

**GUIDELINES ON  
INFECTION PREVENTION AND CONTROL (IPC) MEASURES  
IN MANAGING PERSON UNDER SURVEILLANCE (PUS),  
SUSPECTED, PROBABLE OR CONFIRMED CORONAVIRUS  
DISEASE (COVID-19)**

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# INFECTION PREVENTION AND CONTROL (IPC) MEASURES IN MANAGING PERSON UNDER SURVEILLANCE (PUS), SUSPECTED, PROBABLE OR CONFIRMED CORONAVIRUS DISEASE (COVID-19)

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**Note:**

*This guideline is based on current information available regarding disease severity, transmission efficacy and shedding duration. This document will be updated as more information is made available.*

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## INTRODUCTION

Infection prevention and control (IPC) is one of the eight pillars of the public health response in any health emergency disaster such as COVID-19 pandemic. It also serves as a basic requirement for outbreak preparedness and a critical element of readiness.

The aims of IPC in outbreak are:

- To reduce transmission of healthcare associated infection (HCAI)
- To enhance the safety of healthcare workers (HCWs), patients, carers and visitors
- To enhance the ability of health facility to respond to an outbreak
- To lower or reduce the risk of the hospital itself amplifying the outbreak

## INFECTION PREVENTION AND CONTROL (IPC) GUIDING PRINCIPLES

The principles of IPC to prevent or limit transmission in healthcare facilities include:

1. Availability of IPC program with dedicated and trained IPC team.
2. Ensuring triage, Early and rapid recognition AND source control that includes promotion of respiratory hygiene.
3. Application of routine IPC precautions (Standard Precautions) for all patients.
4. Implementing Additional precautions (Transmission Based Precautions) in selected patients (i.e., contact, droplet, airborne) based on the presumptive diagnosis.
5. Implementing administrative control which include provision of adequate and regular supply of personal protective equipment (PPE) and appropriate training of HCW.
6. Using environmental and engineering control to support IPC activities.
7. Establishment of surveillance program on healthcare associate infection (HCAI).
8. Vaccination of healthcare workers (HCW).

**1. INFECTION PREVENTION AND CONTROL (IPC) PROGRAM WITH DEDICATED AND TRAINED IPC TEAM**

- 1.1. IPC activity should be an ongoing activity supported by the national program and by the IPC focal point/team/committee, the health facility administrator as well as all staff at the facility level.
- 1.2. IPC team should be trained and updated regularly on the latest evidence on SARS-CoV-2.

**2. TRIAGE, EARLY AND RAPID RECOGNITION AND SOURCE CONTROL**

- 2.1. Rapid case identification of visitors, accompanying persons, patients and HCW should be done at all entry points of the healthcare facility.
- 2.2. In order to achieve, limit the number of entrances at the healthcare facilities.
- 2.3. A well-established and well- equipped triage station should be available at the POINT OF ENTRY to hospital emergency departments, health clinics/private GP clinics /fever centres/ambulatory care/ health quarantine centre/ health screening centre.
- 2.4. Post visual alerts (in appropriate languages) at the entrance to outpatient facilities (e.g., emergency departments, physicians' offices, outpatient clinics) instructing patient and the persons who accompany them to inform healthcare personnel of symptoms of a respiratory infection or symptoms related to COVID-19 when they first register for care, and practice respiratory hygiene/cough etiquette.
- 2.5. Use physical barriers to reduce exposure to the SARS CoV-2 virus, such as blind/glass/plastic windows. Please refer to manufacturers guide and facility/engineering recommendation on the use of the barriers.
- 2.6. Screening of patients, visitors and others
  - 2.6.1. Screening questions should include epidemiological link (i.e. close contact history) and clinical presentation.
  - 2.6.2. Screening can be conducted using a nationally or institution accepted method including web-based application (e.g. MySejahtera application), QR code/ attendance record book.
  - 2.6.3. Train HCW on the signs and symptoms of COVID-19 based on the latest case definitions.

- 2.6.4. All patients admitted to wards and their caregivers should fill up the **Patient Declaration Form** (Appendix 7) and **Borang Persetujuan dan Pemahaman Risiko Jangkitan COVID-19 bagi Penjaga Pesakit**.
- 2.6.5. Screening algorithm of patients, visitors and others should be made available.
- 2.7. Resources for performing hand hygiene (alcohol-based hand rub made available) at all entrances (e.g., screening areas), counters, waiting areas and common areas (e.g., pantry, meeting room) as well as the availability of disinfectant wipes for regular cleaning of high touch areas.
- 2.8. Provide tissues with a no-touch bin for disposal of tissues/biohazard bag.
- 2.9. HCW should always maintain physical distancing more than 1 meter from patients, visitors and other HCW.
- 2.10. HCW should wear well fitted surgical mask and other PPE based on the risk assessment.
- 2.11. All visitors, patients, and accompanying person must wear a well fitted surgical mask in healthcare facilities (based on the hospital resources and guidelines).
- 2.12. If visitors, accompanying persons or patients has ARI or fulfil the criteria of suspected COVID-19 based on the screening questionnaire, they should be sent to the dedicated waiting area which is well ventilated with spatial separation of at least 1 – 2 meters between patients in the waiting rooms.
- 2.13. Must offer surgical mask (not N95 mask) if able to tolerate (not tachypneic, not hypoxic). If they are unable to tolerate, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow. To transfer these patients to dedicated areas that are separated from other patients such as isolation or negative pressure room / tent or areas with natural ventilation as soon as possible.
- 2.14. Cleaning of high touch areas (i.e., chair, table, couch) at waiting and triage areas after patient leaves the area or as required (i.e., spillage, soiling).
- 2.15. **Examination / isolation room**
  - 2.15.1. Examination/ isolation room at entry points (i.e., ED/ primary care etc) should be in descending order of preference:
    - i) Single room (nursed with door closed) and attached bathroom
    - ii) Single room

2.15.2. Make sure the rooms are adequately ventilated either by natural ventilation (opening windows) or mechanical ventilation. If mechanical ventilation, ensure airflow and ventilation rate are appropriate as well as sufficient air exchange of indoor and outdoor. Advised to discuss with respective healthcare facilities engineering team on optimizing ventilation.

#### 2.16. Inpatient screening

2.16.1. It is recommended to have a screening algorithm for all admissions and frequent inpatient testing principles according to local transmission dynamics to prevent nosocomial transmission/outbreak of SARS-CoV-2 within the healthcare facility e.g. in psychiatric ward, immunocompromised patients, long staying patients, nephrology ward.

2.16.2. To facilitate inpatient screening refer to Annex 2p: Pre-Admission Screening for COVID-19.

### **3. STANDARD PRECAUTIONS**

Standards Precautions are routine IPC precautions that should apply to ALL patients, in ALL healthcare settings.

In addition, risk assessment is crucial for all activities because it helps to assess activity and PPE needed for adequate protection for each activity.

The precautions, described in detail within Chapter 3 of the 'Policies and Procedures on Infection Prevention and Control – Ministry of Health Malaysia; 2019' are:

#### **3.1. HAND HYGIENE**

Hand hygiene is a simple and effective way to prevent the spread of infectious pathogen including SARS-CoV-2 in healthcare settings.

3.1.1. Hand hygiene should be done according to WHO 5 moments of hand hygiene:

- Before touching a patient;
- Before any clean or aseptic procedure;
- After body fluid exposure risk;
- After touching a patient; and
- After touching a patient's surroundings, including contaminated items or surfaces.



- 3.1.2. Use appropriate product and technique as below:
- Alcohol based hand rub (if hands are not visibly soiled) for 20-30 seconds.
  - Soap and water (when hands are visibly dirty or contaminated) for 40-60 seconds.
- 3.1.3. Display visual aid such as poster or infographic on hand hygiene within the health facility.
- 3.1.4. HCW should ensure bare below elbow during patient care to avoid contamination of clothes.

### **3.2. PERSONAL PROTECTIVE EQUIPMENT (PPE)**

- 3.2.1. PPE should be used according to the setting, target personnel, risk of exposure (e.g., type of activity) and the mode of transmission of the pathogen (e.g., contact, droplet or aerosol).
- 3.2.2. The effectiveness of PPE depends on the following factors:
- HCW training on donning and doffing of PPE
  - Prompt access to sufficient supplies
  - Provision of adequate PPE according to technical specifications
  - Appropriate hand hygiene
  - HCW compliance
  - Supervision and regular monitoring and feedback by IPC team
- 3.2.3. Respiratory fluids continue to be the primary mode of transmission for COVID-19 via large respiratory droplets and small aerosol particles. Transmission occurs predominantly when an infectious person transmits infected droplets into the eyes, nose, or mouth of another person through activities that creates droplets/ aerosols (talking/ coughing/ sneezing etc) and /OR when a person touches recently contaminated surface/object and then rubs his/her eyes, nose, mouth or eats without cleaning hands beforehand.
- 3.2.4. Factors affecting the risk of acquisition of healthcare associated SARS-CoV-2 infection include:
- poor ventilation within the facility
  - HCW proximity to the patient
  - longer durations of exposure to the patient
  - inappropriate use of PPE, including masks and eye protection
  - patient behaviours (e.g., coughing, yelling, ability to wear a mask)
  - day of illness

- 3.2.5. Transmission of infection through fomite contamination of the environment can happen but the risk is considered to be low.
- 3.2.6. The risk of fomite associated transmission is dependent on the following factors;
- the infection prevalence rate in the community.
  - the amount of virus infected people expels (which can be substantially reduced by wearing a well fitted mask).
  - the deposition of expelled virus particles onto surfaces (fomites), which is greater in areas of poor ventilation and poor airflow.
  - interaction with environmental factors (e.g., heat and evaporation) causing damage to virus particles while airborne and on fomites.
  - the time between when a surface becomes contaminated and when a person touches the surface.

*The risk is severely reduced by frequent hand hygiene, effective cleaning and disinfection of high touch areas, wearing appropriate PPE, increasing ventilation and wearing masks. **The use of head cover and boot covers are not recommended and does not confer any additional protection.***

- 3.2.7. The use of surgical mask by HCWs:

All HCW must wear surgical masks when they are:

- In clinical areas.
- Face to face with co-workers (e.g., meetings, workshop, conference).
- All HCW should ensure that their surgical masks are fitted properly to cover their mouth and nose.
- Avoid touching mask without hand hygiene. In case they touched the mask, hand hygiene must be performed immediately. Any soiled mask should be changed and discarded properly into a waste bin.

- 3.2.8. Appropriate mask fitting should always be ensured [for particulate respirators e.g. N95, through initial fit testing and user seal-check (fit check), and for medical masks; through methods to reduce air leakage around the mask] as well as compliance with appropriate use of PPE and other precautions.

- *Fit test is conducted to determine if there is a gap in the seal of the respirator used. It should be conducted at least once a year or whenever there is change in body habitus.*
- *Seal-check is conducted by the user to determine if the respirator is properly sealed to the face.*

- 3.2.9. Particulate respirator is preferred over well fitted surgical mask based on \*Risk assessment:
- where ventilation is known to be poor or cannot be assessed or the ventilation system is not properly maintained.
  - unable to maintain a 2-metre spatial distance.
  - prolong close contact, less than 1 metre.
  - if patients are unable able to wear a mask (e.g. patient is on oxygen/ breathless).
  - AGP / aerosol generating behaviour.
- 3.2.10. Double masking in the clinical area is not recommended in view of lack of evidence regarding the risks and benefits of using it as well the potential of self-contamination and reduced breathability. This is based on *WHO Interim Guidance: Infection Prevention and Control during Health care when Coronavirus disease (COVID-19) is Suspected or Confirmed, 12 July 2021.*
- 3.2.11. The use of bands or ties behind the head (rather than ear loops) in order to improve the mask fit by reducing the gaps at the sides may also be considered.
- 3.2.12. The use of eye protection (face shield/ goggles) with surgical mask in clinical setting is required in an area with high risk of disease transmission. The rationale of the use of eye protection is to protect the mucous membranes of the eyes, nose and mouth.
- 3.2.13. Eye protection should also be worn when exposed to risk of airborne transmission and where there is a risk of contamination to the eyes from splashing of blood, body fluids, excretions or secretions (including respiratory secretions). In activities that have high risk of aerosolization and contamination such as performing AGP procedures. It is recommended to wear a face shield rather than goggles.
- 3.2.14. The following practices are **NOT RECOMMENDED**:
- Reuse of PPE (donning of a used PPE item without decontamination/ reprocessing).
  - Disinfection of gloved hands.
  - Use of gloves in settings where they are not needed (e.g., administration of COVID-19 vaccine).
  - Use of surgical mask in combination with respirator in order to extend the use of respirator.

**3.2.15. Rational use of personal protective equipment for COVID-19 and considerations during shortages**

3.2.15.1. Where shortages in PPE supply are forecasted to impact the safety and sustainability of health care delivery, the use of PPE in health care settings where patients with COVID-19 are cared for must be optimized:

- Optimize the use of PPE through care planning; bundling activities and using alternatives to face to-face interactions where quality of care can be maintained.
- Use PPE items according to the transmission risk; standard and transmission-based precautions should be accordingly applied when providing care to patients.
- Expand PPE availability by evaluating PPE items tested to functionally equivalent international standards

3.2.15.2. Temporary strategies during severe shortage:

In situations where there is a severe PPE shortage or anticipated stockout and when strategies for optimizing available PPE use have been implemented, consider temporary stand-alone or combination measures to maximize the use of available supplies:

- Extended PPE use (using PPE items for longer than normal or for multiple patient encounters)
- Reprocessing PPE (using previously worn PPE after decontamination or reprocessing methods)
- Alternative PPE items (using non-standardized or repurposed products as PPE items).

3.2.16. Recommended PPE to be used in hospital setting is listed in Table 5. Recommended PPE to be used in the management of dead bodies of suspected, probable or confirmed COVID-19 is illustrated in Table 6.

3.2.17. For health clinic and district health office settings, recommended PPE to be used in general is listed in Table 7 and 8.

3.2.18. Recommended PPE to be used in the Vaccination Centre is illustrated in Table 9.

### 3.3. DISINFECTION AND STERILISATION

- 3.3.1. All single use medical equipment should not be re-used.
- 3.3.2. All reusable medical equipment (e.g., blood glucose meter and other point of care devices, surgical instruments, endoscope) is cleaned and reprocessed appropriately prior to use on another patient.
- 3.3.3. Reusable medical equipment must be cleaned and reprocessed according to general protocols for disinfection and sterilization:
  - 3.3.3.1. If not visibly soiled, wipe external surfaces of large portable equipment (e.g., X-ray machines and ultrasound machines) that has been used in the isolation room or area with an approved hospital disinfectant upon removal from the patient's room or area.
  - 3.3.3.2. Proper cleaning and disinfection of reusable respiratory equipment is essential in-patient care.
- 3.3.4. Follow the manufacturer's recommendations for use or dilution, contact time and handling of disinfectants.

### 3.4. ENVIRONMENTAL HYGIENE (CLEANING AND DISINFECTION)

- 3.4.1. Ensure environmental cleaning and disinfection procedures are followed consistently and correctly as per healthcare facilities recommendation.
- 3.4.2. Clean and disinfect surfaces that are likely to be contaminated with pathogens, including those that are in close proximity to the patient (e.g., bed rails, over bed tables) and frequently-touched surfaces in the patient care environment (e.g., door knobs, surfaces in and surrounding toilets in patients' rooms).
- 3.4.3. Recommended frequency of cleaning and disinfection of environmental surfaces in healthcare facility setting are listed in Table 1.
- 3.4.4. Cleaning should be done from the least soiled (cleanest) to the most soiled (dirtiest) areas, and from the higher to lower levels and using standard hospital registered disinfectants, such as sodium hypochlorite 1000 ppm.
- 3.4.5. If visible contamination or spills, it is recommended to use a higher dilution of EPA registered disinfection such as sodium hypochlorite at 10,000ppm.
- 3.4.6. For **ISOLATION ROOM**, terminal cleaning and disinfection should be done following discharge/transfer of a patient. The steps for terminal cleaning are followed:

- 3.4.6.1. Before entering the room, cleaning equipment should be assembled before applying PPE.
  - 3.4.6.2. PPE must be removed, placed in an appropriate receptacle and hands cleaned before moving to another room or task.
  - 3.4.6.3. PPE must not be worn or taken outside the patient room or bed space.
  - 3.4.6.4. Protocols for cleaning must include cleaning of portable carts or built-in holders for equipment.
  - 3.4.6.5. The room should be decontaminated from the highest to the lowest point and from the least contaminated to the most contaminated.
  - 3.4.6.6. Remove curtains and placed in red linen bag with alginate plastic.
  - 3.4.6.7. Use disinfectants such as sodium hypochlorite. The surface being decontaminated must be free from organic soil. A neutral detergent solution should be used to clean the environment prior to disinfection or a combined detergent/disinfectant may be used.
- 3.4.7. In addition to the above measures, the following additional measures must be taken when performing terminal cleaning for Airborne Infection Isolation Rooms (AIIR).
- 3.4.7.1. The cleaner should wait for sufficient air changes to clear the air before cleaning the room.
  - 3.4.7.2. After patient/resident transfer or discharge, the door must be kept closed and the Airborne Precautions sign must remain on the door until sufficient time has elapsed to allow removal of airborne microorganisms. Duration depends on ACHR;
    - With ACHR of 12 or 15, the recommended duration is 23 to 35 minutes and 18 to 28 minutes with 99%-99.9% efficiency respectively.
    - When the ACHR cannot be determined it is recommended that the room is left for time interval of 45 minutes before the cleaning and disinfectant is commenced.

**Table 1 RECOMMENDED FREQUENCY OF CLEANING OF ENVIRONMENTAL SURFACES, ACCORDING TO THE PATIENT AREAS WITH PERSON UNDER SURVEILLANCE (PUS), SUSPECTED, PROBABLE OR CONFIRMED COVID-19 IN HEALTHCARE SETTING**

Patient area	Frequency <sup>a</sup>	Additional guidance
Screening/triage area	At least twice daily	<ul style="list-style-type: none"> <li>Focus on high-touch surfaces, then floors (last)</li> </ul>
Inpatient rooms/cohort – occupied	At least twice daily, preferably three times daily, in particular for high-touch surfaces	<ul style="list-style-type: none"> <li>Focus on high-touch surfaces, starting with shared/common surfaces, then move to each patient bed; use new cloth for each bed if possible; then floors (last)</li> </ul>
Inpatient rooms – unoccupied (terminal cleaning)	Upon discharge/transfer	<ul style="list-style-type: none"> <li>Low-touch surfaces, high-touch surfaces, floors (in that order); waste and linens removed, bed thoroughly cleaned and disinfected</li> </ul>
Outpatient/ambulatory care rooms	After each patient visit (in particular for high-touch surfaces) and at least once daily terminal clean	<ul style="list-style-type: none"> <li>High-touch surfaces to be disinfected after each patient visit</li> <li>Once daily low-touch surfaces, high-touch surfaces, floors (in that order); waste and linens removed, examination bed thoroughly cleaned and disinfected</li> </ul>
Hallways/corridors	At least twice daily <sup>b</sup>	<ul style="list-style-type: none"> <li>High-touch surfaces including railings and equipment in hallways, then floors (last)</li> </ul>
Patient bathrooms/toilets	Private patient room toilet: at least twice daily Shared toilets: at least three times daily	<ul style="list-style-type: none"> <li>High-touch surfaces, including door handles, light switches, counters, faucets, then sink bowls, then toilets and finally floor (in that order)</li> <li>Avoid sharing toilets between staff and patients</li> </ul>

<sup>a</sup> Environmental surface should also be cleaned and disinfected whenever visibly soiled or if contaminated by a body fluid (e.g., blood);

<sup>b</sup> Frequency can be once a day if hallways are not frequently used.

Source: *Cleaning and disinfection of environmental surfaces in the context of COVID-19 Interim guidance*, World Health Organization, 15 May 2020

### 3.5. WASTE MANAGEMENT

- 3.5.1. General waste should be segregated from infectious waste.
- 3.5.2. Infectious waste should be handled and treated in accordance with healthcare facility policies and local regulations.
- 3.5.3. HCW who involved in waste management should be trained and wear appropriate PPE.

### 3.6. LINEN MANAGEMENT

- 3.6.1. Contaminated linen should be handled with minimal manipulation to prevent contamination of the air, surfaces and persons. **DO NOT:**
  - Carry contaminated linen against body.
  - Shake the linen.
  - Place used linen on the floor or other surfaces.
  - Overfill the laundry basket.
- 3.6.2. The steps for handling linen:
  - Place the linen directly into red alginate plastic and secure, if there is any solid excrement on the linen, such as feces or vomit it should be segregated and removed first.
  - Place red alginate plastic into the red linen bag.
- 3.6.3. All linen should be handled inside the isolation room/cohort area/ward.
- 3.6.4. Store all used linen in a designated area (e.g., closet or room).
- 3.6.5. HCW handling soiled bedding, towels and clothes from patient should wear appropriate PPE, which includes surgical mask, gloves, eye protection (face shield/goggles), long-sleeved plastic apron, boots or closed shoes before touching any soiled linen.
- 3.6.6. Washing/disinfecting linen should be handled according to healthcare facilities protocol.



**3.7. SAFE INJECTION PRACTICES, SHARPS MANAGEMENT AND PREVENTION OF NEEDLE STICK INJURIES.**

3.7.1. The seven steps to safe injections are:

- i. Clean workplace
- ii. Hand hygiene
- iii. Sterile safety-engineered syringe
- iv. Sterile vial of medication and diluent
- v. Skin cleaning and antisepsis
- vi. Appropriate collection of sharps
- vii. Appropriate waste management

**3.8. RESPIRATORY HYGIENE/COUGH ETIQUETTE**

3.8.1. Should be applied by all individual with respiratory symptoms.

3.8.2. All individuals (HCWs, patients and visitors) with signs and symptoms of a respiratory infection should:

3.8.2.1. Use surgical mask (refer to Appendix 6 – How to wear a medical mask safely by World Health Organization).

3.8.2.2. Cover their mouth and nose when coughing/sneezing.

3.8.2.3. Use tissues, handkerchiefs, cloth/fabric or surgical masks and dispose them into waste containers.

3.8.2.4. Encourage to perform handwashing.

3.8.2.5. Kept at least 1 metre from other patients.

3.8.3. Visual alert / aids should be placed to remind patients and visitors to practice respiratory hygiene/cough etiquette.

3.8.4. Surgical mask, tissues and hand washing facilities should be made available in all areas.

## 4. ADDITIONAL TRANSMISSION-BASED PRECAUTIONS

### 4.1. CONTACT AND DROPLET PRECAUTIONS

#### 4.1.1. Patient Placement on Admission

- 4.1.1.1. Patient should be placed in an adequately ventilated single room with attached bathroom. Cohort confirmed COVID-19 patient is allowed and patient should be placed at least 1 meter apart. PUS, suspected and probable awaiting result should be placed in an isolation room.

#### 4.1.2. Patient care equipment

- 4.1.2.1. Dedicate the use of non-critical patient-care equipment to avoid sharing between clients/patients/residents (e.g., stethoscope, sphygmomanometer, thermometer or bedside commode). If unavoidable, then adequately clean and disinfect them between use for each individual patient with hospital recommended disinfectant.

#### 4.1.3. Patient Transfer and Transport within the Healthcare Facilities

- 4.1.3.1. Avoid the movement of patients unless medically necessary.
- 4.1.3.2. If movement of patient is required, use pre planned routes that minimize exposure to other staff, patients and visitors. Notify the receiving area before sending the patient.
- 4.1.3.3. Clean and disinfect patient-contact surfaces (e.g., bed, wheelchair, incubators) after use.
- 4.1.3.4. HCWs transporting patients must wear appropriate PPE (surgical mask/ N95 mask, eye protection, isolation gown, gloves).
- 4.1.3.5. When outside of the isolation room, patient should wear a surgical mask (not N95 mask) if not in respiratory distress. Oxygen supplement using nasal prong can be safely used under a surgical mask. If patient is unable to tolerate surgical mask, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow during transport.
- 4.1.3.6. If available, dedicated equipment such as Isopod may be used to transfer patient who are at increased risk of aerosol transmission (e.g., Intubated patients) to reduce environmental contamination.

**4.1.4. Specimen Collection and Transport**

- 4.1.4.1. All specimens should be regarded as potentially infectious, and HCW who collect or transport clinical specimens should adhere rigorously to Standard Precautions, to minimize the possibility of exposure to pathogens.
- 4.1.4.2. Deliver all specimens by hand whenever possible. Do not use pneumatic-tube systems to transport specimens.
- 4.1.4.3. State the name of the PUS/Suspected/Probable/Confirmed COVID-19 case clearly on the accompanying request form. Notify the laboratory as soon as possible that the specimen is being transported.
- 4.1.4.4. Ensure that HCW who collect respiratory specimens from PUS/Suspected/Probable/Confirmed COVID-19 patients wear appropriate PPE.
- 4.1.4.5. Place specimens for transport in leak-proof specimen bags (please refer to Annex 5 Guidelines on Laboratory Testing for COVID-19).
- 4.1.4.6. Ensure that HCW who transport specimens are trained in safe handling practices and spill decontamination procedures. There are no special requirements for transport of samples to laboratory and they can be transported as routine samples for testing. However, HCW may wear gloves and plastic apron (optional) during transfer. Hand hygiene is paramount after specimen has been sent.

**4.1.5. Dishes and Eating Utensils**

- 4.1.5.1. Use disposable utensils as much as possible.
- 4.1.5.2. If not disposable, to wash thoroughly with soap and water as per healthcare facilities guidelines.
- 4.1.5.3. Healthcare facilities may consider using the same utensil for the specific patients during their hospital stay.

**4.1.6. Patient Record/Bed Head Ticket**

- 4.1.6.1. Bed head ticket (BHT) of PUS/Suspected/Probable/Confirmed COVID-19 should be tagged.

- 4.1.6.2. The patient record/bed head ticket preferably be kept outside the patient room to minimize the risk of transmission of COVID-19 / MDRO infection.
- 4.1.6.3. The risk of fomite transmission from any surfaces is low after 3 days (72 hours).
- 4.1.6.4. Hand hygiene should be performed each time after handling patient record/ bed head ticket.

**4.1.7. Healthcare Worker (HCW)**

- 4.1.7.1. Ensure all HCW who are managing these patients are up to date with their vaccination schedule e.g., COVID-19 vaccine and influenza vaccine.
- 4.1.7.2. Pregnant HCW at 14-28 weeks of gestation who are fully vaccinated and without any immunosuppressive comorbid can function at COVID-19 and COVID-19 related wards.
- 4.1.7.3. HCW who are managing and providing routine care for PUS/Suspected/Probable/Confirmed COVID-19 patient need to be trained on proper use of PPE.
- 4.1.7.4. Keep a register of HCW who have provided care for patients with PUS/Suspected/Probable/Confirmed COVID-19 for contact tracing.
- 4.1.7.5. The creation of a dedicated team consisting of nurses, medical officers and specialist and other supportive staff from other areas are recommended for managing Suspected/Probable/Confirmed COVID-19 patient.
- 4.1.7.6. The HCWs/support staff who are managing and providing routine care for PUS/Suspected/Probable/Confirmed COVID-19 patient should be monitored for symptoms minimum daily. If HCWs become symptomatic, he/she need needs to report to the supervisor in the team and managed accordingly (refer Annex 21 Management of HCW During COVID-19 Pandemic).

#### 4.1.8. Visitors or Caregivers

- 4.1.8.1. Refer to the latest *Visiting Policies for Caregivers and Visitors at MOH Hospitals in the Context of COVID-19*.
- 4.1.8.2. No visitor should be allowed unless visitors who are essential such as;
  - patients with critical illness, palliative care, hospice care and end of life
  - patients who need assisted care, e.g., help patient to mobilize, personal care especially for patients with disabilities, critically ill, elderly or postoperative patients.
  - patients who need assistance for communication, such as those with hearing, visual, speech, cognitive, intellectual or memory impairments.
  - patients require emotional and support in decision making.
  - paediatric and mothers in labour.
- 4.1.8.3. Alternate method of communication should be encouraged such as video calls to reduce the risk of transmission.
- 4.1.8.4. If absolutely necessary, discuss with the managing team. Approval is based on the discretion of the attending team and hospital policy.
- 4.1.8.5. Thorough advice and counselling should be given and written consent should be taken prior to visitation based on hospital policy.
- 4.1.8.6. All visitors or caregivers should be screened signs and symptoms of COVID-19 and filled up the declaration form before allowing to enter. For caregivers they should also filled up *Borang Persetujuan dan Pemahaman Risiko Jangkitan COVID-19 bagi Penjaga Pesakit* (refer to *Visiting Policies for Caregivers and Visitors at MOH Hospitals in the Context of COVID-19*).
- 4.1.8.7. Document and limit the number of visitors at scheduled time. Advice family members to assign a single visitor or caregiver who is not at high risk for severe COVID-19 to visit or taking care the patient.
- 4.1.8.8. Visitors or caregivers should be advised to limit their movement in the healthcare facility.

- 4.1.8.9. HCW should educate and supervise the visitors or caregivers on hand hygiene (before entering and leaving the room), respiratory etiquette, physical distancing (maintain at least 1 metre), use of PPE and other IPC measures as well as on how to recognize the signs and symptoms of COVID-19.
- 4.1.8.10. HCW must instruct and supervise all visitors or caregivers on the donning and doffing of PPE (gown, glove, N95 mask) before entering the room.
- 4.1.8.11. Appropriate instruction on should be given while in the patient's room.
- 4.1.8.12. PPE recommend for these long-term carers may be limited to surgical mask. The use of plastic apron and gloves are recommended when anticipating exposure to bodily fluids.
- 4.1.8.13. Visitors or caregivers who have been in contact with the patient before and during hospitalization (i.e., parents taking care of their children) are a possible source/contact of the infection.
- 4.1.8.14. Exposed visitors or caregivers should report any signs and symptoms to their healthcare providers.
- 4.1.8.15. No visitors or caregivers should be allowed during AGP procedure.

### **4.2. AIRBORNE PRECAUTIONS FOR AEROSOL-GENERATING PROCEDURES (AGP)**

- 4.1.1. An aerosol-generating procedure (AGP) is defined as any medical procedure that can induce the production of aerosols of various sizes, including small (< 5µm) particles. The aerosol-generating procedures include:
  - Intubation, extubation and related procedures
  - Tracheotomy/tracheostomy procedures
  - Manual ventilation
  - Suctioning
  - Bronchoscopy
  - Nebulization
  - Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP)
  - Surgery and post-mortem procedures in which high-speed devices are used
  - High-frequency oscillating ventilation (HFOV)

- High-flow Nasal Oxygen (HFNO)
- Induction of sputum (using nebulized hypertonic saline)
- Dental procedures
- Autopsy procedures

4.1.2. Patient placement during AGP should be in descending order of preference:

- i) Negative pressure rooms/AIIR room.
- ii) Adequately ventilated single room with at least natural ventilation with at least 160 L/s/patient air flow, with closed doors **(use with HEPA filter if possible)**.

## 5. ADMINISTRATIVE CONTROLS

5.1. Implementing administrative control and policies in order to prevent and control the transmission of SARS-CoV-2 within the healthcare facility as well as to ensure the safety of HCW, patient and visitors.

5.2. The examples of administrative control implemented by the healthcare facility includes;

- 5.2.1. Develop policies/guidelines such as Management of suspected/confirmed COVID-19, Management of HCW exposed to COVID-19 and etc.
- 5.2.2. Ensure IPC guideline is in place, updated and disseminated to all HCW.
- 5.2.3. Regular education and training on IPC to all category of HCW including patient and visitors.
- 5.2.4. Monitor the HCW compliance to standard precautions and SOPs irrespective of vaccination status.
- 5.2.5. Establish active syndromic surveillance of HCW.
- 5.2.6. Establish infrastructure which support the IPC activities, planning for repurposing of wards for isolating COVID-19 patients.
- 5.2.7. Adequate patient to staff ratio in order to reduce burden and stress to staff.
- 5.2.8. Provision of adequate and regular supply of personal protective equipment (PPE) and appropriate training of staff.

### 5.3. General measures for HCW during pandemic

#### 5.3.1. **Prevention, identification and management of COVID-19 among the HCW**

Information regarding the management of HCW who were exposed to or infected with COVID-19 infection including active and passive syndromic surveillance and testing, refer to Annex 21 Management of Healthcare Workers (HCW) During COVID-19 Outbreak.

**5.3.2. Maintain physical distancing**

- It is encouraged to limit number of HCW during clinical rounds in the wards, and during clinical teaching. When deciding on the number, the ability to maintain at least a 1-meter distance between HCW while conducting ward rounds or consultation session in clinic setting.

**5.3.3. Surau/prayer rooms:**

- For HCWs attending prayers at the mosques, they should follow the respective standard operating procedure (SOP) at the surau/prayer rooms.

**5.3.4. Instructions for HCW at any Service Counter:**

- 5.3.4.1. Always wear a surgical mask (refer Appendix 6).
- 5.3.4.2. Keep a minimum distance of 1 meter from the customer or alternatively have a blind/glass/plastic window in front of the counter.
- 5.3.4.3. Advise customers to wear a surgical mask and perform hand hygiene.
- 5.3.4.4. Minimize handling of cash. After handling cash, to perform hand hygiene. When using credit/debit card, practice contactless interaction by asking the customer to tap/insert and remove the card from the machine themselves.
- 5.3.4.5. Ensure alcohol-based hand rub is always available by the side of each HCW and at the counter.
- 5.3.4.6. Ensure disinfectant wipes are available at counters to encourage regular cleaning of high-touch areas.

**5.3.5. Transport**

If HCW are provided with transport, the following special precautions are to be taken:

- 5.3.5.1. Vehicles should be cleaned and disinfected (the seats, all handles, interior door panel, windows, locks, exterior door handles, poles, etc.) before transport of passengers to prevent possible cross contamination.
- 5.3.5.2. Arrange a vehicle with appropriate seating capacity according to number of HCW to enable them to maintain at least 1-meter distance inside the vehicle once seated.



- 5.3.5.3. All health care personnel including the driver must wear surgical masks while being transported.
- 5.3.5.4. Optimise ventilation in the transport for example by either:
  - opening the windows
  - setting the air ventilation/ air conditioning on non-recirculation mode.
- 5.3.5.5. Refrain from eating or drinking in a rideshare vehicle to ensure mask used at all times. Plan to eat and drink outside of the vehicle when not near other people.
- 5.3.5.6. After leaving the vehicle, use hand sanitizer containing at least 60% alcohol.
- 5.3.5.7. When arrive at destination, wash hands with Alcohol based hand rub or with soap and water for at least 20 seconds.

**6. ENVIRONMENTAL AND ENGINEERING CONTROLS**

- 6.1. Engineering control is one the crucial principles in hierarchy of controls within the healthcare facility in order to prevent the transmission of infectious disease including COVID-19.
- 6.2. Refer to Table 2, 3 and 4 for the summary of Recommendation to Improve Ventilation in Healthcare Settings.

**Table 2 SUMMARY OF RECOMMENDATION TO IMPROVE NATURAL VENTILATION IN HEALTHCARE SETTINGS**

Ventilation rate/ number of air changes	60 L/s/patient (hourly average ventilation rate) or 6 ACH (air changes per hour)  160 L/s/patient (hourly average ventilation rate) or 12 ACH (air changes per hour) where AGP are performed
The airflow direction	Direction should be from clean to less clean.  Modify the functional distribution regarding airflow directions to minimize exposure of health care workers,  Avoid using devices that generate a strong air flow in a common area, especially streams of air going from person to person.

Air exhausted outside	Air should be exhausted directly to the outside away from air intake vents
Toilets	Avoid open windows in toilets to maintain the correct direction of ventilation  Keep toilet ventilation in operation round the clock.  Flush toilets with closed lid.
Monitoring indoor air quality	CO2 level more than 1000 ppm indicates poor indoor air quality. To minimize risk of transmission, it is important to keep the CO2 levels to as low as practically possible (preferable below 800 ppm as recommended by CDC).

**Table 3 SUMMARY OF RECOMMENDATION TO IMPROVE MECHANICAL VENTILATION IN HEALTHCARE SETTINGS**

Ventilation rate/ number of air changes	60 L/s/patient (hourly average ventilation rate) or 6 ACH (air changes per hour)  160 L/s/patient (hourly average ventilation rate) or 12 ACH (air changes per hour) where AGP are performed
The airflow direction	Direction should be from clean to less clean.  Modify the functional distribution regarding airflow directions to minimize exposure of health care workers,  Avoid using devices that generate a strong air flow in a common area, especially streams of air going from person to person.
Air exhausted outside	Air should be exhausted directly to the outside away from air intake vents

Air recirculation	<p>Consult ACMV professional</p> <p>Recirculation systems where no or too little fresh air is added are not recommended.</p> <p>Maximise outside air intake and reduce air recirculation as much as possible.</p> <p>Increase outdoor fresh air supply, potentially up to 100%, if supported by and compatible with the ACMV system</p> <p>Increasing amount of outdoor air will lead to risk of surface condensation and growth of fungus and bacteria. The humidity level should be carefully control not exceed 60% RH by installing dehumidification component at AHU.</p> <p>Non-ducted (with indoor air recirculation) convectors such as split or fan coil units is discouraged (difficult to maintain, provide poor filtration and contribute to turbulence- potentially increasing the risk of infection). MUST be avoided where AGP is performed</p>
Filters	<p>In recirculating central ventilation systems, install/upgrade to the most efficient filters (rated at a MERV-14 level or higher or HEPA) taking the capabilities of the ACMV systems into consideration</p>
Air Relative humidity (RH)	<p>AIIR: Max 60%</p> <p>Noncritical area: 40% to 70%</p>
Regular airing of rooms	<p>Air common areas such as a conference room, during breaks or after the meeting when everyone has left the room.</p> <p>For example, airing is carried out by opening windows and doors wide against each other for 10 to 15 minutes after meeting.</p> <p>To discuss with the hospital engineers if this is allowed and does not cause condensation.</p>
Toilets	<p>Keeping negative pressure in toilets is recommended, as aerosol formation can occur;</p> <p>Avoid open windows in toilets to maintain the correct direction of ventilation</p> <p>Keep toilet ventilation in operation round the clock.</p> <p>Flush toilets with closed lid.</p>

Monitoring indoor air quality	CO2 level more than 1000 ppm indicates poor indoor air quality. To minimize risk of transmission, it is important to keep the CO2 levels to as low as practically possible (preferable below 800 ppm as recommended by CDC).
Maintenance of air filter	<p>Make sure air filters are properly sized and within their recommended service life.</p> <p>Inspect filter housing and racks to ensure appropriate filter fit and minimize air that flows around, instead of through the filter.</p> <p>All maintenance team must wear a full PPE when servicing the AHU (air circulation) or any part of the air ventilation system which cater for COVID-19 patients.</p>

**Table 4 SUMMARY OF VENTILATION SPECIFICATIONS IN SELECTED AREAS OF HEALTH-CARE FACILITIES FOR INFECTION PREVENTION AND CONTROL**

Specifications	All room (includes bronchoscopy suites)	Critical care room*	Isolation anteroom
Air pressure**	Negative	Positive, negative, or neutral	Positive or negative
Room air changes	<p>≥6 ACH (for existing rooms)</p> <p>≥12 ACH (for renovation or new construction)</p>	≥12 ACH	≥10 ACH
Sealed***	Yes	No	Yes
Minimum filtration supply	MERV-14	MERV-14	MERV-14
Minimum filtration Exhaust	HEPA	HEPA	HEPA
Recirculation	No	No	No

If the procedure is an aerosol generating procedure, it is recommended to perform the procedure in an airborne infection isolation room or a bronchoscopy room with 12 totals ACH. The room must be negative, 100% exhaust and no recirculation within the room.

\* Positive pressure and HEPA filters may be preferred in some rooms in intensive care units (ICUs) caring for large numbers of immunocompromised patients.

\*\* Clean-to-dirty: negative to an infectious patient, positive away from immunocompromised patient.

\*\*\* Minimized infiltration for ventilation control; pertains to windows, closed doors, and surface joints.

# Refer to Ministry of Health Malaysia guideline- "Policies & Procedures on Infection Prevention and Control 2019"

For further details, refer to Guideline on Ventilation in Healthcare Facilities to Reduce Transmission of Respiratory Pathogen as in ANNEX 52, COVID-19 Management Guidelines in Malaysia (<https://covid-19.moh.gov.my/garis-panduan/garis-panduan-kkm>).

## 7. INFECTION PREVENTION AND CONTROL CONSIDERATION IN THE CONTEXT OF COVID-19 VACCINATION

7.1 HCWs are among the priority groups for vaccination because they are at the highest risk of being infected with SARS-CoV-2.

7.2 All IPC measures for COVID-19 such as the use of mask, hand hygiene and physical distancing should be implemented in healthcare settings by all vaccinated and unvaccinated HCWs.

7.3 IPC principles and procedures should also be implemented during the COVID-19 vaccination activities by all HCW and volunteer. These includes;

- Standard precautions should be applied during COVID-19 vaccine delivery. Gloves are not required for the administration of vaccine unless indicated (e.g., skin breakdown). Refer to Table 9 Recommended PPE to be used in the Vaccination Centre (*Pusat Pemberian Vaksin COVID-19*).
- Hand hygiene facilities should be available. Vaccinator should perform hand hygiene as indicated (before putting and removing of PPE, before preparing the vaccine and between the administration). The use of gloves does not replace the need for hand hygiene between administrations.
- Ensure the environment is clean, spacious (physical distancing at least 1 metre can be practice) and well ventilated with appropriate waste management.

TABLE 5 RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN HOSPITAL SETTING

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>1.0 NON-CLINICAL AREAS</b>				
Administrative areas, office spaces, canteens/ cafes and any other area where activities <b>do not involve any direct contact with patients</b>	All staff	All activities	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> </ul>	<ul style="list-style-type: none"> <li>Staff should maintain at least 1-meter spatial distance when possible.</li> <li>Staff should perform hand hygiene as per indication.</li> <li>Standard PPE should be available in case of emergencies.</li> </ul>
Registration counter/ Pharmacy counters/ Medical record office and any other area where activities <b>involve contact with patients</b>	All staff	All activities	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>Staff should maintain at least 1-meter spatial distance.</li> <li>Patient should be encouraged to wear well fitted surgical mask (if tolerable).</li> <li>Staff should perform hand hygiene as per indication.</li> </ul>

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>2.0 CLINICAL AREAS BEFORE ENTERING A ROOM/PATIENT AREA WHERE THERE IS A SUSPECTED/ CONFIRMED COVID-19 CASE: EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING WARDS/ ICU / CLINICAL ASSESSMENT CENTRES (CAC)</b>				
Areas within 2 meters of patients	All staff	1. Activities that do not result in physical contact	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>• Triaging areas in emergency department may use physical barriers (such as glass or plastic windows or face shield) to reduce exposure.</li> </ul>
Areas within 2 meters of patients	All staff	2. Activities that result in <b>LOW CONTACT RISK</b> i.e., activities that are unlikely to provide opportunities for the transfer of virus to clothing for example: <ul style="list-style-type: none"> <li>• Recording clinical vital assessment (Blood Pressure/ Pulse Rate/ Oxygen Saturation/ Temperature)</li> <li>• Inserting a peripheral IV cannula</li> <li>• Administering or changing IV fluids</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Disposable plastic apron</li> <li>• Gloves</li> </ul> <p><i>Fluid resistant isolation gown/ long sleeve plastic apron can be used if anticipating spillage/ difficult line insertion or any activities which increases the frequency of exposure</i></p>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1-meter spatial distance when possible.</li> <li>• HCW should limit the time and frequency of exposure as permissible.</li> <li>• Gowns and gloves should be changed between patients after high risk contact activities, to minimise risk of cross-transmission of other pathogens commonly</li> </ul>

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
		<p>3. Activities that result in <b>HIGH CONTACT RISK</b> i.e. <b>activities</b> that involve a higher chance of transfer of virus to the clothing. This includes (but not limited to):</p> <ul style="list-style-type: none"> <li>• Close contact for physical examination</li> <li>• Physiotherapy related activities</li> <li>• Changing diapers and assisting with toileting activities</li> <li>• Wound care</li> <li>• Assisting or performing oral care/ bathing / showering</li> <li>• Transferring a patient e.g. from bed to chair</li> <li>• ANY activities where splashes/ sprays are anticipated</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Gloves</li> <li>• Isolation gown (fluid-repellent long-sleeved gown/ apron) * can be used if anticipated spillage/ difficult line insertion or any activities which increases the frequency of exposure</li> </ul> <p><i>*if the gown is not fluid resistant; it is advised to wear a disposable plastic apron over the gown</i></p> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	<p>encountered in healthcare settings.</p> <ul style="list-style-type: none"> <li>• PPE should be exchanged between patients if visibly contaminated.</li> </ul>
		<p>4. Performing Aerosol Generating Procedures (AGP)</p> <ul style="list-style-type: none"> <li>• Intubation, extubation and related procedures/ CPR</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask/ PAPR</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation gown (fluid repellent long-sleeved gown)</li> </ul>	<ul style="list-style-type: none"> <li>• All PPE should be removed after procedure.</li> </ul>



SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
		<ul style="list-style-type: none"> <li>• Tracheotomy/ tracheostomy procedures</li> <li>• Manual ventilation</li> <li>• Suctioning</li> <li>• Bronchoscopy</li> <li>• Nebulization</li> <li>• Others – Refer Guideline</li> </ul>	<ul style="list-style-type: none"> <li>• Gloves</li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	
Specimen Collection Area	All Staff	Performing oropharyngeal or nasopharyngeal swab	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Gloves*</li> <li>• Long-sleeved plastic apron*</li> </ul> <p><i>*it is sufficient to change gloves and plastic apron between patients</i></p>	<ul style="list-style-type: none"> <li>• Any soiled PPE should be changed.</li> </ul>
<b>3.0 CLINICAL AREAS: MANAGEMENT OF PATIENTS WHO ARE NOT CONFIRMED OR SUSPECTED COVID-19</b>				
Wards	All staff	Involved in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/ goggles)</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> </ul>

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
Outpatient clinics Ambulatory care	All staff	Involved in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/ goggles)</li> </ul>	<ul style="list-style-type: none"> <li>Other PPE should be made available.</li> <li>Standard and transmission-based precautions should be practiced accordingly.</li> <li>Patients should wear a well fitted surgical mask (if tolerable).</li> </ul>
SARI/ ILI	All staff	Involved in providing care for patients who presented / developed respiratory symptoms	<ul style="list-style-type: none"> <li>Well fitted surgical mask/ N95 mask</li> <li>Eye protection (face shield/ goggles)</li> </ul>	<ul style="list-style-type: none"> <li>N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> </ul>
<b>4.0 CLINICAL AREAS: CLEANING ACTIVITES</b>				
Patients Rooms	Cleaners/ other non-clinical staff	Routine cleaning in suspected or confirmed COVID-19 patient area	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Eye protection (face shield/ goggles)</li> <li>Isolation gown (fluid repellent long-sleeved gown)</li> <li>Gloves</li> <li>Rubber boots</li> </ul>	<ul style="list-style-type: none"> <li>Individual centres may consider well fitted surgical mask based on risk assessment.</li> <li>Hand hygiene performed as indicated.</li> <li>PPE should be made available.</li> </ul>
	Cleaners/ other non-clinical staff	Routine cleaning in a non-confirmed/ suspected COVID-19 patient area	<ul style="list-style-type: none"> <li>Well fitted surgical mask or N95 mask as per risk assessment</li> </ul>	

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
			<ul style="list-style-type: none"> <li>• Eye protection (face shield/ goggles)</li> <li>• Disposable apron</li> <li>• Gloves</li> <li>• Rubber boots</li> </ul>	
	Cleaners/ other non-clinical staff	Terminal cleaning of a confirmed/ suspected COVID-19 area <ul style="list-style-type: none"> <li>• Ensure adequate time has been left before cleaning as per guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask based on risk assessment</li> <li>• Isolation gown (fluid-repellent long-sleeved gown / apron)</li> <li>• Gloves</li> <li>• Rubber boots</li> </ul>	
General areas	Cleaners/ other non-clinical staff	Non-Clinical areas	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> </ul>	<ul style="list-style-type: none"> <li>• Increase frequency of cleaning for frequently touched surfaces according to hospital guidelines.</li> <li>• Adhere to OSH attire requirement.</li> </ul>
<b>5.0 TRANSFER OF SUSPECTED/ CONFIRMED COVID 19 PATIENTS (INTERNAL TRANSFERS BETWEEN CLINICAL AREAS / EXTERNAL AMBULANCE TRANSFERS)</b>				
Internal transfer of COVID-19 suspected or confirmed patients	All staff	1. Involved in transporting patients <ol style="list-style-type: none"> <li>a. Between wards/ICU</li> <li>b. OT</li> </ol>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Gloves</li> </ul>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask can also be worn based on Risk assessment*.</li> </ul>

**ANNEX 8**

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
		c. Radiology d. Outpatient settings e. Others	<ul style="list-style-type: none"> <li>• Disposable plastic apron</li> </ul>	
Ambulance transfer vehicle	All staff	2. Activities with <b>NO direct contact with patient</b>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask (based on Risk Assessment* outlined in Note section)</li> </ul>	<ul style="list-style-type: none"> <li>• Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used).</li> <li>• Use air conditioner with fresh air intake mode.</li> <li>• Driver should maintain at least 1-meter spatial distance when possible</li> <li>• Perform hand hygiene as per indication.</li> <li>• Risk assessment* includes:                             <ul style="list-style-type: none"> <li>○ Patient condition</li> <li>○ Ambulance ventilation</li> <li>○ Presence of separation barriers between patient and driver's area</li> </ul> </li> </ul>
Ambulance transfer vehicle	All staff	3. Accompanying COVID-19 patient in ambulance and direct contact is expected	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation gown (fluid repellent long-sleeved gown)</li> <li>• Gloves</li> </ul>	
Ambulance transfer vehicle	All staff	4. Transporting non COVID-19 patients	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask</li> <li>• Use of other PPE according to transmission-based precaution (underlying disease and risk assessment)</li> </ul>	

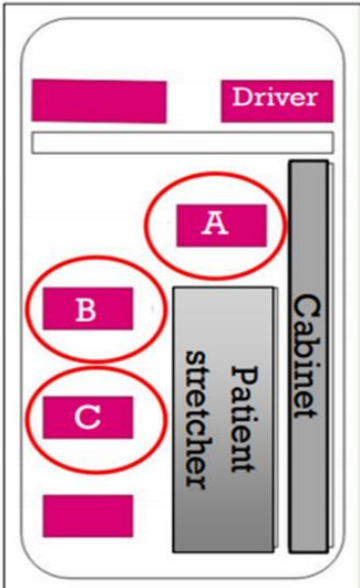
SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
Ambulance transport vehicle	All staff	5. Decontamination of ambulance that transported PUS/ Suspected/ Probable/ Confirmed COVID-19	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Long sleeve plastic apron</li> <li>• Gloves</li> </ul> <p><i>* adhere to OSH attire requirement when handling the chemical</i></p>	<ul style="list-style-type: none"> <li>• Healthcare worker seating arrangement (Figure 1):</li> </ul> <p>A &amp; B: When patient is not in distress</p> <p>C: When patient requires oxygen support/ intervention</p>  <p>The diagram shows the interior of an ambulance. At the top is the 'Driver' seat. Below it is a 'Patient stretcher' and a 'Cabinet'. Three positions are marked with red circles and labeled A, B, and C. Position A is at the top of the stretcher area, B is in the middle, and C is at the bottom. There are also two empty pink rectangular boxes on the left side of the stretcher area.</p>

Figure 1: Ambulance

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>6.0 LABORATORY AND PATHOLOGY AREAS</b>				
Laboratory	All staff	1. Manipulation of respiratory specimens which include oropharyngeal swabs, nasopharyngeal swabs, sputum, tracheal aspirate, bronchoalveolar lavage (BAL) must be accorded high risk	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation gown (fluid repellent long-sleeved gown)</li> <li>• Gloves</li> </ul>	<ul style="list-style-type: none"> <li>• Staff should perform hand hygiene as per indication.</li> <li>• Follow the Principles outlined in Chapter 7 of the Policies and Procedures on Infection Prevention and Control, 3rd Edition.</li> </ul>
Laboratory	All staff	2. Specimen handling for RT-PCR or Antigen testing prior to viral inactivation step, must be carried out in BSL-2 or equivalent facilities	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation gown (fluid repellent long sleeved gown)</li> <li>• Gloves</li> </ul>	
Laboratory	All staff	3. Handling and processing of <b>non-respiratory specimens</b> from Suspected/ Probable/ Confirmed COVID-19 intended for additional laboratory tests	<ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Long sleeve plastic apron/ gown</li> <li>• Gloves</li> </ul>	

**TABLE 6 RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN MANAGEMENT OF DEAD BODIES OF SUSPECTED, PROBABLE OR CONFIRMED COVID-19**


SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>FORENSIC MANAGEMENT OF SUSPECTED/ CONFIRMED COVID 19</b>				
Wards/ ICU/ Mortuary	All staff	Handling of the body in the mortuary/ ward	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation Gown (fluid repellent long sleeved gown)</li> <li>• Gloves</li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	<ul style="list-style-type: none"> <li>• Performing hand hygiene before and after interaction with the body</li> <li>• Instruments used during mortuary care, or during the autopsy should be cleaned and disinfected immediately after use.</li> <li>• Terminal cleaning practices should be adhered to locally prepared guidelines.</li> </ul>
Wards/ ICU/ Mortuary	All staff	Disposal of body <ul style="list-style-type: none"> <li>• Transporting body to burial site/ cremation</li> <li>• At burial/ cremation site</li> </ul>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Isolation Gown (fluid repellent long sleeved gown)</li> <li>• Gloves</li> <li>• Boots/footwear protection</li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	

**ANNEX 8**

<b>SETTING</b>	<b>TARGET PERSONNEL</b>	<b>ACTIVITY</b>	<b>TYPE OF PPE</b>	<b>NOTE</b>
Autopsy unit	All staff involved	Performing Autopsy	<ul style="list-style-type: none"> <li>• N95 mask/ PAPR</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Isolation Gown (fluid repellent long sleeved gown)</li> <li>• Gloves</li> <li>• Boots/footwear protection</li> </ul>	



**SUMMARY RECOMMENDED PPE TO BE USED IN HOSPITAL SETTING AND MANAGEMENT OF DEAD BODIES OF SUSPECTED, PROBABLE OR CONFIRMED COVID-19**

PPE	General areas	Clinical areas		Laboratory		Forensic <sup>§</sup>		AGP Procedure
	No patient contact	Providing care	Cleaning	Respiratory Specimen	Non-respiratory specimen	Handling Body	Disposal Body	
 Surgical mask	✓	# ✗	# ✗	✗	✓	✗	✓	✗
 Particulate respirators	✗	✓	✓	✓	✗	✓	✗	✓
 Gloves	✗	✓	✓	✓	✓	✓	✓	✓
 Isolation gown (fluid-repellent long-sleeved gown)	✗	✗	✓	✓	✓	✓	✓	✓
 Plastic apron	✗	✓	✓	✗	✓	✗	✗	✗
 Eye protection (face shield/ goggles)	✗	✓	✓	✓	✓	✓	✗	✓

#Well fitted medical mask can be worn if there is no patient contact/ contact with non-COVID patients/N95 masks can be opted based on \*Risk assessment

§ During Autopsy a boot cover can be worn as risk of contamination is high

TABLE 7 RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN HEALTH CLINIC SETTING

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>NON-CLINICAL AREAS</b>				
Administrative areas, office spaces, canteens/ cafes and any other area	All staff	All activities <b>do not involve any direct contact with patients</b>	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> </ul>	<ul style="list-style-type: none"> <li>Staff should maintain at least 1 meter spatial distance when possible.</li> <li>Staff should perform hand hygiene as per indication.</li> </ul>
<b>PRIMARY TRIAGE</b>				
Triage	HCW	Involved in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/ goggles)</li> </ul>	<ul style="list-style-type: none"> <li>N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>Other PPE should be made available.</li> <li>Standard and transmission-based precautions should be practiced accordingly.</li> </ul>
Patient Waiting Area	Patients	Patient with respiratory symptoms	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> </ul>	<ul style="list-style-type: none"> <li>Patient should be seated at the designated area, to sit at least 1 metre apart.</li> <li>Waiting area should be well-ventilated.</li> </ul>

<b>SECONDARY TRIAGE</b>				
Secondary Triage a. General patient e.g. post-natal patient, DM, HPT	HCW	Screening for vital signs	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>Full PPE set must be made available at the site in case of emergency.</li> </ul>
b. Influenza like illness (ILI)/Fever	HCW	Screening for vital signs	<ul style="list-style-type: none"> <li>Well fitted surgical mask/ N95 mask</li> <li>Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> <li>Full PPE set must be made available at the site in case of emergency.</li> </ul>
<b>GENERAL EXAMINATION AND TREATMENT ROOM</b>				
Examination room e.g. OPD, MCH,	HCW	History taking and physical examination Other procedures (non-aerosol generating procedure e.g. vaccination, dressing, eye examination)	<ul style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/goggles)</li> <li>Gloves (when indicated)</li> </ul>	<ul style="list-style-type: none"> <li>Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> <li>If using Fundoscopy machine, use physical barriers (such as breath guard) to reduce exposure.</li> </ul>

EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)				
Examination room/area	HCW	History taking and physical examination	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask</li> <li>• Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>• Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> </ul>
		Aerosol Generating Procedures (AGP) <ul style="list-style-type: none"> <li>• Nebulisation</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye Protection (face shield/goggles)</li> <li>• Isolation gown (fluid-repellent long-sleeved gown)</li> <li>• Gloves</li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	<ul style="list-style-type: none"> <li>• All PPE should be removed after procedure.</li> </ul>
		Taking blood for investigation	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul>	
Examination room/area	HCW	Transporting specimen to lab	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> </ul>	

ISOLATION/ DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE				
Areas within 2 meters of patients	HCW	1. Activities that do not result in physical contact	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> </ul>	
Areas within 2 meters of patients	HCW	2. Activities that result in <b>LOW CONTACT RISK</b> i.e., activities that are unlikely to provide opportunities for the transfer of virus to clothing for example: <ul style="list-style-type: none"> <li>• Recording clinical vital assessment (Blood Pressure/ Pulse Rate/ Oxygen Saturation/ Temperature)</li> <li>• Inserting a peripheral IV cannula</li> <li>• Administering or changing IV fluids</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Disposable plastic apron</li> <li>• Gloves</li> </ul> <p><i>*Fluid resistant isolation gown/ long sleeve plastic apron can be used if anticipated spillage/ difficult line insertion or any activities which increases the frequency of exposure</i></p>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1 meter spatial distance when possible.</li> <li>• HCW should limit the time and frequency of exposure as permissible.</li> <li>• Gowns and gloves should be changed between patients after high risk contact activities, to minimise risk of cross-transmission of other pathogens commonly encountered in healthcare settings.</li> <li>• PPE should be exchanged between patients if visibly contaminated.</li> </ul>
		3. Activities that result in <b>HIGH CONTACT RISK</b> i.e. activities that involve a higher chance of transfer of virus to the clothing. This includes (but not limited to):	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/ goggles)</li> <li>• Gloves</li> <li>• Isolation gown (fluid resistant long sleeve gown/apron)</li> </ul>	

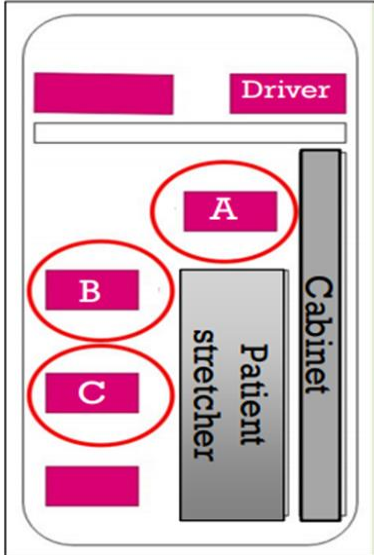
		<ul style="list-style-type: none"> <li>• Close contact for physical examination</li> <li>• Physiotherapy related activities</li> <li>• Changing diapers and assisting with toileting activities</li> <li>• Wound care</li> <li>• Assisting or performing oral care/ bathing / showering</li> <li>• Transferring a patient e.g. from bed to chair</li> <li>• ANY activities where splashes/ sprays are anticipated</li> </ul>	<p><i>*It is advisable to wear a disposable plastic apron over the gown if;</i></p> <ul style="list-style-type: none"> <li>○ <i>anticipating spillage/ difficult line insertion or any activities which increases the frequency of exposure</i></li> <li>○ <i>gown is not fluid resistant</i></li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	
		<p>Aerosol Generating Procedures (AGP)</p> <ul style="list-style-type: none"> <li>• Intubation, extubation and related procedures</li> <li>• Manual ventilation</li> <li>• Suctioning</li> <li>• Nebulization</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Isolation gown (fluid-repellent long-sleeved gown)</li> <li>• Gloves</li> </ul> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>	<ul style="list-style-type: none"> <li>• All PPE should be removed after procedure.</li> </ul>

**ANNEX 8**

Sample collection area	HCW	Performing oropharyngeal or nasopharyngeal swab	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul> <p><i>*it is sufficient to change gloves and plastic apron between patients.</i></p>	<ul style="list-style-type: none"> <li>• Any soiled PPE should be changed.</li> </ul>
		Assisting oropharyngeal or nasopharyngeal swab	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul>	<ul style="list-style-type: none"> <li>• Any soiled PPE should be changed.</li> </ul>
		Transport specimen to lab	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> </ul>	
Sample collection area	HCW	Supervised Saliva RTK-Ag testing	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Gloves</li> </ul>	

AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) OR NON COVID-19 PATIENT				
Ambulance transfer vehicle	HCW	1. Activities with <b>NO direct contact with patient</b>	<ul style="list-style-type: none"> <li>Well fitted surgical mask/ N95 mask (based on Risk Assessment* outlined in Note section)</li> </ul>	<ul style="list-style-type: none"> <li>Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used).</li> <li>Use air conditioner with fresh air intake mode.</li> </ul>
Ambulance transfer vehicle	HCW	2. Accompanying PUS/ Suspected/ Probable/ ILI patient in ambulance and direct contact is expected	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Eye protection (face shield/ goggles)</li> <li>Isolation gown (fluid repellent long sleeved gown)</li> <li>Gloves</li> </ul>	<ul style="list-style-type: none"> <li>Driver should maintain at least 1-meter spatial distance when possible.</li> <li>Perform hand hygiene as per indication.</li> <li>Risk assessment* includes: <ul style="list-style-type: none"> <li>Patient condition</li> <li>Ambulance ventilation</li> <li>Presence of separation barriers between patient and driver's area</li> </ul> </li> </ul>
Ambulance transfer vehicle	HCW	3. Transporting non COVID-19 patients	<ul style="list-style-type: none"> <li>Well fitted surgical mask/ N95 mask</li> <li>Use of other PPE according to transmission-based precaution (underlying disease and risk assessment)</li> </ul>	<ul style="list-style-type: none"> <li>Healthcare worker seating arrangement (Figure 1): <p>A &amp; B: When patient is not in distress</p> <p>C: When patient requires oxygen support/ intervention</p> </li> </ul>



				 <p>Figure 1: Ambulance</p>
<p>Ambulance transfer vehicle</p>	<p>HCW</p>	<p>Decontamination of ambulance</p>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul> <p><i>* adhere to OSH attire requirement when handling the chemical</i></p>	

LABORATORY				
Laboratory	Lab technician	Handling specimen	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves (2 layer)</li> </ul>	
		Handling sputum	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul>	
PHARMACY				
Pharmacy a. General pharmacy b. Satellite pharmacy at ILI area	Pharmacist	Dispensing medication to patient	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• *Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmacist should perform hand hygiene as per indication.</li> </ul>

<b>CLEANING &amp; DISINFECTION</b>				
Isolation/ treatment room/ designated area	Cleaner	Cleaning and disinfection of isolation/treatment room/designated area	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask based on Risk Assessment*</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> <li>• Boots or closed shoes</li> </ul>	
<b>HOME VISIT</b>				
Home visit	HCW	Attending to antenatal, post-natal and child health	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> <li>• Eye protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1 -2 metres spatial distance, when possible, with patient's relatives.</li> <li>• Full PPE set must be made available at the site in case of emergency.</li> </ul>

**TABLE 8 RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED FOR ACTIVITIES BY DISTRICT HEALTH OFFICE**

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
<b>RAPID ASSESSMENT TEAM (RAT)/ RAPID RESPONSE TEAM (RRT)</b>				
Community	HCW  Investigators Team	Interview Suspected/Probable/Confirmed COVID-19 patients or their contacts (PUS) for the purpose of contact tracing	<ul style="list-style-type: none"> <li>No PPE if done remotely (e.g., by telephone or video conference)</li> </ul>	
		In-person interview of PUS/ Suspected/ Probable/Confirmed COVID-19 patients without direct contact	<ul style="list-style-type: none"> <li>N95 mask</li> <li>Eye protection (face shield/goggles)</li> <li>Gloves</li> </ul>	<ul style="list-style-type: none"> <li>HCW should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication.</li> <li>The interview should be conducted outside the house or outdoors, and PUS/Suspected/ Probable/ Confirmed COVID-19 patients should wear a surgical mask if tolerated.</li> <li>Full PPE set must be made available in case of emergency.</li> </ul>

<b>SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER</b>				
Home visit	HCW	<ul style="list-style-type: none"> <li>• Issuing the order and daily monitoring of confirmed COVID-19 patients</li> </ul>	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Gloves</li> </ul>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication.</li> <li>• PUS/Suspected/Probable/Confirmed COVID-19 patients should wear a surgical mask if tolerated.</li> <li>• Full PPE set must be made available in case of emergency.</li> </ul>
		<ul style="list-style-type: none"> <li>• Remove PUS/Confirmed COVID-19 patients wrist band upon release order/ HCW early return to work</li> </ul>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> </ul>	
<b>COVID-19 SAMPLING</b>				
Outside Health Clinic setting e.g. at EMCO areas, targeted group screening etc.	HCW	Performing oropharyngeal or nasopharyngeal swab	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul> <p>*It is sufficient to change gloves and plastic apron between patients.</p>	<ul style="list-style-type: none"> <li>• Any soiled PPE should also be changed</li> </ul>

		Assisting oropharyngeal or nasopharyngeal swab	<ul style="list-style-type: none"> <li>• N95 mask</li> <li>• Eye protection (face shield/goggles)</li> <li>• Long sleeved plastic apron</li> <li>• Gloves</li> </ul>	
		Transporting specimen to lab	<ul style="list-style-type: none"> <li>• Well fitted surgical mask</li> </ul>	
<b>COMMUNITY OUTREACHED PROGRAM</b>				
Health Promotional Activity	HCW	<p>Known or suspected community transmission</p> <p>Sporadic transmission or clusters of COVID-19 cases</p>	<ul style="list-style-type: none"> <li>• Well fitted surgical mask/ N95 mask based on risk assessment</li> <li>• Eye Protection (face shield/goggles)</li> </ul>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication.</li> </ul>
Preventive and control action	HCW	Cleaning and disinfection activity	<ul style="list-style-type: none"> <li>• Refer to Annex 36 Garis Panduan Pembersihan Dan Disinfeksi Di Tempat Awam</li> </ul>	

**TABLE 9 RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN THE VACCINATION CENTRE (PUSAT PEMBERIAN VAKSIN COVID-19)**

SETTING	TARGET PERSONNEL	ACTIVITY	TYPE OF PPE	NOTE
Triage and registration area	HCW / volunteer	Screening for COVID-19 symptoms and registration for vaccination	<ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Eye protection (face shield/goggle)</li> </ul>	<ul style="list-style-type: none"> <li>• HCW /volunteer should maintain at least 1 metre spatial distance with client when possible.</li> <li>• HCW /volunteer should perform hand hygiene as per indication.</li> </ul>
Counselling & consent area	HCW	Giving counselling and taking consent for vaccination	<ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Eye protection (face shield/goggle)</li> </ul>	<ul style="list-style-type: none"> <li>• HCW should maintain at least 1 metre spatial distance with client when possible.</li> <li>• HCW should perform hand hygiene as per indication.</li> </ul>
Vaccination area	HCW	Administering the vaccine	<ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Eye protection (face shield/ goggle) (optional)</li> <li>• Plastic apron</li> <li>• Gloves (when indicated)</li> </ul>	<ul style="list-style-type: none"> <li>• Hand hygiene should be performed in both situations whether gloves are worn or not.</li> <li>• Gloves are NOT REQUIRED, unless come into contact with potentially infectious body fluids, skin lesions or healthcare worker has</li> </ul>

				<p>open lesions on their hands.</p> <ul style="list-style-type: none"> <li>• If gloves are worn, it should be changed between patients along with proper hand hygiene.</li> <li>• Eye protection (face shield/goggle) is optional based on local risk assessment of the COVID-19 transmission.</li> <li>• No need to change eye protection and plastic apron between patients unless they are soiled.</li> </ul>
Observation area	HCW	Confirmation of vaccination and observation of client post vaccine administration	<ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Eye protection (face shield/goggle) (optional)</li> <li>• Plastic apron</li> </ul>	<ul style="list-style-type: none"> <li>• HCW should perform hand hygiene as per indication.</li> <li>• Eye protection (face shield/goggle) is optional based on local risk assessment of the COVID-19 transmission.</li> <li>• No need to change eye protection and plastic apron between patients unless they are soiled.</li> <li>• Full PPE to be used during performing CPR/intubation.</li> </ul>




Appendix 1 Pictorial on Recommended PPE to be used in Hospital Setting




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## RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN HOSPITAL SETTING

Updated: FEBRUARY 2022





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### NON CLINICAL AREAS

**SETTING: ADMINISTRATIVE AREAS,  
OFFICE SPACES, CANTEENS/ CAFES AND  
ANY OTHER AREA**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
All activities which <b>DO NOT INVOLVE</b> any direct contact with patients	1) Well fitted surgical mask

**NOTE**

- Staff should maintain at least 1-meter spatial distance when possible
- Staff should perform hand hygiene as per indication
- Standard PPE should be available in case of emergencies



### NON CLINICAL AREAS

**SETTING: REGISTRATION COUNTER/  
PHARMACY COUNTERS/ MEDICAL  
RECORD OFFICE AND ANY OTHER AREA**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
All activities which <b>INVOLVE CONTACT</b> with patients	1) Well fitted surgical mask 2) Eye protection (face shield/goggles)

NOTE
<ul style="list-style-type: none"> <li>• Staff should maintain at least 1-meter spatial distance</li> <li>• Patient should be encouraged to wear well fitted surgical mask</li> <li>• Staff should perform hand hygiene as per indication</li> </ul>



**CLINICAL AREAS BEFORE ENTERING A  
ROOM/ PATIENT AREA WHERE THERE IS A  
SUSPECTED/ CONFIRMED COVID-19 CASE:  
EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING  
WARDS/ ICU /CAC**




**SETTING: AREAS WITHIN 2 METERS OF PATIENTS**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Activities that <b>DO NOT</b> result in physical contact	1) N95 mask 2) Eye protection (face shield/goggles)


NOTE
<ul style="list-style-type: none"> <li>• Triage areas in emergency department may use physical barriers (such as glass or plastic windows or face shield) to reduce exposure.</li> </ul>



**CLINICAL AREAS BEFORE ENTERING A ROOM/ PATIENT AREA WHERE THERE IS A SUSPECTED/ CONFIRMED COVID-19 CASE: EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING WARDS/ ICU /CAC**

**SETTING: AREAS WITHIN 2 METERS OF PATIENTS**  
**TARGET: ALL STAFF**


ACTIVITY	TYPE OF PPE
<p>Activities that result in <b>LOW CONTACT RISK</b> i.e., activities that are unlikely to provide opportunities for the transfer of virus to clothing for example:</p> <ul style="list-style-type: none"> <li>Recording clinical vital assessment (Blood Pressure/ Pulse Rate/ Oxygen Saturation/ Temperature)</li> <li>Inserting a peripheral IV cannula</li> <li>Administering or changing IV fluids</li> </ul>	<ol style="list-style-type: none"> <li>N95 mask</li> <li>Eye protection (face shield/ goggles)</li> <li>Disposable plastic apron</li> <li>Gloves</li> </ol> <p>Fluid resistant isolation gown/ long sleeve plastic apron can be used if anticipated spillage/ difficult line insertion or any activities which increases the frequency of exposure</p>
NOTE	
<ul style="list-style-type: none"> <li>HCW should maintain at least 1-meter spatial distance when possible.</li> <li>HCW should limit the time and frequency of exposure as permissible.</li> <li>Gowns and gloves should be changed between patients after high risk contact activities, to minimise risk of cross-transmission of other pathogens commonly encountered in healthcare settings.</li> <li>PPE should be exchanged between patients if visibly contaminated</li> </ul>	



**CLINICAL AREAS BEFORE ENTERING A ROOM/ PATIENT AREA WHERE THERE IS A SUSPECTED/ CONFIRMED COVID-19 CASE: EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING WARDS/ ICU /CAC**

**SETTING: AREAS WITHIN 2 METERS OF PATIENTS**  
**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
<p>Activities that result in <b>HIGH CONTACT RISK</b> i.e. activities that involve a higher chance of transfer of virus to the clothing. This includes (but not limited to):</p> <ul style="list-style-type: none"> <li>Close contact for physical examination</li> <li>Physiotherapy related activities</li> <li>Changing diapers and assisting with toileting activities</li> <li>Wound care</li> <li>Assisting or performing oral care/ bathing / showering</li> <li>Transferring a patient e.g. from bed to chair</li> <li>ANY activities where splashes/ sprays are anticipated</li> </ul>	<ol style="list-style-type: none"> <li>N95 mask</li> <li>Eye protection (face shield/ goggles)</li> <li>Gloves</li> <li>Isolation gown (fluid resistant long sleeve gown/ apron)* can be used if anticipated spillage/ difficult line insertion or any activities which increases the frequency of exposure</li> </ol> <p>*if the gown is not fluid resistant; it is advised to wear a disposable plastic apron over the gown</p> <p>*use of coverall does not offer additional protection and not recommended</p>




**CLINICAL AREAS BEFORE ENTERING A ROOM/ PATIENT AREA WHERE THERE IS A SUSPECTED/ CONFIRMED COVID-19 CASE: EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING WARDS/ ICU /CAC**

**SETTING: AREAS WITHIN 2 METERS OF PATIENTS**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Performing Aerosol Generating Procedures (AGP) <ul style="list-style-type: none"> <li>• Intubation, extubation and related procedures/ CPR</li> <li>• Tracheotomy/ tracheostomy procedures</li> <li>• Manual ventilation</li> <li>• Suctioning</li> <li>• Bronchoscopy</li> <li>• Nebulization</li> <li>• Others – Refer Guideline</li> </ul>	1) N95 mask/ PAPR 2) Eye protection (face shield/ goggles) 3) Isolation gown (fluid repellent long sleeved gown) 4) Gloves  *use of coverall does not offer additional protection and not recommended

**CLINICAL AREAS BEFORE ENTERING A ROOM/ PATIENT AREA WHERE THERE IS A SUSPECTED/ CONFIRMED COVID-19 CASE: EMERGENCY DEPARTMENT / INPATIENT CARE INCLUDING WARDS/ ICU /CAC**

**SETTING: SPECIMEN COLLECTION AREA**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Performing oropharyngeal or nasopharyngeal swab	1) N95 mask 2) Eye protection (face shield/goggles) 3) Gloves** 4) Long-sleeved plastic apron**  **it is sufficient to change gloves and plastic apron between patients

**NOTE**

- Any soiled PPE should be changed





## CLINICAL AREAS: MANAGEMENT OF PATIENTS WHO ARE NOT CONFIRMED OR SUSPECTED COVID-19

**SETTING: WARDS**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Involved in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	1) Well fitted surgical mask 2) Eye protection (face shield/goggles)
NOTE	
<ul style="list-style-type: none"> <li>• N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour</li> <li>• Other PPE should be made available</li> <li>• Standard and transmission-based precautions should be practiced accordingly</li> <li>• Patients should wear a well fitted surgical mask</li> </ul>	



## CLINICAL AREAS: MANAGEMENT OF PATIENTS WHO ARE NOT CONFIRMED OR SUSPECTED COVID-19

**SETTING: OUTPATIENT CLINICS, AMBULATORY CARE**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Involved in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	1) Well fitted surgical mask 2) Eye protection (face shield/goggles)
NOTE	
<ul style="list-style-type: none"> <li>• N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour</li> <li>• Other PPE should be made available</li> <li>• Standard and transmission-based precautions should be practiced accordingly</li> <li>• Patients should wear a well fitted surgical mask</li> </ul>	



**CLINICAL AREAS:  
MANAGEMENT OF PATIENTS  
WHO ARE NOT CONFIRMED  
OR SUSPECTED COVID-19**

**SETTING: SARI/ ILI**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Involvement in providing care for patients who presented / developed respiratory symptoms	1) Well fitted surgical mask/ N95 mask 2) Eye protection (face shield/goggles)

**NOTE**

- N95 mask must be worn during AGP procedures/ anticipate aerosol generating behavior.



**CLINICAL AREAS:  
CLEANING ACTIVITIES**

**SETTING: PATIENT ROOMS**

**TARGET: CLEANERS/ OTHER NON-CLINICAL STAFF**

ACTIVITY	TYPE OF PPE
Routine cleaning in suspected or confirmed COVID-19 patient area	1) N95 mask 2) Eye protection (face shield/ goggles) 3) Isolation gown (fluid repellent long sleeved gown) 4) Gloves 5) Rubber boots

**NOTE**

- Individual centres may consider well fitted surgical mask based on risk assessment
- Hand hygiene performed as indicated
- PPE should be made available



## CLINICAL AREAS: CLEANING ACTIVITES

**SETTING: PATIENT ROOMS**

**TARGET: CLEANERS/ OTHER NON-CLINICAL  
STAFF**

ACTIVITY	TYPE OF PPE
Routine cleaning in suspected or confirmed COVID-19 patient area	<ol style="list-style-type: none"> <li>1) N95 mask</li> <li>2) Eye protection (face shield/ goggles)</li> <li>3) Isolation gown (fluid repellent long sleeved gown)</li> <li>4) Gloves</li> <li>5) Rubber boots</li> </ol>

### NOTE

- Individual centres may consider well fitted surgical mask based on risk assessment
- Hand hygiene performed as indicated
- PPE should be made available



## CLINICAL AREAS: CLEANING ACTIVITES

**SETTING: PATIENT ROOMS**

**TARGET: CLEANERS/ OTHER NON-  
CLINICAL STAFF**

ACTIVITY	TYPE OF PPE
Routine cleaning in a non- confirmed/ suspected COVID-19 patient area	<ol style="list-style-type: none"> <li>1) Well fitted surgical mask or N95 mask as per risk assessment</li> <li>2) Eye protection (face shield/ goggles)</li> <li>3) Disposable apron</li> <li>4) Gloves</li> <li>5) Rubber boots</li> </ol>

### NOTE

- Individual centres may consider well fitted surgical mask based on risk assessment
- Hand hygiene performed as indicated
- PPE should be made available





## CLINICAL AREAS: CLEANING ACTIVITIES

**SETTING: PATIENT ROOMS**

**TARGET: CLEANERS/ OTHER NON-CLINICAL STAFF**

ACTIVITY	TYPE OF PPE
Terminal cleaning of a confirmed/ suspected COVID-19 area <ul style="list-style-type: none"> <li>• Ensure adequate time has been left before cleaning as per guidelines</li> </ul>	1) Well fitted surgical mask/ N95 mask based on risk assessment 2) Isolation gown (fluid repellent long sleeved gown/ apron) 3) Gloves 4) Rubber boots
NOTE	
<ul style="list-style-type: none"> <li>• Individual centres may consider well fitted surgical mask based on risk assessment</li> <li>• Hand hygiene performed as indicated</li> <li>• PPE should be made available</li> </ul>	



## CLINICAL AREAS: CLEANING ACTIVITIES

**SETTING: GENERAL AREAS**

**TARGET: CLEANERS/ OTHER NON-CLINICAL STAFF**

ACTIVITY	TYPE OF PPE
Routine cleaning in non clinical areas	1) Well fitted surgical mask
NOTE	
<ul style="list-style-type: none"> <li>• Increase frequency of cleaning for frequently touched surfaces according to hospital guidelines</li> <li>• Adhere to OSH attire requirement</li> </ul>	





## TRANSFER OF SUSPECTED/ CONFIRMED COVID 19 PATIENTS (INTERNAL TRANSFERS BETWEEN CLINICAL AREAS / EXTERNAL AMBULANCE TRANSFERS)

**SETTING: INTERNAL TRANSFER OF COVID-19  
SUSPECTED OR CONFIRMED PATIENTS**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Involved in transporting patients	1) N95 mask
a. Between wards/ICU	2) Eye protection (face shield/ goggles)
b. OT	3) Gloves
c. Radiology	4) Disposable plastic apron
d. Outpatient settings	
e. Others	

### NOTE

- Well fitted surgical mask can also be worn based on Risk assessment



## TRANSFER OF SUSPECTED/ CONFIRMED COVID 19 PATIENTS (INTERNAL TRANSFERS BETWEEN CLINICAL AREAS / EXTERNAL AMBULANCE TRANSFERS)



**SETTING: AMBULANCE TRANSFER VEHICLE**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Activities with <b>NO direct contact with patient</b>	1) Well fitted surgical mask/ N95 mask based on Risk Assessment*

### NOTE

- Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used)
- Use air conditioner with fresh air intake mode
- Driver should maintain at least 1 meter spatial distance when possible
- Perform hand hygiene as per indication
- Risk assessment\* includes:
  - Patient condition
  - Ambulance ventilation
  - Presence of separation barriers between patient and drivers area



**TRANSFER OF SUSPECTED/  
CONFIRMED COVID 19 PATIENTS**  
(INTERNAL TRANSFERS BETWEEN CLINICAL AREAS  
/ EXTERNAL AMBULANCE TRANSFERS)

**SETTING: AMBULANCE TRANSFER VEHICLE**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Accompanying COVID-19 patient in ambulance and direct contact is expected	1) N95 mask 2) Eye protection (face shield/ goggles) 3) Isolation gown (fluid repellent long sleeved gown) 4) Gloves

**NOTE**

- Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used)
- Use air conditioner with fresh air intake mode
- Driver should maintain at least 1 meter spatial distance when possible
- Perform hand hygiene as per indication
- Risk assessment\* includes:
  - Patient condition
  - Ambulance ventilation
  - Presence of separation barriers between patient and drivers area
- Healthcare worker seating arrangement (Figure 1):
  - A & B: When patient is not in distress
  - C: When patient requires oxygen support/ intervention

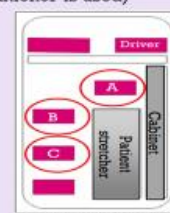


Figure 1: Ambulance



**TRANSFER OF SUSPECTED/  
CONFIRMED COVID 19 PATIENTS** (INTERNAL TRANSFERS  
BETWEEN CLINICAL AREAS / EXTERNAL  
AMBULANCE TRANSFERS)

**SETTING: AMBULANCE TRANSFER VEHICLE**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Transporting non COVID-19 patients	1) N95 mask/well fitted surgical mask 2) Use of other PPE according to transmission based precaution (underlying disease and risk assessment)





## TRANSFER OF SUSPECTED/ CONFIRMED COVID 19 PATIENTS (INTERNAL TRANSFERS BETWEEN CLINICAL AREAS / EXTERNAL AMBULANCE TRANSFERS)

**SETTING: AMBULANCE TRANSFER VEHICLE**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Decontamination of ambulance that transported PUS/ Suspected/ Probable/ Confirmed COVID-19	<ol style="list-style-type: none"> <li>1) Well fitted surgical mask</li> <li>2) Eye Protection (face shield/ goggles)</li> <li>3) Long sleeve plastic apron</li> <li>4) Gloves</li> </ol> <p>* adhere to OSH attire requirement when handling the chemical</p>



## LABORATORY AND PATHOLOGY AREAS

**SETTING: LABORATORY**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Manipulation of respiratory specimens which include oropharyngeal swabs, nasopharyngeal swabs, sputum, tracheal aspirate, bronchoalveolar lavage (BAL) must be accorded high risk	<ol style="list-style-type: none"> <li>1) N95 mask</li> <li>2) Eye Protection (face shield/ goggles)</li> <li>3) Isolation gown (fluid repellent long sleeved gown)</li> <li>4) Gloves</li> </ol>

### NOTE

- Staff should perform hand hygiene as per indication
- Follow the Principles outlined in Chapter 7 of the Policies and Procedures on Infection Prevention and Control, 3rd Edition



## LABORATORY AND PATHOLOGY AREAS

**SETTING: LABORATORY**

**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Specimen handling for RT-PCR or Antigen testing prior to viral inactivation step, must be carried out in BSL-2 or equivalent facilities	<ol style="list-style-type: none"> <li>1) N95 mask</li> <li>2) Eye Protection (face shield/ goggles)</li> <li>3) Isolation gown (fluid repellent long sleeved gown)</li> <li>4) Gloves</li> </ol>

### NOTE

- Staff should perform hand hygiene as per indication
- Follow the Principles outlined in Chapter 7 of the Policies and Procedures on Infection Prevention and Control, 3rd Edition



## LABORATORY AND PATHOLOGY AREAS

**SETTING: LABORATORY**


**TARGET: ALL STAFF**

ACTIVITY	TYPE OF PPE
Handling and processing of non-respiratory specimens from Suspected/ Probable/ Confirmed COVID-19 intended for additional laboratory tests	<ol style="list-style-type: none"> <li>1) Well fitted surgical mask</li> <li>2) Eye Protection (face shield/ goggles)</li> <li>3) Long sleeve plastic apron/ gown</li> <li>4) Gloves</li> </ol>

### NOTE

- Staff should perform hand hygiene as per indication
- Follow the Principles outlined in Chapter 7 of the Policies and Procedures on Infection Prevention and Control, 3rd Edition

**Appendix 2 Pictorial on Recommended PPE to be used in Management of Dead Bodies of Suspected, Probable or Confirmed COVID-19**




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## RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN MANAGEMENT OF DEAD BODIES OF SUSPECTED, PROBABLE OR CONFIRMED COVID-19

Updated: FEBRUARY 2022


FORENSIC MANAGEMENT OF SUSPECTED/ CONFIRMED COVID 19	
<b>SETTING : WARDS/ ICU / MORTUARY</b> <b>TARGET : ALL STAFF</b>	
ACTIVITY	TYPE OF PPE
Handling of the body in the mortuary/ ward	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/ goggles)</li> <li>3. Isolation Gown (fluid repellent long sleeved gown)</li> <li>4. Gloves</li> </ol> <p style="font-size: small; margin-top: 5px;">*use of coverall does not offer additional protection and not recommended</p>
NOTE	
<ul style="list-style-type: none"> <li>Performing hand hygiene before and after interaction with the body</li> <li>Instruments used during mortuary care, or during the autopsy should be cleaned and disinfected immediately after use.</li> <li>Terminal cleaning practices should be adhered to locally prepared guidelines.</li> </ul>	



FORENSIC MANAGEMENT OF SUSPECTED/ CONFIRMED COVID 19	
<b>SETTING : WARDS/ ICU / MORTUARY</b>	
<b>TARGET : ALL STAFF</b>	
ACTIVITY	TYPE OF PPE
Disposal of body • Transporting body to burial site/ cremation • At burial/ cremation site	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Isolation Gown (fluid repellent long sleeved gown)</li> <li>3. Gloves</li> <li>4. Boots/footwear protection</li> </ol> *use of coverall does not offer additional protection and not recommended
NOTE	
<ul style="list-style-type: none"> <li>• Performing hand hygiene before and after interaction with the body</li> <li>• Instruments used during mortuary care, or during the autopsy should be cleaned and disinfected immediately after use.</li> <li>• Terminal cleaning practices should be adhered to locally prepared guidelines.</li> </ul>	



FORENSIC MANAGEMENT OF SUSPECTED/ CONFIRMED COVID 19	
<b>SETTING : AUTOPSY UNIT</b>	
<b>TARGET : ALL STAFF</b>	
ACTIVITY	TYPE OF PPE
Performing Autopsy	<ol style="list-style-type: none"> <li>1. N95 mask/ PAPR</li> <li>2. Eye protection (face shield/ goggles)</li> <li>3. Isolation Gown (fluid repellent long sleeved gown)</li> <li>4. Gloves</li> <li>5. Boots/footwear protection</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>• Performing hand hygiene before and after interaction with the body</li> <li>• Instruments used during mortuary care, or during the autopsy should be cleaned and disinfected immediately after use.</li> <li>• Terminal cleaning practices should be adhered to locally prepared guidelines.</li> </ul>	



Appendix 3 Pictorial on Recommended PPE to be used in Health Clinic



MINISTRY OF HEALTH MALAYSIA

## RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN HEALTH CLINIC SETTING

1

NON-CLINICAL AREAS


**SETTING : ADMINISTRATIVE AREAS, OFFICE SPACES, CANTEENS/ CAFES AND ANY OTHER AREA**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
All activities do not involve any direct contact with patients	1. Well fitted surgical mask

NOTE

- ❖ Staff should maintain at least 1-meter spatial distance when possible.
- ❖ Staff should perform hand hygiene as per indication.









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BAHAGIAN PEMBANGUNAN KESIHATAN KELUARGA


2

PRIMARY TRIAGE	
<b>SETTING : TRIAGE</b>	
<b>TARGET : HEALTHCARE WORKER</b>	
ACTIVITY	TYPE OF PPE
Involvement in providing care for patients who do not have any respiratory symptoms but require admission/ review for other reasons.	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/ goggles)</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>❖ N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>❖ Other PPE should be made available.</li> <li>❖ Standard and transmission-based precautions should be practiced accordingly.</li> </ul>	
	
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TRIAGE AREA	
<b>SETTING : PATIENT WAITING AREA</b>	
<b>TARGET : PATIENT</b>	
ACTIVITY	TYPE OF PPE
Patient with respiratory symptoms	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>❖ Patient should be seated at the designated area, to sit at least 1-meter apart.</li> <li>❖ Waiting area should be well-ventilated.</li> </ul>	
	
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SECONDARY TRIAGE	
<b>SETTING :</b> GENERAL PATIENT (E.G. POST-NATAL PATIENT, DM, HPT)	
<b>TARGET :</b> HEALTHCARE WORKER	
ACTIVITY	TYPE OF PPE
Screening for vital signs	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> </ol>
NOTE	
❖ Full PPE set must be made available at the site in case of emergency.	



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SECONDARY TRIAGE	
<b>SETTING :</b> INFLUENZA LIKE ILLNESS (ILI) / FEVER	
<b>TARGET :</b> HEALTHCARE WORKER	
ACTIVITY	TYPE OF PPE
Screening for vital signs	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask/ N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>❖ N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>❖ Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> <li>❖ Full PPE set must be made available at the site in case of emergency.</li> </ul>	



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GENERAL EXAMINATION AND TREATMENT ROOM	
<b>SETTING : EXAMINATION ROOM (E.G. OPD, MCH)</b>	
<b>TARGET : HEALTHCARE WORKER</b>	
ACTIVITY	TYPE OF PPE
<ol style="list-style-type: none"> <li>History taking and physical examination</li> <li>Other procedures (non-aerosol generating procedure e.g. vaccination, dressing, eye examination)</li> </ol>	<ol style="list-style-type: none"> <li>Well fitted surgical mask</li> <li>Eye protection (face shield/goggles)</li> <li>Gloves (when indicated)</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>❖ Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> <li>❖ If using Fundoscopy machine, use physical barriers (such as breath guard) to reduce exposure.</li> </ul>	



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EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)	
<b>SETTING : EXAMINATION ROOM/ AREA</b>	
<b>TARGET : HEALTHCARE WORKER</b>	
ACTIVITY	TYPE OF PPE
History taking and physical examination	<ol style="list-style-type: none"> <li>Well fitted surgical mask/ N95 mask</li> <li>Eye protection (face shield/goggles)</li> </ol>
NOTE	
<ul style="list-style-type: none"> <li>❖ N95 mask must be worn during AGP procedures/ anticipate aerosol generating behaviour.</li> <li>❖ Patient should be reminded to wear a well fitted surgical mask (if tolerable).</li> </ul>	



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### EXAMINATION ROOM / AREA FOR INFLUENZA LIKE ILLNESS (ILI)

**SETTING :** EXAMINATION ROOM/ AREA  
**TARGET :** HEALTHCARE WORKER

ACTIVITY	TYPE OF PPE
Aerosol Generating Procedures (AGP) <ul style="list-style-type: none"> <li>• Nebulisation</li> </ul>	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye Protection (face shield/goggles)</li> <li>3. Isolation gown (fluid-repellent long-sleeved gown)</li> <li>4. Gloves</li> </ol> <p><small>*use of coverall does not offer additional protection and not recommended</small></p>

**NOTE**

❖ All PPE should be removed after procedure.




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### EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)


**SETTING :** EXAMINATION ROOM/ AREA  
**TARGET :** HEALTHCARE WORKER


ACTIVITY	TYPE OF PPE
Taking blood for investigation	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol>




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<b>EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)</b>	
SETTING : EXAMINATION ROOM/ AREA	
TARGET : HEALTHCARE WORKER	
<b>ACTIVITY</b>	<b>TYPE OF PPE</b>
Transporting specimen to lab	1. Well fitted surgical mask





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<b>ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE</b>	
SETTING : AREAS WITHIN 2 METERS OF PATIENTS	
TARGET : HEALTHCARE WORKER	
<b>ACTIVITY</b>	<b>TYPE OF PPE</b>
Activities that do not result in physical contact	1. N95 mask 2. Eye protection (face shield/goggles)





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**ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE**

**SETTING : ISOLATION/ DESIGNATED AREA**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Aerosol Generating Procedures (AGP) <ul style="list-style-type: none"> <li>• Intubation, extubation and related procedures;</li> <li>• Manual ventilation;</li> <li>• Suctioning;</li> <li>• Nebulization</li> </ul>	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Isolation Gown (fluid-repellent long-sleeved gown)</li> <li>4. Gloves</li> </ol> <p><i>*use of coverall does not offer additional protection and not recommended</i></p>

**NOTE**

❖ All PPE should be removed after procedure.



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**ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE**

**SETTING : SAMPLE COLLECTION AREA**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Performing oropharyngeal or nasopharyngeal swab	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (goggles / face shield)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol> <p>❖ It is sufficient to change gloves and plastic apron between patients.</p>

**NOTE**

❖ Any soiled PPE should be changed



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**ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE**

**SETTING : SAMPLE COLLECTION AREA**  
**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Assisting oropharyngeal or nasopharyngeal swab	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol>

**NOTE**

❖ Any soiled PPE should be changed.




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**ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE**

**SETTING : SAMPLE COLLECTION AREA**  
**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Transporting specimen to lab	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> </ol>



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### ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE

**SETTING : SAMPLE COLLECTION AREA**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Supervised Saliva RTK-Ag testing	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Gloves</li> </ol>



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### AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) OR NON COVID-19 PATIENT

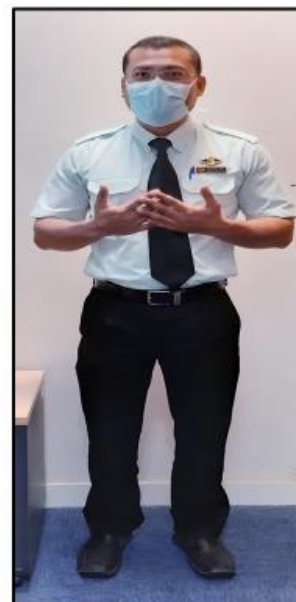
**SETTING : AMBULANCE TRANSFER VEHICLE**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Activities with <b>NO direct contact with patient</b>	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask/ N95 mask (based on Risk Assessment* outlined in Note section)</li> </ol>

#### NOTE

- ❖ Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used).
- ❖ Use air conditioner with fresh air intake mode.
- ❖ Driver should maintain at least 1 meter spatial distance when possible.
- ❖ Perform hand hygiene as per indication.
- ❖ Risk assessment\* includes:
  - Patient condition
  - Ambulance ventilation
  - Presence of separation barriers between patient and driver's area



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**AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) OR NON COVID-19 PATIENT**

**SETTING : AMBULANCE TRANSFER VEHICLE**  
**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Accompanying PUS/ Suspected/ Probable/ ILI patient in ambulance and direct contact is expected	1. N95 mask 2. Eye protection (face shield/ goggles) 3. Isolation gown (fluid repellent long sleeved gown) 4. Gloves

**NOTE**

- ❖ Windows should be kept open throughout the drive (about 3cm if the air-conditioner is used).
- ❖ Use air conditioner with fresh air intake mode.
- ❖ Driver should maintain at least 1 meter spatial distance when possible.
- ❖ Perform hand hygiene as per indication.
- ❖ Risk assessment\* includes:
  - Patient condition
  - Ambulance ventilation
  - Presence of separation barriers between patient and driver's area
- ❖ Healthcare worker seating arrangement (Figure 1):  
 A & B: When patient is not in distress  
 C: When patient requires oxygen support/ intervention

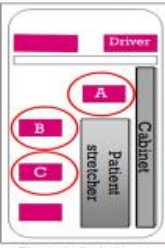




Figure 1: Ambulance




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**AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) OR NON COVID-19 PATIENT**

**SETTING : AMBULANCE TRANSFER VEHICLE**  
**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Transporting non COVID-19 patients	1. Well fitted surgical mask/ N95 mask 2. Use of other PPE according to transmission-based precaution (underlying disease and risk assessment)




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### AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) OR NON COVID-19 PATIENT


**SETTING : AMBULANCE TRANSFER VEHICLE**  
**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Decontamination of ambulance	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol> <p>* adhere to OSH attire requirement when handling the chemical</p>





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### LABORATORY


**SETTING : LABORATORY**  
**TARGET : LAB TECHNICIAN**

ACTIVITY	TYPE OF PPE
Handling specimen	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves (2 layer)</li> </ol>













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LABORATORY	
SETTING : LABORATORY	
TARGET : LAB TECHNICIAN	
ACTIVITY	TYPE OF PPE
Handling sputum	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (goggles / face shield)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol>
	
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PHARMACY	
SETTING : GENERAL PHARMACY & SATELLITE PHARMACY AT ILI AREA	
TARGET : PHARMACIST	
ACTIVITY	TYPE OF PPE
Dispensing medication to patient	<ol style="list-style-type: none"> <li>1. Surgical mask</li> <li>2. *Eye protection (face shield/ goggles) if there is no physical barrier or unable to maintain 1 – 2 metres distance</li> </ol>
NOTE	
❖ Pharmacist should perform hand hygiene as per indication	
	
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## CLEANING & DISINFECTION

**SETTING** : ISOLATION / TREATMENT ROOM / DESIGNATED AREA

**TARGET** : HEALTHCARE WORKER

ACTIVITY	TYPE OF PPE
Decontamination of isolation / treatment room / designated area	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask/ N95 mask based on Risk Assessment</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> <li>5. Boots or closed shoes</li> </ol>



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## HOME VISIT

**SETTING** : HOME VISIT

**TARGET** : HEALTHCARE WORKER

ACTIVITY	TYPE OF PPE
Attending to antenatal, post-natal and child health	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> <li>2. Eye protection (face shield/goggles)</li> </ol>

### NOTE

- ❖ HCW should maintain at least 1 -2 metres spatial distance, when possible, with patient's relatives.
- ❖ Full PPE set must be made available at the site in case of emergency.



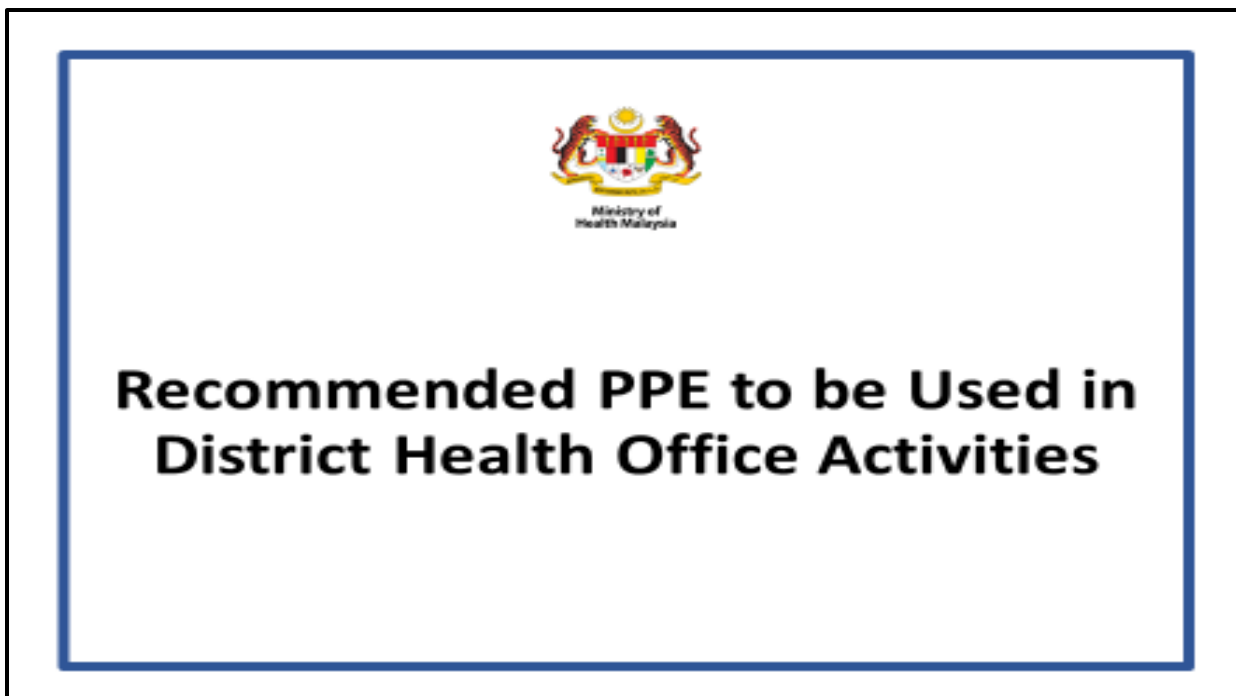
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**Appendix 4 Pictorial on Recommended PPE to be Used in District Health Office (DHO) Activities**



<b>RAPID ASSESSMENT TEAM (RAT)/ RAPID RESPONSE TEAM (RRT)</b>	
<b>SETTING : COMMUNITY</b> <b>TARGET : HEALTHCARE WORKER / INVESTIGATOR TEAM</b>	
<b>ACTIVITY</b>	<b>TYPE OF PPE</b>
In-person interview of PUS/ Suspected/ Probable/Confirmed COVID-19 patients without direct contact	1. N95 mask 2. Eye protection (face shield/goggles)
<b>NOTE</b>	
<ul style="list-style-type: none"> <li>HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.</li> <li>The interview should be conducted outside the house or outdoors, and PUS/Suspected/Probable/ Confirmed COVID-19 patients should wear a surgical mask if tolerated.</li> <li>Full PPE set must be made available in case of emergency.</li> </ul>	



## SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER

**SETTING : HOME VISIT**

**TARGET : HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Issuing the order and daily monitoring of confirmed COVID-19 patients	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Gloves</li> </ol>

### NOTE

- HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.
- PUS/Suspected/ Probable/Confirmed COVID-19 patients should wear a surgical mask if tolerated.
- Full PPE set must be made available in case of emergency.



## SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER

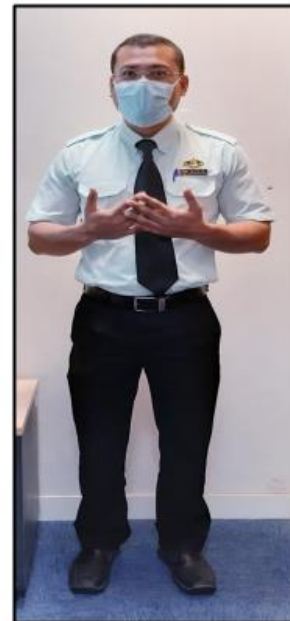
**SETTING : HOME VISIT**

**TARGET : HEALTHCARE WORKER**


ACTIVITY	TYPE OF PPE
Remove PUS/ confirmed COVID-19 patients wrist band upon release order/ HCW early return to work	<ol style="list-style-type: none"> <li>1. Well fitted surgical mask</li> </ol>

### NOTE


- HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.
- PUS/Suspected/ Probable/Confirmed COVID-19 patients should wear a surgical mask if tolerated.




COVID-19 SAMPLING	
<p><b>SETTING : OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.</b></p> <p><b>TARGET : HEALTHCARE WORKER</b></p>	
ACTIVITY	TYPE OF PPE
Performing oropharyngeal or nasopharyngeal swab	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol> <p>*It is sufficient to change gloves and plastic apron between patients.</p>
NOTE	
<ul style="list-style-type: none"> <li>• Any soiled PPE should also be changed.</li> </ul>	




COVID-19 SAMPLING	
<p><b>SETTING : OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.</b></p> <p><b>TARGET : HEALTHCARE WORKER</b></p>	
ACTIVITY	TYPE OF PPE
Assisting oropharyngeal or nasopharyngeal swab	<ol style="list-style-type: none"> <li>1. N95 mask</li> <li>2. Eye protection (face shield/goggles)</li> <li>3. Long sleeved plastic apron</li> <li>4. Gloves</li> </ol> <p>*It is sufficient to change gloves and plastic apron between patients.</p>
NOTE	
<ul style="list-style-type: none"> <li>• Any soiled PPE should also be changed.</li> </ul>	



<b>COVID-19 SAMPLING</b>	
<p><b>SETTING : OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.</b></p> <p><b>TARGET : HEALTHCARE WORKER</b></p>	
<b>ACTIVITY</b>	<b>TYPE OF PPE</b>
Transporting specimen to lab	1. Well fitted surgical mask





<b>COMMUNITY OUTREACHED PROGRAM</b>	
<p><b>SETTING : HEALTH PROMOTIONAL ACTIVITY</b></p> <p><b>TARGET : HEALTHCARE WORKER</b></p>	
<b>ACTIVITY</b>	<b>TYPE OF PPE</b>
Known or suspected community transmission	1. Well fitted surgical mask/ N95 mask based on risk assessment
Sporadic transmission or clusters of COVID-19 cases	2. Eye protection (face shield/goggles)
<b>NOTE</b>	
<ul style="list-style-type: none"> <li>• HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.</li> </ul>	



Appendix 5 Pictorial on Recommended PPE to be used in the Vaccination Centre (PPV)



## RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN THE VACCINATION CENTRE (PPV)



**SETTING: TRIAGE & REGISTRATION AREA**

**TARGET: HEALTHCARE WORKER / VOLUNTEER**

ACTIVITY	TYPE OF PPE
Screening for COVID-19 symptoms and registration for vaccination	1) Surgical mask 2) Eye protection (face shield/goggle)

**NOTE**

- HCW /volunteer should maintain at least 1 metre spatial distance with client when possible.
- HCW /volunteer should perform hand hygiene as per indication.

**SETTING: COUNSELLING & CONSENT AREA**


**TARGET: HEALTHCARE WORKER**

ACTIVITY	TYPE OF PPE
Giving counselling and taking consent for vaccination	1) Surgical mask 2) Eye protection (face shield/goggle)

**NOTE**

- HCW should maintain at least 1 metre spatial distance with client when possible.
- HCW should perform hand hygiene as per indication.





**SETTING: VACCINATION AREA**


**TARGET: HEALTHCARE WORKER**

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Malaysia

ACTIVITY	TYPE OF PPE
Administering the vaccine	1) Surgical mask 2) Eye protection (face shield/goggle) (optional) 3) Plastic apron 4) Gloves (when indicated)

**NOTE**

- Hand hygiene should be performed in both situation whether gloves are worn or not.
- Gloves are **NOT REQUIRED**, unless come into contact with potentially infectious body fluids, skin lesions or healthcare worker has open lesions on their hands.
- If gloves are worn, it should be changed between patients along with proper hand hygiene.
- Eye protection (face shield/goggle) is optional based on local risk assessment of the COVID-19 transmission.
- No need to change eye protection and plastic apron between patients unless they are soiled.



**SETTING: OBSERVATION AREA**

**TARGET: HEALTHCARE WORKER**

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Malaysia

ACTIVITY	TYPE OF PPE
Confirmation of vaccination and observation of client post vaccine administration	1) Surgical mask 2) Eye protection (face shield/goggle) (optional) 3) Plastic apron

**NOTE**

- HCW should perform hand hygiene as per indication.
- Eye protection (face shield/goggle) is optional based on local risk assessment of the COVID-19 transmission.
- No need to change eye protection and plastic apron between patients unless they are soiled.
- Full PPE to be used during performing CPR/intubation.

Pictorial can be downloaded from the link below:

[https://drive.google.com/drive/folders/1AG3nD\\_R0K3D84pZAQMJ1RQhSnBKFOeYo?usp=sharing](https://drive.google.com/drive/folders/1AG3nD_R0K3D84pZAQMJ1RQhSnBKFOeYo?usp=sharing)

Appendix 6 WHO Infographic on How to Wear A Medical Mask Safely

# HOW TO WEAR A MEDICAL MASK SAFELY

[who.int/epi-win](http://who.int/epi-win)

## Do's →



Wash your hands before touching the mask



Inspect the mask for tears or holes



Find the top side, where the metal piece or stiff edge is



Ensure the colored-side faces outwards



Place the metal piece or stiff edge over your nose



Cover your mouth, nose, and chin



Adjust the mask to your face without leaving gaps on the sides



Avoid touching the mask



Remove the mask from behind the ears or head



Keep the mask away from you and surfaces while removing it



Discard the mask immediately after use preferably into a closed bin



Wash your hands after discarding the mask

## Don'ts →



Do not use a ripped or damp mask



Do not wear the mask only over mouth or nose



Do not wear a loose mask



Do not touch the front of the mask



Do not remove the mask to talk to someone or do other things that would require touching the mask



Do not leave your used mask within the reach of others



Do not re-use the mask

**Remember that masks alone cannot protect you from COVID-19. Maintain at least 1 metre distance from others and wash your hands frequently and thoroughly, even while wearing a mask.**




## Appendix 7 COVID-19 Declaration Form for Patient/Carer



Versi 4/2021

## BORANG DEKLARASI SARINGAN PENYAKIT COVID-19 (PESAKIT/PENJAGA)

(Fasiliti kesihatan boleh membuat modifikasi yang bersesuaian, mengikut keperluan setempat)

## SILA JAWAB SEMUA SOALAN (TANDAKAN MANA YANG BERKENAAN)

A. HUBUNGAN EPIDEMIOLOGI		Ya	Tidak
1	Adakah anda menetap / bekerja di kawasan dengan risiko tinggi penularan penyakit COVID-19: Kediaman tertutup, institusi seperti penjara, depot tahanan imigresen; dalam tempoh masa 14 hari sebelum gejala bermula. Jika YA, nyatakan nama kawasan tersebut: _____		
2	Adakah anda menetap / melawat ke kawasan dengan penularan komuniti dalam tempoh masa 14 hari sebelum gejala bermula. Jika YA, nyatakan nama tempat yang dilawati: _____		
3	Adakah anda bekerja di mana-mana fasiliti penjagaan kesihatan, termasuk fasiliti kesihatan atau di dalam komuniti; dalam tempoh masa 14 hari sebelum gejala bermula. Jika YA, nyatakan nama fasiliti kesihatan tersebut: _____		
4	Adakah anda mempunyai kaitan dengan mana-mana kluster COVID-19 dalam tempoh masa 14 hari sebelum gejala bermula?.		
5	Adakah anda merupakan <b>kontak rapat</b> kepada individu yang disahkan positif COVID-19 dalam masa 14 hari Jika YA, sila jawab soalan a hingga c:		
	a. Bekerja bersama dalam jarak dekat atau berkongsi persekitaran bilik/ ruang yang sama dengan pesakit COVID-19.		
	b. Menaiki kenderaan yang sama dengan individu yang disahkan positif COVID-19.		
	c. Tinggal serumah dengan individu yang disahkan positif COVID-19.		

B. GEJALA		Ya	Tidak
1	Demam ( <i>fever</i> )		
2	Batuk ( <i>cough</i> )		
3	Kelesuan ( <i>general weakness</i> ) /Keletihan ( <i>fatigue</i> )		
4	Sakit kepala ( <i>headache</i> )		
5	Sakit badan ( <i>myalgia</i> )		
6	Sakit tekak ( <i>sore throat</i> )		
7	<i>Coryza</i>		
8	Sesak nafas ( <i>dyspnea</i> )		
9	Anorexia / Loya ( <i>nausea</i> ) / Muntah-muntah ( <i>vomiting</i> )		
10	Cirit-birit ( <i>diarrhea</i> )		
11	Perubahan status mental ( <i>altered mental status</i> )		
12	Hilang deria bau secara tiba-tiba ( <i>sudden loss of smell/anosmia</i> )		
13	Hilang deria rasa secara tiba-tiba ( <i>sudden loss of taste/ argeusia</i> )		

SUHU: \_\_\_\_\_°C

Tandatangan Pesakit/Penjaga:

Tandatangan Anggota Kesihatan Yg Menyaring:

Nama: \_\_\_\_\_

Nama: \_\_\_\_\_

No. Kad Pengenalan: \_\_\_\_\_

No. Kad Pengenalan: \_\_\_\_\_

Tarikh: \_\_\_\_\_

Tarikh: \_\_\_\_\_

HENTIKAN COVID-19!

KEJUJURAN ANDA BOLEH MENYELAMATKAN RAMAI NYAWA TERMASUK ANGGOTA KESIHATAN.  
PASTIKAN ANDA MENDAFTAR DI DALAM MySejahtera



**COVID-19 DECLARATION FORM (PATIENT/CARER)**

*(Individual facility may amend the form according to the need of local setting)*

**ANSWER ALL QUESTIONS (TICK ✓ WHERE APPROPRIATE)**

<b>A. EPIDEMIOLOGICAL LINK</b>		<b>Yes</b>	<b>No</b>
1	Residing or working in an area/locality with high risk of transmission of virus: closed residential settings, institutional settings such as prisons, immigration detention depots ; anytime within the 14 days prior to sign and symptom onset If yes, please specify the area: _____		
2	Residing or travel to an area with community transmission anytime within the 14 days prior to sign and symptom onset If yes, please specify the area: _____		
3	Working in any health care setting, including within health facilities or within the community; any time within the 14 days prior to sign and symptom onset. If yes, please specify the health care setting: _____		
4	Linked to a COVID-19 cluster within the past 14 days prior to sign and symptom onset.		
5	Close contact to a confirmed case of COVID-19, within 14 days before onset of illness. If yes, please answer questions a to c:		
	a. Working together in close proximity or sharing the same classroom environment with a with COVID-19 patient		
	b. Traveling together with COVID-19 patient in any kind of conveyance		
	c. Living in the same household as a COVID-19 patient		

<b>B. SYMPTOMS</b>					
		<b>Yes</b>	<b>No</b>		
1	Fever			8	Dyspnea
2	Cough			9	Anorexia / Nausea / Vomiting
3	General weakness /Fatigue			10	Diarrhea
4	Headache			11	Altered mental status
5	Myalgia			12	Sudden loss of smell (Anosmia)
6	Sore throat			13	Sudden loss of taste (Ageusia)
7	Coryza			<b>TEMPERATURE</b> _____ °C	

Signature of Patient/Carer:

Signature of Screening Officer:

Name: \_\_\_\_\_

Name: \_\_\_\_\_

IC Number: \_\_\_\_\_

IC Number: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**STOP COVID-19!**

**YOUR HONESTY CAN SAVE MANY LIVES INCLUDING HEALTH CARE WORKERS.  
MAKE SURE YOU REGISTER IN MySejahtera**

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