GUIDELINES ON

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

Ministry of Health Malaysia
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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).
ANNEX 8

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. Temperature screening.
• All patients and visitors are required to declare and provide correct information to healthcare providers.
• All patients admitted to wards and their carers should fill up the Patient Declaration Form (Appendix 7).

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 surgical mask and other PPE based on the risk assessment.

2.11. All visitors, patients, and accompanying person must wear surgical mask in healthcare facilities.

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. To prevent the transmission/outbreak of SARS-CoV-2 within the healthcare facility it is crucial to detect and screen the patient admitted to ward who was missed by screening or triage such as patient transferred in from other healthcare facility.

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.

3.2. PERSONAL PROTECTIVE EQUIPMENT (PPE)

3.2.1. The use of PPE should be guided by risk assessment concerning anticipated contact with blood, body fluids, secretions and non-intact skin for routine patient care.

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. 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.
- All visitors, patients, and accompanying person must wear surgical mask in hospital premises (based on the hospital resources and guidelines).
3.2.4. Double masking in the clinical area is not recommend 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.

3.2.5. 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.

3.2.6. The use of eye protection with face mask in clinical setting is required in an area with high risk of disease transmission. The rational of the use of eye protection is to protect the mucous membranes of the eyes, nose and mouth. E.g., During procedures that GENERATE SPLASHES OR SPRAYS of blood, body fluids, secretion and excretion.

3.2.7. Select masks, goggles, face shields, and combinations of each according to the need anticipated by the task performed (risk assessment) or based on clinical area. Personal glasses/ spectacles are not a suitable substitute.

3.2.8. 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

3.2.9. **Provision of adequate and regular supply of personal protective equipment (PPE) and appropriate training of staff.**

3.2.9.1. Rational and appropriate use of PPE is important to protect our frontline HCW and to avoid supply shortages.

3.2.9.2. 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).

3.2.9.3. If particulate respirator (e.g., N95) is used, fit test and user seal-check (fit check) should be done.
• 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.

3.2.9.4. Recommended PPE to be used when managing Person Under Surveillance (PUS), Suspected, Probable or Confirmed COVID-19 in hospital is listed in Table 5 and recommended PPE to be used when attending/treating Influenza like Illness (ILI) patient in hospital is shown in Table 6. For health clinic and district health office settings, recommended PPE to be used in general is listed in Table 7 and 8.

3.2.9.5. 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).
ANNEX 8

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**

<table>
<thead>
<tr>
<th>Patient area</th>
<th>Frequency a</th>
<th>Additional guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening/triage area</td>
<td>At least twice daily</td>
<td>• Focus on high-touch surfaces, then floors (last)</td>
</tr>
<tr>
<td>Inpatient rooms/ cohort – occupied</td>
<td>At least twice daily, preferably three times daily, in particular for high-touch surfaces</td>
<td>• 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)</td>
</tr>
<tr>
<td>Inpatient rooms – unoccupied</td>
<td>Upon discharge/transfer</td>
<td>• Low-touch surfaces, high-touch surfaces, floors (in that order); waste and linens removed, bed thoroughly cleaned and disinfected</td>
</tr>
</tbody>
</table>
| Outpatient/ ambulatory care rooms | After each patient visit (in particular for high-touch surfaces) and at least once daily terminal clean | • High-touch surfaces to be disinfected after each patient visit  
• Once daily low-touch surfaces, high-touch surfaces, floors (in that order); waste and linens removed, examination bed thoroughly cleaned and disinfected |
### ANNEX 8

<table>
<thead>
<tr>
<th>Hallways/ corridors</th>
<th>At least twice daily</th>
<th>• High-touch surfaces including railings and equipment in hallways, then floors (last)</th>
</tr>
</thead>
</table>
| Patient bathrooms/toilets | **Private patient room toilet:** at least twice daily  
**Shared toilets:** at least three times daily | • High-touch surfaces, including door handles, light switches, counters, faucets, then sink bowls, then toilets and finally floor (in that order)  
• Avoid sharing toilets between staff and patients |

\[\text{\textsuperscript{a}}\ \text{Environmental surface should also be cleaned and disinfected whenever visibly soiled or if contaminated by a body fluid (e.g., blood);}\]
\[\text{\textsuperscript{b}}\ \text{Frequency can be once a day if hallways are not frequently used.}\]

*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/cohoot 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 should be kept outside the patient room.

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**

4.1.1.1. No visitor should be allowed unless visitors who are essential such as parents of paediatric patients and caregivers.
4.1.1.2. Alternate method of communication should be encouraged such as video calls to reduce the risk of transmission.

4.1.1.3. If absolutely necessary, discuss with the managing team. Approval is based on the discretion of the attending team and hospital policy.

4.1.1.4. Thorough advice and counselling should be given and written consent should be taken prior to visitation based on hospital policy.

4.1.1.5. All visitors should be screened signs and symptoms of COVID-19 and filled up the declaration form before allowing to enter.

4.1.1.6. 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.

4.1.1.7. Visitors should be advised to limit their movement in the healthcare facility.

4.1.1.8. 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.

4.1.1.9. HCW must instruct and supervise all visitors on the donning and doffing of PPE (gown, glove, N95 mask) before entering the room.

4.1.1.10. Appropriate instruction on should be given while in the patient’s room.

4.1.1.11. PPE recommend for these long-term carers may be limited to surgical mask. The use of plastic aprons and gloves are recommended when anticipating exposure to bodily fluids.

4.1.1.12. Visitors 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.

4.1.1.13. Exposed visitors should report any signs and symptoms to their healthcare providers.

4.1.1.14. No visitor 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. Advice 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). |
| 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                    | Consult ACMV professional  
Recirculation systems where no or too little fresh air is added are not recommended.  
Maximise outside air intake and reduce air recirculation as much as possible.  
Increase outdoor fresh air supply, potentially up to 100%, if supported by and compatible with the ACMV system  
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.  
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 |
| Filters                              | 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 |
| Air Relative humidity (RH)           | AIIR: Max 60%  
Noncritical area: 40% to 70% |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular airing of rooms</td>
<td>Air common areas such as a conference room, during breaks or after the meeting when everyone has left the room. For example, airing is carried out by opening windows and doors wide against each other for 10 to 15 minutes after meeting. To discuss with the hospital engineers if this is allowed and does not cause condensation.</td>
</tr>
<tr>
<td>Toilets</td>
<td>Keeping negative pressure in toilets is recommended, as aerosol formation can occur; 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.</td>
</tr>
<tr>
<td>Monitoring indoor air quality</td>
<td>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).</td>
</tr>
<tr>
<td>Maintenance of air filter</td>
<td>Make sure air filters are properly sized and within their recommended service life. Inspect filter housing and racks to ensure appropriate filter fit and minimize air that flows around, instead of through the filter. 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.</td>
</tr>
<tr>
<td>Specifications</td>
<td>All room (includes bronchoscopy suites)</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Air pressure**</td>
<td>Negative</td>
</tr>
<tr>
<td>Room air changes</td>
<td>≥6 ACH (for existing rooms) ≥12 ACH (for renovation or new construction)</td>
</tr>
<tr>
<td>Sealed***</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum filtration supply</td>
<td>MERV-14</td>
</tr>
<tr>
<td>Minimum filtration Exhaust</td>
<td>HEPA</td>
</tr>
<tr>
<td>Recirculation</td>
<td>No</td>
</tr>
</tbody>
</table>

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”

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.
### Annex 8

**Table 5: Recommended PPE to be Used When Managing Person Under Surveillance (PUS), Suspected, Probable or Confirmed COVID-19 in Hospital Setting**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Target Personnel</th>
<th>Activity</th>
<th>Type of PPE</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Any Areas in Healthcare Facility</strong></td>
<td>HCW</td>
<td>Direct contact with any patient (Non-PUS/Non-Suspected/Non-Probable/Non-Confirmed COVID-19 patient OR patient without respiratory symptoms)</td>
<td>• Surgical mask</td>
<td>• HCW should maintain at least 1 metre spatial distance when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• *Eye Protection (face shield/goggles)</td>
<td>• HCW should limit the time and frequency of exposure as permissible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.</td>
<td>• HCW should perform hand hygiene as per indication.</td>
</tr>
</tbody>
</table>

**EMERGENCY DEPARTMENT**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Target Personnel</th>
<th>Activity</th>
<th>Type of PPE</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Triage</td>
<td>HCW</td>
<td>Involved in triaging patients</td>
<td>• Surgical mask</td>
<td>• May use physical barriers (such as glass or plastic windows or face shield) to reduce exposure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• *Eye Protection (face shield/goggles)</td>
<td>• HCW should maintain at least 1 metre spatial distance when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.</td>
<td>• HCW should limit the time and frequency of exposure as permissible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• HCW should perform hand hygiene as per indication.</td>
</tr>
<tr>
<td>Role</td>
<td>Location</td>
<td>Activity</td>
<td>Required PPE</td>
<td>Additional Instructions</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Patient Waiting Area</td>
<td>Patients</td>
<td>Patient with respiratory symptoms</td>
<td>• Surgical mask</td>
<td>• Full PPE set must be made available at the site in case of emergency.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Triage</td>
<td>HCW</td>
<td>History taking and physical examination</td>
<td>• Surgical mask, Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron, Gloves, Eye Protection (face shield/goggles)</td>
<td>• Patient should be seated at the designated area, to sit at least 1 metre apart.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Waiting area should be well-ventilated.</td>
</tr>
<tr>
<td>Examination Room/Consultation Room</td>
<td>HCW</td>
<td>History taking and physical examination</td>
<td>• Surgical mask, Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron, Gloves, Eye Protection (face shield/goggles)</td>
<td>• Patient should be reminded to wear a surgical mask when the HCW enters the cubicle /triage examination area</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Boot cover/shoe cover (ONLY when anticipating spillage and vomiting)</td>
</tr>
<tr>
<td>Cleaners</td>
<td>Cleaning the examination room/consultation room</td>
<td></td>
<td>• Surgical mask, Long-sleeved plastic apron, Gloves, Eye Protection (face shield/goggles)</td>
<td>• Increase frequency of cleaning for frequently touched surfaces</td>
</tr>
</tbody>
</table>
| Ambulance transfer vehicle | Driver | Involved in driving PUS/ Suspected/Probable/ Confirmed COVID-19 BUT NO direct contact with patient | Surgical mask/ N95 mask (based on Risk Assessment*) | Windows should be kept open throughout the drive (about 3cm only) | Use air conditioner with fresh air intake mode | Driver should maintain at least 1 metre spatial distance when possible | Driver should perform hand hygiene as per indication | Risk assessment* includes:  
  - Patient condition  
  - Ambulance ventilation |
|----------------------------|--------|------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
|                            |        | Involved in driving PUS/ Suspected/Probable/ Confirmed COVID-19 and involved in loading and unloading of patients | Surgical mask/ N95 mask (based on Risk Assessment*)  
  - Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron  
  - Gloves  
  - Eye Protection (face shield/goggles) | Driver should always maintain at foot end of stretcher and perform hand hygiene as per indication | Windows should be kept open throughout the drive (about 3cm only) | Use air conditioner with fresh air intake mode | Risk assessment* includes:  
  - Patient condition  
  - Ambulance ventilation |
| Ambulance transfer vehicle | HCW | Transporting PUS/ Suspected/Probable/ Confirmed COVID-19 patient to the referral health care facility | • N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown)  
• Gloves  
• Eye Protection (face shield/goggles)  
• Head cover | • Windows should be kept open throughout the drive (about 3cm only)  
• Use air conditioner with fresh air intake mode  
• If windows cannot be opened, use fan  
• Healthcare worker seating arrangement (Figure 1):  

A & B: When patient is not in distress  
C: When patient requires oxygen support/ intervention |

![Figure 1: Ambulance](image)
| Ambulance Transport Vehicle | HCW | Decontamination of ambulance that transported PUS/Suspected/Probable/Confirmed COVID-19 | • Surgical mask  
• Long-sleeved plastic apron  
• Gloves  
• Eye Protection (face shield/goggles)  
• Boots or closed shoes |
|----------------------------|-----|---------------------------------------------------------------------------------|---------------------------------------------------------------|
| Patient Cubicle/Resuscitation Zone | HCW | Performing Aerosol Generating Procedures (AGP) on PUS/Suspected/Probable/Confirmed COVID-19 patients  
• Intubation, extubation and related procedures/CPR  
• Tracheotomy/tracheostomy procedures  
• Manual ventilation  
• Suctioning  
• Bronchoscopy  
• Nebulization  
• Others – Refer Guideline | **Minimum Recommendation:**  
• N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron  
• Gloves  
• Eye Protection (face shield/goggles)  
• Head cover  
• Boot cover/shoe cover |
### ANNEX 8

<table>
<thead>
<tr>
<th>Specimen Collection Area</th>
<th>HCW</th>
<th>Performing oropharyngeal or nasopharyngeal swab</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• N95 mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Gloves**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Long-sleeved plastic apron**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Eye protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Head cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>**It is sufficient to change gloves and plastic apron between patients.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Boot cover/shoe cover (ONLY when anticipating spillage and vomiting)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Any soiled protective equipment’s should also be changed</td>
</tr>
</tbody>
</table>

### INPATIENT FACILITIES

<table>
<thead>
<tr>
<th>Patient Room</th>
<th>HCW</th>
<th>Providing care PUS/Suspected/Probable/Confirmed COVID-19 patients who are <strong>not on oxygen</strong> and <strong>able to wear surgical mask</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Surgical mask / N95 mask (based on Risk Assessment**)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Boot cover/shoe cover (ONLY when anticipating spillage and vomiting)</strong></td>
</tr>
</tbody>
</table>
|              |     | **Risk assessment** includes:
|              |     | o Type of procedures conducted. |
|              |     | o Room setting & ventilation |
| **Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are not on oxygen but NOT able to wear surgical mask** | • N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown)  
• Gloves  
• Eye Protection (face shield/goggles)  
• Head cover | • Boot cover/shoe cover (ONLY when anticipating spillage and vomiting) |
|---|---|---|
| **Providing care PUS/Suspected/Probable/Confirmed COVID-19 patients who are on oxygen.** | • N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown)  
• Gloves  
• Eye Protection (face shield/goggles)  
• Head cover | • Boot cover/shoe cover (ONLY when anticipating spillage and vomiting) |
| **Performing oropharyngeal or nasopharyngeal swab to PUS/Suspected/Probable/Confirmed COVID-19 patients** | • N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown)  
• Gloves  
• Eye Protection (face shield/goggles)  
• Head cover | • Boot cover/shoe cover (ONLY when anticipating spillage and vomiting) |
| **Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are ventilated in a closed circuit** | • N95 mask  
• Isolation Gown (fluid-repellent long-sleeved gown)  
• Gloves | • Boot cover/shoe cover (ONLY when anticipating spillage and vomiting) |
<table>
<thead>
<tr>
<th>Patient Room</th>
<th>HCW</th>
<th>Performing Aerosol Generating Procedures (AGP) on PUS/Suspected/Probable/Confirmed COVID-19 patients</th>
<th>Option 1 (Preferred):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Intubation, extubation and related procedures</td>
<td>• Powered air-purifying respirator (PAPR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tracheotomy/tracheostomy procedures;</td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron / Coverall suit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manual ventilation</td>
<td>• Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Suctioning</td>
<td>• Eye Protection (face shield/goggles) *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bronchoscopy</td>
<td>• Boot cover/shoe cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nebulization</td>
<td>*Depends on type of PAPR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Surgery and post-mortem procedures in which high-speed devices are used</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High-frequency oscillating ventilation (HFOV)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High-flow Nasal Oxygen (HFNO)</td>
<td></td>
</tr>
</tbody>
</table>

Option 2:
- Coverall suit
- N95 mask
- Eye Protection (face shield/goggles)
- Gloves
- Boot cover/shoe cover

Option 3 (if Option 1 & 2 not available):
- N95 mask
- Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron
- Gloves
| Patient Room | HCW | Transporting specimen to lab | Surgical mask  
|             |     |                             | Gloves  
|             |     |                             | Plastic apron (optional) |
| Cleaners    | Cleaners | Cleaning the PUS/Suspected/Probable/Confirmed COVID-19 patient’s room | N95 mask  
|             |     |                             | Isolation Gown (fluid-repellent long-sleeved gown)  
|             |     |                             | Gloves  
|             |     |                             | Eye Protection (face shield/goggles)  
|             |     |                             | Head cover  
|             |     |                             | Boots or closed shoes  
| Laboratory  | HCW | Manipulation of respiratory specimens which include oropharyngeal swabs, nasopharyngeal swabs, sputum, tracheal aspirate, bronchoalveolar lavage (BAL) must be accorded high risk | N95 mask  
|             |     |                             | Isolation Gown (fluid-repellent long-sleeved gown)  
|             |     |                             | Gloves  
|             |     |                             | Eye Protection (face shield/goggles)  
|             |     |                             | Head cover  
|             |     |                             | Boots or closed shoes  

*Surgical mask may be used in areas of low-risk transmission such as PKRC category 1-3.*
<p>| Outside patient room (more than 1-2 meters) | All staff including HCW | Any activity that does not lead to contact with PUS/Suspected/ Probable/ Confirmed COVID-19 | • Specimen handling for RT-PCR or Antigen testing prior to viral inactivation step, must be carried out in BSL-2 or equivalent facilities | Handling and processing of specimens from Suspected/Probable/ Confirmed COVID-19 intended for additional laboratory tests, such as haematology, microbiology, biochemistry, cytology or histopathological processing should apply standard precautions to provide a barrier between the specimen and personnel |
| | | | • Surgical mask | • Surgical mask |
| | | | • Isolation Gown (fluid-repellent long-sleeved gown) | • Isolation Gown (fluid-repellent long-sleeved gown) |
| | | | • Gloves | • Gloves |
| | | | • Eye Protection (face shield/goggles) | • Eye Protection (face shield/goggles) |
| | | | • Boots or closed shoes | • Boots or closed shoes |
| | | | • Surgical mask | • HCW should maintain at least 1 metre spatial distance when possible |
| | | | | • HCW should limit the time and frequency of exposure as permissible |
| | | | | • HCW should perform hand hygiene as per indication |</p>
<table>
<thead>
<tr>
<th>Administrative Areas/Public Areas</th>
<th>Roles</th>
<th>Activities</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Areas</td>
<td>All staff</td>
<td>Any activities not involving direct contact with patient</td>
<td>• Surgical mask is recommended if unable to maintain more than 1 metre spatial distance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• All staff should maintain at least 1 metre spatial distance when possible and surgical mask must be worn during any face-to-face interaction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• All staff should perform hand hygiene as per indication.</td>
</tr>
<tr>
<td>Security Officer</td>
<td>Security officers in healthcare facilities</td>
<td>• Surgical mask</td>
<td>• Security officer should maintain at least 1 metre spatial distance when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Security officer should limit the time and frequency of exposure as permissible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Security officer should perform hand hygiene as per indication</td>
</tr>
</tbody>
</table>
### TABLE 6: RECOMMENDED PPE TO BE USED WHEN ATTENDING OR TREATING INFLUENZA LIKE ILLNESS (ILI) PATIENT IN HOSPITAL SETTING

<table>
<thead>
<tr>
<th>SETTING</th>
<th>TARGET PERSONNEL</th>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INFLUENZA LIKE ILLNESS (ILI) PATIENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination Room / Consultation Room</td>
<td>HCW</td>
<td>History taking/physical examination/providing care</td>
<td>• Surgical mask</td>
<td>• Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Gloves**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Long-sleeved plastic apron**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Eye protection (face shield/goggles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>**Change plastic apron and gloves after examination of each patient</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performing Aerosol Generating Procedures (AGP)</td>
<td>• N95 mask</td>
<td>• Boot cover / shoe cover (ONLY when anticipating spillage and vomiting) - not always necessary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Intubation</td>
<td>• Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Suctioning</td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nebulization</td>
<td>• Eye protection (face shield/goggles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• CPR</td>
<td>• Head cover</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Also, when performing oropharyngeal or nasopharyngeal swab</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 7: RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN HEALTH CLINIC SETTING

<table>
<thead>
<tr>
<th>SETTING</th>
<th>TARGET PERSONNEL</th>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare facilities</td>
<td>HCW</td>
<td>Direct contact with any patient **other than PUS, Suspected/Probable/Non-Confirmed COVID-19 patient OR patient without respiratory symptoms)</td>
<td>• Surgical mask</td>
<td>• HCW should maintain at least 1 metre spatial distance when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• *Eye Protection (face shield/goggles)</td>
<td>• HCW should limit the time and frequency of exposure as permissible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.</td>
<td>• HCW should perform hand hygiene as per indication.</td>
</tr>
<tr>
<td>TRIAGE AREA</td>
<td></td>
<td></td>
<td>**Full PPE set must be made available at the site in case of emergency</td>
<td></td>
</tr>
<tr>
<td>Triage</td>
<td>HCW</td>
<td>Preliminary screening not involving direct contact with any patient and <strong>ABLE TO MAINTAIN 1-2 metres spatial distance at all time</strong></td>
<td>• Surgical mask</td>
<td>• May use physical barriers (such as glass or plastic windows or face shield) to reduce exposure.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• *Eye protection (face shield/goggles)</td>
<td>• HCW should perform frequent hand hygiene as per indication.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.</td>
<td>• Patient to fill up the Patient Declaration Form (Appendix 7).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>**Full PPE set must be made available at the site in case of emergency</td>
<td>• Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition,</td>
</tr>
</tbody>
</table>
### Preliminary screening not involving direct contact with any patient and **UNABLE TO MAINTAIN 1-2 metres** spatial distance at all time

- Surgical mask
- Long sleeved plastic apron
- Gloves
- Eye Protection (face shield/goggles)

*Full PPE set must be made available at the site in case of emergency*

advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.

- Alcohol base hand rub should be made available for patient.

### Patient Waiting Area

<table>
<thead>
<tr>
<th>Patients</th>
<th>Patient with respiratory symptoms</th>
<th>Surgical Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Patient should be seated at the designated area, to sit at least 1 metre apart.
- Waiting area should be well-ventilated.

### Administrative Areas/ Public Areas

<table>
<thead>
<tr>
<th>All staff including HCW</th>
<th>Any activities not involving direct contact with patient</th>
<th>Surgical mask</th>
</tr>
</thead>
</table>

- All staff including HCW should maintain at least 1 metre spatial distance when possible.
- All staff including HCW should perform hand hygiene as per indication.
- May use physical barriers (such as glass or plastic windows or face shield) to reduce exposure.
## SECONDARY TRIAGE

<table>
<thead>
<tr>
<th>Secondary Triage</th>
<th>HCW</th>
<th>Screening for vital signs</th>
<th>Surgical mask</th>
<th>*Eye Protection (face shield/goggles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. General patient e.g. post-natal patient, DM, HPT</td>
<td></td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>b. Influenza like illness (ILI)/Fever</td>
<td>HCW</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Long sleeved plastic apron</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Protection (face shield/goggles)</td>
<td></td>
</tr>
</tbody>
</table>

**Full PPE set must be made available at the site in case of emergency**

• Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.

• HCW should perform hand hygiene as per indication.

## GENERAL EXAMINATION AND TREATMENT ROOM

<table>
<thead>
<tr>
<th>Examination room e.g. OPD, MCH</th>
<th>HCW</th>
<th>History taking and physical examination Other procedures (non-aerosol generating)</th>
<th>Surgical mask</th>
<th>*Eye Protection (face shield/goggles)</th>
</tr>
</thead>
</table>

• HCW should perform hand hygiene as per indication.
| Examination room e.g. OPD, MCH | HCW | Eye examination – Fundoscopy machine | Gloves (when indicated)  
* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask. |
|---------------------------------|-----|-------------------------------------|------------------------------------------------------------------|
| Examination room/area for influenza like illness (ILI) | HCW | History taking and physical examination | Surgical mask  
* Eye protection (face shield/goggles) whenever possible  
Patient should be reminded to wear a surgical mask and minimal talking during examination.  
If using Fundoscopy machine, use physical barriers (such as breath guard) to reduce exposure.  
HCW should perform hand hygiene as per indication.  
Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow. |
### ANNEX 8

<table>
<thead>
<tr>
<th>Aerosol Generating Procedures (AGP)</th>
<th>N95 mask</th>
<th>Boot cover/shoe cover (ONLY when anticipate spillage and vomiting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Nebulisation</td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Long sleeved plastic apron</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Eye Protection (face shield/goggles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Head cover</td>
<td></td>
</tr>
</tbody>
</table>

| Taking blood for investigation      | Surgical mask                      |  |
|                                     | • Long sleeved plastic apron       |  |
|                                     | • Gloves                           |  |
|                                     | • Eye Protection (face shield/goggles) |  |

| Examination room/area               | HCW                                  | Transport specimen to lab |
|                                     |                                      | Surgical mask |
|                                     |                                      | • Gloves |
|                                     |                                      | Plastic apron (optional) |

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

<table>
<thead>
<tr>
<th>Isolation/ Designated Area</th>
<th>HCW</th>
<th>Vital sign, history taking and physical examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Surgical mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td>*It is sufficient to change gloves and plastic apron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
between patients. Any soiled protective equipment’s should also be changed.

<table>
<thead>
<tr>
<th>Aerosol Generating Procedures (AGP)</th>
<th>N95 mask</th>
<th>Isolation Gown (fluid-repellent long-sleeved gown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intubation, extubation and related procedures</td>
<td>Long sleeved plastic apron</td>
<td>Gloves</td>
</tr>
<tr>
<td>Manual ventilation</td>
<td>Eye Protection (face shield/goggles)</td>
<td>Head cover</td>
</tr>
<tr>
<td>Suctioning</td>
<td>Boot cover/shoe cover</td>
<td></td>
</tr>
<tr>
<td>Nebulization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample collection area</th>
<th>Performing oropharyngeal or nasopharyngeal swab</th>
<th>N95 mask</th>
<th>Isolation Gown (fluid-repellent long-sleeved gown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW</td>
<td>Long sleeved plastic apron</td>
<td>Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Protection (face shield/goggles)</td>
<td>Head cover</td>
<td></td>
</tr>
</tbody>
</table>

*It is sufficient to change gloves and plastic apron between patients. Any soiled protective equipment’s should also be changed.

<table>
<thead>
<tr>
<th>Sample collection area</th>
<th>Performing oropharyngeal or nasopharyngeal swab</th>
<th>Boot cover/shoe cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW</td>
<td></td>
<td>(ONLY when anticipate spillage and vomiting).</td>
</tr>
</tbody>
</table>
### ANNEX 8

<table>
<thead>
<tr>
<th>Activity</th>
<th>Equipment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisting oropharyngeal or nasopharyngeal swab</td>
<td>- N95 mask</td>
<td>Boot cover/shoe cover (ONLY when anticipate spillage and vomiting).</td>
</tr>
<tr>
<td></td>
<td>- Isolation Gown (fluid-repellent long-sleeved gown)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Eye Protection (face shield/goggles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Head cover</td>
<td></td>
</tr>
<tr>
<td>Transport specimen to lab</td>
<td>- Surgical mask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Plastic apron (optional)</td>
<td></td>
</tr>
<tr>
<td>Sample collection area</td>
<td>HCW</td>
<td></td>
</tr>
<tr>
<td>Performing RTK-Ab testing</td>
<td>- Surgical mask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gloves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Eye protection (face shield/goggles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Plastic apron (optional)</td>
<td></td>
</tr>
<tr>
<td>AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) PATIENT</td>
<td>HCW</td>
<td></td>
</tr>
<tr>
<td>Transporting PUS/Suspected/Probable/ILI patient to the referral health care facility</td>
<td>- N95 mask</td>
<td>Windows should be kept open throughout the drive (about 3cm only).</td>
</tr>
<tr>
<td></td>
<td>- Isolation Gown (fluid-repellent long-sleeved gown)</td>
<td>Use air conditioner with <em>fresh air intake</em> mode.</td>
</tr>
<tr>
<td></td>
<td>- Gloves</td>
<td>If windows cannot be opened, use fan.</td>
</tr>
<tr>
<td></td>
<td>- Eye Protection (face shield/goggles)</td>
<td>Healthcare worker seating arrangement (Figure 1):</td>
</tr>
<tr>
<td></td>
<td>- Head cover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Boot cover/shoe cover are not necessary</td>
<td></td>
</tr>
</tbody>
</table>
### Figure 1: Ambulance

| Ambulance transfer vehicle | Driver | Involved in driving the patient with PUS/Suspected/Probable/ILI BUT NO direct contact with patient | Surgical mask/ N95 mask (based on Risk Assessment*) | Windows should be kept open throughout the drive (about 3cm only). Use air conditioner with *fresh air intake* mode. Driver should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication. |

A & B: When patient is not in distress  
C: When patient requires oxygen support/ intervention
<table>
<thead>
<tr>
<th>Assault 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved in driving the patient with PUS/Suspected/Probable/ILI and involved in loading and unloading of patients</td>
</tr>
<tr>
<td>• Surgical mask/ N95 mask (based on Risk Assessment*)</td>
</tr>
<tr>
<td>• Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron</td>
</tr>
<tr>
<td>• Gloves</td>
</tr>
<tr>
<td>• Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td>• If the driver involves in loading and unloading of patients, he should always maintain at foot end of stretcher and perform hand hygiene as per indication.</td>
</tr>
<tr>
<td>• Windows should be kept open throughout the drive (about 3cm only).</td>
</tr>
<tr>
<td>• Use air conditioner with fresh air intake mode.</td>
</tr>
<tr>
<td>• Risk assessment* includes:</td>
</tr>
<tr>
<td>o Patient condition</td>
</tr>
<tr>
<td>o Ambulance ventilation</td>
</tr>
</tbody>
</table>

| Ambulance transfer vehicle | HCW | Decontamination of ambulance | Surgical mask |
| Long sleeved plastic apron |
| Gloves |
| Eye protection (face shield/goggles) |
| Boots or closed shoes |

<table>
<thead>
<tr>
<th>LABORATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory</td>
</tr>
<tr>
<td>Surgical mask</td>
</tr>
<tr>
<td>Long sleeved plastic apron</td>
</tr>
<tr>
<td>Gloves (2 layer)</td>
</tr>
<tr>
<td>Eye protection (face shield/goggles)</td>
</tr>
<tr>
<td>Close shoe/shoe cover</td>
</tr>
</tbody>
</table>
# Annex 8

## Handling sputum
- N95 mask
- Long sleeved plastic apron
- Gloves
- Eye protection (face shield/goggles)
- Close shoe/shoe cover

## PHARMACY

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Pharmacist</th>
<th>Dispensing medication to patient</th>
<th>Handling</th>
<th>Handling by Pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Satellite pharmacy at ILI area</td>
<td>Pharmacist</td>
<td>Surgical mask</td>
<td>Handing</td>
<td>Surgical mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long sleeved plastic apron</td>
<td>Handing</td>
<td>Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
<td>Handing</td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surgical mask</td>
<td>Handing</td>
<td>Surgical mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long sleeved plastic apron</td>
<td>Handing</td>
<td>Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
<td>Handing</td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
</tr>
<tr>
<td>b. General pharmacy</td>
<td>Dispensing medication to patient</td>
<td>Surgical mask</td>
<td>Handing</td>
<td>Surgical mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long sleeved plastic apron</td>
<td>Handing</td>
<td>Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
<td>Handing</td>
<td>*Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1-2 metre distance</td>
</tr>
</tbody>
</table>

## CLEANING & DISINFECTION

<table>
<thead>
<tr>
<th>Isolation/ treatment room/ designated area</th>
<th>Cleaner</th>
<th>Cleaning and disinfection of isolation/treatment room/designated area</th>
<th>Handling</th>
<th>Handling by Cleaner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surgical mask</td>
<td>Handling</td>
<td>Surgical mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long sleeved plastic apron</td>
<td>Handling</td>
<td>Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gloves</td>
<td>Handling</td>
<td>Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye protection (face shield/goggles)</td>
<td>Handling</td>
<td>Eye protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boots or closed shoes</td>
<td>Handling</td>
<td>Boots or closed shoes</td>
</tr>
<tr>
<td>HOME VISIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home visit</td>
<td>HCW</td>
<td>Attending to antenatal, post-natal and child health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|  |  | • Surgical mask
• *Eye protection (face shield/goggles) if necessary
*Long sleeved plastic apron, face shield and gloves should be made available. |
|  |  | • HCW should maintain at least 1 -2 metres spatial distance, when possible, with patient’s relatives.
• HCW should perform hand hygiene as per indication.
• Patient to fill up the Patient Declaration Form (Appendix 7). |
TABLE 8: RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED FOR ACTIVITIES BY DISTRICT HEALTH OFFICE

<table>
<thead>
<tr>
<th>SETTING</th>
<th>TARGET PERSONNEL</th>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPID ASSESSMENT TEAM (RAT)/ RAPID RESPONSE TEAM (RRT)</td>
<td>Community</td>
<td>HCW Investigators Team</td>
<td>Interview Suspected/Probable/Confirmed COVID-19 patients or their contacts (PUS) for the purpose of contact tracing</td>
<td>• No PPE if done remotely (e.g., by telephone or video conference)</td>
</tr>
</tbody>
</table>
| | | | In-person interview of Suspected/Probable/Confirmed COVID-19 patients without direct contact | • Surgical Mask  
• Eye Protection (face shield/goggles)  
• Gloves  
** Full PPE set must be made available in case of emergency | • HCW should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication.  
• 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. |
| | | | In-person interview with asymptomatic contacts (PUS) of COVID-19 patients | • Surgical mask  
• Eye Protection (face shield/goggles)  
• Gloves  
** Full PPE set must be made available in case of emergency |
### ANNEX 8

#### SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER

| Home visit | HCW | • Issuing the order and daily monitoring | • Surgical mask  
| | | | • Eye Protection (face shield/goggles)  
| | | | • Gloves  
| | | ** Full PPE set must be made available in case of emergency | • HCW should maintain at least 1 metre spatial distance when possible and perform hand hygiene as per indication.  
| | | | • PUS/Suspected/Probable/Confirmed COVID-19 patients should wear a surgical mask if tolerated.  
| | • Remove PUS wrist band upon release order/HCW early return to work | • Surgical mask  
| | | | • Eye Protection (face shield/goggles)  

#### COVID-19 SAMPLING

| Outside Health Clinic setting e.g. at EMCO areas, targeted group screening etc. | HCW | Performing oropharyngeal or nasopharyngeal swab | • N95 mask  
| | | | • Isolation Gown (fluid-repellent long-sleeved gown)  
| | | | • Long sleeved plastic apron  
| | | | • Eye Protection (face shield/goggles)  
| | | | • Head cover  
| | | *It is sufficient to change gloves and plastic apron between patients. Any soiled protective equipment’s should also be changed | • Boot cover/shoe cover (ONLY when anticipate spillage and vomiting)  
| | | | • Boot cover/shoe cover (ONLY when anticipate spillage and vomiting)  
<p>|</p>
<table>
<thead>
<tr>
<th>Activity</th>
<th>HCW</th>
<th>Known or suspected community transmission</th>
<th>Cleaning and Disinfection activity</th>
<th>Health Promotional Activity</th>
<th>Preventive and control action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisting oropharyngeal or nasopharyngeal swab</td>
<td>N95 mask</td>
<td>Surgical mask</td>
<td>Refer to Annex 36 Garis Pembersihan Dan Disinfeksi Di Tempat Awam</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Isolation Gown (fluid-repellent long-sleeved gown)</td>
<td>Eye Protection (face shield/goggles)</td>
<td></td>
<td>Known or suspected community transmission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gloves</td>
<td></td>
<td></td>
<td>Sporadic transmission or clusters of COVID-19 cases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Head cover</td>
<td></td>
<td></td>
<td>Cleaning and Disinfection activity</td>
<td></td>
</tr>
<tr>
<td>Transport specimen to lab</td>
<td>Surgical mask</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gloves</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plastic apron (optional)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boot cover/shoe cover</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ONLY when anticipate spillage and vomiting)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 9: RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO BE USED IN THE VACCINATION CENTRE (*PUSAT PEMBERIAN VAKSIN COVID-19*)

<table>
<thead>
<tr>
<th>SETTING</th>
<th>TARGET PERSONNEL</th>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triage and registration area</td>
<td>HCW / volunteer</td>
<td>Screening for COVID-19 symptoms and registration for vaccination</td>
<td>• Surgical mask</td>
<td>• HCW /volunteer should maintain at least 1 metre spatial distance with client when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Eye protection (face shield/goggle)</td>
<td>• HCW /volunteer should perform hand hygiene as per indication.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counselling &amp; consent area</td>
<td>HCW</td>
<td>Giving counselling and taking consent for vaccination</td>
<td>• Surgical mask</td>
<td>• HCW should maintain at least 1 metre spatial distance with client when possible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Eye protection (face shield/goggle)</td>
<td>• HCW should perform hand hygiene as per indication.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaccination area</td>
<td>HCW</td>
<td>Administrating the vaccine</td>
<td>• Surgical mask</td>
<td>• Hand hygiene should be performed in both situations whether gloves are worn or not.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Eye protection (face shield/ goggle) (optional)</td>
<td>• Gloves are NOT REQUIRED, unless come into contact with potentially infectious body fluids, skin lesions or healthcare worker has</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Plastic apron</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Gloves (when indicated)</td>
<td></td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Observation area</th>
<th>HCW</th>
<th>Confirmation of vaccination and observation of client post vaccine administration</th>
<th>Surgical mask</th>
<th>Eye protection (face shield/goggle) (optional)</th>
<th>Plastic apron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HCW should perform hand hygiene as per indication.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye protection (face shield/goggle) is optional based on local risk assessment of the COVID-19 transmission.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No need to change eye protection and plastic apron between patients unless they are soiled.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full PPE to be used during performing CPR/intubation.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 1: Pictorial on Recommended PPE to be used when Managing Person Under Surveillance (PUS), Suspected, Probable or Confirmed COVID-19 in Healthcare Facilities

**HEALTHCARE FACILITY**

**SETTING:** ANY AREAS IN HEALTHCARE FACILITY

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Direct contact with any patient (Non-PUS/Non-Suspected/Non-Probable/Non-Confirmed COVID-19 patient OR patient without respiratory symptoms) | 1) Surgical mask  
2) *Eye Protection (face shield/goggles)  
* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask. |

**NOTE**
- HCW should maintain at least 1 metre spatial distance when possible
- HCW should limit the time and frequency of exposure as permissible
- HCW should perform hand hygiene as per indication

**EMERGENCY DEPARTMENT**

**SETTING:** PRIMARY TRIAGE

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Involve in triaging patients | 1) Surgical mask  
2) *Eye Protection (face shield/goggles)  
* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask. |

**NOTE**
- May use physical barriers (such as glass or plastic windows or face shield) to reduce exposure
- HCW should maintain at least 1 metre spatial distance when possible
- HCW should limit the time and frequency of exposure as permissible
- HCW should perform hand hygiene as per indication
- Full PPE set must be made available at the site in case of emergency
EMERGENCY DEPARTMENT
SETTING: SECONDARY TRIAGE/EXAMINATION ROOM/CONSULTATION ROOM
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>History taking and physical examination</td>
<td>1) Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2) Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>3) Gloves</td>
</tr>
<tr>
<td></td>
<td>4) Eye Protection (face shield/goggles)</td>
</tr>
</tbody>
</table>

**NOTE**
- Boot cover/shoe cover (ONLY when anticipating spillage and vomiting)
- Patient should be reminded to wear a surgical mask when the HCW enters the cubicle/triage examination area/room.

---

EMERGENCY DEPARTMENT
SETTING: EXAMINATION ROOM/CONSULTATION ROOM
TARGET: CLEANER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning the examination room / consultation room</td>
<td>1) Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2) Long-sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>3) Gloves</td>
</tr>
<tr>
<td></td>
<td>4) Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>5) Boots or closed shoes</td>
</tr>
</tbody>
</table>

**NOTE**
- Increase frequency of cleaning for frequently touched surfaces.

---

EMERGENCY DEPARTMENT
SETTING: AMBULANCE TRANSFER VEHICLE (PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)
TARGET: AMBULANCE DRIVER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved in driving PUS/ Suspected/ Probable/ Confirmed COVID-19 and involved in loading and unloading of patients</td>
<td>1) Surgical mask/ N95 mask (based on Risk Assessment*)</td>
</tr>
<tr>
<td></td>
<td>2) Isolation Gown (fluid repellent long-sleeved gown) OR long-sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>3) Gloves</td>
</tr>
<tr>
<td></td>
<td>4) Eye Protection (face shield/goggles)</td>
</tr>
</tbody>
</table>

**NOTE**
- Driver should always maintain at foot end of stretcher and perform hand hygiene as per indication.
- Windows should be kept open throughout the drive (about 3cm only).
- Use air conditioner with fresh air intake mode.
- Risk assessment** includes:
  - Patient condition
  - Ambulance ventilation
**Annex 8**

### Emergency Department Setting: Ambulance Transfer Vehicle (PUS/Suspected/Probable/Confirmed COVID-19)

**Target: Healthcare Worker**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Type of PPE</th>
</tr>
</thead>
</table>
| Transporting PUS/Suspected/Probable/Confirmed COVID-19 patient to the referral health care facility | 1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/goggles)  
5) Head cover |

**Note:**
- Windows should be kept open throughout the drive (about 3cm only)
- Use air conditioner with fresh air intake mode
- If windows cannot be opened, use fan
- Healthcare worker seating arrangement (Figure 1):
  - A & B: When patient is not in distress
  - C: When patient requires oxygen support/intervention

---

### Emergency Department Setting: Ambulance Transfer Vehicle (PUS/Suspected/Probable/Confirmed COVID-19)

**Target: Healthcare Worker**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Type of PPE</th>
</tr>
</thead>
</table>
| Decontamination of ambulance that transported PUS/Suspected/Probable/Confirmed COVID-19 | 1) Surgical mask  
2) Long-sleeved plastic apron  
3) Gloves  
4) Eye Protection (face shield/goggles)  
5) Boots or closed shoes |

---

### Emergency Department Setting: Patient Cubicle / Resuscitation Zone

**Target: Healthcare Worker**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Type of PPE</th>
</tr>
</thead>
</table>
| Performing Aerosol Generating Procedures (AGP) on PUS/Suspected/Probable/Confirmed COVID-19 patients | Minimum Recommendation:  
1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron  
3) Gloves  
4) Eye Protection (face shield/goggles)  
5) Boot cover / shoe cover  
6) Head cover |
- Intubation, extubation and related procedures
- Tracheostomy/tracheostomy procedures
- Manual ventilation
- Suctioning
- Bronchoscopy
- Nebulization
- Others – Refer Guideline
### EMERGENCY DEPARTMENT

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

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Performing oropharyngeal or nasopharyngeal swab | 1) N95 mask  
2) Gloves  
3) Isolation Gown (fluid-repellent long-sleeved gown)  
4) Long sleeved plastic apron  
5) Eye protection (face shield/ goggles)  
6) Head cover |

**NOTE**  
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)  
- Any soiled/wet protective equipment should be changed  
- *It is sufficient to change gloves and plastic apron between patients*

---

### IN-PATIENT FACILITY

**SETTING:** PATIENT ROOM  
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)  
**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are not on oxygen and able to wear surgical mask | 1) Surgical mask / N95 (based on Risk Assessment)  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/ goggles) |

**NOTE**  
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)  
- Risk assessment includes:  
  - Type of procedures conducted  
  - Room setting & ventilation

---

### IN-PATIENT FACILITY

**SETTING:** PATIENT ROOM  
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)  
**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are **not on oxygen** but **NOT** able to wear surgical mask | 1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/ goggles)  
5) Head cover |

**NOTE**  
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)
**IN-PATIENT FACILITY**

**SETTING:** PATIENT ROOM  
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are ventilated in a closed circuit.

**NOTE**
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)

**TYPE OF PPE**
1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/ goggles)  
5) Head cover

---

**IN-PATIENT FACILITY**

**SETTING:** PATIENT ROOM  
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
Performing oropharyngeal or nasopharyngeal swab to PUS/Suspected/Probable/Confirmed COVID-19 patients

**NOTE**
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)

**TYPE OF PPE**
1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/ goggles)  
5) Head cover

---

**IN-PATIENT FACILITY**

**SETTING:** PATIENT ROOM  
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
Providing care to PUS/Suspected/Probable/Confirmed COVID-19 patients who are on oxygen.

**NOTE**
- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting)

**TYPE OF PPE**
1) N95 mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/ goggles)  
5) Head cover
**IN-PATIENT FACILITY**
**SETTING: PATIENT ROOM**
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)
**TARGET: HEALTHCARE WORKER**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing Aerosol Generating Procedures (AGP) on PUS/Suspected/Probable/Confirmed COVID-19 patients • Intubation, extubation and related procedures • Tracheotomy/tracheostomy procedures • Manual ventilation • Suctioning • Bronchoscopy • Nebulization • Others – Refer Guideline</td>
<td>Option 1 (Preferred): 1) PAPR 2) Isolation Gown (fluid-repellent long-sleeved gown) with plastic apron / Coverall suit 3) Gloves 4) Eye Protection (face shield/ protective goggles)* 5) Boot cover / shoe cover * Depends on type of PAPR</td>
</tr>
</tbody>
</table>
IN-PATIENT FACILITY

SETTING: PATIENT ROOM
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)

TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transporting specimen to lab</td>
<td>1) Gloves</td>
</tr>
<tr>
<td></td>
<td>2) Surgical mask</td>
</tr>
<tr>
<td></td>
<td>* Plastic Apron - Optional</td>
</tr>
</tbody>
</table>

NOTE
- Surgical mask may be used in areas of low-risk transmission such as PPRC category 1-3.

IN-PATIENT FACILITY

SETTING: PATIENT ROOM
(PUS/SUSPECTED/PROBABLE/CONFIRMED COVID-19)

TARGET: CLEANER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning the PUS/Suspected/Probable/Confirmed COVID-19 patient’s room</td>
<td>1) N95 mask</td>
</tr>
<tr>
<td></td>
<td>2) Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td>3) Gloves</td>
</tr>
<tr>
<td></td>
<td>4) Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>5) Boots or closed shoes</td>
</tr>
</tbody>
</table>

NOTE
- Surgical mask may be used in areas of low-risk transmission such as PPRC category 1-3.

IN-PATIENT FACILITY

SETTING: LABORATORY

TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manipulation of respiratory specimens which include oropharyngeal swabs, nasopharyngeal swabs, sputum, tracheal aspirate, bronchoalveolar lavage (BAL) must be accorded high risk</td>
<td>1) N95 mask</td>
</tr>
<tr>
<td>* Specimen handling for RT-PCR or Antigen testing prior to viral inactivation step, must be carried out in BSL-2 or equivalent facilities</td>
<td>2) Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td>3) Gloves</td>
</tr>
<tr>
<td></td>
<td>4) Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>5) Head cover</td>
</tr>
<tr>
<td></td>
<td>6) Boots or closed shoes</td>
</tr>
</tbody>
</table>
IN-PATIENT FACILITY
SETTING: LABORATORY
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| • Handling and processing of specimens from PUS/Suspected/Probable/Confirmed COVID-19 intended for additional laboratory tests, such as haematology, microbiology, biochemistry, cytology or histopathological processing should apply standard precautions to provide a barrier between the specimen and personnel. | 1) Surgical mask  
2) Isolation Gown (fluid-repellent long-sleeved gown)  
3) Gloves  
4) Eye Protection (face shield/goggles)  
5) Boots or closed shoes |

IN-PATIENT FACILITY
SETTING: OUTSIDE PATIENT ROOM (MORE THAN 1-2 METRES)
TARGET: ALL STAFF INCLUDING HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any activity that does not lead to contact with PUS/Suspected/Probable/Confirmed COVID-19 patients</td>
<td>1) Surgical mask</td>
</tr>
</tbody>
</table>

NOTE
• HCW should maintain at least 1 metre spatial distance when possible
• HCW should limit the time and frequency of exposure as permissible
• HCW should perform hand hygiene as per indication

ADMINISTRATIVE AREAS
SETTING: ANY AREAS
TARGET: ALL STAFF

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any activities not involving direct contact with patient</td>
<td>1) Surgical mask is recommended if unable to maintain more than 1 metre spatial distance</td>
</tr>
</tbody>
</table>

NOTE
• All staff should maintain at least 1 metre spatial distance when possible and surgical mask must be worn during any face-to-face interaction.
• All staff should perform hand hygiene as per indication
Pictorial can be download from the link below:
https://drive.google.com/drive/folders/1AG3nD_R0K3D84pZAQMJ1RQuhSnBKFOeYo?usp=sharing
Appendix 2: Pictorial on Recommended PPE to be used When Attending or Treating Influenza Like Illness (ILI) Patient

**RECOMMENDED PPE TO BE USED WHEN ATTENDING OR TREATING INFLUENZA LIKE ILLNESS (ILI) PATIENT**

**INFLUENZA LIKE ILLNESS (ILI) PATIENT**

**SETTING:** EXAMINATION ROOM/CONSULTATION ROOM

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| History taking / physical examination / providing care | 1) Surgical mask  
2) Gloves  
3) Long-sleeved plastic apron*  
4) Eye protection (face shield/goggles) |

*Change plastic apron and gloves after examination of each patient

**NOTE**

- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.

---

**INFLUENZA LIKE ILLNESS (ILI) PATIENT**

**SETTING:** EXAMINATION ROOM/CONSULTATION ROOM

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Performing Aerosol Generating Procedures (AGP)  
• Intubation  
• Suctioning  
• Nebulization  
• CPR  
• Also when performing oropharyngeal or nasopharyngeal swab | 1) N95 mask  
2) Gloves  
3) Isolation Gown (fluid-repellent long-sleeved gown)  
4) Eye protection (face shield/goggles)  
5) Head cover |

**NOTE**

- Boot cover / shoe cover (ONLY when anticipating spillage and vomiting) - not always necessary
### ANNEX 8

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

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

**HEALTHCARE FACILITIES**

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Direct contact with any patient other than PIUS, Suspected /Probable/Non-Confirmed COVID-19 patient or patient without respiratory symptoms | 1. Surgical mask  
2. *Eye Protection (face shield/ goggles)*  
* If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask. |

**NOTE**
- HCW should maintain at least 1 metre spatial distance when possible.
- HCW should limit the time and frequency of exposure as permissible.
- HCW should perform hand hygiene as per indication.

---

**TRIAGE AREA**

**TARGET:** HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Preliminary screening not involving direct contact with any patient and ABLE TO MAINTAIN 1-2 metres spatial distance at all time | 1. Surgical mask  
2. *Eye protection (face shield/ goggles)*  
*If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.**

**NOTE**
- Use physical barriers (such as glass or plastic windows) to reduce exposure.
- HCW should perform hand hygiene as per indication.
- Patient to fill up the Declaration Form.
- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.
- Alcohol base hand rub should be made available for patient.

---

66
TRIAGE AREA

SETTING: TRIAGE
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary screening not involving direct contact with any patient and UNABLE TO MAINTAIN 1-2 metres spatial distance at all time</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td>2. Long sleeved plastic apron</td>
<td></td>
</tr>
<tr>
<td>3. Gloves</td>
<td></td>
</tr>
<tr>
<td>4. Eye Protection (face shield/goggles)</td>
<td></td>
</tr>
</tbody>
</table>

*Full PPE set must be made available at the site in case of emergency*

NOTE
- Use physical barriers (such as glass or plastic windows) to reduce exposure
- HCW should perform hand hygiene as per indication
- Patient to fill up the Declaration Form
- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow
- Alcohol base hand rub should be made available for patient

---

TRIAGE AREA

SETTING: PATIENT WAITING AREA
TARGET: PATIENT

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient with respiratory symptoms</td>
<td>• Surgical mask</td>
</tr>
</tbody>
</table>

NOTE
- Patient should be seated at the designated area and to sit at least 1 metre apart.
- Waiting area should be well-ventilated

---

ADMINISTRATIVE AREAS / PUBLIC AREAS

SETTING: REGISTRATION AREA / COUNTER
TARGET: ALL STAFF INCLUDING HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any activities not involving direct contact with patient</td>
<td>1. Surgical mask</td>
</tr>
</tbody>
</table>

NOTE
- May use physical barriers (such as glass or plastic windows or face shield) to reduce exposure
- All staff including HCW should maintain at least 1 metre spatial distance when possible.
- All staff including HCW should perform hand hygiene as per indication.
### SECONDARY TRIAGE

**SETTING:** GENERAL PATIENT (E.G. POST-NATAL PATIENT, DM, HPT)

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
- Screening for vital signs

**TYPE OF PPE**
1. Surgical mask
   - *Eye Protection (face shield/goggles)*
2. *If anticipating less than 1 metre spatial distance and when patient is unable to wear face mask.*
3. *Full PPE set must be made available at the site in case of emergency.*

**NOTE**
- HCW should perform hand hygiene as per indication

---

### SECONDARY TRIAGE

**SETTING:** INFLUENZA LIKE ILLNESS (ILI) / FEVER

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
- Screening for vital signs

**TYPE OF PPE**
1. Surgical mask
2. Long sleeved plastic apron
3. Gloves
4. *Eye Protection (face shield/goggles)*

**NOTE**
- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.
- HCW should perform hand hygiene as per indication.

---

### GENERAL EXAMINATION AND TREATMENT ROOM

**SETTING:** EXAMINATION ROOM (E.G. OPD, MCH)

**TARGET:** HEALTHCARE WORKER

**ACTIVITY**
1. History taking and physical examination
2. Other procedures (non-aerosol generating procedure e.g. vaccination, dressing)

**TYPE OF PPE**
1. Surgical mask
   - *Eye Protection (face shield/goggles)*
2. *If anticipating less than 1 metre spatial distance*
3. Gloves whenever indicated

**NOTE**
- HCW should perform hand hygiene as per indication
GENERAL EXAMINATION AND TREATMENT ROOM

SETTING: EXAMINATION ROOM (E.G. OPD, MCH)
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Eye Examination - Fundoscopy machine | 1. Surgical mask  
                                          2. *Eye protection (face shield/goggles) whenever possible |

NOTE
- Patient should be reminded to wear a surgical mask and minimal talking during examination
- If using Fundoscopy machine, use physical barriers (such as breath guard) to reduce exposure
- HCW should perform hand hygiene as per indication

EXAMINATION ROOM/AREA FOR INFLUENZA LIKE ILLNESS (ILI)

SETTING: EXAMINATION ROOM/ AREA
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| History taking and physical examination | 1. Surgical mask  
                                          2. Long sleeved plastic apron  
                                          3. Gloves  
                                          4. Eye Protection (face shield/goggles) |

NOTE
- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow

EXAMINATION ROOM / AREA FOR INFLUENZA LIKE ILLNESS (ILI)

SETTING: EXAMINATION ROOM/ AREA
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Aerosol Generating Procedures (AGP) • Nebulisation | 1. N95 mask  
                                          2. Isolation Gown (fluid-repellent long-sleeved gown)  
                                          3. Long sleeved plastic apron  
                                          4. Gloves  
                                          5. Eye Protection (face shield/goggles)  
                                          6. Head cover |

NOTE
- Boot cover/shoe cover (ONLY when anticipate spillage and vomiting)
EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)

SETTING: EXAMINATION ROOM/ AREA
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking blood for investigation</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2. Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>3. Gloves</td>
</tr>
<tr>
<td></td>
<td>4. Eye Protection (face shield/ goggles)</td>
</tr>
</tbody>
</table>

EXAMINATION ROOM/ AREA FOR INFLUENZA LIKE ILLNESS (ILI)

SETTING: EXAMINATION ROOM/ AREA
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport specimen to lab</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2. Gloves</td>
</tr>
<tr>
<td></td>
<td>3. Plastic apron (optional)</td>
</tr>
</tbody>
</table>

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

SETTING: ISOLATION/ DESIGNATED AREA
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vital sign, history taking and physical examination</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2. Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td>3. Long sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>4. Gloves</td>
</tr>
<tr>
<td></td>
<td>5. Eye Protection (goggles / face shield)</td>
</tr>
</tbody>
</table>

**NOTE**
- Patient should be reminded to wear a surgical mask (if tolerable). If not tolerable due to medical condition, advise the patient to cover nose and mouth during coughing or sneezing with tissue or flexed elbow.
- Shoe cover / boot cover are not necessary (ONLY when anticipate spillage and vomiting).
- It is sufficient to change gloves and plastic apron between patients. Any soiled protective equipment’s should also be changed.
ISOLATION / DESIGNATED AREA FOR PERSON UNDER SURVEILLANCE (PUS), SUSPECTED OR PROBABLE

SETTING: ISOLATION / DESIGNATED AREA
TARGET: HEALTHCARE WORKER

**ACTIVITY**
- Aerosol Generating Procedures (AGP)
  - Intubation, extubation and related procedures;
  - Manual ventilation;
  - Suctioning;
  - Nebulization

**TYPE OF PPE**
1. N95 mask
2. Isolation Gown (fluid-repellent long-sleeved gown)
3. Long sleeved plastic apron
4. Gloves
5. Eye Protection (face shield/goggles)
6. Head cover
7. Boot cover/Shoe cover

---

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

SETTING: SAMPLE COLLECTION AREA
TARGET: HEALTHCARE WORKER

**ACTIVITY**
- Performing oropharyngeal or nasopharyngeal swab

**TYPE OF PPE**
1. N95 mask
2. Isolation Gown (fluid-repellent long-sleeved gown)
3. Long sleeved plastic apron
4. Gloves
5. Eye Protection (goggles / face shield)
6. Head cover

**NOTE**
- Shoe cover / boot cover are not necessary (ONLY when anticipate spillage and vomiting)
- It is sufficient to change gloves and plastic apron between patients. Any soiled protective equipment should also be changed

---

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

SETTING: SAMPLE COLLECTION AREA
TARGET: HEALTHCARE WORKER

**ACTIVITY**
- Assisting oropharyngeal or nasopharyngeal swab

**TYPE OF PPE**
1. N95 mask
2. Isolation Gown (fluid-repellent long-sleeved gown)
3. Gloves
4. Eye Protection (face shield/goggles)
5. Head cover

**NOTE**
- Shoe cover / boot cover are not necessary (ONLY when anticipate spillage and vomiting)
**ANNEX 8**

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

**SETTING : SAMPLE COLLECTION AREA**

**TARGET : HEALTHCARE WORKER**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Transport specimen to lab | 1. Surgical mask  
2. Gloves  
3. Plastic apron (optional) |

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Performing RTK-Ab testing | 1. Surgical mask  
2. Gloves  
3. Eye protection (face shield/goggles)  
4. Plastic apron (optional) |

**AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) PATIENT**

**SETTING : AMBULANCE TRANSFER VEHICLE**

**TARGET : HEALTHCARE WORKER**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| Transporting PUS/Suspected/Probable/ILI patient to the referral healthcare facility | 1. N95 mask  
2. Isolation Gown (fluid-resistant long-sleeved gown)  
3. Gloves  
4. Eye Protection (face shield/goggles)  
5. Head cover  
6. Shoe covers/Boot cover are not necessary |

**NOTE**

- Windows should be kept open throughout the drive (about 3cm only)
- Use air conditioner with fresh air intake mode
- If windows cannot be opened, use fan
- Healthcare worker wearing arrangement (Figure 1)

A & B: When patient is not in distress  
C: When patient requires oxygen support/ intervention

**Figure 1: Ambulance**
AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) PATIENT

SETTING : AMBULANCE TRANSFER VEHICLE
TARGET : DRIVER

ACTIVITY
- Involved in driving the patient with PUS/Suspected/Probable/ILI BUT NO direct contact with patient

TYPE OF PPE
- 1. Surgical mask/ N95 mask (based on Risk Assessment*)

NOTE
- Windows should be kept open throughout the drive (about 3cm only)
- Use air conditioner with fresh air intake mode
- Driver should maintain at least 1 metre spatial distance when possible
- Driver should perform hand hygiene as per indication
- Risk assessment* includes:
  - Patient condition
  - Ambulance ventilation

---

AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) PATIENT

SETTING : AMBULANCE TRANSFER VEHICLE
TARGET : DRIVER

ACTIVITY
- Involved in driving the patient with PUS/Suspected/Probable/ILI and involved in loading and unloading of patients

TYPE OF PPE
- 1. Surgical mask / N95 mask (based on Risk Assessment*)
- 2. Isolation Gown (fluid-repellent long-sleeved gown) OR long-sleeved plastic apron
- 3. Gloves
- 4. Eye Protection (face shield/goggles)

NOTE
- If the driver is involved in loading and unloading of patients, he should always maintain at foot end of stretcher and perform hand hygiene as per indication
- Windows should be kept open throughout the drive (about 3cm only)
- Use air conditioner with fresh air intake mode
- Risk assessment* includes:
  - Patient condition
  - Ambulance ventilation

---

AMBULANCE TRANSFER OF PUS/SUSPECTED/PROBABLE/INFLUENZA LIKE ILLNESS (ILI) PATIENT

SETTING : AMBULANCE TRANSFER VEHICLE
TARGET : HEALTHCARE WORKER

ACTIVITY
- Decontamination of ambulance

TYPE OF PPE
- 1. Surgical mask
- 2. Long sleeved plastic apron
- 3. Gloves
- 4. Eye protection (face shield/goggles)
- 5. Boots or closed shoes
LABORATORY

SETTING : LABORATORY
TARGET : LAB TECHNICIAN

ACTIVITY
Handling specimen

TYPE OF PPE
1. Surgical mask
2. Long sleeved plastic apron
3. Gloves (2 layer)
4. Eye protection (face shield/goggles)
5. Close shoe/shoe cover

PHARMACY

SETTING : SATELLITE PHARMACY AT ILI AREA
TARGET : PHARMACIST

ACTIVITY
Dispensing medication to patient

TYPE OF PPE
1. Surgical mask
2. Long sleeved plastic apron
3. "Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1 – 2 metres distance

NOTE
✓ Pharmacist should perform hand hygiene as per indication
ANNEX 8

PHARMACY

SETTING: GENERAL PHARMACY
TARGET: PHARMACIST

TYPE OF PPE
1. Surgical mask
2. *Eye protection (face shield/goggles) if there is no physical barrier or unable to maintain 1 – 2 metres distance

NOTE
- Pharmacist should perform hand hygiene as per indication

CLEANING & DISINFECTION

SETTING: ISOLATION / TREATMENT ROOM / DESIGNATED AREA
TARGET: HEALTHCARE WORKER

TYPE OF PPE
1. Surgical mask
2. Long sleeved plastic apron
3. Gloves
4. Eye protection (face shield/goggles)
5. Boots or closed shoes

HOME VISIT

SETTING: HOME VISIT
TARGET: HEALTHCARE WORKER

TYPE OF PPE
1. Surgical mask
2. *Eye protection (face shield/goggles) if necessary
*Long sleeved plastic apron, face shield and gloves should be made available

NOTE
- HCW should maintain 1-2 metres spatial distance with patient’s relatives
- HCW should perform hand hygiene as per indication
- Patient to fill up the Patient Declaration Form (Appendix 6)

Pictorial can be downloaded from the link below:
https://drive.google.com/drive/folders/1AG3nD_R0K3D84pZAQMJ1RQhSnBKFOeYo?usp=sharing
Appendix 4: Pictorial on Recommended PPE to be Used in District Health Office (DHO) Activities

Recommended PPE to be Used in District Health Office Activities

RAPID ASSESSMENT TEAM (RAT)/RAPID RESPONSE TEAM (RRT)

SETTING: COMMUNITY
TARGET: HEALTHCARE WORKER/INVESTIGATOR TEAM

ACTIVITY
In-person interview of suspected/probable/confirmed COVID-19 patients without direct contact

TYPE OF PPE
1. Surgical Mask
2. Eye Protection (face shield/goggles)
3. Gloves

** Full PPE set must be made available in case of emergency

NOTE:
- HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.
- 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.

RAPID ASSESSMENT TEAM (RAT)/RAPID RESPONSE TEAM (RRT)

SETTING: COMMUNITY
TARGET: HEALTHCARE WORKER/INVESTIGATOR TEAM

ACTIVITY
In-person interview with asymptomatic contacts (PUS) of COVID-19 patients

TYPE OF PPE
1. Surgical Mask
2. Eye Protection (face shield/goggles)
3. Gloves

** Full PPE set must be made available in case of emergency

NOTE:
- HCW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.
- 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.
ANNEX 8

SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER

SETTING: HOME VISIT
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuing the order and daily</td>
<td>1. Surgical Mask</td>
</tr>
<tr>
<td>monitoring</td>
<td>2. Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>3. Gloves</td>
</tr>
</tbody>
</table>

**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.

SERVING HOME SURVEILLANCE ORDER/RELEASE ORDER

SETTING: HOME VISIT
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove PUS wrist band upon release order/HCW early return to work.</td>
<td>1. Surgical Mask</td>
</tr>
<tr>
<td></td>
<td>2. Eye Protection (face shield/goggles)</td>
</tr>
</tbody>
</table>

**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

SETTING: OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing oropharyngeal or</td>
<td>1. N95 mask</td>
</tr>
<tr>
<td>nasopharyngeal swab</td>
<td>2. Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td>3. Long-sleeved plastic apron</td>
</tr>
<tr>
<td></td>
<td>4. Gloves</td>
</tr>
<tr>
<td></td>
<td>5. Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>6. Head cover</td>
</tr>
</tbody>
</table>

**NOTE**
- Breathe cover/shoe cover (ONLY when anticipate spillage and vomiting).

*It is sufficient to change gloves and plastic apron between patients. Any soiled protective equipment’s should also be changed.*
COVID-19 SAMPLING

SETTING: OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisting oropharyngeal or nasopharyngeal swab</td>
<td>1. N95 mask</td>
</tr>
<tr>
<td></td>
<td>2. Isolation Gown (fluid-repellent long-sleeved gown)</td>
</tr>
<tr>
<td></td>
<td>3. Gloves</td>
</tr>
<tr>
<td></td>
<td>4. Eye Protection (face shield/goggles)</td>
</tr>
<tr>
<td></td>
<td>5. Head cover</td>
</tr>
</tbody>
</table>

NOTE
- Boot cover/shoe cover (ONLY when anticipate spillage and vomiting).

COVID-19 SAMPLING

SETTING: OUTSIDE HEALTH CLINIC SETTING E.G. AT EMCO AREAS, TARGETED GROUP SCREENING ETC.
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport specimen to lab</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2. Gloves</td>
</tr>
<tr>
<td></td>
<td>3. Plastic apron (optional)</td>
</tr>
</tbody>
</table>

COMMUNITY OUTREACHED PROGRAM

SETTING: HEALTH PROMOTIONAL ACTIVITY
TARGET: HEALTHCARE WORKER

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known or suspected community transmission</td>
<td>1. Surgical mask</td>
</tr>
<tr>
<td>Sporadic transmission or clusters of COVID-19 cases</td>
<td>2. Eye Protection (face shield/goggles)</td>
</tr>
</tbody>
</table>

NOTE
- HOW should maintain spatial distance of at least 1 meter when possible and perform hand hygiene as per indication.
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**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| 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**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administering the vaccine</td>
<td>1) Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2) Eye protection (face shield/goggle) (optional)</td>
</tr>
<tr>
<td></td>
<td>3) Plastic apron</td>
</tr>
<tr>
<td></td>
<td>4) Gloves (when indicated)</td>
</tr>
</tbody>
</table>

**NOTE**

- Hand hygiene should be performed in both situations 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

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TYPE OF PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of vaccination and observation of client post vaccine administration</td>
<td>1) Surgical mask</td>
</tr>
<tr>
<td></td>
<td>2) Eye protection (face shield/goggle) (optional)</td>
</tr>
<tr>
<td></td>
<td>3) Plastic apron</td>
</tr>
</tbody>
</table>

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

**HOW TO WEAR A MEDICAL MASK SAFELY**

**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.
### ANNEX 8

**Appendix 7: COVID-19 Declaration Form for Patient/Carer**

**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)**

<table>
<thead>
<tr>
<th>A. HUBUNGAN EPIDEMIOLOGI</th>
<th>Ya</th>
<th>Tidak</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3, Adakah anda bekerja di mana-manfa 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:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4, Adakah anda mempunyai kaitan dengan mana-manfa kluster COVID-19 dalam tempoh masa 14 hari sebelum gejala bermula?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5, Adakah anda merupakan <strong>kontak rapat</strong> kepada individu yang disahkan positiv COVID-19 dalam masa 14 hari Jika YA, sila jawab soalan a hingga c:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Menaiki kenderaan yang sama dengan individu yang disahkan positiv COVID-19.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Tinggal serumah dengan individu yang disahkan positiv COVID-19.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. GEJALA**

<table>
<thead>
<tr>
<th></th>
<th>Ya</th>
<th>Tidak</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Demam (fever)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Batuk (cough)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Kelesuan (general weakness) / Keletihan (fatigue)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Sakit kepala (headache)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Sakit badan (myalgia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Sakit tekak (sore throat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Coryza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Sesak nafas (dyspnea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Anorexia / Loya (nausea) / Muntah-muntah (vomiting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Ciri-ciri (diarrhoea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Perubahan status mental (altered mental status)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Hilang deria bau secara tiba-tiba (sudden loss of smell/anosmia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Hilang deria rasa secara tiba-tiba (sudden loss of taste/ arguesia)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUHU: _____ °C**

<table>
<thead>
<tr>
<th>Tandatangan Pesakit/Penjaga:</th>
<th>Tandatangan Anggota Kesihatan Yg Menyaring:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nama: ____________________</td>
<td>Nama: ____________________</td>
</tr>
<tr>
<td>No. Kad Pengenalan: _______</td>
<td>No. Kad Pengenalan: __________</td>
</tr>
<tr>
<td>Tarih: ___________</td>
<td>Tarih: ___________</td>
</tr>
</tbody>
</table>

**HENTIKAN COVID-19!**

*KEJURUAN ANDA BOLEH MENYELAMATKAN RAMAI NYAWA Termasuk ANGGOTA KESIHATAN. PASTIKAN ANDA MENDAFTAR DI DALAM MySejahtera*
ANNEX 8

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)

A. EPIDEMIOLOGICAL LINK

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>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:</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Linked to a COVID-19 cluster within the past 14 days prior to sign and symptom onset.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Close contact to a confirmed case of COVID-19, within 14 days before onset of illness. If yes, please answer questions a to c:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Working together in close proximity or sharing the same classroom environment with a with COVID-19 patient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Traveling together with COVID-19 patient in any kind of conveyance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Living in the same household as a COVID-19 patient</td>
<td></td>
</tr>
</tbody>
</table>

B. SYMPTOMS

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fever</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cough</td>
<td>9</td>
<td>Anorexia / Nausea / Vomiting</td>
</tr>
<tr>
<td>3</td>
<td>General weakness /Fatigue</td>
<td>10</td>
<td>Diarrhea</td>
</tr>
<tr>
<td>4</td>
<td>Headache</td>
<td>11</td>
<td>Altered mental status</td>
</tr>
<tr>
<td>5</td>
<td>Myalgia</td>
<td>12</td>
<td>Sudden loss of smell (Anosmia)</td>
</tr>
<tr>
<td>6</td>
<td>Sore throat</td>
<td>13</td>
<td>Sudden loss of taste (Ageusia)</td>
</tr>
<tr>
<td>7</td>
<td>Coryza</td>
<td></td>
<td>TEMPERATURE</td>
</tr>
</tbody>
</table>

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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REFERENCES

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