first pass success • Consider video laryngoscopy • Prefer cuffed endotracheal tube if available • Endotracheal intubation or supraglottic advanced airway • Waveform capnography or capnometry to confirm and monitor ET tube placement • Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions
Drug Therapy
<ul style="list-style-type: none"> • Epinephrine IO/IV dose: 0.01 mg/kg (0.1 mL/kg of the 0.1 mg/mL concentration). Repeat every 3-5 minutes. • Amiodarone IO/IV dose: 5 mg/kg bolus during cardiac arrest. May repeat up to 2 times for refractory VF/pulseless VT. or • Lidocaine IO/IV dose: Initial: 1 mg/kg loading dose. Maintenance: 20-50 mcg/kg per minute infusion (repeat bolus dose if infusion initiated >15 minutes after initial bolus therapy).
Return of Spontaneous Circulation (ROSC)
<ul style="list-style-type: none"> • Pulse and blood pressure • Spontaneous arterial pressure waves with intra-arterial monitoring
Reversible Causes
<ul style="list-style-type: none"> • Hypovolemia • Hypoxia • Hydrogen ion (acidosis) • Hypoglycemia • Hypo-/hyperkalemia • Hypothermia • Tension pneumothorax • Tamponade, cardiac • Toxins • Thrombosis, pulmonary • Thrombosis, coronary

Infographics 8: Optical outlet protocol during COVID pandemic

OPTICAL OUTLET PROTOCOL



Infographics 9: Spectacle dispensing workflow



Use Red Tray to place the frames tried by the patients



After sanitization, please place the frames in the Green tray and later back in the display unit

Infographics 10: Optical Equipment Sanitization


Optical Equipment Sanitization



- All optical equipment should be sterilized after using for a customer with Alcohol swabs.
 - ✓ PD Meters – don't miss nose pads and forehead bar
 - ✓ Scales –entire scale
 - ✓ Lens meter –after checking PGP
 - ✓ Frame measurement tools



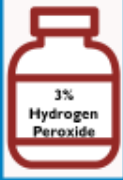
Infographics 11: Optical frame cleaning protocol









Frame cleaning solution

Hydrogen Peroxide[H₂O₂] 0.5% *

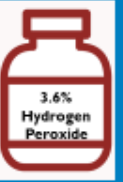
Available in local pharmacies in 3% or 3.6% H₂O₂







+




=


3 % Hydrogen Peroxide mix with 5 parts of water to make it 0.5% Hydrogen Peroxide and transfer to a spray jar

+



=




3.6 % Hydrogen Peroxide mix with 5 parts of water to make it 0.5% Hydrogen Peroxide and transfer to a spray jar



Frame cleaning solution

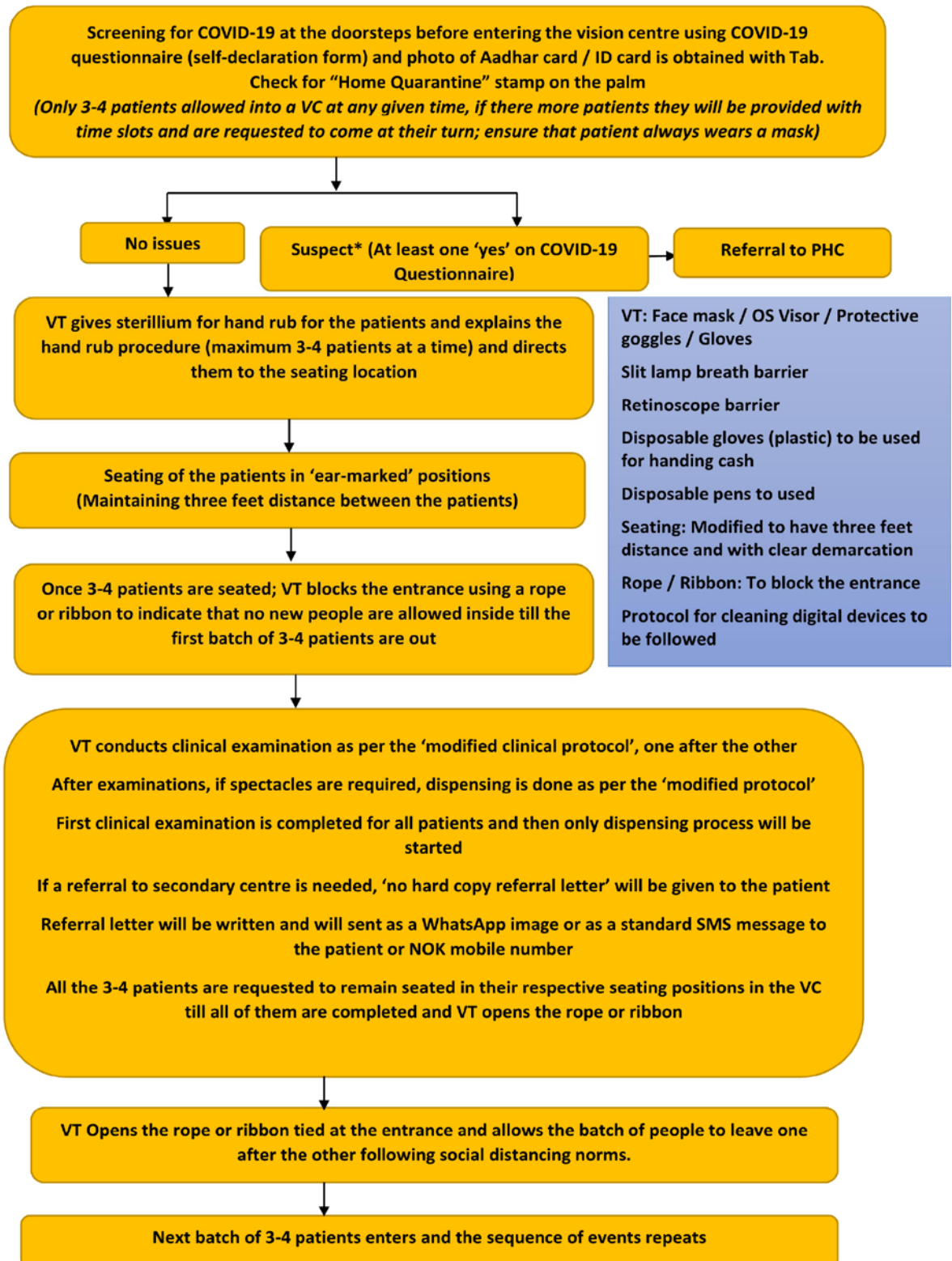
Hydrogen Peroxide[H₂O₂] 0.5% *

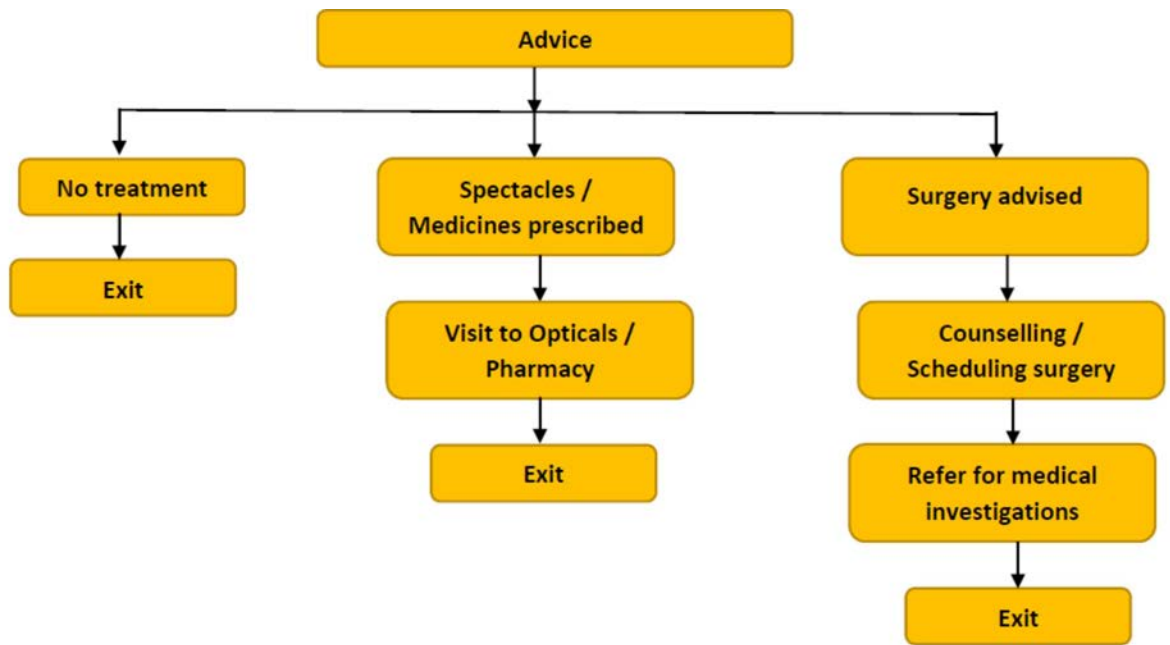
- Spray 0.5% H₂O₂ on a clean cloth and clean the spectacles or sunglasses, covering all parts of the frame especially the nose bridge and nose pads.
- Store in cool and shady place

→→

Infographics 12: Modified workflow for Vision Centres – Post COVID-19

Modified workflow for vision centres – Post COVID-19



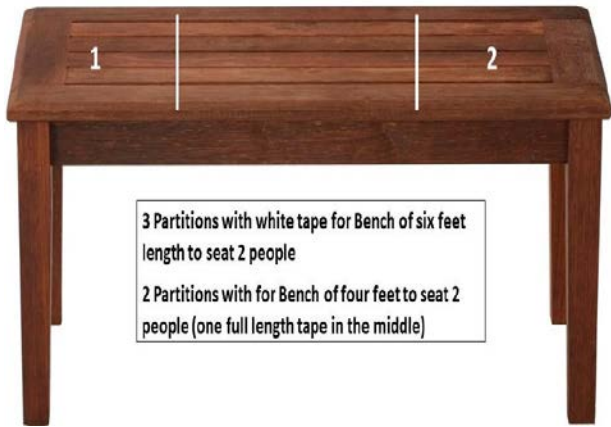


Infographics 13: Cleaning protocol at Vision Centres

Type of surface	Disinfectant to be use	Frequency of cleaning
Metallic surfaces <ul style="list-style-type: none"> • Door handles, • Desk handles, etc • Locks, keys • Partition surfaces 	Regular household solution such as Lizol / Lemonizer and water (Lysol Disinfectant Surface Cleaner)	Twice a day* (Once in the morning after opening and once after lunch)
Electronic /IT equipment <ul style="list-style-type: none"> • Monitor, Keyboard, Mouse • Mobile, Tablet 	70% Isopropyl Alcohol wipes	Three times a day
Floor <ul style="list-style-type: none"> • All open area in the examination room, waiting and seating area 	Regular household solution such as Lizol / Lemonizer and water (Lysol Disinfectant Surface Cleaner) <ul style="list-style-type: none"> • About 30ml for 4 Litres water • Apply /Sprinkle on the surface until thoroughly wet • Wipe with a clean cloth, sponge, or mop To Sanitize: Leave for 1 minute before wiping To Disinfect: Leave for 10 minutes before wiping	Three times a day
Wooden surfaces <ul style="list-style-type: none"> • Desks / Benches / Chairs 	0.5% Hydrogen Peroxide solution in a spray bottle or Regular household solution such as Lizol / Lemonizer and water (Lysol Disinfectant Surface Cleaner)	Twice a day* (Once in the morning after opening and once after lunch)
Medical equipment <ul style="list-style-type: none"> • Slit lamp including barrier • Trial frame • Retinoscope / Barrier sheet • Barrier for Forus camera 	70% Isopropyl Alcohol wipes	Every time before starting an eye examination
Dispensing area <ul style="list-style-type: none"> • Spectacles frames • Display mirror • Display unit desk 	0.5% Hydrogen Peroxide in a spray bottle	After every patient

* Cleaning will be done by the Vision Technician

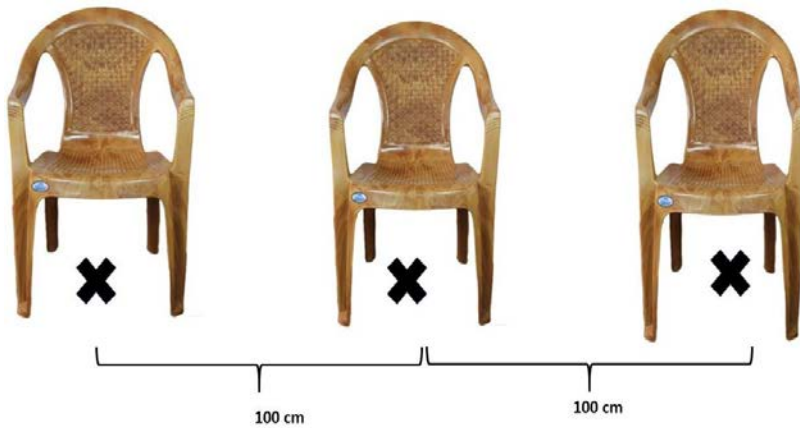
Infographics 14: Arrangement of Chairs at Secondary Centres and Vision Centres during COVID-19 Pandemic



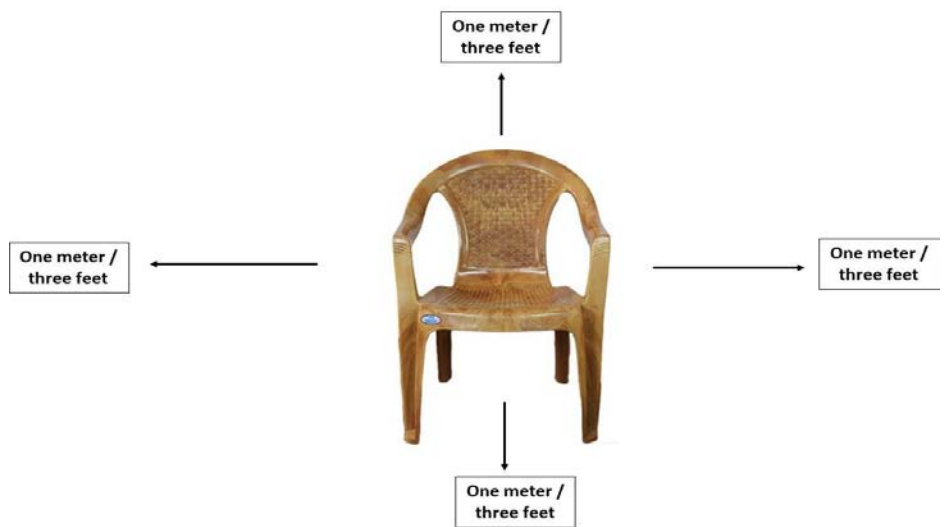
3 Partitions with white tape for Bench of six feet length to seat 2 people
2 Partitions with for Bench of four feet to seat 2 people (one full length tape in the middle)



Patients should be instructed to sit on chairs indicated with white cross



Chairs should always be places over the cross made with white tape / Marker



Infographics15: Personal Protective Equipment ready reckoner for Secondary Centres and Vision Centres during COVID-19 Pandemic

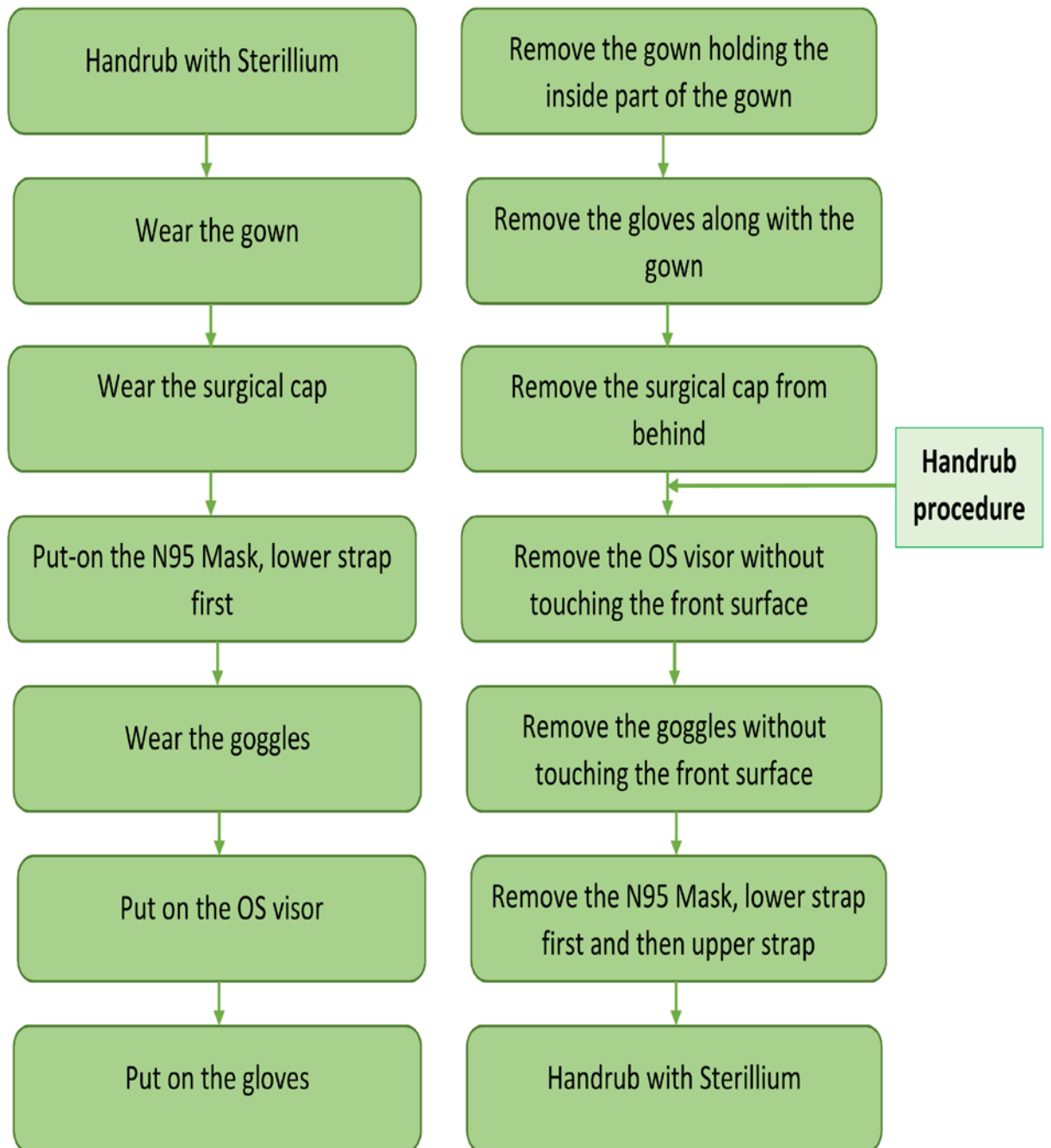
All need to wear full sleeves shirt and maintain social distancing

- Social distancing to be maintained at all levels
- All patients to wear mask at all times

Staff	Cloth mask	Surgical mask	N95 mask	Gloves	Visor	Gowns
Security	Yes	----		Yes	Yes	----
CSP staff	Yes	----		Yes	Yes	----
Reception	----	Yes		Yes	Yes	----
Vision technician	----	----	Yes	Yes	Yes	Yes
Ophthalmologist	----	----	Yes	Yes	Yes	Yes
Counsellor	----	Yes		Yes	Yes	----
Ward nurse	----	----	Yes	Yes	Yes	Yes
Operating room staff	----	----	Yes	Yes	Yes	Yes
Stores	Yes	----	----	Yes	Yes	----
Pharmacy	----	Yes	----	Yes	Yes	----
Opticals	----	Yes	----	Yes	Yes	----
House keeping	----	Yes	----	Yes	Yes	----
PCA	----	Yes	----	Yes	Yes	----
Driver	Yes	----	----	----	Yes	----

Infographics 16: Sequence of Donning and Doffing Personal Protective Equipment during COVID-19 Pandemic

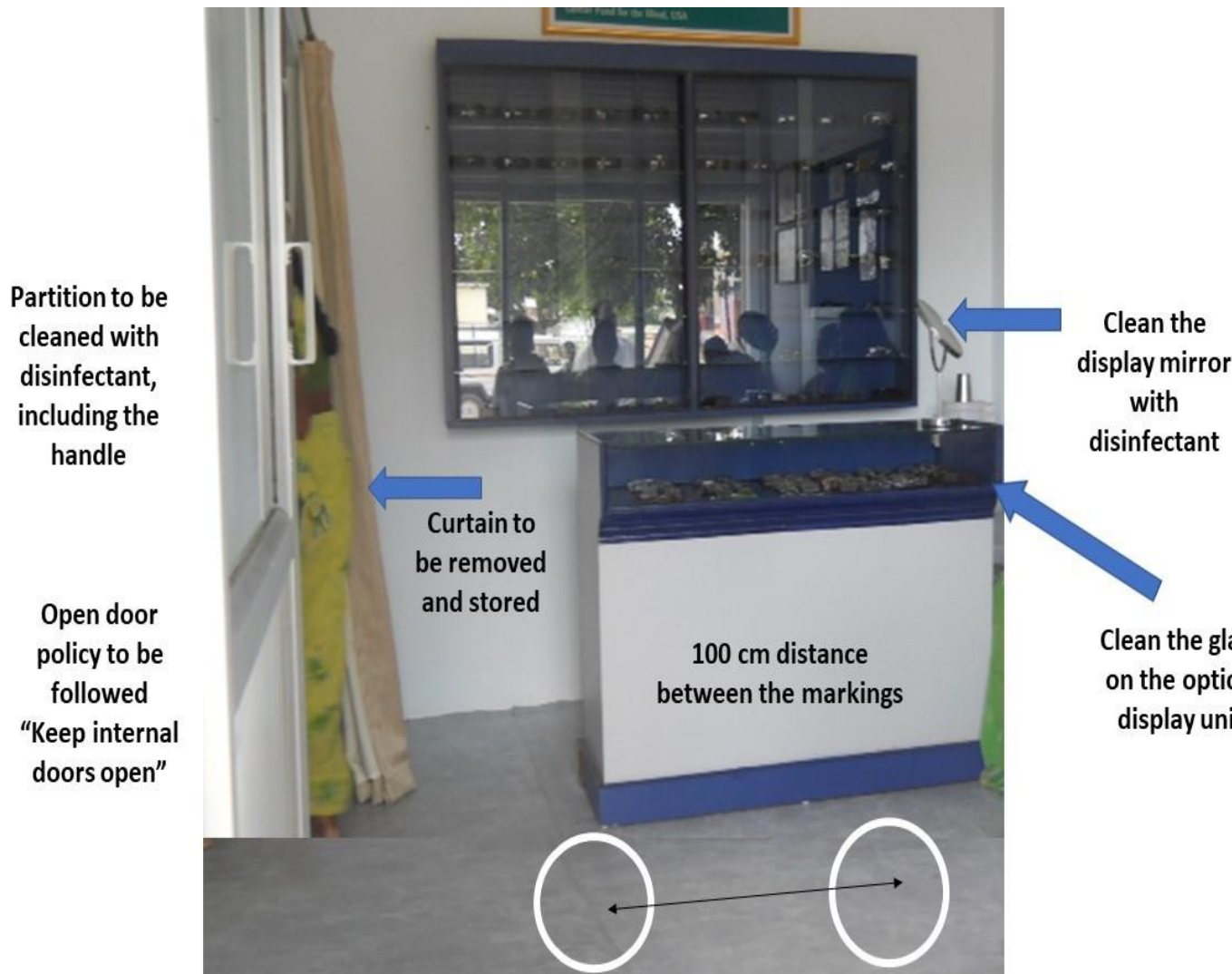
Donning and Removing the Personal Protection Equipment – Sequence



Adapted from Centers for Disease Control and Prevention (CDC) Handout:

<https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>

Infographics 17: Positioning of Optical shop at Vision Centre



RESOURCES AND LINKS

Resources and Links

- Preparing a Slit lamp shield: <https://youtu.be/VMMlt2aXGhk>
- Handwashing technique: <https://www.youtube.com/watch?v=lisgnbMfKvI>
- Hand cleaning with sanitiser: <https://www.youtube.com/watch?v=4xC-7ZiQoY>
- <https://www.youtube.com/watch?v=yC61ZPFjuic>
- Wearing a surgical mask: https://www.youtube.com/watch?v=qilLP_UnaHg
- Cleaning a mobile phone: <https://www.youtube.com/watch?v=XwPVqXrJitI>
- <https://www.bbc.com/news/av/technology-51863924/coronavirus-how-to-clean-your-smartphone-safely>
- Hand washing and other ways to protect yourself : <https://www.bbc.com/news/av/health-51722269/coronavirus-hand-washing-and-other-ways-to-protect-yourself>
- (Source: <https://images.app.goo.gl/o1XAEPdwAcG48M3RA>)
- Guidelines for using N95 Mask: <https://www.youtube.com/watch?v=zoxpvDVoNI>