STANDARD OPERATING PROCEDURES FOR FUNCTIONING OF OPHTHALMIC FACILITIES NPCB&VI IN THE CURRENT CONTEXT OF COVID-19
1. All eye care facilities to carry out routine clinical activities including OPD, IPD and Surgical Procedures, in all areas except the containment zones.

2. But all due precautions for preventing the spread of infection to be taken like Social distancing, wearing of face masks, face shield, Goggles etc. and frequent Hand Wash/Hand rub as per MOHFW additional guidelines for non-COVID hospitals.

3. Ensure minimum patients at any given time in the premises and maintain physical distancing norms of three feet between the patients.

4. Ensure minimum touch of OPD Cards, Trial Frames, Trail lenses and other paraphernalia being used in the Eye OPD and their frequent disinfection.

5. Ensure patient wears a face mask and uses a hand rub before entering the OPD and does not have symptoms resembling Covid infection.

6. A special consent form should be filled by the patient before any invasive procedure is undertaken, disclaiming responsibility from the development of future Corona infection in the patient. This fact should be well explained to the patient.

7. No outreach camps to be undertaken. No mobile vans to be sent in the field.

8. Tele-ophthalmology and Teleconsultation practices to be explored and encouraged specially in difficult areas.

9. IEC messages through digital means only

10. No eyeball retrieval from homes, however, HCRP can be continued in Non-Covid dead patients, for the need of corneas for therapeutic purposes only.

11. During surgical procedures, the surgeons and the OT team should follow the guidance and precautions as for other surgeons (as per MOHFW additional guidelines).

12. Pre-surgical Covid test on patients is not mandatory.
Measures to be observed during Work

For staff:

1. All persons to wash hands and/or use hand sanitizers at the entry point to the hospital.
2. Strict enforcement of screening protocols, and one attendant only policy at the entry point.
3. The Self Declaration/ Consent Form (only for procedures) is to be filled and body temperature to be noted (Annexure -1)
4. Arogya Setu app, to be downloaded or to dial Aphathamitra helpline 14410 by all staff and patients as mandated by Govt guidelines with location enabled in his/her mobile.
5. A checklist for patients to be pasted near the screening counter for information and education about the measures.
6. All persons inside the hospital to wear masks at all times (refer to the table of recommended PPE). Patients and their attendants to be advised to come wearing masks. In case anyone does not have a mask, the same is to be provided at the screening counter near the entrance.
7. Identify opportunities to modify process flow in OPD to minimize people’s movement inside premises and also to reduce time spent during the hospital visit.
8. Physical distancing to be observed at all times and in all areas.
   a. Cords/ribbons/Tapes to be tied to alternate chairs in the waiting area to ensure that people are seated at least one chair apart.
   b. Tapes on the floor and physical barriers like queue managers, etc to be used to help people maintain physical distancing.
9. Reducing instances of hand to hand transfer (handing over of bills/ prescriptions)
10. Preferably no folder to be used or plastic folders may be used for movement of Patient stationery (prescriptions, files, coordination slips, etc.) during OPD and IPD visits so that the same can be easily disinfected with 1% sodium hypochlorite or 70% alcohol solution.
11. Hand hygiene and disinfection protocols to be strictly complied.
12. Equipment maintenance protocols to be continued.

For Use of PPE: Refer Annexure -3

Protocol for Screening and Triaging

For patients & attendees:

The patient screening desk shall be located near the entrance to the hospital and would be the first contact point before the patient reaches the front desk/registration counter.
1. The patient screening desk shall be manned by a nurse and/or paramedical person who shall screen all the patients and attendants. Other staff may assist depending on the requirement.
2. The screening desk shall have the body temperature measuring device, the self-declaration form, hand sanitizer, Yellow BMW bin, spare masks, a register to note down the details of the patients and their attendant.

3. Body temperature of the patient, attendants and staff to be checked. Persons with fever >37.5°C or 99.5°F shall be kept in separate triage Aptomitra helpline 14410 to be advised to seek appropriate medical help.

4. The triaging to be done as follows:
   a. Patients without fever and no travel history, no Flu-like illness and no history of contact with a known case of COVID-19: to proceed further to the registration counter.
   b. Patients with fever and/or positive history of travel and/or Flu-like illness and/or contact with a positive case of COVID-19: to be directed to seek treatment at Fever clinic or dial Aptomitra helpline 14410.

5. All persons to observe hand sanitization before proceeding further to the registration counter.

PROTOCOL FOR OPD:

For staff:

1. The general instructions are already outlined above.

2. Wear PPE as indicated: surgical mask, goggles/ face shield and gloves.

3. Observe hand hygiene.

4. Slit-lamp should have the barriers/ breath shields. All the surfaces should be cleaned before examining the next patient.

5. Equipment disinfection protocols to be followed. Ensure proper disinfection frequently, where patient is coming in contact.


PROTOCOL FOR DILATATION:

1. Avoid touching patient while instilling dilating drops.

2. Instruct patients to pull lower eye lid down by themselves while drop is being instilled.

3. If you have to touch patient, use a bud to pull lower lid down or use disposable gloves.

PROTOCOL FOR REFRACTION:

1. Follow general guidelines as already detailed above.

2. Wear appropriate PPE.
3. If patient has 6/6 and N6 vision unaided or with current spectacles, retinoscopy may be avoided.

4. During vision screening and refraction maintain 2-3 feet distance from the patient.
   - **Visual Acuity:**
     - **Distance:** When testing visual acuity, one may start from the lowest achievable line to speed things up. Avoid using occluder and request patients to close the non-testing eye with their palm after using sanitizer. At least one-meter distance from the patient should be maintained while assessing visual acuity.
     - **Near:** Hold the near vision chart with gloved hands at appropriate distance instead of the patient holding the chart. One may assess the near vision while standing so that the examiner is at a higher level compared to that of the patient.
     - **Manifest Refraction:** Avoid touching the forehead of the patient to measure working distance. The Trial frame, pinhole occluder and all lenses used should be wiped with alcohol swab or appropriately sanitized before bringing the next patient and provide sufficient time to make the surface of these instruments dry.

5. **Follow disinfection protocol.**
   - Keep a bowl with disinfectant solution and cotton next to the trial set. Used lenses to be disinfected before being returned back to the set. Avoid mixing of unused lenses with used lenses before they are properly disinfected.
   - Trial frames, lenses, furniture, etc used by patient to be disinfected immediately.
   - Unused instruments, tabletops, computers, etc to be disinfected every 2 hours.

6. **Contact Lens:**
   - Contact lens trial to be avoided unless there is an urgent clinical indication.
   - Use fresh contact lens for every patient to check the fits.
   - Use regular contact lens disinfecting solution.
   - For soft lens, trial use disposable lenses.
   - In the case of specialty Contact lenses, the lenses have to be disinfected using 3% H2O2 and neutralize with normal saline for 2 hours. Space the specialty appointments in such a way that the same lens would be used after a week or whatever period you feel would be safer.

7. **For measuring pupillary distance (PD)**
   - Ensure that you are wearing the face shield and gloves.
   - Ensure that appropriate physical distance is maintained.
   - Follow hand hygiene and disinfection protocols.
8. Patient should perform hand hygiene before touching the frames.
9. Request them to shortlist and try on as few frames/sunglasses as possible. Explain that all products worn need to undergo an elaborate disinfection process.
10. Sample frames, mirrors, furniture, etc touched by the patient must be disinfected immediately before use by the next patient.
   • Spectacle frames: 0.5% Hydrogen peroxide or liquid dish soap and rinse with water.
   • Sunglasses: Liquid dish soap and rinsing with water.
   • Spectacle lenses: Use Isopropyl Alcohol.
   • PD meter/lens meter: Rundown gently with 70% Isopropyl Alcohol. Don’t spray.
11. Use tissue paper to clean the frames and dispose it immediately. Cloth cleaning may be avoided to discourage multiple use.
12. Explore the possibility of home delivery of spectacles to avoid frequent visits to the hospital.
13. Intraocular Pressure (IOP): IOP may be performed using Schiotz tonometry or Goldman applanation tonometry (GAT) or such devices to minimize the risk of cross infection. The GAT prism to be wiped with alcohol between every case and with 1:10 sodium hypochlorite at the beginning and end of the day. Non-contact tonometry may be avoided as it is may generate aerosols.
14. Lacrimal sac evaluation: Take universal precautions while examining the lacrimal sac. In suspicious case of chronic nasolacrimal duct obstruction or chronic it is advisable to postpone cataract surgery.
15. Fundus examination: Do not use direct ophthalmoscope. Use indirect ophthalmoscope. Indentation to be avoided.
16. Nd: YAG Capsulotomy: It can be considered wherever necessary. The breast shield should be installed as a barrier between the patient and the ophthalmologist.

PROTOCOL FOR PRE ADMISSION COVID-19 TESTING:
Pre-surgical COVID test on patients is not mandatory as per the guidelines issued by Govt. of Karnataka Health & Family Welfare Services, letter no - HFW 146 ACS 2020 dated 08-05-2020.

Protocol for Surgery/IPD Procedures :-
Scheduling of surgery/IPD procedures can be done while maintaining the OT air-conditioning, disinfection and culture protocols.
• All persons going to OT to wear PPE as recommended.
• Reduce the number of staff going to OT to have less crowding and also economical
use of PPE. The suggested bare minimum OT team is one surgeon, one assistant to the surgeon (only if necessary), one anaesthetist, one circulation staff (nurse or OT tech as may be required) and one housekeeping staff.

• Choose the quickest possible surgical procedure. Quick and safe surgery is warranted.
• A gap of at least 20 minutes is to be maintained between two procedures in the same OT for GA cases.
• Surface disinfection of OT table, equipment, trolleys, etc to be carried out between two procedures.
• Ensure safe use of consumables.
• Ensure proper management of Biomedical Waste as per the BMW Management Rules.
• Aerosol generating procedures such as intubation and extubation should be done by anesthetist with full PPE use and the surgeon should be outside the OT during these procedures. Bare minimum staff should be present when the patients are intubated and extubated in the OT.

PROTOCOL FOR DISINFECTION:-
EQUIPMENT SURFACES THAT TOUCH THE PATIENT:

• Clean the patient contact areas on medical equipment with alcohol wipe.
• These include Forehead rest and Chinrest of the following equipment;
  Slit lamps
  Keratometers
  Autorefractometers
  Retina Laser
  YAG Laser
  OCT
• These also include the trial lens and frames.
• Change Chin-rest Papers on Slit Lamps in-between every patient.
• Slit-lamp barrier screens to be disinfected in between patients with 70% isopropyl alcohol.

EQUIPMENT AND EQUIPMENT PART THAT COME IN CONTACT WITH THE EYE:

• These should be cleaned with alcohol swabs and dried before using for another patient.
• These include
  Aplanation Tonometer
  Pachymeter probe
  A scan probe
  B scan probe
• Lenses that come in contact with the cornea, like Gonioscopes, YAG lenses, etc.
  o Gel is placed on the corneal contact part of the lens, so this must be rinsed off after every use.
  o The lens should be dried with a soft cloth after use.
  o The lens should be disinfected with alcohol before and after use.

Specific Guidelines for Equipment Disinfection
Coordinate with the Biomedical Engineering Team and Quality team to keep update on any particular guidelines that may be provided by the Equipment Manufacturer.

Housekeeping Protocol:
The hospital areas shall be classified as follows:

High-risk areas: OT, Registration, OPD, Counselling room, Consultation room, Patient waiting areas, Lifts, Washrooms

Moderate risk areas: Meeting halls, Lounges, Cabins

Low-risk areas: NONE
• Floor of all the high-risk areas MUST be cleaned with 7% Lysol every 2 to 3 hourly and Moderate risk areas 3 times a day.
• Deep Cleaning to be done any time when there is any contamination.
• Door handles, side rails on stairs, bedside rail, high touch surface like reception counter, help desk, gate with 1% Sodium Hypochlorite (2 to 3 hourly)
• Chair in the waiting area (head end, armrest etc), Electronic /IT equipment like monitor, Keyboard, Mouse etc must be done with alcohol swab frequently.
• All wheelchair and stretcher trolley must be cleaned with 1% Sodium Hypochlorite solution.

DETECTION OF COVID -19 CASES IN HEALTH FACILITIES:

This should be followed by disinfection of the surfaces using 1% sodium hypochlorite and the rooms (all areas visited by positive patient) sterilized using fumigation as per guidelines. The facility can be re-used from the next day (https://nccd.gov.in/showfile.php?id=435). Whenever a non-COVID patient or any healthcare workers is suspected to have COVID like symptoms/tests positive for COVID-19, it should be investigated by HICC.
Follow up actions:

When an Organization reports a COVID-19 case, the HICC will ensure the following in order to minimize the possibility of an undetected contact/case amongst other patients/HCWs:

- Ensure that active screening of all staff at the hospitals is done daily (by means of thermal screening especially at the start of shift)
- All healthcare and supportive staff is encouraged to monitor their own health at all the time for the appearance of COVID-19 symptoms and report them at the earliest.
- Standard precautions which has already been shared by Govt. of India and Quality team to be followed diligently by all
- Follow all guidelines regarding the triaging of patients.

Joint Director (Ophthalmology)
Directorate of Health & F.W. Services
Anada Rao Circle, Bengaluru-09
Annexure -1

DECLARATION/SCREENING FORM FOR COVID-19 INFECTION

To ensure your safety and the safety of the doctors and hospital staff who are trying to help you with your eye condition and for the safety of the other patients visiting the hospital, as per the guidelines issued by the Ministry of Health and Family Welfare, Government of India and WHO, We need the following particulars before we take you up for consultation/surgery/procedure. Please note that in case of any event in the future, if any of the below-given details are found to be false and not correct, strict action may be initiated against you and your family members as per guidelines and regulations laid down by MoH&FW, Government of India.

Name of Patient: __________________________ Age / Sex: ______________

Address: __________________________________________________________

Mobile No: ___________________________

(Verified Y / N) MRD No: ___________________________

Alt Mobile No: (Verified Y / N) ___________________________

Email ____________________________ Aadhar Card Number ________________
<table>
<thead>
<tr>
<th>S.No.</th>
<th>COVID-19 QUESTIONNAIRE</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Do you or your accompanying relative or a family member staying with you have symptoms of Fever, Cough, Sneezing, Sore throat, Extreme tiredness/body ache, difficulty in breathing, Loss of smell and taste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Have you or a family member staying with you travelled outside city to any other city/town/place/containment zone/country in past 14 days? If Yes, mention details. Details of place visited: _____________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Did you or a family member staying with you have any exposure to a confirmed COVID-19 patient or to a suspicious patient in last 14 days?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Have you downloaded Arogya Setu application on your phone and kept it “ON”?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Have you or a family member staying with you visited a health care facility in the past 14 days? If Yes, mention purpose _</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Did you or a family member staying with you have a red eye in last 21 days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Body Temperature recorded: .................................................................

Name and Signature of the patient: .........................................................

Name and Signature of Accompanying Relative: .....................................

Verified by Staff Sign.................................................................

Time.................................................................Date.............................
COVID-19 PANDEMIC OPHTHALMIC TREATMENT CONSENT FORM

I understand the novel coronavirus causes the disease known as COVID-19. I understand the novel coronavirus has duration during which carriers of the virus may not show symptoms and. Even though lockdown is lifted, in the wake of the current Coronavirus threat pandemic (present all over the world), I have come to _________________ (Name of the Hospital) by my own free will for my Eye Treatment. I suspect it may endanger doctors and hospital staff. It is my responsibility to take appropriate precautions and to follow the protocols prescribed by the hospital staff.

I am aware that I may get an infection from the hospital or from a doctor, or other patients in the hospital even after the hospital has taken precautions, which have been explained to me, as per guidelines prescribed by the Ministry of Health and Family Welfare, Government of India and WHO. This disease spreads by droplets and is very contagious even though every precaution is taken it will reduce the risk of transmission and will not completely eliminate the risk.

I understand that ophthalmology (eye) procedures (OPD & OT) might create droplets which is one way that the novel coronavirus can spread. The droplets can linger in the air for minutes to sometimes hours, which can transmit the novel coronavirus.

I confirm that I am not in a high-risk category, including: diabetes, cardiovascular disease, hypertension, lung diseases including moderate to severe asthma, being immunocompromised, or over age 60. OR I fall into the following high-risk category (__) and my doctor and I have discussed the risks, and I agree to proceed with treatment.

I confirm that I am not waiting for the results of a laboratory test for the novel coronavirus.

I verify that I have not been identified as a contact of someone who has tested positive for novel corona virus or been asked to self-isolate by the government.

I also understand that during my treatment and recovery, I can contact this infection outside the hospital premise. I will take every precaution to reduce the risk of transmission from happening, but I will not at all hold doctors and hospital staff accountable if such infection occurs to me or my accompanying persons. In case I or my attendant gets the COVID-19 infection after the visit to the
hospital, I will inform the hospital authorities at the earliest, so that appropriate tracking of the patients/attendants and hospital staff present on the day of my visit can be done.

I verify the information I have provided on this form and in the questionnaire overleaf is truthful and accurate. I knowingly and willingly consent to necessary investigations and treatment completed during the COVID-19 pandemic. I am also aware, if any details provided by me or by my accompanying relative are found to be false and not correct or if I or accompanying relative has hidden facts and other relevant details, appropriate legal action may be initiated against me and my family members as per applicable government rules.

________________________________________
SIGNATURE/THUMB IMPRESSION OF PATIENT

Name____________________________________ Date________________________

Mobile No.:______________________________________________________________

Address:________________________________________________________________

Name of the Attendant:______________ Date:_______ Mobile No.______________

Signature of the Attendant

Name of the Doctor/Hospital Personnel______________ Date: ________________

________________________________________
SIGNATURE OF THE DOCTOR/ HOSPITAL PERSONNEL
GOVERNMENT OF KARNATAKA

No. HFW172ACS 2020
Karnataka Government Secretariat
Vikasa Soudha
Bengaluru, dated 22.5.2020

CIRCULAR

SOP for Management of Biomedical Waste in COVID situations - 09-05-2020 (Version 1.0)

In order to deal with COVID-19 pandemic, Government of Karnataka has initiated various steps, which include setting up of quarantine centers/camps, isolation wards, sample collection centers and laboratories.

The waste generated in the above settings should be handled with utmost care and disposed safely such that it does not harm the human health or environment.

The following Standard operative procedures are based on current guidelines issued by CPCB and NGT directions; they shall be updated from time to time based on guidelines issued by WHO, MoH&FW, ICMR, CPCB, CDC and other concerned agencies.

1. Authorization:

   • Fever clinics/ COVID Care Centres/DCHC /Dedicated COVID Hospital (DCH) which are already authorized should intimate the starting of COVID services to the respective CBWTF and KSPCB.
   • As per BMWM rules 2016, Quarantine wards come under the ambit of Health camps and they do not require authorization, but need to report to respective CBWTF and KSPCB.

2. Fever clinic/ DCHC/ Dedicated COVID Hospital/ wards/ICU/ COVID-19 sample collection centers and laboratories

2.1. Person responsible:

   ○ Nodal officer designated for Biomedical waste management/ Waste management committee is responsible to ensure safe management and disposal of BMW
   ○ Report opening or operation of COVID-19 ward, COVID ICU/ ward, COVID-19 sample collection centers and laboratories to KSPCB and respective Common Biomedical Waste Treatment Facility (CBWTF) located in the area.

   ○ Designated space to be provided for waste bins at all these facilities.
   ○ Depute dedicated sanitation workers separately for biomedical waste and general solid waste so that waste can be collected and transferred within time to temporary waste storage area. Deputed sanitation worker shall be provided with adequate PPEs and it should be ensured he/she is using the PPE properly and regularly.
   ○ Use of PPE by waste handler should be monitored by the nurse/lab technician working at COVID ward/ICU.
2.2 Segregation and containment:
- BMWM Rules 2016 to be followed and segregation of waste should be at point of generation. No change in segregation as per color code (Annexure-1)
- Keep separate color coded bins/bags/containers inwards and maintain proper segregation of waste as per BMWM Rules, 2016 as amended.
- Dedicated four color coded bins with liners with biohazard symbol should be provided at points of generation.
- In addition to mandatory labeling, bags/containers used for collecting biomedical waste from COVID-19 wards, should be labeled as “COVID-19 waste”. This marking would enable CBWTFs to identify the waste easily for priority treatment and disposal immediately upon receipt.
- Yellow, Red and blue Waste bins should be covered and be foot operated. Tamper proof, leak proof, puncture proof, white translucent container to be used for sharps waste.
- As precaution double layered bags (using 2 bags) should be used for collection of waste (Red, Yellow and Blue) from COVID-19 isolation wards so as to ensure adequate strength and prevent leakage. Additional packing if required can be done to prevent any spillage or leaks with outer labeling of COVID-19.
- Collect and store biomedical waste separately prior to handing over the same to CBWTF.
- Any disposable materials (Ex: plates, cups, food waste etc.) used by the COVID positive patients should be considered as BMW. Contaminated general waste generated in isolation wards/ICU to be disposed into yellow bin. Contaminated plastic general waste (Water bottles, plastic plates & cups etc) to be disposed to yellow bin.

2.3 Storage and on site-transportation:
- The frequency of waste collection must be done at least once a day or once 3/4th filled.
- Barcoding to be ensured for documentation of quantum of waste.
- Designated trolley should be used for transportation of waste from COVID wards to storage area or to the CBWTF vehicle directly. Trolley should be labeled as COVID-19.
- Predefined route should be followed for transportation of waste where there is minimal contact with other health care staff or patients.
- Designated temporary storage space to be allocated in the respective centers.
- Use dedicated collection bin labeled as “COVID-19” to store COVID-19 waste and keep separately in temporary storage room prior to handing over to authorized staff of CBWTF.
- Alternatively, biomedical waste collected in such isolation wards can also be lifted directly from ward into CBWTF collection van.

2.4. Onsite disinfection:
- The (inner and outer) surface of containers/bins/trolleys used for storage of COVID-19 waste should be disinfected with 1% sodium hypochlorite daily.
- Sharps waste should be disinfected with freshly prepared 1% Sodium hypochlorite solution and handed over to CBWTF once 3/4th filled. (Preparation of 1% Sodium Hypochlorite solution is given in Annexure-2)
- It is also preferable to pretreat waste in blue container with 1% Sodium Hypochlorite solution.
- As per BMWM rules 2016, all Laboratory waste including that of COVID-19 tested should be autoclaved /microwaved and disposed in red bin before handing it over to CBWTF.

2.5 Records:
- Maintain separate records for waste generated from COVID-19 isolation wards.
- Display the reports on website
3. Quarantine Camps/ Home-Care /COVID care centers (CCC)
   - Quarantine Camps/ Quarantine-Home/ Home-care/ CCC are the places where suspected people or the contacts of suspected/ confirmed cases who have been directed by authorized hospitals or local authorities to stay at home for at least 14 days for observation for any symptoms of COVID-19, if any.
   - Patients' positive for COVID-19 will not be treated at Quarantine Camps/ Quarantine-Home/ Home-care unless such situation is notified by the State Government.
   - Less quantity of biomedical waste is expected from quarantine Camps/ Home Quarantine/ CCC. However, the persons responsible for operating quarantine camps/centers/CCC need to follow the below mentioned steps to ensure safe handling and disposal of waste.
   - Biomedical waste generated from such places would be treated as 'domestic hazardous waste' as defined under Solid Waste Management Rules, 2016, and shall be disposed as per provisions under Biomedical Waste Management Rules, 2016.

3.1 Responsibility:
   - It shall be the responsibility of the Urban local bodies (ULB)/ District authorities to ensure that a proper mechanism is established such that general waste and biomedical waste is collected and disposed appropriately.
   - Persons operating Quarantine centers should call the CBWTF operator to collect Biomedical waste as and when it gets generated.
   - CBWTF should make necessary arrangement to collect the waste at door step or at designated collection points as identified.

3.2 Segregation: Waste generated at Quarantine facility/ Home care should be separated as General solid waste and Biomedical waste.
   - General solid waste (household waste) - should be handed over to waste collector identified by ULB/ District authorities or as per the prevailing local method of disposing general solid waste.
   - Biomedical waste
     o will comprise of used syringes, date expired or discarded medicines, used masks/ gloves and in case of patients with other chronic diseases may also include drain bags, urine bags, body fluid or blood-soaked tissues/ cotton, empty ampules etc.
     o should be collected separately in yellow colored bags (suitable for biomedical waste collection) provided by ULBs/ District authorities.
     o These bags can be placed in separate and dedicated dust-bins of appropriate size.

3.3. Collection of Biomedical waste:
   - Persons taking care of quarantine home/ Home-care should deposit biomedical waste if any generated from suspected or recovered COVID-19 patients, by following any of the following methods as may be arranged by ULBs/District authorities
     - Door to door collection of biomedical waste from the quarantine centers by the personnel from CBWTF.
     - Biomedical waste from the quarantine centers to be collected by authorized personnel and deposited at a designated centre for CBWTF to pick up.
     - Handover the yellow bag to an authorized waste collector at door step engaged by the ULB/ District authorities.
   - Separate vehicle to be used for collection of waste generated from the Quarantine centers.
4. Special considerations:

4.1. Faeces:

- Faeces from COVID-19 confirmed patient, who is unable to use toilets and excreta is collected in a diaper, must be treated as biomedical waste and should be placed in a yellow bag/container.
- If a bedpan is used, then faeces should be washed into toilet and cleaned with natural detergent and water, disinfected with a 1% Sodium hypochlorite solution, then rinsed and cleaned with water.

4.2. PPE

- Occupier shall provide appropriate PPE for waste handlers and waste collectors.
- Goggles, Gloves, Face shield, splash proof apron, plastic overall, Hazmat suit, nitrile gloves should be disposed in red bag.
- Used masks (triple layer mask and N95 mask), Head cover, cover/cap, disposable, linen, gown, non-plastic or semi-plastic coverall in yellow bags.
- Pre-treat viral transport media, plastic vials, Eppendorf tubes, plastic cryovials, pipette tips as per BMWM rules 2016 and collect in red bag.
- Used masks and gloves from quarantine or other households - paper bag for minimum of 72 hours prior to disposal, (cut the masks prior to disposal to prevent re-use).

4.3. Waste water from HCFs:

- Ensure disinfection of treated waste water with 1% Sodium hypochlorite / prevailing practices to inactivate corona virus.
- Operators of ETP/STP – Standard operative procedures, practice basic hygiene precautions and wear PPE – Face mask, Gloves, liquid repellent coveralls, waterproof gloves and rubber boots.
- During COVID-19 Pandemic, utilization of treated waste water in utilities of Health care facilities such as gardening, flushing of toilet etc. should be avoided.

4.4. Blood/ Body fluid spill management: Follow steps of spill management as described in Annexure-3.

5. Duties of Urban Local Bodies/ District authorities:

5.1. Urban Local Bodies are responsible for ensuring safe collection and disposal of biomedical waste, if any, generated from Quarantine Camps/Quarantine Homes/ Home Care for COVID-19 suspected persons.

5.2. Should maintain the list of Quarantine Camps/Quarantine Homes/ Home-Care and report to SPCCBs from time to time.

5.3. ULB/ district authorities shall engage CBWTF operator for ultimate disposal of biomedical waste collected from quarantine home/home care or waste deposition centers or from door steps as may be required depending on local situation; ULB/ District authorities shall make agreement with CBWTF in this regard.

5.4. Ensure lifting of Biomedical waste from quarantine camps by identified CBWTF at least once a day by either of the methods:

- Engage authorized waste collectors for door steps collection of biomedical waste and transfer to collection points for further pick-up by CBWTF; and/or
**Annexure -3**

(Ref: Additional guidelines on rational use of Personal Protective Equipment setting approach for Health functionaries working in non-COVID areas by Ministry of Health and Family Welfare dated 15th May 2020)

1. **About this guideline**

This guideline is for health care workers and others working in Non COVID hospitals and Non-COVID treatment areas of a hospital which has a COVID block. These guidelines are in continuation of guidelines issued previously on ‘Rational use of Personal Protective Equipment’ (https://www.mohfw.gov.in/pdf/GuidelinesonrationaluseofPersonalProtectiveEquipment.pdf). This guideline uses “settings” approach to guide on the type of personal protective equipment to be used in different settings.

1. Rational use of PPE for Non COVID hospitals and Non-COVID treatment areas of a hospital which has a COVID block

The PPEs are to be used based on the risk profile of the health care worker. The document describes the PPEs to be used in different settings.

### 1.1. Out Patient Department

<table>
<thead>
<tr>
<th>S. No</th>
<th>Setting</th>
<th>Activity</th>
<th>Risk</th>
<th>Recommended PPE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Help desk/Registration counter</td>
<td>Provide information to patients</td>
<td>Mild risk</td>
<td>Triple layer medical mask</td>
<td>Physical distancing to be followed at all times</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Doctors chamber</td>
<td>Clinical management</td>
<td>Mild risk</td>
<td>Triple layer medical mask</td>
<td>No aerosol generating procedures should be allowed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Chamber of Dental/ENT doctors/ Ophthalmology doctors</td>
<td>Clinical management</td>
<td>Moderate risk</td>
<td>N-95 mask Goggles</td>
<td>Aerosol generating procedures anticipated. Face shield, when a splash of body fluid is expected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves + face shield</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pre- anesthetic check-up clinic</td>
<td>Pre-anesthetic check-up</td>
<td>Moderate risk</td>
<td>N-95 mask Goggles*</td>
<td>* Only recommended when oral cavity/dentures is to be done</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Pharmacy counter</td>
<td>Distribution of drugs</td>
<td>Mild risk</td>
<td>Triple layer medical mask</td>
<td>Frequent use of hand sanitizer is advised over gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sanitary staff</td>
<td>Cleaning frequently touched surfaces/ Floor</td>
<td>Mild risk</td>
<td>Triple layer medical mask</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Latex examination gloves</td>
<td></td>
</tr>
</tbody>
</table>
# All hospitals should identify a separate triage and holding area for patients with Influenza like illness so that suspect COVID cases are triaged and managed away from the main out-patient department.

**12. In-patient Department (Non-COVID Hospital & Non-COVID treatment areas of a hospital which has a COVID block)**

<table>
<thead>
<tr>
<th>S.N o.</th>
<th>Setting</th>
<th>Activity</th>
<th>Risk</th>
<th>Recommended PPE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ward/individual rooms</td>
<td>Clinical management</td>
<td>Mild risk</td>
<td>Triple layer medical mask, Latex examination gloves</td>
<td>Patients stable. No aerosol generating activity.</td>
</tr>
<tr>
<td>2</td>
<td>ICU/ Critical care</td>
<td>Critical care management</td>
<td>Moderate</td>
<td>N-95 mask, Goggles, Nitrile examination gloves + Face shield</td>
<td>Aerosol generating activities performed. Face shield, when a splashing of body fluid is expected.</td>
</tr>
<tr>
<td>3</td>
<td>Ward/ICU/critical care (Non-COVID)</td>
<td>Dead body packing</td>
<td>Low Risk</td>
<td>Triple Layer medical mask, Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ward/ICU/Critical care (Non-COVID)</td>
<td>Dead body transport to mortuary</td>
<td>Low Risk</td>
<td>Triple Layer medical mask, Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Labor room</td>
<td>Intra-partum care</td>
<td>Moderate</td>
<td>Triple Layer medical mask, Face shield, Sterile latex gloves, Coverall N-95 mask*</td>
<td>Patient to be masked in the Labor room, if possible. *If the pregnant woman is a resident</td>
</tr>
<tr>
<td>6</td>
<td>Operation Theater</td>
<td>Performing surgery, administering general anesthesia</td>
<td>Moderate</td>
<td>Triple Layer medical mask, Face shield, (wherever feasible) Sterile latex gloves + Goggles N-95 mask*</td>
<td>Already OT staff shall be wearing For personnel involved in aerosol generating procedures. *If the person being operated upon is a resident of containment zone</td>
</tr>
<tr>
<td>7</td>
<td>Sanitation</td>
<td>Cleaning frequently touched surfaces/ floor/ changing linen</td>
<td>Low Risk</td>
<td>Triple Layer medical mask, Latex examination gloves</td>
<td></td>
</tr>
</tbody>
</table>
### 4 Other Supportive/ Ancillary Services

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Setting</th>
<th>Activity</th>
<th>Risk</th>
<th>Recommended PPE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Routine Laboratory</td>
<td>Sample collection and transportation and testing of routine (non-respiratory) samples</td>
<td>Mild risk</td>
<td>Triple layer medical mask Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respiratory samples</td>
<td>Moderate risk</td>
<td>N-95 mask Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Radio-diagnosis, Blood bank, etc.</td>
<td>Imaging services, blood bank services etc.</td>
<td>Mild risk</td>
<td>Triple layer medical mask Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CSSD/Laundry</td>
<td>Handling linen</td>
<td>Mild risk</td>
<td>Triple layer medical mask Latex Examination gloves</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Other supportive services incl. Kitchen</td>
<td>Administrative Financial and dietary services, etc.</td>
<td>Low risk</td>
<td>Face cover</td>
<td>Engineering and dietary service personnel visiting treatment areas will wear personal protective gears appropriate to that area</td>
</tr>
</tbody>
</table>

### 1.3 Emergency Department (Non-COVID)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Setting</th>
<th>Activity</th>
<th>Risk</th>
<th>Recommended PPE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emergency</td>
<td>Attending emergency cases</td>
<td>Mild risk</td>
<td>Triple Layer medical mask Latex examination gloves</td>
<td>No aerosol generating procedures are allowed</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Attending to severely ill patients while performing aerosol generating procedure</td>
<td>High risk</td>
<td>Full complement of PPE (N-95 mask, coverall, goggle, Nitrile examination gloves, shoe cover)</td>
<td></td>
</tr>
</tbody>
</table>
### Pre-hospital (Ambulance) Services

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Setting</th>
<th>Activity</th>
<th>Risk</th>
<th>Recommended PPE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ambulance Transfer to designated hospital</td>
<td>Transporting patients not on any assisted ventilation</td>
<td>Low risk</td>
<td>Triple layer medical mask Latex examination gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management of SARI patient</td>
<td></td>
<td>High risk</td>
<td>Full complement of PPE (N-95 mask, coverall, goggle, latex examination gloves, shoe cover)</td>
<td>While performing aerosol generating procedure</td>
</tr>
<tr>
<td></td>
<td>Driving the ambulance</td>
<td></td>
<td>Low risk</td>
<td>Triple layer medical mask Latex examination gloves</td>
<td>Driver helps in shifting patients to the emergency</td>
</tr>
</tbody>
</table>

### Points to remember while using PPE

1. Standard precaution to be followed at all times
2. PPEs are not alternative to basic preventive public health measures such as hand hygiene, respiratory etiquettes which must be followed at all times.
3. Always follow the laid down protocol for disposing off PPEs as detailed in infection prevention and control guideline available on website of MoHFW.

In addition, patients and their attendants to be encouraged to put on face cover.

In case a COVID-19 patient is detected in such Non-COVID Health facility, the MoHF guidelines for the same has to be followed (Available [here](https://www.mohfw.gov.in/pdf/GuidelinestobefollowedondetectionofsuspectorconfirmedCOVID19ca se.pdf)

### Note:

1. N95 mask is recommended for use in OT when patient being operated is a resident of a containment zone.
2. Anesthetist and assistant to wear PPE, as recommended in guidelines issued by MoHFW on May 1, 2020, for GA cases as intubation/ extubation can generate aerosols. During intubation/ extubation surgeon and other staff to move out of OT.
3. Either one of these two PPEs is to be used - Goggles/ Glasses & Face Shield as per the Procedure
   a. Use of Face Shield is recommended when a splash of Body Fluid is expected.
   b. Use of Goggles is recommended when performing Aerosol generating procedure.
   c. Attendant / Visitor are allowed only with Elderly / Paediatric Patients. The attendant/visitor are required to wear mask.

**Policy for Disinfecting and Reusing Personal Protective Equipment (PPE)**

<table>
<thead>
<tr>
<th>S. No</th>
<th>PPE - Type</th>
<th>Reuse</th>
<th>Disinfection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>N 95Mask</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>3 ply Mask</td>
<td>NO</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Gloves</td>
<td>NO</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Head Cap</td>
<td>NO</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Shoe Cover</td>
<td>NO</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Face Shields</td>
<td>YES</td>
<td>**** Refer to the Disinfection Protocol below.</td>
</tr>
<tr>
<td>7.</td>
<td>Goggles</td>
<td>YES</td>
<td>**** Refer to the Disinfection Protocol below.</td>
</tr>
</tbody>
</table>

1. **FACE SHIELDS AND GOGGLES**
   - Eyeshields and goggles can be cleaned with 70% alcohol solution/ Alcohol Swab.
   - This should be done prior to beginning the work and should be repeated at the end of workday prior to leaving the hospital.
   - Please keep these in your possession and avoid mixing it with other staff. Preferable to write your name in one corner for identification.
2. **DISPOSAL AS PER Bio Medical Waste (BMW) RULES: DISPOSE EVERY DAY AFTER FINISHING THE WORK**

- 3 PLY Masks, Head Caps, PPE Suits, Disposable Gowns in Yellow bin
- Gloves in the red bin

**DOS AND DON'TS:**

- Use appropriate PPE at all places.

- PPE should be discarded in an appropriate waste container after use, and hand hygiene should be performed before putting on and after taking off PPE.

- DON'T touch the outer surface of your PPE while working or doffing of the PPE.