



Providing Healthcare during Covid 19

KEY PRATICE POINTS FOR HEALTH CARE PROVIDERS

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Route of transmission of COVID-19

- The primary route for the spread of COVID-19 is thought to be through aerosolized droplets
- Expelled during coughing, sneezing, or breathing.
- But also concerns about possible air borne transmission.
- Feco-oral transmission has also been reported in a few cases, with viral isolation from the faeces of some patients

Confirmed Covid case

*Is a person with **laboratory confirmation of COVID-19** infection, irrespective of clinical signs and symptoms*

Patients at High risk

- All symptomatic individuals who have undertaken international travel in the last 14 days *or*
- All symptomatic contacts of laboratory confirmed cases *or*
- All symptomatic healthcare personnel (HCP) *or*
- All hospitalized patients with severe acute respiratory illness (SARI) (fever AND cough and/or shortness of breath) *or*
- Asymptomatic direct and high risk contacts of a confirmed case (should be tested once between day 5 and day 14 after contact)

(Symptomatic refers to fever/cough/shortness of breath.)

(Direct and high-risk contacts include those who live in the same household with a confirmed case and HCP who examined a confirmed case.)

Testing for Covid

- Testing to be prioritized to all Pregnant Women especially near term
- All those with patients with any of these things positive should be referred to the nearby Covid centre for testing. (Government or Private diagnostic facility)
- Testing should be performed as per the directions of the health authorities
- Testing should be clinically indicated, justified and accurate

Testing for Covid-19 in Pregnancy

INDIAN COUNCIL OF MEDICAL RESEARCH
DEPARTMENT OF HEALTH RESEARCH

Strategy for COVID19 testing for pregnant women in India (Version 1, dated 20/04/2020)

- Testing for pregnant women should be done as per ICMR testing strategy (<https://icmr.nic.in/content/covid-19>).
- Pregnant women residing in clusters/containment area or in large migration gatherings/evacuees centre from hotspot districts presenting in labour or likely to deliver in next 5 days should be tested **even if asymptomatic**.

N.B. Asymptomatic pregnant women should be tested in the health facilities where they were expected to deliver and all arrangements should be made to collect and transfer samples to testing facilities. Women should not be referred for lack of testing facility.

Advisory for testing will be updated periodically.

Health Care Providers at High Risk for Covid 19

- Doctors and paramedical staff above age of 60 years.
- Those with underlying medical conditions (especially immunocompromised / predisposing to infections) like:
 - DM, Chronic Liver, Heart & Kidney disease, Chronic lung conditions like Asthma, COPD, Bronchiectasis, ILD, etc., Cancer, On Chemotherapy or Steroid treatment, Pregnant, Seropositive status.

Pregnant and Breastfeeding patients

- Testing to be prioritized, if suspicion arises
- Currently there is no data suggestive of viral transmission via breast milk.
- However, due to close contact and risk of droplet transmission, breastfeeding should be avoided in COVID-19 confirmed mothers.

Key Measures to minimize infection in practice

- Limit the entry of infection into the health care facility
- Isolate symptomatic patient as soon as possible
- Protect health care workers

Phone/ Message based Triage (Teleconsult)

- The crucial 1st step in protecting doctors and other patients.
- All patients must be assessed for possible COVID-19 infection and suspects (as mentioned earlier), if they do not have any of them, call them to your clinic by appointment, keeping the reasonable time between each patient as per your discretion to avoid crowding at the clinic.
- If any patient seems to be Covid suspect, please refer him to the nearby Covid testing centre.
- Avoid routine follow ups and elective procedures
- You may guide the patient on phone for minor issues at your discretion

Triage at Facility - Clinic/ Hospital

- Triage stations with adequately trained staff should be allotted at the entrance of each health care facility.
- Physical barriers(glass/plastic barriers)should be installed at these stations to limit close contact between triage personnel and potentially infectious patients.
- Use of Personal Protective Equipment (PPE) is preferred.

Managing Clinics and Consulting rooms

- Restrict the OPD time to limited hours
- Avoid relatives as much as possible
- Make the patients wait about 1 meter apart (can make squares)
- If possible, don't make patient sit anywhere in your clinic
- If patient need to be examined on bed or table, clean it immediately following the examination.

Managing Clinics and Consulting rooms

- Please don't touch any documents of the patient, just see them from far. (may ask patients to click photos and send you in advance)
- Use new prescription for all patients (may have an assistant for the same)
- While dispensing medicines, prefer no touch techniques with the patient.

Managing Clinics and Consulting rooms

- All patients to be made to wear a mask in the waiting area and instructed on cough and sneeze hygiene.
- Doctors clinics should be well ventilated and patients should be seated and stay six feet apart except during physical examination.
- The doctor should wear a surgical mask and scrub hands with soap and water and use an alcohol- based disinfectant after each patient interaction.

Health Awareness/ Education for Patients at Clinic

- Visual alerts should be posted at the entrance and strategic areas (waiting areas, elevators and cafeterias)
- To reinforce both patients and health care workers, the importance of hand hygiene, respiratory hygiene and cough etiquette
- Display material can be procured from Govt websites

Do's and Dont's for the HCW

- Use only 1 pen, phone and water bottle (disposable better)
- Decontaminate phone
- Do not touch anything
- Everything is contaminated unless cleaned in your presence
- No watches no rings no bangles no dangling earrings
- Hairs tied and Cover your head with cap.
- Shift to scrubs full sleeves, if available.
- Empty bowel and bladder before you wear your PPE
- Wear double gloves
- Keep your palms together when you see patients to remind you not to touch them.
- Wear masks if patient contact or in busy area (Mask details later)
- Wear goggles
- Wear footwear which covers foot fully. Plastic or rubber easy to disinfect

Do's and Dont's for the HCW


- Social distancing is often poorly practiced in hospitals, so please pay attention
- Safe distance always Keep 1 m distance
- Clean your desk, door knob, computer, workstation yourself or in your presence
- Keep door open
- Minimal touching
- Do not touch papers and files, prefer Electronic entries, if feasible
- Wash hands after every patient examination and clean your instruments with sterilium, especially stethoscope to avoid cross infection
- Avoid lifts, Closed space, Don't touch lift buttons. Get them cleaned often
- Avoid many patients at clinic at one time
- Leave all your stethoscope, knee hammers and other medical stuff in hospital itself.
- Don't take home
- Decontaminate car handles

While going back home

- Ring up home when you start from hospital.
- Someone at home should keep the front door open(so that you don't have to touch the calling bell or door handle) and a bucket of water with washing soap powder or bleaching powder added to it in the front door.
- Keep things(car keys, pen, sanitiser bottle, phone) in box outside the door.
- Wash your hands in the bucket and stand in the water for a few minutes.
- Meanwhile use tissue and sanitizer and wipe the items you have placed in the box and the box.
- Wash your hands with soap water again
- Now enter the house without touching anything.
- The bathroom door is kept open by someone and a bucket of detergent soap water is ready.
- You take off all your clothes including innerwear and soak inside the bucket
- Then take a head bath with a shampoo and body bath with soap
- Wash your clothes/ put in washing machine with high temperature settings and dry clothes in direct sunlight

Hand hygiene....a must for all HCWs

- All health care workers should perform hand hygiene using alcohol-based hand rub (minimum 20 seconds) or by washing with soap and water (minimum 40 seconds). If hands are visibly soiled, use soap and water for hand wash.
- Performed before and after using bathroom, before, during and after preparing food, before and after eating /drinking, after coughing, blowing or sneezing, after touching garbage, after touching mask or soiled PPE.
- Foot operated sanitizers should be put outside elevators, OPDs, screening areas, ICUs and wards.

 Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED



World Health Organization

Patient Safety

A World Alliance for Safe Health Care

SAVE LIVES

Clean Your Hands

Need of the protective gears for all?

- Hand hygiene is for all healthcare workers
- Based upon the role in patient management and **duration of exposure with patient** (more than or less than 15 minutes), you have to don the protective gears.
- Thus, need of protective gears depends upon the place where you are practicing

Exposure Risk	Examples	Recommendations
High	Performing aerosol-generating procedures for COVID-19 patients	N95 mask plus full-face shield or powered air-purifying respirator, full body protective suit, nitrile/latex gloves. Two layers of gowns and gloves are recommended.
	Providing direct care to critically ill COVID-19 patients	
Medium	Providing care to non critically ill COVID-19 patients	N95 mask, disposable gown (full body suits are encouraged but not necessary), nitrile/latex gloves, goggles. Hair and shoe covers are recommended, especially for individuals with long hair.
	Performing aerosol-generating procedures for non confirmed COVID-19 patient	
Low	Providing any care, inpatient or outpatient	Surgical mask.
	Any interactions on hospital grounds	

ROUTINE OBSTETRIC AND GYNAEC OPD ANS WARD CARE IS MEDIUM AND LOW RISK
SURGICAL PROCEDURES IS HIGH RISK



Coverall/Gowns

- Impermeable to blood & body fluids, provides cover to whole body
- Single use only
- Avoid dark colors, light colors are preferred to detect possible contamination
- Thumb/finger loops to anchor sleeves in place should be used
- If using a gown, an apron can be worn over the gown for the entire time the health worker is in the treatment area
- If using gowns, head cover should be used to cover head and neck. Hair extensions must fit inside as well
- The health worker must have continuous whole-body protection with no openings at all times
- **PPE should be SITRA/DRDE approved**
- **Quality should meet or exceeds ISO 16603 class 3 exposure pressure, or equivalent**
- **Although Ministry of Health has not specified any GSM requirements for PPE, BMC's team of experts have recommended using 70 GSM.**



Face Shield

- Made of clear plastic with good visibility to both the wearer + patient
- Adjustable band to attach firmly around the head and fit snugly against the forehead
- Fog resistant (preferable)
- Completely covers the sides and length of the face
- May be reusable (made of material which can be cleaned and disinfected) or disposable
- **Quality compliant with the below standards, or equivalent:**
- A) EU standard directive 86/686/EEC, EN 166/2002 b.
- B) ANSI/SEA Z87.1-2010



Gloves

- Nitrile gloves are preferred over latex gloves
- Non-sterile
- Non - powered gloves are preferred over powder gloves
- Outer gloves preferably reach mid-forearm (minimum 280 mm total length)
- Different sizes (6.5 & 7)
- **Quality compliant with the below standards, or equivalent:**
- EU standard directive 93/42/EEC Class I, EN 455
- EU standard directive 89/686/EEC Category III, EN 374
- ANSI/SEA 105-2011
- ASTM D6319-10



Goggles

- With transparent glasses, zero power, well fitting, covered from all sides with elastic band/or adjustable holder.
- Good seal with the skin of the face
- Flexible frame to easily fit all face contours without too much pressure
- Covers the eyes and the surrounding areas and accommodates for prescription glasses
- Adjustable band to secure firmly so as not to become loose during clinical activity
- **Quality compliant with the below standards, or equivalent:**
- A) EU standard directive 86/686/EEC, EN 166/2002
- B) ANSI/SEA Z87.1-2010



N95 masks

- Shape that will not collapse easily
- High filtration efficiency
- Good breathability, with expiratory valve
- Quality compliant with standards for particulate respirator that can be worn with full - face shield.
- **Fluid resistance: Minimum 80 mmHg pressure based on ASTM F1862, ISO 22609, or equivalent**
- **Quality compliant with standards for medical N95 respirator:**
- **NIOSH N95, EN149 FFP2, or equivalent.**



Triple Layer Mask

- Three layered medical masks of non-woven material with nose piece, having filter efficiency of 99% for 3-micron particle size.
- **Quality should be ISI specifications or equivalent.**



Shoe Covers

- Should cover the entire shoe and reach above ankles.
- Made up of the same fabric as of coverall.

Screening OPD : Healthcare workers (Doctor/Nurses)

PPE Required For Sampling

- N95 Mask
- Goggles
- Gown (Water-Resistant)
- Gloves (Double)
- Shoe Cover
- Hood



COVID Ward: Healthcare workers (Doctor/Nurses/Technician)

PPE Required For COVID Ward

- N95 Mask
- Goggles or Face shield
- Gown (Water-Resistant)
- Gloves (Double)
- Shoe Cover
- Hood



COVID ICU: Healthcare workers (Doctor/Nurses/Technician)

PPE Required For COVID ICU

- N95 Mask
- Goggles or Face shield
- Gown (Water-Resistant)
- Gloves (Double)
- Apron (optional)
- Shoe Cover
- Hood

COVID ICU: Cleaner/Sweeper/HA

- N95 Mask
- Goggles or Face shield
- Gown (Water-Resistant)
- Heavy Duty Gloves
- Boots
- Hood

Ambulance for Transporting COVID Patients :

Healthcare workers (Doctor/Nurses)

- N95 Mask
- Goggles
- Gown (Water-Resistant)
- Gloves (Double)

Administrative Areas & Offices

No PPE Required

COVID-19: Guidelines on rational use of Personal Protective Equipment

Source - Ministry of Health and Family Welfare, Directorate General of Health Services [Emergency Medical Relief]

Patient Care Activities /Area	Risk of Exposure	Triple Layered Mask	N-95 Mask	Gloves	Gown/Coverall	Goggles	Head Cover	Shoe cover
Triage Area in OPD	Moderate risk	X	✓	✓	X	X	X	X
Help desk/ Registration counter	Moderate risk	X	✓	✓	X	X	X	X
Temperature recording station	Moderate risk	X	✓	✓	X	X	X	X
Holding area/ waiting area	Moderate risk	X	✓	✓	X	X	X	X
Doctors chamber in OPD	Moderate risk	X	✓	✓	X	X	X	X
Clinical Management in Isolation rooms	Moderate risk	X	✓	✓	X	X	X	X
ICU facility / Critical Care Ward where aerosol generating procedures are done	High Risk	X	✓	✓	✓	✓	✓	✓
SARI ward - attending to severely ill patients of SARI	High Risk	X	✓	✓	✓	✓	✓	✓
Sample Collection/Sample testing for COVID-19	High Risk	X	✓	✓	✓	✓	✓	✓
Dead Body Packing	High Risk	X	✓	✓	✓	✓	✓	✓
Dead Body Transport	Moderate Risk	X	✓	✓	X	X	X	X
Mortuary - Dead Body Handling	Moderate Risk	X	✓	✓	X	X	X	X
Mortuary- While performing autopsy	High Risk	X	✓	✓	✓	✓	✓	✓
Sanitary staff	Moderate risk	X	✓	✓	X	X	X	X
CSSD/Laundry- Handling linen of COVID-19 patients	Moderate risk	X	✓	✓	X	X	X	X
Visitors attending OPD	Low Risk	✓	X	X	X	X	X	X
Visitors accompanying Patients in IP facility	Low Risk	✓	X	X	X	X	X	X
Supportive services-Administrative Financial Engineering Security, etc	NO risk	X	X	X	X	X	X	X

Using the Mask correctly .. Mask etiquette



If masks are worn, appropriate use and disposal is essential to ensure they are effective and to avoid any increase in risk of transmission associated with the incorrect use and disposal of masks.

- i. Place mask carefully to cover mouth and nose and tie securely to minimize any gaps between the face and the mask
- ii. While in use, avoid touching the mask
- iii. Remove the mask by using appropriate technique (i.e. do not touch the front but remove the lace from behind)
- iv. After removal or whenever you inadvertently touch a used mask, clean hands by using an alcohol-based hand rub for 20 seconds or soap and water if visibly soiled for 40 seconds
- v. Replace masks with a new one as soon as they become damp/humid
- vi. Do not re-use single-use masks
- vii. Discard single-use masks after each use and dispose-off them immediately upon removal
- viii. For N95 respirators adequate fit check must be performed after wearing.

When to use a surgical face mask



In cohorted area (but no patient contact)

For example:

Cleaning the room, equipment cleaning, discharge patient room cleaning, etc

PPE to be worn

- Surgical face mask (along with other designated PPE for cleaning)

Close patient contact (within one metre)

For example:

Providing patient care, direct home care visit, diagnostic imaging, phlebotomy services, physiotherapy, etc

PPE to be worn

- Surgical face mask
- Apron
- Gloves
- Eye protection (if risk of contamination of eyes by splashes or droplets)

When to use an FFP3 respirator



When carrying aerosol generating procedures (AGP) on a patient with possible or confirmed COVID-19

In high risk areas where AGPs are being conducted (eg: ICU)

The AGP list is:

- Intubation, extubation and related procedures such as manual ventilation and open suctioning
- Tracheotomy/tracheostomy procedures (insertion/open suctioning/removal)
- Bronchoscopy
- Surgery and post-mortem procedures involving high-speed devices
- Some dental procedures (such as high-speed drilling)
- Non-Invasive Ventilation (NIV) such as Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP)
- High-Frequency Oscillating Ventilation (HFOV)
- High Flow Nasal Oxygen (HFNO), also called High Flow Nasal Cannula
- Induction of sputum

PPE to be worn

- FFP3 respirator
- Long sleeved disposable gown
- Gloves
- Disposable eye protection

Always fit check the respirator

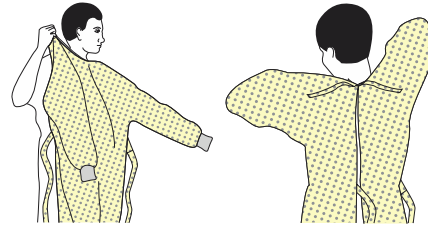
Donning (putting on) PPE

SEQUENCE FOR **PUTTING ON** PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



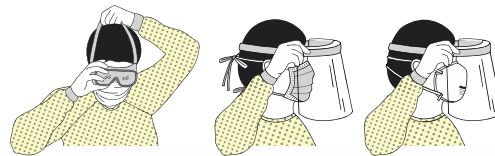
2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



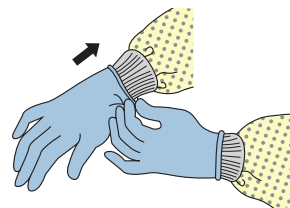
3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



Donning (putting on) PPE

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

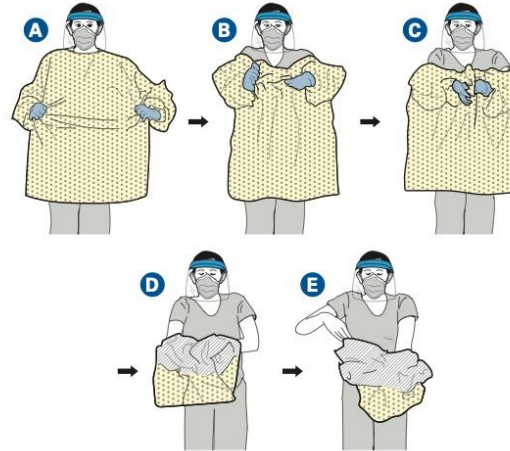
**Doffing (taking off)
PPE**

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



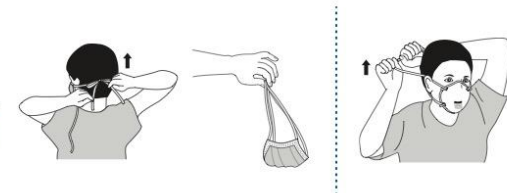
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

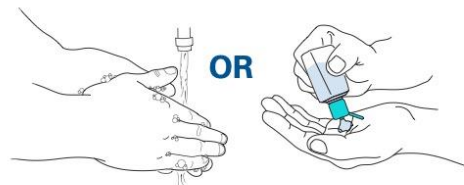


3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — **DO NOT TOUCH!**
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



Doffing (taking off) PPE

**PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS
BECOME CONTAMINATED AND IMMEDIATELY AFTER
REMOVING ALL PPE**



Aerosol generating procedures: Special care

- Include tracheal intubation, non-invasive ventilation, tracheostomy, cardiopulmonary resuscitation, and bronchoscopy.
- Are all associated with increased risk of transmission of COVID-19
- HCWs conducting such procedures should be wearing full-body PPEs including N95 particle-filtering masks
- Should be carried out in an adequately ventilated room or in airborne infection isolation rooms (AIIR) which are negative pressure rooms

Prophylactic HCQ for HCWs...

The National Taskforce for COVID-19 recommends the use of hydroxychloroquine for prophylaxis of SARS-CoV-2 infection for selected individuals as follows:

Eligible individuals:

- Asymptomatic healthcare workers involved in the care of suspected or confirmed cases of COVID-19
- Asymptomatic household contacts of laboratory confirmed cases

Dose:

- Asymptomatic healthcare workers involved in the care of suspected or confirmed cases of COVID-19: 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 7 weeks; to be taken with meals
- Asymptomatic household contacts of laboratory confirmed cases: 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 3 weeks; to be taken with meals

Prophylactic HCQ for HCWs...

- Exclusion/contraindications:
 - The drug is not recommended for prophylaxis in children under 15 years of age.
 - The drug is contraindicated in persons with known case of retinopathy, known hypersensitivity to hydroxychloroquine, 4-aminoquinoline compounds
- Key considerations:
 - The drug has to be given only on the prescription of a registered medical practitioner.
 - Advised to consult with a physician for any adverse event or potential drug interaction before initiation of medication
 - If anyone becomes symptomatic while on prophylaxis he/she should immediately contact the health facility, get tested as per national guidelines and follow the standard treatment protocol.
 - All asymptomatic contacts of laboratory confirmed cases should remain in home quarantine as per the national guidelines, even if they are on prophylactic therapy.

Deciding on Surgery

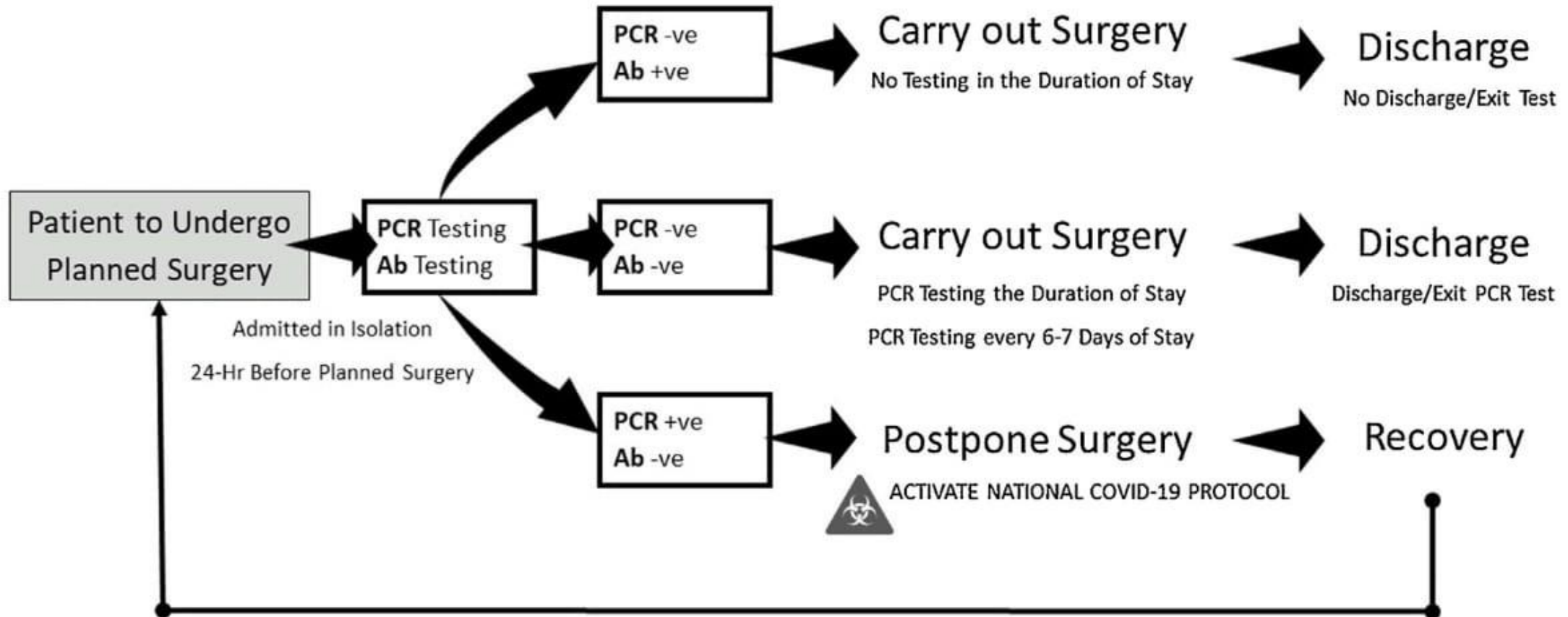
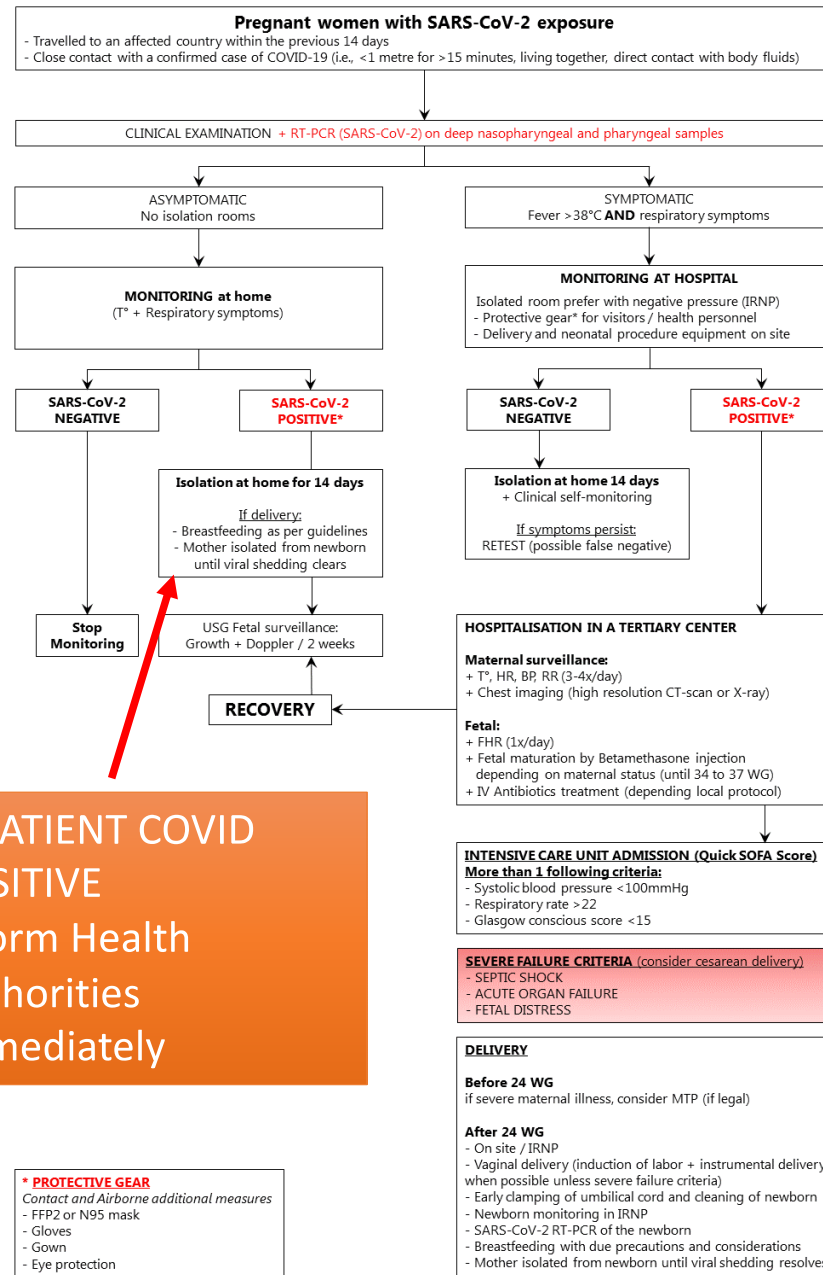



Fig. 1. Flowchart suggesting COVID-19 testing protocol for planned surgical patients.

Flowchart for Management in Pregnant Women (Adapted from Lancet)



IF PATIENT COVID POSITIVE Inform Health Authorities Immediately

Guidance for Management of Pregnant Women in COVID-19 Pandemic



ICMR - National Institute for Research in Reproductive Health
 Jehangir Merwanji Street, Parel, Mumbai - 400 012

Action to be taken on detection of COVID -19 case in non-COVID health facility



- **Entire hospital will not be shut if a patient/employee tests positive**
- **Only a part of the hospital will be shut for two days for disinfection**
- **Hospital staff to be put in 7/7 shifts – 7 days of work, 7 days off**
- **Hospitals must send patients with Covid-19 symptoms to fever clinics**
- **Screen patients on phone, check reports online, physical check at hospital**

Action to be taken on detection of COVID -19 case in non-COVID health facility

- Inform the local health authorities about the case
- Assess the clinical status of the patient prior to referral to a designated COVID facility
- The patient should be immediately isolated to another room (if currently being managed in a shared ward/room). If the clinical condition permits, such patients should be masked and only a dedicated healthcare worker should attend this case, following due precautions.
- If the clinical status of the case permits, transfer such case to a COVID-19 isolation facility (Dedicated COVID Health Centre or dedicated COVID Hospital), informing the facility beforehand about the transfer, as per his/her clinical status, test results (if available), with information to local health authority. Complete case records of such patients must be made available to the receiving hospital.

Action to be taken on detection of COVID -19 case in non-COVID health facility

- Follow appropriate standard precautions while transporting the patient
- This should be followed by disinfection procedures at the facility and the ambulance
- All contacts of this patient (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.) should be quarantined and followed up for 14 days. Their details must also be shared with the local health authorities.
- All close contacts (other HCWs and supportive staff) of the confirmed case should be put on Hydroxychloroquine chemoprophylaxis for a period of 7 weeks, keeping in mind the contraindications of HCQ.

Transporting a Covid patient

For shifting any suspected or confirmed COVID-19 patients, the following steps must be followed by the accompanying healthcare provider:

A. Decontaminate hands (alcohol-based sanitiser/soap)

B. Don PPE

C. Inform Covid Centre control room regarding the admission/transfer of a potentially infectious patient.

D. In ambulance

- Use single use or single patient use medical equipment where possible
- Use disposable linen if available
- Monitor and document vitals and medical management done in ambulance

Transporting a Covid patient

E. Arrival at Covid centre

- Before the patient leaves the ambulance ensure arrangements are in place for receipt of the patient
- Transfer patient to the care of hospital staff at Covid Centre
- After transfer of patient remove PPE
- Perform hand hygiene

F. Before ambulance is used again

- Cleaning and disinfecting (PPE as outlined above should be worn while cleaning)
- Surfaces (stretcher, chair, door handles etc.) should be cleaned with a freshly prepared 0.5-1% hypochlorite solution or equivalent
- Medical equipment should be cleaned as per hospital infection control protocol

Environmental sanitation

- Immediately remove and wash clothes and bedding that have blood, stool or other body fluids on them
- Clean and disinfect frequently touched surfaces in the quarantined person's room (e.g. bed frames, tables etc.) daily with Sodium Hypochlorite solution (1%) or ordinary bleach (5%)
- Clean and disinfect toilet surfaces daily with regular household bleach solution/phenolic disinfectants
- Wash laundry used by the person separately using common household detergent and dry thoroughly using the warmest temperatures recommended on the clothing label
- Place all used disposable gloves, masks and other contaminated waste in a lined container before disposing of them with other household waste and wash hands with soap and water/alcohol-based hand rub

Decontamination and waste management in clinics

- **Cleaning agents and disinfectants:**

1. 1% Sodium Hypochlorite can be used as a disinfectant for cleaning and disinfection
2. The solution should be prepared fresh.
3. Leaving the solution for a contact time of at least 10 minutes is recommended.
4. Alcohol (e.g. isopropyl 70% or ethyl alcohol 70%) can be used to wipe down surfaces where the use of bleach is not suitable, e.g. metals.

Decontamination

PPE to be worn while carrying out cleaning and disinfection works:

1. Wear heavy duty/disposable gloves, disposable long-sleeved gowns, eye goggles or a face shield, and a medical mask (please see the PPE document for details)
2. Avoid touching the nose and mouth (goggles may help as they will prevent hands from touching eyes)
3. Disposable gloves should be removed and discarded if they become soiled or damaged, and a new pair worn
4. All other disposable PPE should be removed and discarded after cleaning activities are completed. Eye goggles, if used, should be disinfected after each use, according to the manufacturer's instructions.
5. Hands should be washed with soap and water/alcohol-based hand rub immediately after each piece of PPE is removed, following completion of cleaning.

Where possible, seal off areas where the confirmed case has visited, before carrying out cleaning and disinfection of the contaminated environmental surfaces. This is to prevent unsuspecting persons from being exposed to those surfaces. Inform the local authorities immediately.

Decontamination

Frequency of cleaning of surfaces:

1. More Frequently touched surfaces: Disinfection of more frequently touched surfaces like (doorknobs, telephone, call bells, bedrails, stair rails, light switches, wall areas around the toilet) should be done every 3-4 hours.
2. Less Frequently touched surfaces: For less frequently surfaces (walls, mirrors, etc.) mopping should be done at least once daily.

HOME QUARANTINE/ISOLATION GUIDELINES FOR SUSPECTED OR CONFIRMED COVID-19 CASES

Instructions for home quarantine of COVID-19 contacts:

- Stay in a well-ventilated room separated from other people and pets
- Should preferably have attached/separate toilet
- Restrict his/her movement within the house.
- In shared spaces, maintain a distance of at least 1-2 meters and wear a medical mask when in proximity with other people
- Take special care to stay away from elderly people, pregnant women, children and persons with co-morbidities

Do NOT attend any social/religious/public gathering e.g. wedding, condolences, etc.

- Wash hand often thoroughly with soap and water (at least 40 seconds) or with alcohol-based hand sanitizer (at least 20 seconds) especially after coughing and sneezing, and before and after eating, drinking and using the washroom
- Follow all steps of handwashing as described in chapter 4
- Avoid sharing household items with other people at home (e.g. dishes, drinking glasses, cups, eating utensils, towels, bedding etc.)
- Used three layered medical mask should be considered as potentially infected
- If symptoms appear (cough/fever/difficulty in breathing), he/she should immediately inform the nearest health center or call **011-23978046. or 1976**

Instructions for the family members of person being home quarantined/isolated



Household members should stay in a different room and be separated from the person as much as possible

- Only an assigned family member should be tasked with taking care of the person and should help with groceries, prescriptions and other personal needs
- Avoid shaking the soiled linen or direct contact with skin
- Pets should be cared for by household members and should be kept separate from the person
- Use disposable gloves when cleaning the surfaces or handling soiled linen

Stay at least 1 m away from those who are coughing

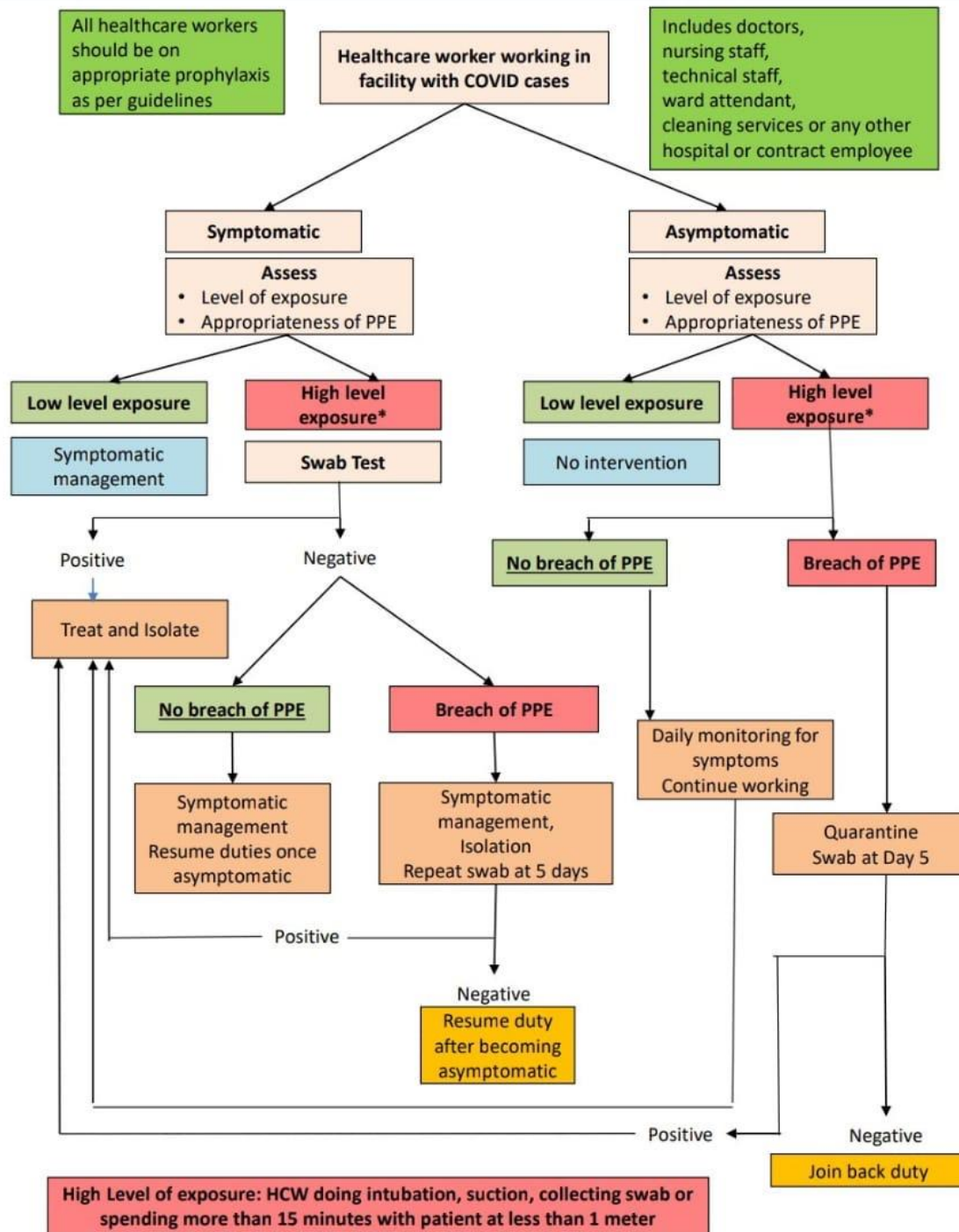
- Wash hands after removing gloves and before and after eating, drinking and using the washroom with soap and water (at least 20 seconds) or with alcohol-based hand sanitizer (at least 30 seconds)
- All non-essential visitors should be prohibited
- In case the person being quarantined becomes symptomatic, all his close contacts will be home quarantined for 14 days and followed up for an additional 14 days or till the report of such case turns out negative on lab testing

Duration of home quarantine period...

- **Is for 14 days from contact with a confirmed case or earlier if a suspected case (of whom the index person is a contact) turns out negative on laboratory testing.**
- **Duration of home isolation for confirmed cases with mild disease is:**
 - Afebrile for 72 hours AND at least 7 days after symptom onset *OR*
 - 2 negative samples 24 hours apart



HCW working in Covid facility



These guidelines are based on limited evidence and will be updated from time to time as new data evolves and new situation arises

These guidelines are approved by Medicine HoDs of KEM, Sion and Nair Hospital

When a suspect/confirmed COVID-19 HCW is identified

- HCWs developing respiratory symptoms (e.g. fever, cough, shortness of breath) should be considered suspected case of COVID-19.
- He/she should immediately put on a facemask, inform his supervisor and HICC. He/she should be isolated and arrangement must be made to immediately to refer such a HCW to COVID-19 designated hospital (if not already working in such a facility) for isolation and further management.
- He/she should be immediately taken off the roster

When a suspect/confirmed COVID-19 HCW is identified



- Rapidly risk stratify 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 (or earlier if the test result of a suspect case turns out negative). Their details must also be shared with the local health authorities.
- All close contacts (other HCW and supportive staff) of the confirmed case should be put on Hydroxychloroquine chemoprophylaxis for a period of 7 weeks, keeping in mind the contraindications of the HCQ.
- **All health facilities (HCF) must have a staffing plan in place including a contingency plan for such an event to maintain continuity of operations. E.g. staff in HCF can be divided into groups to work on rotation basis every 14 days and a group of back up staff which is pooled in case some high risk exposure/HCW with suspected COVID-19 infection is detected.**
- Ensure that the disinfection procedures are strictly followed.



Team AMOGS 2020-2022

Thank You