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# Novel Corona Virus Infection Response Guideline 2020



Health protection Agency  
Ministry of Health  
Maldives

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## Introduction

On 31 December 2019, WHO was alerted to several cases of pneumonia in Wuhan City, Hubei Province of China. The virus did not match any other known virus. This raised concern because when a virus is new, we do not know how it affects people.

One week later, on 7 January, Chinese authorities confirmed that they had identified a new virus. The new virus is a coronavirus, which is a family of viruses that include the common cold, and viruses such as SARS and MERS. This new virus was temporarily named “2019-nCoV.”

WHO has been working with Chinese authorities and global experts from the day we were informed, to learn more about the virus, how it affects the people who are sick with it, how they can be treated, and what countries can do to respond.

Because this is a coronavirus, which usually causes respiratory illness, WHO has advice to people on how to protect themselves and those around them from getting the disease.

### **This Guideline is divided into 4 major volumes**

Section 1: Infection Prevention and Control (IPC) for Novel Coronavirus

Section 2: Guidelines Suspected cases of Novel Corona Virus, for Tourist Establishments (Resorts/Guest Houses)

Section 3: Suspected case identified in an island

Section 4: Surveillance Guideline for the Novel Corona Virus at the Points of Entry

# Section 1: Infection Prevention and Control (IPC) for Novel Coronavirus

Adapted from WHO Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected (Interim guidance) January 2020. [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected)

## PART A

### CASE DEFINITION

**IF the patient fits criteria A or B, it is a suspected novel Corona virus patient.**

- A. Patients with severe acute respiratory infection ( $\geq 38^{\circ}\text{C}$ ,  $100.4^{\circ}\text{F}$  fever, cough, and requiring admission to hospital), **AND** with no other etiology that fully explains the clinical presentation<sup>1</sup> **AND** at least one of the following:

- a history of travel to or residence in China in the 14 days prior to symptom onset,
- or
- patient is a health care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.

(Fits the case definition, case will be isolated and treated, sample will be collected for testing)

- B. Patients with any acute respiratory illness with symptoms like ( $\geq 38^{\circ}\text{C}$ ,  $100.4^{\circ}\text{F}$  fever, cough, runny nose, sore throat or breathing difficulty) **AND** at least one of the following:

- close contact with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset,
- or
- visiting or working in a live animal market in China in the 14 days prior to symptom onset,
- or
- worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCoV infections have been reported.
  - Visited Hubei in the last 14 days

(Fits the case definition, case will be isolated and treated, sample will be collected for testing)

C. Patients with any acute respiratory illness **AND** has travel history of visiting China within the last 14 days (DOES NOT fit the case definition as a suspected nCoV but will still be advised to stay at home, limit outside contact, not share any personal use items (like clothes, towels, and utensils), until the symptoms are gone. If condition worsens and patient gets admitted, patient will now fit the case definition as outlined in point A)

## IPC in health care facility

### Principles of infection prevention and control strategies associated with health care

#### suspected nCoV

IPC strategies to prevent or limit infection transmission in health-care settings include the following:

1. Early recognition and source control
2. Application of Standard Precautions for all patients
3. Implementation of empiric additional precautions (droplet and contact and whenever applicable airborne precautions) for suspected cases

### **Early recognition and source control**

- 1.1. ER triage and rapid identification of at risk patients (from screening questionnaire/ self-reporting)
- 1.2. Educate and Promote respiratory hygiene with posters in ER/ Wards
- 1.3. Offer medical mask (surgical mask) for suspected nCoV infection for those who can tolerate it (source control) and implement standard and additional precautions as described.

### **Standard Precautions assume that every person is potentially infected all**

- 1.4. Educate patient on good respiratory hygiene
  - Cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others
  - Perform hand hygiene after contact with respiratory secretions.
- 1.5. Hand hygiene using soap and water or using alcohol-based hand rubs.
  - If hands are visibly soiled, use soap and water and not alcohol-based hand rubs.
  - Health care worker (HCW) should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of personal protective equipment, including gloves. Hand hygiene in healthcare settings can be performed by washing with soap and water or using alcohol-based hand rubs. If hands are visibly soiled, use soap and water, not alcohol-based hand rubs.
- 1.6. Personal protective equipment if at risk of exposure to potentially infectious materials in any patient (contact with blood or body fluids)
  - Gloves
    - Wear gloves for any contact with potentially infectious material.
    - Remove gloves after contact, followed by hand hygiene.
    - Do not wear the same pair of gloves for care of more than one patient.
    - Do not wash gloves for the purpose of reuse.
  - Gowns
    - Remove gown and perform hand hygiene before leaving the patient's environment.
    - Do not wear the same gown for care of more than one patient
    - Wear gowns for any patient-care activity when contact with blood, body fluids, secretions (including respiratory), or excretions is anticipated.
  - Ensure proper environmental cleaning and disinfection

## **Implementation of additional precaution for suspected nCoV**

### **1.7. Droplet and Contact precaution by family members, visitors and HCWs**

#### **Surgical mask/medical mask with eye protection (goggles or face shield), fluid resistant gowns and gloves**

- Place patients in adequately ventilated single rooms or if this is not possible cohort patient with other suspected patients in an adequately ventilated ward
- Place beds at least 1 meter apart (3 feet)
- Where possible, cohort HCWs to exclusively care for cases (to reduce the risk of spreading transmission due to inadvertent infection control breaches)
- Use a medical mask with eye/facial protection (goggles or face shield)
- Use a gloves and gowns (clean, non-sterile, long-sleeved fluid resistant gown)
- Use either single use disposable equipment or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect between each patient use (e.g. ethyl alcohol 70%);
- Refrain from touching eyes, nose or mouth with potentially contaminated hands;
- Avoid the movement and transport of patients out of the room or area unless medically necessary.
- If possible, use designated portable X-ray equipment and/or other important diagnostic equipment. If transport is required, use pre-determined transport routes to minimize exposures to staff, other patients and visitors and apply medical mask to patient;
- Ensure that HCWs who are transporting patients
- Wear appropriate PPE as described in this section and perform hand hygiene;
- Notify the receiving area of necessary precautions as soon as possible before the patient's arrival;
- Routinely clean and disinfect patient-contact surfaces;
- Limit the number of HCWs, family members and visitors in contact with a patient with suspected nCoV infection;
- Maintain a record of all persons entering the patient's room including all staff and visitors.



## Contact and Droplet Precaution

(non aerosol generating procedures)



### 1.8. Additional airborne precaution required if using aerosol generating procedures

- Aerosol generating procedures: **Tracheal intubation, non-invasive ventilation, Tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation and bronchoscopy**
- Use N95 mask, when putting on a disposable particulate respirator, always perform the seal-check. (Note that if the wearer has facial hair (beard) this can prevent a proper respirator fit).
- Eye protection (i.e. goggles or a face shield);
- Clean, non-sterile, long-sleeved gown and gloves; If gowns are not fluid resistant, use a waterproof apron for procedures with expected high fluid volumes that might penetrate the gown
- Perform procedures in an adequately ventilated room; i.e. at least natural ventilation with at least 160 l/s/patient air flow or negative pressure rooms with at least 12 air changes per hour (ACH) and controlled direction of air flow when using mechanical ventilation
- Limit the number of persons present in the room to the absolute minimum required for the patient's care and support.



**Put on a fit-tested N-95 or higher level respirator before room entry.**



**Remove respirator after exiting the room and closing the door.**

**Door to room must remain closed.**



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## Contact and Airborne

(Aerosol generating procedures like intubation)




**Clean their hands, including before entering and when leaving the room.**

**PROVIDERS AND STAFF MUST ALSO:**



**Put on gloves before room entry. Discard gloves before room exit.**



**Put on gown before room entry. Discard gown before room exit.**

**Do not wear the same gown and gloves for the care of more than one person.**



**Use dedicated or disposable equipment. Clean and disinfect reusable equipment before use on another person.**



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Duration of additional precaution is till their symptoms are resolved based on either clinical and/or laboratory findings (two negative RT-PCR tests at least 24 hours apart)

**Note:**

Aerosol-generating procedures (AGP) are procedures that stimulate coughing and promote the generation of aerosols. Additional infection prevention and control precautions are required for some AGP where an increased risk of infection has been identified.

APGs include: Intubation, manual ventilation, Non-invasive ventilation (e.g., BiPAP, BPAP), tracheostomy insertion, Open respiratory and airway suctioning, sputum induction, cardiopulmonary resuscitation.

Nebulisation is no longer considered an AGP but patients receiving nebulisation should be placed in a single room.

Chest physiotherapy is not considered an AGP but a surgical mask should be worn by the patient if tolerated and HCWs should wear PPE as recommended for routine care during the procedure.

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## PART B

### Collection and handling of laboratory specimens from patients with suspected nCoV

1. Ensure that HCWs who collect specimens use appropriate PPE (eye protection, medical mask, long-sleeved gown, gloves).
2. If the specimen is collected under **aerosol generating procedure**, personnel should wear a particulate respirator like **N95 mask** with eye protection, gowns (fluid resistance), gloves.
3. Ensure that all personnel who transport specimens are trained in safe handling practices and spill decontamination procedures.
4. Place specimens for transport in leak-proof specimen bags (secondary container) that have a separate sealable pocket for the specimen (i.e. a plastic biohazard specimen bag), with the patient's label on the specimen container (primary container), and a clearly written laboratory request form.
5. Ensure that health-care facility laboratories adhere to appropriate biosafety practices and transport requirements according to the type of organism being handled.
6. Deliver all specimens by hand whenever possible.
7. **DO NOT** use pneumatic-tube systems to transport specimens.
8. Document patients full name, date of birth of suspected nCoV of potential concern clearly on the accompanying laboratory request form. Notify the laboratory as soon as possible that the specimen is being transported.

## How to put on and remove PPE

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

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

#### 1. GOWN

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



#### 2. MASK OR RESPIRATOR

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



#### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



#### 4. GLOVES

- Extend to cover wrist of isolation gown



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

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

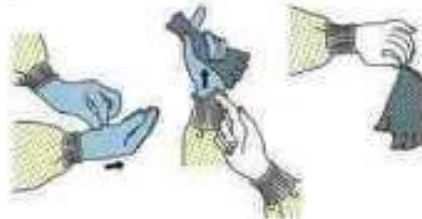


## HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

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

### 1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer.
- Using a gloved hand, grasp the wrist area of the other gloved hand and peel off first glove.
- Hold removed glove in gloved hand.
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove.
- Discard gloves in an infectious\* waste container.



### 2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer.
- Remove goggles or face shield from the back by lifting head band or ear pieces.
- If the lens is reusable, place in designated receptacle for reprocessing. Otherwise, discard in an infectious\* waste container.



### 3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer.
- Undo gown ties, taking care that sleeves don't contact your body when reaching for ties.
- Pull gown away from neck and shoulders, touching inside of gown only.
- Turn gown inside out.
- Fold or roll into a bundle and discard in an infectious\* waste container.



### 4. MASK OR RESPIRATOR

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



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



\* An infectious waste container is used to dispose of PPE that is potentially contaminated with Ebola virus.

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



## PART C

### Home care of patients suspected of nCoV

WHO recommends that suspected cases of 2019- nCoV infection be isolated and monitored in a hospital setting. This would ensure both safety and quality of health care (in case patients' symptoms worsen) and public health security.

However, for several possible reasons, including situations when inpatient care is unavailable or unsafe (i.e. limited capacity and resources unable to meet demand for healthcare services), or in a case of informed refusal of hospitalization, alternative settings<sup>1</sup> for health care provision may need to be considered.

If such a reason exists, patients with mild symptoms and without underlying chronic conditions such as lung or heart disease, renal failure, or immunocompromising conditions that place him/her at increased risk of developing complications may be cared for in the home environment. Mild symptoms is defined as Low-grade fever, cough, malaise, rhinorrhoea, sore throat without any warning signs, such as shortness of breath or difficulty in breathing, increased respiratory (i.e. sputum or haemoptysis), gastro-intestinal symptoms such as nausea, vomiting, and/or diarrhea and without changes in mental status (i.e. confusion, lethargy).

The same principle of care in the home environment applies to symptomatic patients no longer requiring hospitalization. This decision requires careful clinical judgment and should be informed by assessing the safety of the patient's home environment.

1. Ensure a link with health care provider. Give a number to call in case of emergency and Health care personnel should be involved in reviewing the current health status for the progression of symptoms of contacts by phone and if feasible, by face-to-face visits on a regular (e.g. daily basis, performing specific diagnostic tests as necessary).
2. Educate the patient and the household members on personal hygiene, basic infection prevention and control measures, on how to care for the suspected infected member of the family as safely as possible, and to prevent spread of infection to household contacts. The patient and family should be provided with ongoing support, education and monitoring.
  - Place the patient in a well-ventilated single room.
  - Limit the number of caretakers of the patient, ideally assign one person who is in a good health without risk conditions. No visitors.
  - Household members should stay in a different room or, if that is not possible, maintain a distance of at least 1 m from the ill person (e.g. sleep in a separate bed).

(An exception may be considered for a breastfeeding mother. Considering the benefits of breastfeeding and insignificant role of the breast milk in transmission of other respiratory viruses, the mother could continue breastfeeding. The mother should wear a medical mask when she is near her baby and perform careful hand hygiene before close contact with the baby. She would need also to apply the other hygienic measures described in this document).

- Limit the movement of the patient and minimize shared space. Ensure that shared spaces (e.g. kitchen, bathroom) are well ventilated (e.g. keep windows open).
- The caregiver should wear a medical/surgical mask fitted tightly to the face when in the same room with the ill person.
- Masks should not be touched or handled during use. If the mask gets wet or dirty with secretions, it must be changed immediately. Discard the mask after use and perform hand hygiene after removal of the mask.
- Perform hand hygiene following all contact with ill persons or their immediate environment.
- Hand hygiene should also be performed before and after preparing food, before eating, after using the toilet, and whenever hands look dirty.
- If hands are not visibly soiled, alcohol based hand rub can be used. Perform hand hygiene using soap and water when hands are visibly soiled.
- When using soap and water, disposable paper towels/tissue to dry hands is desirable. If not available, use dedicated cloth towels and replace them when they become wet.
- Respiratory hygiene should be practiced by all, especially ill persons, at all times. Respiratory hygiene refers to covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues or flexed elbow, followed by hand hygiene.
- Discard materials used to cover the mouth or nose or clean them appropriately after use (e.g. wash handkerchiefs using regular soap or detergent and water).
- Avoid direct contact with body fluids, particularly oral or respiratory secretions, and stool.
- Use disposable gloves to provide oral or respiratory care and when handling stool, urine and waste.
- Perform hand hygiene before and after removing gloves.
- Gloves, tissues, masks and other waste generated by ill persons or in the care of ill persons should be placed in a lined container in the ill person's room before disposal with other household waste.
- Avoid other types of possible exposure to ill persons or contaminated items in their immediate environment (e.g. avoid sharing toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths or bed linen).
- Eating utensils and dishes should be cleaned with either soap or detergent and water after use and may be re-used instead of being discarded.
- Clean and disinfect frequently touched surfaces such as bedside tables, bedframes, and other bedroom furniture daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
- Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
- Clean clothes, bedclothes, bath and hand towels, etc. of ill persons using regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly.
- Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid direct contact of the skin and clothes with the contaminated materials.

- Use disposable gloves and protective clothing (e.g. plastic aprons) when cleaning or handling surfaces, clothing or linen soiled with body fluids. Perform hand hygiene before and after removing gloves.
- Persons with symptoms should remain at home until their symptoms are resolved based on either clinical and/or laboratory findings (two negative RT-PCR tests at least 24 hours apart).
- All household members should be considered contacts and their health should be monitored as described below.
- If a household member develops symptoms of acute respiratory infection, including fever, cough, sore throat and difficult breathing, need to call the given number.

## Management of contacts

Persons (including health care workers) who may have been exposed to individuals with suspected 2019-nCoV infection should be advised to monitor their health for 14 days from the last day of possible contact and seek immediate medical attention if they develop any symptoms, particularly fever, respiratory symptoms such as coughing or shortness of breath, or diarrhoea.

1. Notify the receiving medical facility that a symptomatic contact will be coming to their facility.
2. While traveling to seek care, the ill person should wear a medical mask.
3. Avoid public transportation to the health care facility, if possible; call an ambulance or transport the ill person with a private vehicle and open the windows of the vehicle if possible.
4. The ill contact should be advised to always perform respiratory hygiene and hand hygiene; stand or sit as far away from others as possible (at least 1 m), when in transit and when in the health care facility.
5. Appropriate hand hygiene should be employed by the ill contact and caregivers.
6. Any surfaces that become soiled with respiratory secretions or body fluids during transport should be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).

## **PART D**

### **Suspected case at the Points of Entry**

#### **Suspected case (passenger/crew) identified at the airport on arrival (via thermal scanner/self-reporting to the border health counter)**

##### **Events in order**

1. passenger is identified at the airport on arrival
2. passenger escorted by the border health staff to screening area, put on the mask on the passenger.
3. Clinic doctor checks the passenger for the case definition (see PART A)
4. If the passenger does not fit the case definition criteria then send him/her back to the immigration line, but give the person the information slip.
5. If the suspected case fits the case definition criteria, detain and put a surgical mask on him/her.
6. Inform nCoV Clinic (designated place), get the ambulance
7. Inform the immigration to complete the passport control process.
8. Inform MACL and Customs to clear the passenger's baggage and bring it to the screening area or make arrangements to send it to the nCoV Clinic (designated place)
9. Inform the airline operators and immigration to get the contact tracing information. Name, passport number, seat number, and destination of the passengers sitting in the same row, and the 2 rows in front and 2 rows behind the suspected case.
10. In case of a tourist passenger, inform the destination hotel/resort about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with the cancellation of the bookings and any other necessary details.
11. In case of an expatriate employee, inform the employer about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with any other necessary details.
12. Escort the passenger to the ambulance.
13. A suspected case is said to be handled and over once the checklist is completed. (Checklist is in the annex.

### **IPC measures for the airport staff**

#### **Border health staff who escort and screen the cases at the airport**

1. They should wear disposable latex gloves, surgical masks, and goggles or face shield
2. They should use alcohol based hand sanitizer in-between the examination of suspected cases
3. They should wash their hands and face with soap and water after finish their duty
4. They should wash their hands and face with soap and water after before leaving the terminal area when taking a break

5. They should dispose of the gloves and mask every time they leave their post at the screening area
6. They should wash their hands/ face body with soap and water and dispose of clothes if contaminated by the bodily fluids, blood of the suspected case.
7. All contaminated material must be disposed separately.

#### **Border health staff manning the border health counters at the airport**

1. Should be behind the glass or plastic barrier (which must give them coverage for 7 feet from the floor including the height of the counter) and must wear disposable latex gloves for the duration of their duty.
2. If leaving or taking a break from their duty post they must dispose of the gloves and wash their hands with soap and water or use hand sanitizer.

#### **If an airport staff or a concerned person at the airport calls regarding a potential exposure**

1. Take them to the contact tracing area
2. Tell them to wash their face and hands with soap and water
3. Get the full history of the incident
4. Take their ID card number/passport number/work permit number, Work place (for expatriates), name, age, gender, current residential address, contact number, email address, date of the incident and the date at which the 14-day incubation period is over.
5. Instruct the person to inform the border health hotline (7954333), if they show any of the following symptoms:  
Fever, Cough, runny nose, or breathing difficulty in the last 14 days
6. Reassure the person that it is unlikely that any thing will happen and that in most cases even if the disease develops, it is usually cured within a week or two.

#### **Immigration staff manning the immigration counters at the airport**

1. Should be behind the glass or plastic barrier (which must give them coverage for 7 feet from the floor including the height of the counter) and must wear disposable latex gloves for the duration of their duty.
2. If leaving or taking a break from their duty post they must dispose of the gloves and wash their hands with soap and water.

#### **Custom staff manning the custom counters at the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks and disposable latex gloves if dealing with passengers otherwise wear gloves when inspecting luggage.
3. Avoid passengers who are coughing or sneezing
4. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).

#### **MACL staff manning the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks
3. Avoid passengers who are coughing or sneezing

4. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).

#### **Other organizations and enterprises working at the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks and disposable latex gloves
3. Avoid passengers who are coughing or sneezing
4. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).

#### **Suspected case identified at the airport (from the airport clinic or elsewhere within the airport)**

1. Suspected case is identified at the airport (from the airport clinic or elsewhere within the airport)
2. Suspected case escorted by the border health staff to screening area and put on a surgical mask on the suspected case.
3. Clinic doctor checks the passenger for case definition (see PART A)
4. If the passenger does not fit the case definition criteria, give him/her the information slip proceed with the normal treatment (in a clinic) or instruct the patient to go to a health care facility.
5. If the person fits the case definition criteria, detain him/her.
6. Inform nCoV Clinic (designated place), get the ambulance
7. If it is a departure passenger, inform the immigration and the airline operator agent to delay the departure dates.
8. If the person has luggage with him/her, make arrangements to transfer the luggage to the nCoV Clinic (designated place).
9. If it is a tourist, call the tourism focal point to inform the embassy.
10. In case of an expatriate employee, inform the employer and the embassy, about the detainment of the passenger.
11. Escort the passenger to the ambulance.

#### **Suspected case identified at the airport (at departure)**

1. Suspected case is identified at the airport departure terminal
2. Suspected case escorted by the border health staff to screening area and put on a surgical mask on the suspected case.
3. Clinic doctor checks the passenger for
4. If the passenger does not fit the case definition criteria then send him/her back departure terminal or check-in counter, but give the person the information slip.
5. If the person fits the case definition criteria, detain and put a surgical mask on the him/her
6. Inform nCoV Clinic (designated place), get the ambulance
7. If it is a departure passenger, inform the immigration and the airline operator agent to delay the departure dates.
8. If the person has luggage with him/her, make arrangements to transfer the luggage to the nCoV Clinic (designated place).

9. If it is a tourist, call the tourism focal point to inform the embassy.
10. In case of an expatriate employee, inform the employer and the embassy, about the detainment of the passenger.
11. Escort the passenger to the ambulance.

### Suspected case identified en route in an airplane

1. Get the situation information from the captain
2. Tell the captain to put a surgical mask (if not available then a normal mask or cover the patients nose and mouth with a cloth) on the passenger.
3. Ask the flight attendants to wash their hands with soap and water.
4. The captain announces to all the passengers "Do not be alarmed, we have a passenger who is not feeling well, and we are taking care of him/her. Do not move from your seat, do not use the toilet facilities, we will assess the situation and let you know the appropriate steps to be taken as soon as possible"
5. Checks the sick passenger for case definition (PART A)
6. Identify the passengers in the row where the suspected passenger is seated, and also identify the passengers seated 2 rows in front and 2 rows behind the suspected passenger.
7. Ask the passengers to identify themselves if they have moved from their assigned seats.  
"If you have moved from your assigned seats to another seat please let us know"  
If this involves the row in which the ill patient is in or 2 rows in front or 2 rows behind, then the contact information of the passengers who switched will be needed.
8. Identify the toilets that the suspected passenger used
9. Identify all the passengers who used the same toilet
10. Treat the patient's symptoms,
  - A. Panadol/paracetamol for fever
  - B. Lozenges for cough
  - C. Plenty of fluids
11. Ask the passengers if they have used the same toilet as the suspected patient and collect their contact information

Contact Information form		
Seat number		
Name		
Address		
Country of residence		
Mailing address		
Email address (if any)		
Contact number (if any)		
Transit airports		
Countries visited in the last 14 days		
Have you visited Hubei province in china within the last 14 days	YES	NO

## **In-flight/ sea vessel announcements for those flights/vessels travelling to Maldives (any port)**

The Pilot of all aircrafts in-bound to Maldives must make this announcement 30 minutes after take-off and 30 minutes before landing in Maldives.

“The following are health measures requested by the Health Protection Agency of Maldives. If you have travelled to China within the last 14 days and If you developed any of the following symptoms:

- Fever
- Cough
- Sore throat
- Runny nose
- Breathing difficulty

Please stay in your seat and inform the cabin crew

If you develop any of these symptoms upon arrival, please inform the Border Health desk

If you develop any of these symptoms after arriving in Maldives: Please call the novel Corona Virus HOTLINE: 7377004 and inform them of your symptoms.”

The captains of all sea vessels in-bound to Maldives must make this announcement 30 minutes after setting off and once every 24 hours during the journey and 30 minutes before docking in Maldives. If anyone develops any of the symptoms and fits the criteria, The Border Health of Maldives must be informed as soon as possible.

“The following are health measures requested by the Health Protection Agency of Maldives. If you have travelled to China within the last 14 days and If you developed any of the following symptoms:

- Fever
- Cough
- Sore throat
- Runny nose
- Breathing difficulty

Inform the captain and stay in your cabin

If you develop any of these symptoms while the on-board health inspection is going on, please inform the Border Health officers.

If you develop any of these symptoms after arriving in Maldives: Please call the novel Corona Virus HOTLINE: 7377004 and inform them of your symptoms.”

### **On board management and contact tracing in a quarantined airplane**

This will be done by the border health team. Refer to the “Contact Tracing Guideline For nCoV 2020”

### **Suspected case identified on a sea vessel, en route to Maldives or during the on-board inspection (via thermal scanner/self/captain reports)**

If a case is informed by the ship’s captain:

Before any ship enters the port of maldives

1. Provide a list of ports that the ship had docked at within the last 14 days
2. Provide a list of passengers/crew that have been to China within the last 14 days, and if any of the onboard passengers/crew fit the case definition (see PART A)
3. Place the patient in a well-ventilated single room/cabin.
4. Limit the number of caretakers of the patient, ideally assign one person who is in a good health without risk conditions. No visitors.
5. Identify the passengers sharing the cabin with the suspected passenger, and also identify the passengers who came in contact with the suspected passenger. Fill out the case contact form.
6. Identify the toilets that the suspected passenger used
7. Identify all the passengers who used the same toilet
8. Crew/passengers who share the cabin should stay in a different room or, if that is not possible, maintain a distance of at least 1 m from the ill person (e.g. sleep in a separate bed).

- (An exception may be considered for a breastfeeding mother. Considering the benefits of breastfeeding and insignificant role of the breast milk in transmission of other respiratory viruses, the mother could continue breastfeeding. The mother should wear a medical mask when she is near her baby and perform careful hand hygiene before close contact with the baby. She would need also to apply the other hygienic measures described in this document).
9. Limit the movement of the patient and minimize shared space. Ensure that shared spaces (e.g. kitchen, bathroom) are well ventilated (e.g. keep windows open).
  10. The caregiver should wear a medical/surgical mask fitted tightly to the face when in the same room with the ill person.
  11. Masks should not be touched or handled during use. If the mask gets wet or dirty with secretions, it must be changed immediately. Discard the mask after use and perform hand hygiene after removal of the mask.
  12. Perform hand hygiene following all contact with ill persons or their immediate environment.
  13. Hand hygiene should also be performed before and after preparing food, before eating, after using the toilet, and whenever hands look dirty.
  14. If hands are not visibly soiled, alcohol based hand rub can be used. Perform hand hygiene using soap and water when hands are visibly soiled.
  15. When using soap and water, disposable paper towels/tissue to dry hands is desirable. If not available, use dedicated cloth towels and replace them when they become wet.
  16. Respiratory hygiene should be practiced by all, especially ill persons, at all times. Respiratory hygiene refers to covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues or flexed elbow, followed by hand hygiene.
  17. Discard materials used to cover the mouth or nose or clean them appropriately after use (e.g. wash handkerchiefs using regular soap or detergent and water).
  18. Avoid direct contact with body fluids, particularly oral or respiratory secretions, and stool.
  19. Use disposable gloves to provide oral or respiratory care and when handling stool, urine and waste.
  20. Perform hand hygiene before and after removing gloves.
  21. Gloves, tissues, masks and other waste generated by ill persons or in the care of ill persons should be placed in a lined container in the ill person's room before disposal with other household waste.
  22. Avoid other types of possible exposure to ill persons or contaminated items in their immediate environment (e.g. avoid sharing toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths or bed linen).
  23. Eating utensils and dishes should be cleaned with either soap or detergent and water after use and may be re-used instead of being discarded.
  24. Clean and disinfect frequently touched surfaces such as bedside tables, bedframes, and other bedroom furniture daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
  25. Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
  26. Clean clothes, bedclothes, bath and hand towels, etc. of ill persons using regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly.

27. Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid direct contact of the skin and clothes with the contaminated materials.
28. Use disposable gloves and protective clothing (e.g. plastic aprons) when cleaning or handling surfaces, clothing or linen soiled with body fluids. Perform hand hygiene before and after removing gloves.
29. Persons with symptoms should remain at in their cabins until their symptoms are resolved or until transferred to a health facility.
30. All crew/passengers who share the cabin should be considered contacts and their health should be monitored as described below.
31. If a crew/passengers develops symptoms of acute respiratory infection, including fever, cough, sore throat and difficult breathing, isolate the crew/passengers like the primary case

When the ship docks in Maldives, before going onboard ensure the following:

32. A screening area should be set up. All passengers and crew are to stay away from this area. The area should be a well ventilated area.
33. All Immigration officers should wear disposable latex gloves when handling the passports and other documents
34. All Customs officers should wear surgical masks, goggles, and disposable latex gloves when handling the baggage or interacting with passengers and crew
35. All border health officers should wear surgical masks, goggles, and disposable latex gloves before interacting with passengers and crew. If a passenger with fever is detected via the thermal scanner or by self-reporting/told by captain. The passenger should be taken to the screening area.
36. Check the sick passenger to see if he/she fits the case definition (see PART A)
37. Identify the cabin, close contacts, and facilities used by the passenger.  
Do a contact tracing of all who entered the cabin or were in close contact with the passenger with the last 14 days (if the travel exceeds or is equal to 14 days).  
Give the person the information slip to all contacts.
38. If the suspected case fits the case definition criteria, detain and put a surgical mask and disposable latex gloves on him/her.
39. Inform nCoV Clinic (designated place), get the ambulance
40. Escort the passenger off the ship.
41. In case of a tourist passenger, inform the tourism focal point and have them inform the embassy and to proceed with the cancellation of the bookings and any other necessary details.
42. In case of a crew member, inform the captain/employer about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with any other necessary details.
43. Escort the passenger to the ambulance.

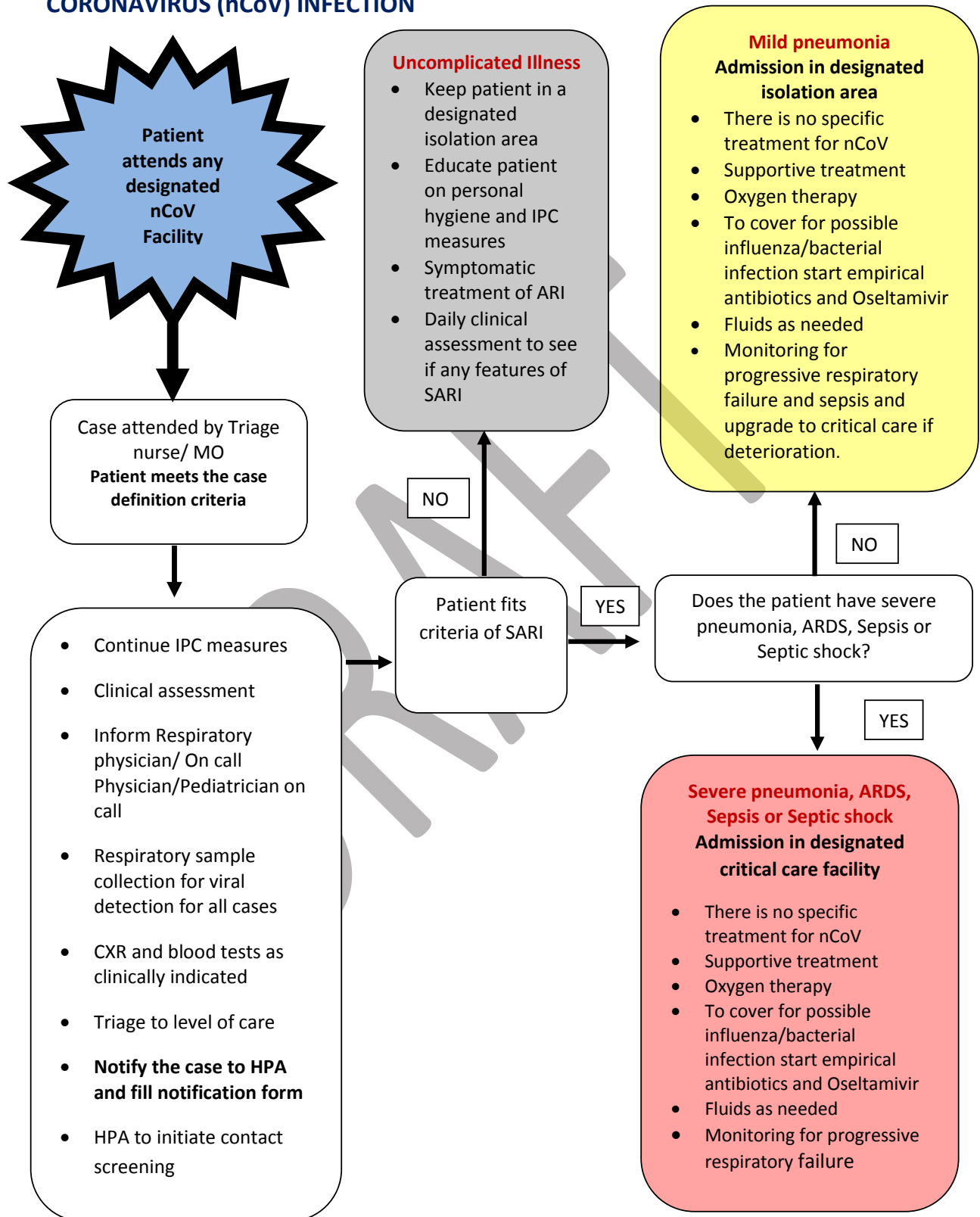
## PART E

### Clinical Management of a Case with Suspected Novel Coronavirus (nCoV) Infection

Surveillance and case definitions nCoV (WHO- 21 Jan2020)	
<b>Suspected case</b>	<p><b>IF the patient fits criteria A or B, it is a suspected novel Corona virus patient.</b></p> <p>A. Patients with severe acute respiratory infection (<math>\geq 38^{\circ}\text{C}</math>, <math>100.4^{\circ}\text{F}</math> fever, cough, and requiring admission to hospital), AND with no other etiology that fully explains the clinical presentation<sup>1</sup> AND at least one of the following:</p> <ol style="list-style-type: none"> <li>1. a history of travel to or residence in China in the 14 days prior to symptom onset,</li> <li>or</li> <li>2. patient is a health care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.</li> </ol> <p>(Fits the case definition, case will be isolated and treated, sample will be collected for testing)</p> <p>B. Patients with any acute respiratory illness with symptoms like (<math>\geq 38^{\circ}\text{C}</math>, <math>100.4^{\circ}\text{F}</math> fever, cough, runny nose, sore throat or breathing difficulty) AND at least one of the following:</p> <ol style="list-style-type: none"> <li>1. close contact with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset,</li> <li>or</li> <li>2. visiting or working in a live animal market in China in the 14 days prior to symptom onset,</li> <li>or</li> <li>3. worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCov infections have been reported.</li> <li>4. Visited Hubei in the last 14 days</li> </ol> <p>(Fits the case definition, case will be isolated and treated, sample will be collected for testing)</p> <p>C. Patients with any acute respiratory illness AND has travel history of visiting China within the last 14 days</p> <p><b>(DOES NOT</b> fit the case definition as a suspected nCoV but will still be advised to stay at home, limit outside contact, not share any personal use items (like clothes, towels, and utensils), until the symptoms are gone. If condition worsens and patient gets admitted, patient will now fit the case definition as outlined in point A)</p>
<b>Probable case</b>	A suspect case for whom testing for 2019-nCoV is inconclusive or for whom testing was positive on a pan-coronavirus assay.

<b>Confirmed case</b>	<b>A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.</b>
<b>Explanations and definitions:</b> <ul style="list-style-type: none"> <li>Epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.</li> <li>SARI: An ARI with history of fever or measured temperature <math>\geq 38^{\circ}\text{C}</math> and cough; onset within the last 14 days; and requiring hospitalization. However, the absence of fever does <b>NOT</b> exclude viral infection.</li> <li>Close contact: <ul style="list-style-type: none"> <li>Health care associated exposure, including providing direct care for nCoV patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment as a nCoV patient.</li> <li>Working together in close proximity or sharing the same classroom environment with a nCoV patient</li> <li>Traveling together with a nCoV patient in any kind of conveyance</li> <li>Living in the same household as a nCoV patient</li> </ul> </li> </ul>	

## ALGORITHM FOR MANAGEMENT OF A CASE WITH SUSPECTED NOVEL CORONAVIRUS (nCoV) INFECTION



## Clinical syndromes associated with nCoV infection

<b>Uncomplicated illness</b>	<p>Low-grade fever, cough, malaise, rhinorrhoea, sore throat <b>without any warning signs</b>, such as shortness of breath or difficulty in breathing, haemoptysis, gastro-intestinal symptoms such as nausea, vomiting, and/or diarrhoea and without changes in mental status (i.e. confusion, lethargy).</p> <p><b>No underlying chronic conditions</b> such as lung or heart disease, renal failure, or immunocompromising conditions</p>
<b>Mild pneumonia</b>	<p>Patient with pneumonia and no signs of severe pneumonia.</p> <p>Child with non-severe pneumonia has cough or difficulty breathing + fast breathing: fast breathing (in breaths/min): &lt;2 months, <math>\geq 60</math>; 2–11 months, <math>\geq 50</math>; 1–5 years, <math>\geq 40</math> and no signs of severe pneumonia.</p>
<b>Severe pneumonia</b>	<p><b>Adolescent or adult:</b> fever or suspected respiratory infection, plus any one of the following:</p> <ul style="list-style-type: none"> <li>• Respiratory rate <math>&gt;30</math> breaths/min</li> <li>• Severe respiratory distress</li> <li>• SpO<sub>2</sub> <math>&lt;90\%</math> on room air (adapted from [1]).</li> </ul> <p><b>Child:</b> Cough or difficulty in breathing, plus at least one of the following: Central cyanosis or SpO<sub>2</sub> <math>&lt;90\%</math> Severe respiratory distress (e.g. grunting, very severe chest indrawing) Signs of pneumonia with a general danger sign: inability to breastfeed or drink, lethargy or unconsciousness, or convulsions.</p>
<b>Acute Respiratory Distress Syndrome</b>	<p><b>Onset:</b> new or worsening respiratory symptoms within one week of known clinical insult.</p> <p><b>Chest imaging</b> (radiograph, CT scan, or lung ultrasound): bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules.</p> <p><b>Origin of oedema:</b> respiratory failure not fully explained by cardiac failure or fluid overload.</p> <p><b>Oxygenation (adults):</b></p> <ul style="list-style-type: none"> <li>• Mild ARDS: <math>200 \text{ mmHg} &lt; \text{PaO}_2/\text{FiO}_2 \leq 300 \text{ mmHg}</math> (with PEEP or CPAP <math>\geq 5 \text{ cmH}_2\text{O}</math>, or non-ventilated)</li> <li>• Moderate ARDS: <math>100 \text{ mmHg} &lt; \text{PaO}_2/\text{FiO}_2 \leq 200 \text{ mmHg}</math> with PEEP <math>\geq 5 \text{ cmH}_2\text{O}</math>, or non-ventilated)</li> <li>• Severe ARDS: <math>\text{PaO}_2/\text{FiO}_2 \leq 100 \text{ mmHg}</math> with PEEP <math>\geq 5 \text{ cmH}_2\text{O}</math>, or non-ventilated</li> </ul>

	<ul style="list-style-type: none"> <li>When PaO<sub>2</sub> is not available, SpO<sub>2</sub>/FiO<sub>2</sub> ≤315 suggests ARDS (including in non-ventilated patients)</li> </ul> <p><b>Oxygenation in Children:</b> (note OI = Oxygenation Index and OSI = Oxygenation Index using SpO<sub>2</sub>):</p> <ul style="list-style-type: none"> <li>Bilevel NIV or CPAP ≥5 cmH<sub>2</sub>O via full face mask: PaO<sub>2</sub>/FiO<sub>2</sub> ≤ 300 mmHg or SpO<sub>2</sub>/FiO<sub>2</sub> ≤264</li> <li>Mild ARDS (invasively ventilated): 4 ≤ OI &lt; 8 or 5 ≤ OSI &lt; 7.5</li> <li>Moderate ARDS (invasively ventilated): 8 ≤ OI &lt; 16 or 7.5 ≤ OSI &lt; 12.3</li> <li>Severe ARDS (invasively ventilated): OI ≥ 16 or OSI ≥ 12.3</li> </ul>
<b>Sepsis</b>	<p><b>Adults:</b> life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction. <b>Signs of organ dysfunction include:</b> altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or lab evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia.</p> <p><b>Children:</b> suspected or proven infection and ≥2 SIRS criteria, of which one must be abnormal temperature or white blood cell count.</p>
<b>Septic shock</b>	<p><b>Adults:</b> persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≥65 mmHg and serum lactate level &gt;2 mmol/L.</p> <p><b>Children:</b> any hypotension (SBP &lt;5th centile or &gt;2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR &lt;90 bpm or &gt;160 bpm in infants and HR &lt;70 bpm or &gt;150 bpm in children); prolonged capillary refill (&gt;2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.</p>

## Infection Prevention and Control (IPC) for Novel Coronavirus January 2020

### Important points for Infection Prevention and Control (IPC):

Medical masks, alcohol-based hand rub/ hand washing facility should be available at the screening facility.

### Patient who presents to the initial screening facility:

- Give medical mask.
- Patient should be seen in an isolated room if available.
- If isolation room not available keep a distance of at least 1 m / 3 feet between patients.
- Advice on good respiratory hygiene.
- Cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others and dispose of used tissues in dustbins.
- Frequent hand hygiene (soap and water or alcohol-based hand-rub).

### Health care workers (HCW) and close contacts:

- Use contact and droplet precaution **within 2 meters /6 feet** of the patient.
- Use medical mask, eye protection (goggles or face shield), gloves and full sleeve gown (fluid resistant gowns/ a plastic apron inside the gown should be used for procedures with expected high fluid volumes that might penetrate the gown)
- Ensure HCW use contact with airborne precaution **when using aerosol generating procedures** (Intubation, manual ventilation, non-invasive ventilation, tracheostomy insertion, open respiratory and airway suctioning, sputum induction, cardiopulmonary resuscitation. Nebulization and chest physio are not considered an AGP. However, HCW should take contact and droplet precautions when administering nebulization.
- Airborne precautions include Respirator (N95 mask), eye protection (goggles or face shield), gloves and gown (use fluid resistant gown of high fluid volume exposure)

### Duration of additional precautions (contact and droplet/airborne precautions)

- Till symptoms resolve based on either clinical and/or laboratory findings (two negative RT-PCR tests at least 24 hours apart)

## Sequence for putting on PPE

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

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

#### 1. GOWN

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



#### 2. MASK OR RESPIRATOR

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



#### 3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



#### 4. GLOVES

- Extend to cover wrist of isolation gown



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

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




## Sequence for removing PPE

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

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


#### 1. GOWN AND GLOVES

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




#### 2. GOGGLES OR FACE SHIELD

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




#### 3. MASK OR RESPIRATOR

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




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



\* An infectious waste container is used to dispose of PPE that is potentially contaminated with EBV virus.

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



## Collection and handling of laboratory specimens from patients with suspected nCoV

Collect specimens from BOTH the upper respiratory tract (Nasopharyngeal and Oropharyngeal) AND lower respiratory tract (Expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) for nCoV testing by RT-PCR.

Clinicians may choose to collect only lower respiratory samples in mechanically ventilated patients.

1. Ensure that HCWs who collect specimens use appropriate PPE (eye protection, medical mask, long-sleeved gown, gloves).
2. If the specimen is collected under **aerosol generating procedure**, personnel should wear a particulate respirator like **N95 mask** with eye protection, gowns (fluid resistant), gloves.
3. Place specimens in a leak proof container (e.g. zip lock bags) for transport (secondary container). Put the patient's label on the specimen container (primary container), and provide a clearly written laboratory request form.
4. Deliver all specimens by hand whenever possible.
5. **DO NOT USE PNEUMATIC-TUBE SYSTEMS TO TRANSPORT SPECIMENS.**
6. Document patients full name, date of birth of suspected nCoV of potential concern clearly on the accompanying laboratory request form. Notify the laboratory as soon as possible that the specimen is being transported.

## Clinical management of patients with SARI

### Early supportive therapy and monitoring

**Treatment of All SARI cases should be under guidance of the respective specialists.**

#### Oxygen therapy

- Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock.
- Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO<sub>2</sub> ≥90% in non-pregnant adults and SpO<sub>2</sub> ≥92-95 % in pregnant patients.
- Children with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive oxygen therapy during resuscitation to target SpO<sub>2</sub> ≥94%; otherwise, the target SpO<sub>2</sub> is ≥90%.

#### Fluids

- Use conservative fluid management in patients with SARI when there is no evidence of shock, because aggressive fluid resuscitation may worsen oxygenation.
- In resuscitation from septic shock in adults, give at least 30 ml/kg of isotonic crystalloid. In resuscitation from septic shock in children give 20 ml/kg as a rapid bolus and up to 40-60 ml/kg in the first 1 hr.
- Perfusion targets include MAP (>65 mmHg or age-appropriate targets in children), urine output (>0.5 ml/kg/hr in adults, 1 ml/kg/hr in children), and improvement of skin mottling, capillary refill, level of consciousness, and lactate.
- Administer vasopressors when shock persists during or after fluid resuscitation (Intra venous Noradrenaline is considered first-line in adult patients)

#### Empiric antimicrobials

- Patients with sepsis should receive antimicrobials within one hour of presentation.
- Empirical antibiotic should be based on the clinical diagnosis (CAP, HAP, or sepsis).
- Empiric therapy should include treatment of influenza
- Should be de-escalated on the basis of microbiology results and clinical judgment.

**Systemic corticosteroids** SHOULD NOT be used routinely for treatment of viral pneumonia or ARDS unless they are indicated for another reason (lack of effectiveness and possible harm).

**Closely monitor patients with SARI for signs of clinical deterioration, such as rapidly progressive respiratory failure and sepsis, and apply supportive care interventions immediately.**

**Consider the patient's co-morbid condition(s) to tailor the management of critical illness.**

**Communicate early with patient and family.**

### **Management of hypoxemic respiratory failure and ARDS**

- Recognize severe hypoxemic respiratory failure when a patient with respiratory distress does not improve with oxygen therapy (Patient may continue to have increased work of breathing or hypoxemia despite high flow oxygen)
- Non-invasive ventilation (NIV) should only be used in selected patients with hypoxemic respiratory failure.
- Patients with hemodynamic instability, multiorgan failure, or abnormal mental status should not receive NIV.
- Patients treated with NIV should be closely monitored for clinical deterioration.
- Endotracheal intubation should be done in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr)

### **Management of patients at Quarantine/Isolation facility or home care**

- Isolate the patient in a well-ventilated single room.
- Breastfeeding mothers can continue breastfeeding. Mother should use a medical mask and all other precautions
- Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing diluted bleach solution (1-part bleach to 99 parts water).
- Clean clothes, bedclothes, bath and hand towels of ill persons with regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly.
- Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid direct contact of the skin and clothes with the contaminated materials.
- Use disposable gloves to provide oral or respiratory care and when handling stool, urine and waste.

- Gloves, tissues, masks and other waste generated by ill persons or in the care of ill persons should be placed in a lined container in the ill person's room before disposal with other household waste.
- Eating utensils and dishes should be cleaned with either soap or detergent and water after use and may be re-used instead of being discarded.
- Clean and disinfect frequently touched surfaces such as bedside tables, bedframes, and other bedroom furniture daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).

### **Management of contacts**

Persons (including health care workers) who may have been exposed to individuals with suspected 2019-nCoV infection should be advised to monitor their health for 14 days from the last day of possible contact and seek immediate medical attention if they develop any symptoms, particularly fever, respiratory symptoms such as coughing or shortness of breath, or diarrhea immediately notify HPA.

- Notify the receiving medical facility that a symptomatic contact will be coming to their facility.
- While traveling to seek care, the ill person should wear a medical mask.
- Avoid public transportation to the health care facility, if possible; transport in a dedicated vehicle and keep the windows of the vehicle open if possible.
- The ill contact should be advised to always perform respiratory hygiene and hand hygiene; stand or sit as far away from others as possible (at least 1 m), when in transit and when in the health care facility.
- Appropriate hand hygiene should be employed by the ill contact and caregivers.
- Any surfaces that become soiled with respiratory secretions or body fluids during transport should be cleaned with soap and water and disinfected with a solution containing regular household diluted bleach (1-part bleach to 99 parts water).

## **Section 2: Guidelines Suspected cases of Novel Corona Virus, for Tourist Establishments (Resorts/Guest Houses)**

If a guest/employee get ill and fits the following criteria, follow the steps given below.

See PART A for case definition

### **Care of guest with suspected illness of novel Corona virus (nCoV) infection**

1. Reassure the guest that everything will be taken care of. If the guest cannot speak English, give him/her the information slip (which has instructions in Chinese/English). Call the Corona virus HOTLINE 7377004 and follow their instructions.
2. Isolate the patient to his/her the room. If the guest doesn't have a room then find a room , which is well ventilated and shift the guest in there.
3. Put a surgical mask or normal mask or cover nose and mouth with a cloth of the guest
4. No one should enter the room in which the guest is kept unless absolutely necessary, and if they do enter the room they should maintain a 3 feet distance or wear a surgical mask, latex disposable gloves and goggles or a face shield. Wash hands and face with soap and water after contact with the guest.
5. Limit the number of caretakers of the patient, ideally assign one person who is in a good health without risk conditions. No visitors.
6. Dispose the masks in a bio hazard bag. Seal it properly and keep them well tagged. Make arrangements with a waste disposal company (like WAMCO) to incinerate the biohazardous waste.
7. Avoid other types of possible exposure to ill persons or contaminated items in their immediate environment (e.g. avoid sharing toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths or bed linen).
8. Eating utensils and dishes used by the guest, should be cleaned with either soap or detergent and water after use and may be re-used by the guest only. Others should not use these, and they should be discarded as biohazard waste.
9. Clean and disinfect frequently touched surfaces such as bedside tables, bedframes, and other bedroom furniture daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
10. Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water).
11. Clean clothes, bedclothes, bath and hand towels, etc. of ill persons using regular laundry soap and water or machine wash at 60–90 °C with common household detergent, and dry thoroughly.

12. Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid direct contact of the skin and clothes with the contaminated materials.
13. Use disposable gloves and protective clothing (e.g. plastic aprons) when cleaning or handling surfaces, clothing or linen soiled with body fluids. Perform hand hygiene before and after removing gloves.
14. Make arrangements to ensure that their staff are in compliance with the Infection Prevention Control (IPC) measures advised for them.
15. Ensure that the areas that the guest came in contact with that may potentially be contaminated are cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).
16. Ensure that all biohazardous waste is properly sealed, tagged and separately handed over to a waste disposal company (like WAMCO) where it should be incinerated.
17. You may give Panadol/paracetamol for symptoms like fever/headache/body aches to the guest. Do not give any other medicines without a doctors advise. Offer plenty of fluids and advise rest to the guest.
18. Send the guest in an ambulance send from the NCoV center through arrangements made through the Corona virus HOTLINE 7377004.

## **Management of contacts**

Persons (including guests and employees) who may have been exposed to individuals with suspected 2019-nCoV infection should be advised to monitor their health for 14 days from the last day of possible contact and call the Corona virus HOTLINE 7377004 (If they do not speak English the establishment must provide a translator to coordinate with the Corona virus HOTLINE 7377004) if they develop any symptoms, particularly fever, respiratory symptoms such as coughing or shortness of breath.

Information slip for contacts (See Annex)

## **Suspected case identified in a resort /guest house**

1. A guest /employee in a resorts gets sick with a respiratory illness:

Check if the guest /employee fits the following criteria:

## **Criteria for a guest at a tourist establishment**

Patients with any respiratory illness (with  $\geq 38^{\circ}\text{C}$ ,  $100.4^{\circ}\text{F}$  fever, and symptoms like cough, sore throat, runny nose or breathing difficulty) **AND** at least one of the following:

- a. close contact with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset,
- b. visiting or working in a live animal market in China in the 14 days prior to symptom onset,
- c. worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCoV infections have been reported.
- d. Visited Hubei (China) within the last 14 days
- e. patient is a health care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.

THIS DOES NOT MEAN THAT THE PATIENT IS A SUSPECTED NOVEL CORONA VIRUS BUT IT IS THE CRITERIA NEEDED FOR CALLING THE HOTLINE (7377004) AND GETTING ADVICE FROM THEM ON HOW TO PROCEED

3. Identify the toilets that the suspected passenger used
4. Identify all the passengers who used the same toilet
5. Treat the patient's symptoms,
  - a. Panadol/paracetamol for fever
  - b. Lozenges for cough
  - c. Plenty of fluids
6. Instruct the guest to put a surgical mask (if not available then a normal mask or cover the patients nose and mouth with a cloth). Politely instruct the guest to stay in his/her room until HPA team comes and assesses the situation or give further instruction is given.
7. Ask the all those who came in contact with the guest or went to the room of the guest to wash their hands with soap and water.
8. Provide a list of countries that the guest had visited within the last 14 days
9. Follow the instructions provided by HPA

## **Section 3: Suspected case identified in an island**

All Health Centers and Atoll Hospitals must have a designated well ventilated isolation area where suspected cases for nCoV can be examined and kept. All the IPC measure explained in the section 1 regarding the health facility must be in place

Any local/ expatriate person who gets sick with a respiratory illness in an island, must seek medical attention from the local Health care facility. As soon as the patient explains the symptoms and travel history;

1. Put a surgical mask on the patient
2. Escort the patient to the isolation area.
3. Health care providers must follow the IPC protocols explained in Section 1.
4. Check if the local/ expatriate person fits the case definition criteria (see PART A)
5. Inform HPA or contact 7377004 (Corona virus HOTLINE)
6. Identify the contacts of the patient since the onset of symptoms. Fill out Contact Information form for suspected case in a Health facility (see Annex)
7. Treat the patient's symptoms,
  - a. Panadol/paracetamol for fever
  - b. Lozenges for cough
  - c. Plenty of fluids
8. Inform nCoV Clinic (designated place), verify the secondary actions to be taken
  - a. Treat in the island Health facility
  - b. Transfer to the NCoV Center
  - c. Transfer to the IGMH Isolation ward
9. If the passenger needs transfer, follow the advice given by the HPA. Call the HOTLINE: 7377004 and get connected with the relevant focal point from HPA

## **Patient Transfer Protocols for Ambulance/Sea ambulance/Helicopters**

### **Standard Precautions**

1. Make sure that the patient keeps on the face mask at all times, unless to vomit or drink fluids.
2. Perform hand hygiene after contact with respiratory secretions.
3. If hands are visibly soiled hand hygiene using soap and water
4. Health care worker (HCW) should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of personal protective equipment, including gloves. Hand hygiene in healthcare settings can be performed by washing with soap and water or using alcohol-based hand rubs. If hands are visibly soiled, use soap and water, not alcohol-based hand rubs.
5. Personal protective equipment should be worn by all people who assist the patient during transfer to the ambulance/sea ambulance. If at risk of exposure to potentially infectious materials in any patient (contact with blood or body fluids) wear the following PPE as needed
  - Surgical mask
    - Wear surgical mask for any contact with potentially infectious material.
    - Remove surgical mask after contact, followed by hand hygiene.
    - Do not wear the same pair of surgical mask after removal.
    - Do not wash surgical mask for the purpose of reuse.
  - Goggles/face shield
    - Wear goggles/face shield for any contact with potentially infectious material.
    - Remove goggles/face shield after contact, followed by hand hygiene.
    - The same pair of goggles/face shield can be reused after disinfecting them (e.g. ethyl alcohol 70%).

- Gloves
  - Wear gloves for any contact with potentially infectious material.
  - Remove gloves after contact, followed by hand hygiene.
  - Do not wear the same pair of gloves for care of more than one patient.
  - Do not wash gloves for the purpose of reuse.
- Gowns
  - Remove gown and perform hand hygiene before leaving the patient's environment.
  - Do not wear the same gown for care of more than one patient
  - Wear gowns for any patient-care activity when contact with blood, body fluids, secretions (including respiratory), or excretions is anticipated.

### **Ambulance/launch/helicopter clean up procedure**

- Preferably use Nitrile gloves box (Small, Medium, Large, Extra-large) before starting any cleaning.
- Ensure proper environmental cleaning and disinfection after patient has been removed from the vehicle
- All biohazardous waste must be cleaned out and disposed of into biohazard bags.
- Use a detergent and bleach (1-part bleach to 99 parts water). A full rub down with a bleach (1-part bleach to 99 parts water). soaked wash cloth (bleach wipe) must be performed. All cleaning wipes and wash clothes must be disposed of in biohazard bag.
- For a more detailed procedure refer to

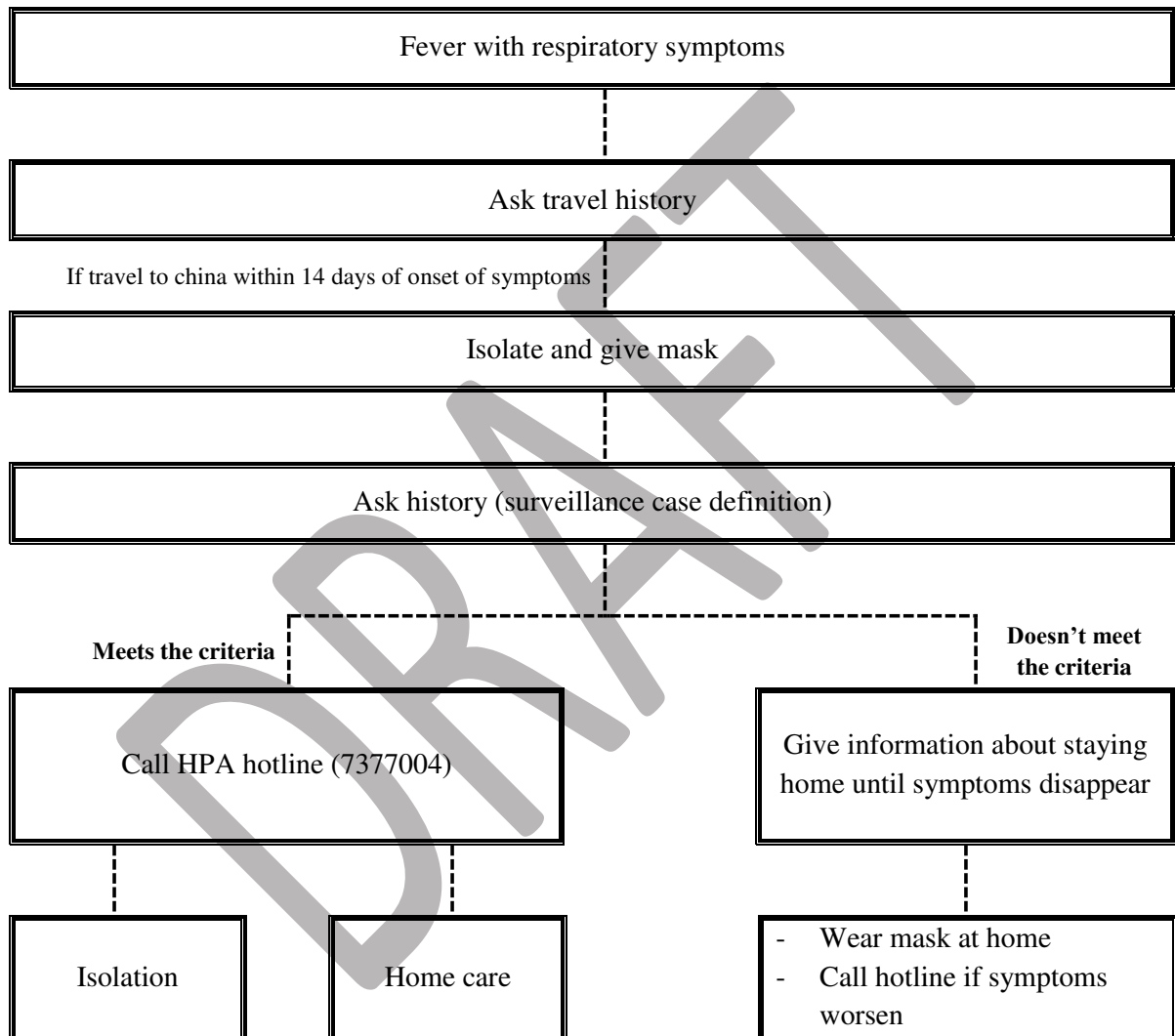
### **Droplet and Contact precaution by HCWs and those accompanying the patient**

#### **Surgical mask/medical mask with eye protection (goggles or face shield), fluid resistant gowns and gloves**

- Maintain a 3 feet distance where possible.
- Use a medical mask with eye/facial protection (goggles or face shield)
- Use a gloves and gowns (clean, non-sterile, long-sleeved fluid resistant gown)
- Use either single use disposable equipment or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect between each patient use (e.g. ethyl alcohol 70%);
- Refrain from touching eyes, nose or mouth with potentially contaminated hands;
- Avoid the movement and transport of patients out of the room or area unless medically necessary.
- Notify the receiving area of necessary precautions as soon as possible before the patient's arrival
- Clean and disinfect patient-contact surfaces after patient has been removed from the vehicle by using detergent and bleach (1-part bleach to 99 parts water).
- Limit the number of HCWs, family members and visitors in contact with a patient with suspected nCoV infection;

- Maintain a record of all persons travelling in the vehicle/vessel including drivers and assistants.

## Flowchart for a suspected nCoV case in an island health facility



## **Section 4: Surveillance Guideline for the Novel Corona Virus at the Points of Entry**

### **Introduction**

A novel Corona virus has been detected in China, and Maldives is a major hub for Chinese tourists (approximately 15000/month); which makes it likely for the disease to be introduced to the country. Several measures have been taken to prevent this from happening. This guideline outlines the specific surveillance actions to be taken in response to this threat.

Surveillance measures at the points of entry are 2-fold.

1. Surveillance for the entry into the country of any potential passengers or crew members that might have been infected with the novel Corona Virus.
2. Surveillance of the total number of passengers and crew members that are arriving from nCoV endemic areas.

The surveillance measures are to be carried out at the main points of entry where Chinese tourists frequently disembark from. The Identified PoEs for this are:

1. Velana International Airport
2. Male' Seaport
3. Addu Airport
4. Hanimaadhoo Airport

### **Criteria for a passenger/crew member to be suspected of having nCoV infection:**

CASE DEFINITION see PART A

#### **Probable case**

Probable case: A suspect case for whom testing for 2019-nCoV is inconclusive or for whom testing was positive on a pan-coronavirus assay.

#### **Confirmed case**

A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.

### **Suspected case identified at the airport on arrival (via thermal scanner/self-reporting to the border health counter)**

#### **Role of Border Health Unit**

Events in order

1. passenger is identified at the airport on arrival
2. border health staff is to put a surgical mask on the passenger and escort him/her to the screening area.
3. Clinic doctor checks the passenger to see if he/she fits the case definition (see PART A)

4. If the passenger does not fit the case definition criteria then send him/her back to the immigration line, but give the person the information slip.
5. If the suspected case fits the case definition criteria, detain him/her.
6. Inform nCoV Clinic (designated place), get the ambulance
7. Inform the immigration to complete the passport control process.
8. Inform MACL and Customs to clear the passenger's baggage and bring it to the screening area or make arrangements to send it to the nCoV Clinic (designated place)
9. Take baggage information (like the number of pieces, tag numbers) also note the number of hand luggage pieces.
10. Inform the airline operators and immigration to get the contact tracing information.  
Name, passport number, seat number, and destination of the passengers sitting in the same row, and the 2 rows in front and 2 rows behind the suspected case. Name, passport/ID card number of all the crew and pilot. Passenger manifest with seat numbers.
11. In case of a tourist passenger, inform the destination hotel/resort about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with the cancellation of the bookings and any other necessary details. Call the Airline operators to reschedule the departure.
12. In case of an expatriate employee, inform the employer about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with any other necessary details.
13. Escort the passenger to the ambulance.

### **Role of Border Health Unit**

1. Make arrangements to identify, separate and transfer to an isolation facility of anyone suspected of having nCoV.
2. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.
3. Make arrangements with MACL to ensure that the work areas of the counter staff are properly cleaned at the end of every shift.
4. Collect all the necessary surveillance, contact, Case information and report back to HPA in a timely manner.
5. Inform and train the airport operators and all the other organizations working at the airport about the IPC measures and the role these organizations are to play in a health emergency situation.
6. Inform all the other involved agencies whenever a passenger is detained. Task checklist needs to be filled as the tasks are completed. (Annex: Task check list )

### **Role of Immigration**

1. Make arrangements to clear the immigration of any detained passenger suspected of having nCoV.
2. Collect information about the destinations of the passengers deemed as contacts, and send it to the Border Health Unit.
3. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.

4. Make arrangements with MACL to ensure that the work areas of the counter staff are properly cleaned at the end of every shift.

### **Role of Airline Operators**

1. Make arrangements to, cancel, reschedule or any other departure flight ticketing arrangements of any detained passenger suspected of having nCoV.
2. Collect information requested by Border Health like contact tracing information, passenger manifest, flight transit information, crew and pilot information and send it to the Border Health Unit.
3. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.
4. Make arrangements with MACL to ensure that the work areas of the counter staff if contaminated are properly cleaned at the end of every shift.

### **Role of Customs**

1. Make arrangements to clear the baggage of any detained passenger suspected of having nCoV.
2. Handover the baggage to the Border Health Unit or make arrangements to transfer the baggage to the isolation facility or the NCoV Center as needed. Ensure that the Border Health Unit is well informed about the transfer arrangements of the baggage and also the provide the necessary information about the luggage to the Border Health Unit.
3. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.
4. Make arrangements with MACL to ensure that the work areas of the counter staff are properly cleaned at the end of every shift.

### **Role of MACL**

1. Assist all the other organizations stationed at the airport to perform their specific tasks .
2. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.
3. Ensure that the work areas of all the counters and screening area that may potentially be contaminated are cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).
4. Ensure that all biohazardous waste is properly sealed, tagged and separately handed over to a waste disposal company (like WAMCO) where it should be incinerated.

### **Role of Avescom, MNDF, MPS**

1. If needed by the Border Health Unit, assist in isolating and detaining the detained passenger suspected of having nCoV.
2. Manage any panic situation that arises.
3. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.

4. Make arrangements with MACL to ensure that the work areas of their counter staff if contaminated, are properly cleaned at the end of every shift.

### **Role of Ministry of Tourism**

1. Contact the embassy of the PUI (Person Under Investigation) and inform them of the situation.
2. Contact the Resort/Guest house where the PUI was going and make arrangements for booking cancellations or any other alternate arrangements that need to be done.

### **Role of other organizations at work in the airport such as Resort Reps, Food establishments, Shops, pharmacies e.t.c.**

1. Make arrangements to ensure that their staff are in compliance with the IPC measure advised for them.
2. Make arrangements with MACL to ensure that the work areas of their counter staff if contaminated, are properly cleaned at the end of every shift.

### **IPC measures for the airport staff**

#### **Border health staff who escort and screen the cases at the airport**

1. They should wear disposable latex gloves, surgical masks, and goggles or face shield
2. They should use alcohol based hand sanitizer in-between the examination of suspected cases
3. They should wash their hands and face with soap and water after finish their duty
4. They should wash their hands and face with soap and water after before leaving the terminal area when taking a break
5. They should dispose of the gloves and mask every time they leave their post at the screening area
6. They should wash their hands/ face body with soap and water and dispose of clothes if contaminated by the bodily fluids, blood of the suspected case.
7. All contaminated material (used masks, surface wipes and such) must be disposed separately in a biohazard bag, which should be well identifies so that it can be disposed by incineration.
8. The border health counter and screening area must be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).

#### **Border health staff manning the border health counters at the airport**

1. Should be behind the glass or plastic barrier (which must give them coverage for 7 feet from the floor including the height of the counter) and must wear disposable latex gloves for the duration of their duty.
2. If leaving or taking a break from their duty post they must dispose of the gloves and wash their hands with soap and water.

3. All contaminated material (used masks, surface wipes and such) must be disposed separately in a biohazard bag, which should be well identifies so that it can be disposed by incineration.
4. The border health counter and screening area must be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).

#### **If an airport staff or a concerned person at the airport calls regarding a potential exposure**

1. Take them to the contact tracing area
2. Tell them to wash their face and hands with soap and water
3. Get the full history of the incident
4. Take their ID card number/passport number/work permit number, Work place (for expatriates), name, age, gender, current residential address, contact number, email address, date of the incident and the date at which the 14-day incubation period is over.
5. Instruct the person to inform the border health hotline (7954333), if they show any of the following symptoms:
6. Fever, Cough, runny nose, or breathing difficulty
7. Reassure the person that it is unlikely that any thing will happen and that in most cases even if the disease develops, it is usually cured within a week or two.

#### **Immigration staff manning the immigration counters at the airport**

1. Should be behind the glass or plastic barrier (which must give them coverage for 7 feet from the floor including the height of the counter) and must wear disposable latex gloves for the duration of their duty.
2. If leaving or taking a break from their duty post they must dispose of the gloves and wash their hands with soap and water.

#### **Custom staff manning the custom counters at the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks and disposable latex gloves if dealing with passengers otherwise wear gloves when inspecting luggage.
3. Avoid passengers who are coughing or sneezing
4. All contaminated material (used masks, surface wipes and such) must be disposed separately in a biohazard bag, which should be well identifies so that it can be disposed by incineration.
5. If possible, any area that is potentially contaminated must be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).
6. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).

#### **MACL staff manning the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks
3. Avoid passengers who are coughing or sneezing

4. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).
5. All contaminated material (used masks, surface wipes and such) must be disposed separately in a biohazard bag, which should be well identifies so that it can be disposed by incineration.
6. If possible, any area that is potentially contaminated must be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).
7. MACL must ensure that the biohazard waste id kept in biohazard bags, properly sealed and identified and make arrangements with WAMCO (or any other sanitation company) to incinerate it.

#### **Other organizations and enterprises working at the airport**

1. Maintain 3 feet distance from the passengers
2. Wear surgical masks and disposable latex gloves
3. Avoid passengers who are coughing or sneezing
4. All contaminated material (used masks, surface wipes and such) must be disposed separately in a biohazard bag, which should be well identifies so that it can be disposed by incineration.
5. If possible, any area that is potentially contaminated must be cleaned with soap and water and disinfected with a solution containing a regular household diluted bleach (1-part bleach to 99 parts water).
6. If a staff comes in contact with a passenger's bodily fluids, or blood, contact the border health hotline (7954333).

#### **Suspected case identified at the airport (from the airport clinic or elsewhere within the airport)**

1. Suspected case is identified at the airport (from the airport clinic or elsewhere within the airport)
2. Suspected case escorted by the border health staff to screening area.
3. Clinic doctor checks the passenger to see if he/she fits the case definition (see PARTA)
4. If the passenger does not fit the case definition criteria, give him/her the information slip and send him/her back.
5. If the person fits the case definition criteria, detain and put a surgical mask on the suspected case
6. Inform nCoV Clinic (designated place), get the ambulance
7. If it is a departure passenger, inform the immigration and the airline operator agent to delay the departure dates.
8. If the person has luggage with him/her, make arrangements to transfer the luggage to the nCoV Clinic (designated place).
9. If it is a tourist, call the tourism focal point to inform the embassy.
10. In case of an expatriate employee, inform the employer and the embassy, about the detainment of the passenger.
11. Escort the passenger to the ambulance.

## **Suspected case identified at the airport (at departure)**

1. Suspected case is identified at the airport departure terminal
2. Suspected case escorted by the border health staff to screening area.
3. Clinic doctor checks the passenger to see if he/she fits the case definition (see PARTA)
4. If the passenger does not fit the case definition criteria then send him/her back departure terminal or check-in counter, but give the person the information slip.
5. If the person fits the case definition criteria, detain and put a surgical mask on the him/her
6. Inform nCoV Clinic (designated place), get the ambulance
7. If it is a departure passenger, inform the immigration and the airline operator agent to delay the departure dates.
8. If the person has luggage with him/her, make arrangements to transfer the luggage to the nCoV Clinic (designated place).
9. If it is a tourist, call the tourism focal point to inform the embassy.
10. In case of an expatriate employee, inform the employer and the embassy, about the detainment of the passenger.
11. Escort the passenger to the ambulance.

## **IPC measures to be taken by Flight crew**

1. All flight attendants arriving from China should wear surgical masks, and goggles at all times and in addition they must wear gloves if handling a sick patient.
2. Wash their hands with soap and water.
3. Use detergent to clean any contaminated surface (i.e. all seats of the row in which the patient was sitting. 2 rows in front and 2 rows behind. (diagram is given in the annex "On board Contact Tracing"). Use 1-part Bleach, 99-parts water solution to cleans the seats.

## **Suspected case identified en route in an airplane**

1. Get the situation information from the captain
2. Tell the captain to put a surgical mask (if not available then a normal mask or cover the patients nose and mouth with a cloth) on the passenger.
3. Ask the flight attendants to wash their hands with soap and water.
4. The captain announces to all the passengers "Do not be alarmed, we have a passenger who is not feeling well, and we are taking care of him/her. Do not move from your seat, do not use the toilet facilities, we will assess the situation and let you know the appropriate steps to be taken as soon as possible"
5. Ask the passengers to identify themselves if they have moved from their assigned seats.
6. Clinic doctor checks the passenger to see if he/she fits the case definition (see PARTA)
7. Identify the passengers in the row where the suspected passenger is seated, and also identify the passengers seated 2 rows in front and 2 rows behind the suspected passenger.
8. Identify the toilets that the suspected passenger used
9. Identify all the passengers who used the same toilet
10. Treat the patient's symptoms,
  - A. Panadol/paracetamol for fever
  - B. Lozenges for cough

C. Plenty of fluids

11. Ask the passengers if they have used the same toilet as the suspected patient.
12. Fill out the “Contact Information for a passenger in an airplane” (see Annex)

## **On board management and contact tracing in a quarantined airplane**

Refer to the “Contact Tracing Guideline For nCoV 2020”

## **Suspected case identified at the seaport (via thermal scanner)**

### Before any ship enters the port of maldives

1. Request from the ship’s captain:
2. Provide a list of ports that the ship had docked at within the last 14 days
3. Provide a list of passengers/crew that have been to China within the last 14 days, and if any of the onboard passengers/crew fit the case definition (see PART A)
4. Identify the passengers in the row where the suspected passenger is seated, and also identify the passengers seated 2 rows in front and 2 rows behind the suspected passenger.
5. Identify the toilets that the suspected passenger used
6. Identify all the passengers who used the same toilet

### **When the ship docks in Maldives**

Before going on board ensure the following:

1. A screening area should be set up. All passengers and crew are to stay away from this area. The area should be a well ventilated area.
2. All Immigration officers should wear disposable latex gloves when handling the passports and other documents
3. All Customs officers should wear surgical masks, goggles, and disposable latex gloves when handling the baggage or interacting with passengers and crew
4. All border health officers should wear surgical masks, goggles, and disposable latex gloves before interacting with passengers and crew. If a passenger with fever is detected via the thermal scanner or by self-reporting/told by captain. The passenger should be taken to the screening area.
5. Check to see if the passenger fits the case definition (see PART A)
6. Identify the cabin, close contacts, and facilities used by the passenger. Do a contact tracing of all who entered the cabin or were in close contact with the passenger with the last 14 days (if the travel exceeds or is equal to 14 days). Give the person the information slip to all contacts.
7. If the suspected case fits the case definition criteria, detain and put a surgical mask and disposable latex gloves on him/her.
8. Inform nCoV Clinic (designated place), get the ambulance
9. Escort the passenger off the ship.
10. In case of a tourist passenger, inform the tourism focal point and have them inform the embassy and to proceed with the cancellation of the bookings and any other necessary details.

11. In case of a crew member, inform the captain/employer about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with any other necessary details.
12. Escort the passenger to the ambulance.

## **Suspected case identified en route from a ship**

1. Request from the ship's captain:  
Check to see if the passenger fits the case definition (see PART A)
2. Identify the passengers in the row where the suspected passenger is seated, and also identify the passengers seated 2 rows in front and 2 rows behind the suspected passenger.
  - a. Identify the toilets that the suspected passenger used
  - b. Identify all the passengers who used the same toilet
3. Treat the patient's symptoms,
  - a. Panadol/paracetamol for fever
  - b. Lozenges for cough
  - c. Plenty of fluids
4. Tell the passenger to put a surgical mask (if not available then a normal mask or cover the patient's nose and mouth with a cloth) on the passenger.
5. Ask the crew to wash their hands with soap and water if they have been in the cabin with passenger or have come in close contact with the passenger.
6. Get an expected date and time of arrival in Maldives, inform HPA and the nCoV Clinic (designated place).
7. Provide a list of ports that the ship had docked at within the last 14 days
8. Provide a list of passengers/crew that fit the case definition
  1. Identify the toilets that the suspected passenger used
  2. Identify all the passengers who used the same toilet
9. When the ship docks in Maldives, before going onboard ensure the following:
10. A screening area should be set up. All passengers and crew are to stay away from this area. The area should be a well ventilated area.
11. All Immigration officers should wear disposable latex gloves when handling the passports and other documents
12. All Customs officers should wear surgical masks, goggles, and disposable latex gloves when handling the baggage or interacting with passengers and crew
13. All border health officers should wear surgical masks, goggles, and disposable latex gloves before interacting with passengers and crew. If a passenger with fever is detected via the thermal scanner or by self-reporting/told by captain. The passenger should be taken to the screening area.
14. Check to see if the passenger fits the case definition (see PART A)
15. Identify the passengers in the row where the suspected passenger is seated, and also identify the passengers seated 2 rows in front and 2 rows behind the suspected passenger.
16. Identify the toilets that the suspected passenger used
17. Identify all the passengers who used the same toilet
18. Identify the cabin, close contacts, and facilities used by the passenger.
19. Do a contact tracing of all who entered the cabin or were in close contact with the passenger with the last 14 days (if the travel exceeds or is equal to 14 days).

20. Give the person the information slip to all contacts.
21. If the suspected case fits the case definition criteria, detain and put a surgical mask and disposable latex gloves on him/her.
22. Inform nCoV Clinic (designated place), get the ambulance
23. Escort the passenger off the ship.
24. In case of a tourist passenger, inform the tourism focal point and have them inform the embassy and to proceed with the cancellation of the bookings and any other necessary details.
25. In case of a crew member, inform the captain/employer about the detainment of the passenger. Call the tourism focal point to inform the embassy and to proceed with any other necessary details.
26. Escort the passenger to the ambulance.

### Measures to be taken by the Border Health Staff

1. Maintain vigilant thermal scanning of the arrival passengers. Direct the passenger to the Screening area if a suspected case shows up on the thermal scanner.
2. Maintain the surveillance data of arrival passengers.
3. Wear the surgical mask when dealing with a suspected case of nCoV.
4. Gloves to be worn when handling the patient.
5. Soap and water to wash your hands, or alcohol based hand sanitizer.
6. Maintain stock of the PPE, and related items like, N95 masks, gloves, soap and others)
7. Inform the HOTLINE 7377004 if you develop any pf the symptoms given in the case definition or if you have any questions.

### Surveillance data collection

Data collection for a suspected case Fill out the nCoV Surveillance Form	
<u>Arrival Passenger data collection.</u>	
Airport	Daily/Weekly number of flights and pax/crew arriving from China, transiting from China, or passenger has travel history to china within the last 14 days
Seaport	Daily/Weekly number of vessels and pax/crew arriving from China or transiting from China , or passenger has travel history to china within the last 14 days

## **Regarding forced detention of a person suspected of novel Corona Virus Infection**

- 1.** All persons who have been detected by the thermal cameras at any points of entry by the border health staff
- 2.** All persons who have been identified at the screening points at any points of entry
- 3.** All persons who have been isolated at any designated isolation facility or quarantine facility
- 4.** All persons who have been identified by a doctor as fitting the criteria for a suspected case of nCoV.
- 5.** Detain the nCoV suspected person until he is deemed no longer infectious to others
- 6.** An infected person can be transported to another country under specific conditions with specific prevention measure. The specific conditions and measures that are required will be approved by the Director General of Public Health.
- 7.** Patient has the right to refuse treatment but the patient will be kept in isolation until deemed noninfectious to others. This will be decided by the Technical Advisory Committee of the formed by the DGPH (per each case).
- 8.** Detaining a suspected nCoV case will be done by MPS/AVSEC/MNDF. Letter from DGPH/AG giving them legal authority to detain the nCoV suspected person, once he/she has been identified by the Border Health Officers, screening room doctor, a doctor from a health facility, as per the case definition provided by HPA.
- 9.** If a person wishes to be treated elsewhere, he/she must bear all the necessary treatment costs. An official letter must be sent from the alternate treatment facility ensuring that all the required measures for isolation of such a patient can be met by the health care facility. This decision needs approval by the DGPH.

# Annex

## Information slip

This slip is given by the border health staff to all those passengers who have been suspected of nCoV but have been cleared after taking the history. The Information slip is also given to all passengers arriving from China at the immigration counter. Some of this Information is also shown on the standees.

### Novel Corona Virus Related Information

#### PLEASE READ CAREFULLY!

- A. In the last 14 days have you visited China and
- have you been in close contact with a confirmed or probable case of 2019-nCoV
  - or
  - have you visited or worked at a live animal market in China
  - or
  - have you worked at or attended a health care facility where patients with hospital-associated 2019-nCoV infections have been reported.
  - worked as a health care worker in an environment where severe acute respiratory infections of unknown etiology were being cared for
  - Visited Wuhan (China)
- B. If you develop any of the following symptoms:
- ≥38°C, 100.4 °F fever
  - Cough
  - Runny nose
  - Breathing difficulty

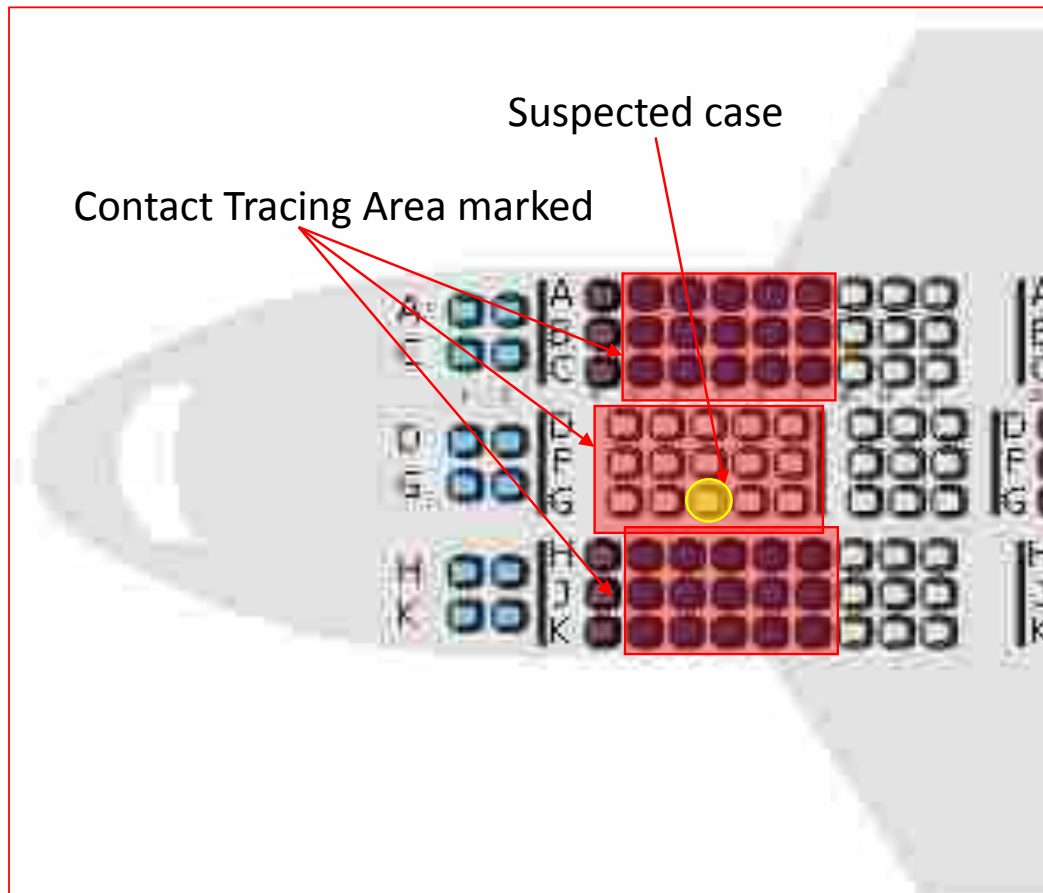
#### What you should do

1. If you do not speak English, seek help from the hotel front desk and ask them to call the **7377004** (Corona virus HOTLINE)
2. If you can speak English/Dhivehi Please call **7377004** (Corona virus HOTLINE) and inform them of your situation, **do not worry**, the hotline operators will get you the help you need)
3. Do not go outside, and stay in your room
4. Other people should refrain from going to your room
5. Wear a surgical mask or normal mask over your nose and mouth, or cover your nose and mouth with a cloth.
6. Maintain a 3 foot distance from other people.
7. Seek medical attention from a health facility
8. You may take Panadol/paracetamol for symptoms like fever/headache/body aches. Do not take any other medicines without a doctors advise. Drink plenty of fluids and rest.

## On board Contact Tracing

A doctor, nurse and a Border Health staff will do on board to identify and follow the “Contact Tracing Guideline For nCoV 2020”.

Show the passengers that need to be identified for contact tracing



## nCoV Surveillance Form

nCoV Surveillance Form					
PLEASE READ CAREFULLY AND FILL OUT ALL THE RELEVANT INFORMATION!					
Flight number/vessel name		Country			
Seat Number (for flight passengers)		Address			
Name of passenger/crew		Address in Maldives			
Passport number		Email address			
Date of Birth		Contact number			
Do you have any of the following symptoms (Tick Yes /No where applicable)					
Symptom		Yes	No	Onset date	
Fever	°F   °C				
Cough					
Runny nose					
Breathing difficulties					
Within the last 14 days, have you:				Yes	No
1. Travelled to China.					
2. Been in close contact with a known case of nCoV in any country.					
3. Been in close contact with a confirmed or probable case of 2019-nCoV					
4. Visited or worked at a live animal market in China					
5. Worked at or attended a health care facility where patients with hospital-associated 2019-nCoV infections have been reported.					
6. Worked as a health care worker in an environment where severe acute respiratory infections of unknown etiology were being cared for					
7. Travelled to Wuhan (China)					

For sea vessels (To be filled by Seaports staff)	
Port of calls within the last 14 days	
Total number of passengers/crew who have been to China within the last 14 days	
Agent	
Contact number (Agent)	
Email address (Agent)	
Address of any disembarked passengers/crew (This part is filled for a ship that has been docked in Maldives)	

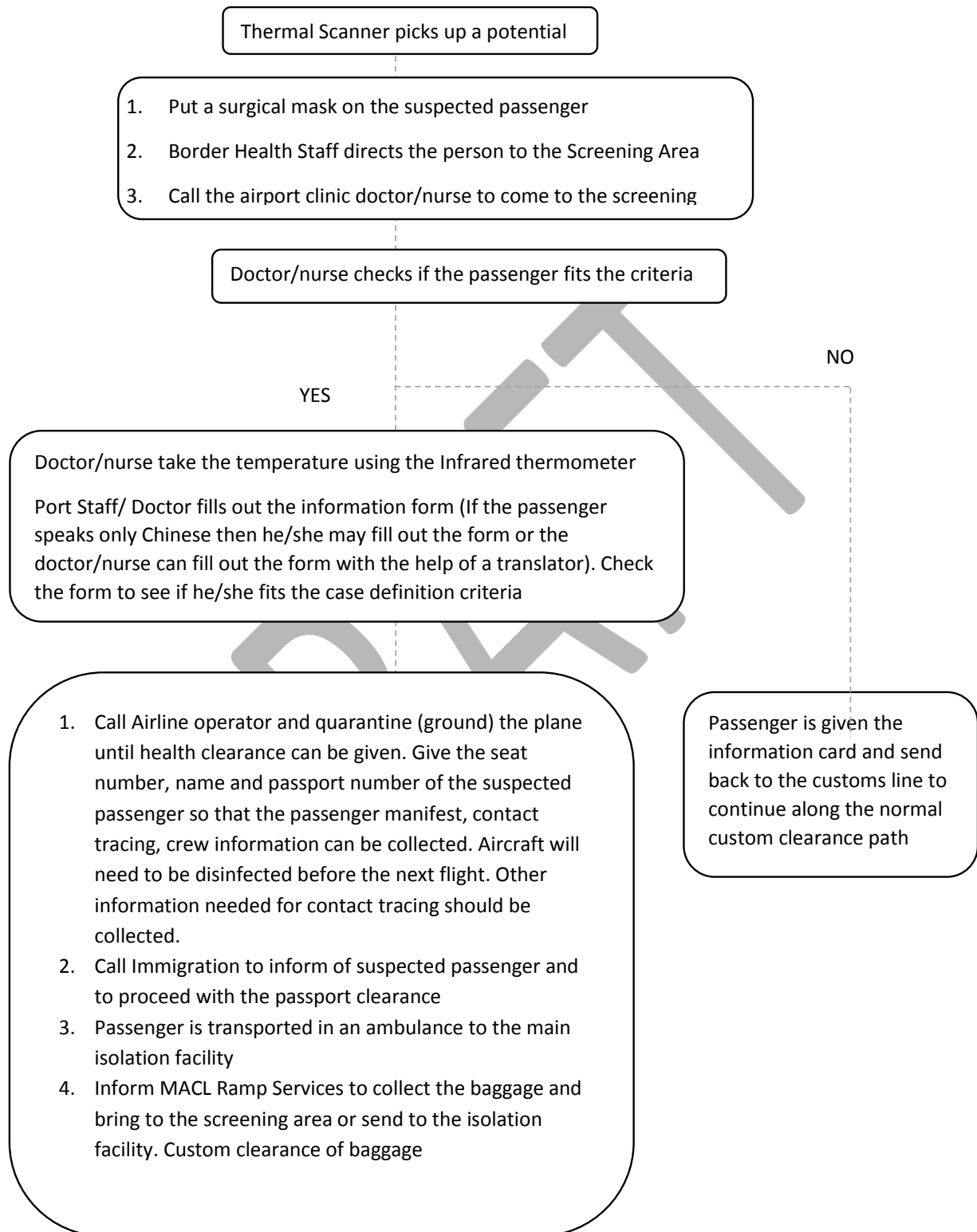
## Contact Information form for passengers from an airplane

Contact Information form for passengers from an airplane		
Seat number		
Passport number		
Name		
Address		
Country of residence		
Mailing address		
Email address (if any)		
Contact number (if any)		
Transit airports		
Countries visited in the last 14 days		
Have you visited Hubei province in china within the last 14 days	YES	NO
Symptoms if any		

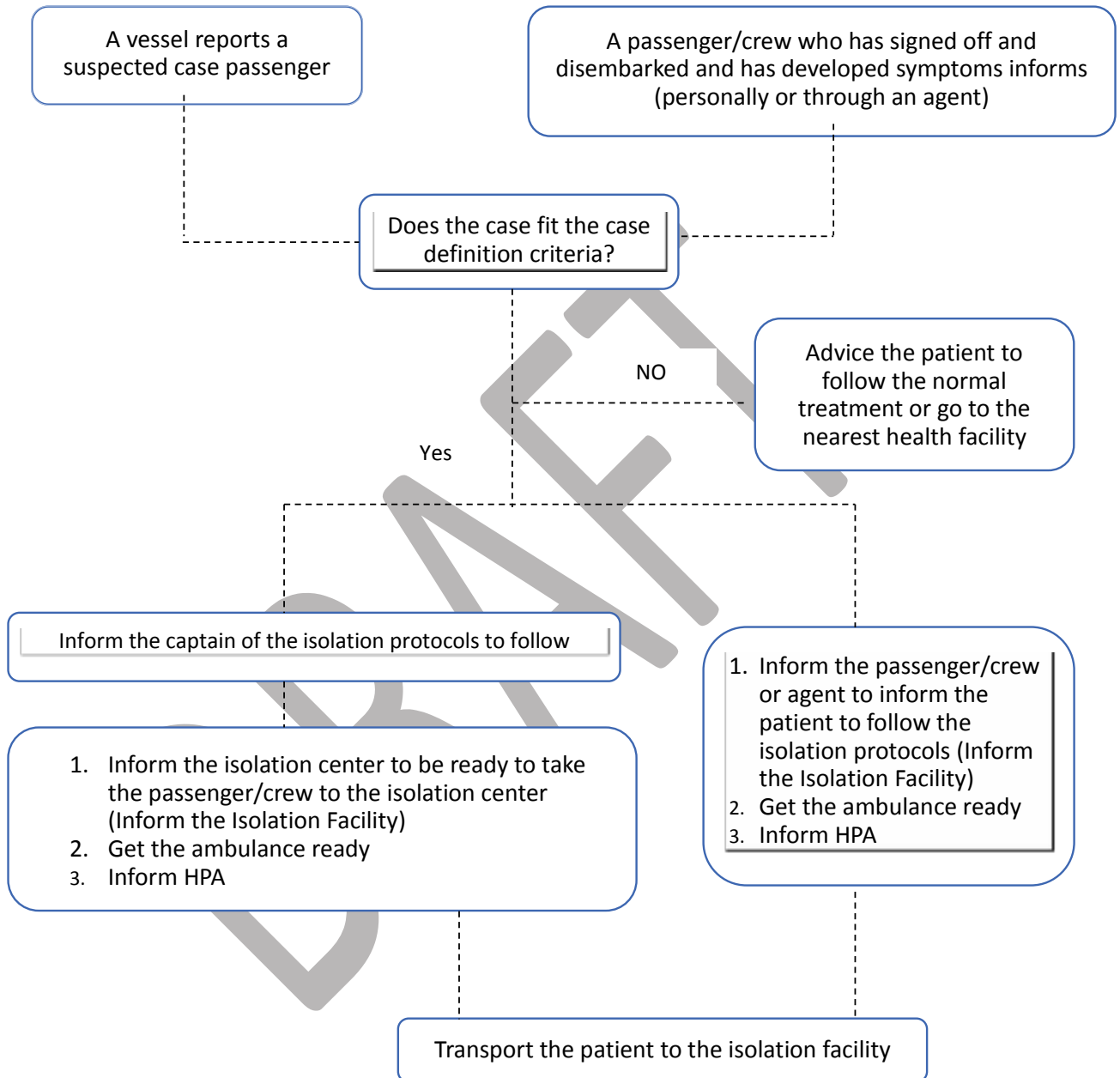
## Contact Information form for suspected case in a Health facility

Contact Information form for suspected case in a Health facility		
Arrival date to Maldives		
Passport number/ID number (for locals)		
Name		
Address		
Country of residence		
Current address in Maldives		
Mailing address		
Email address (if any)		
Contact number		
Transit airports		
Countries visited in the last 14 days		
Have you visited Hubei province in china within the last 14 days	YES	NO
Symptoms if any		

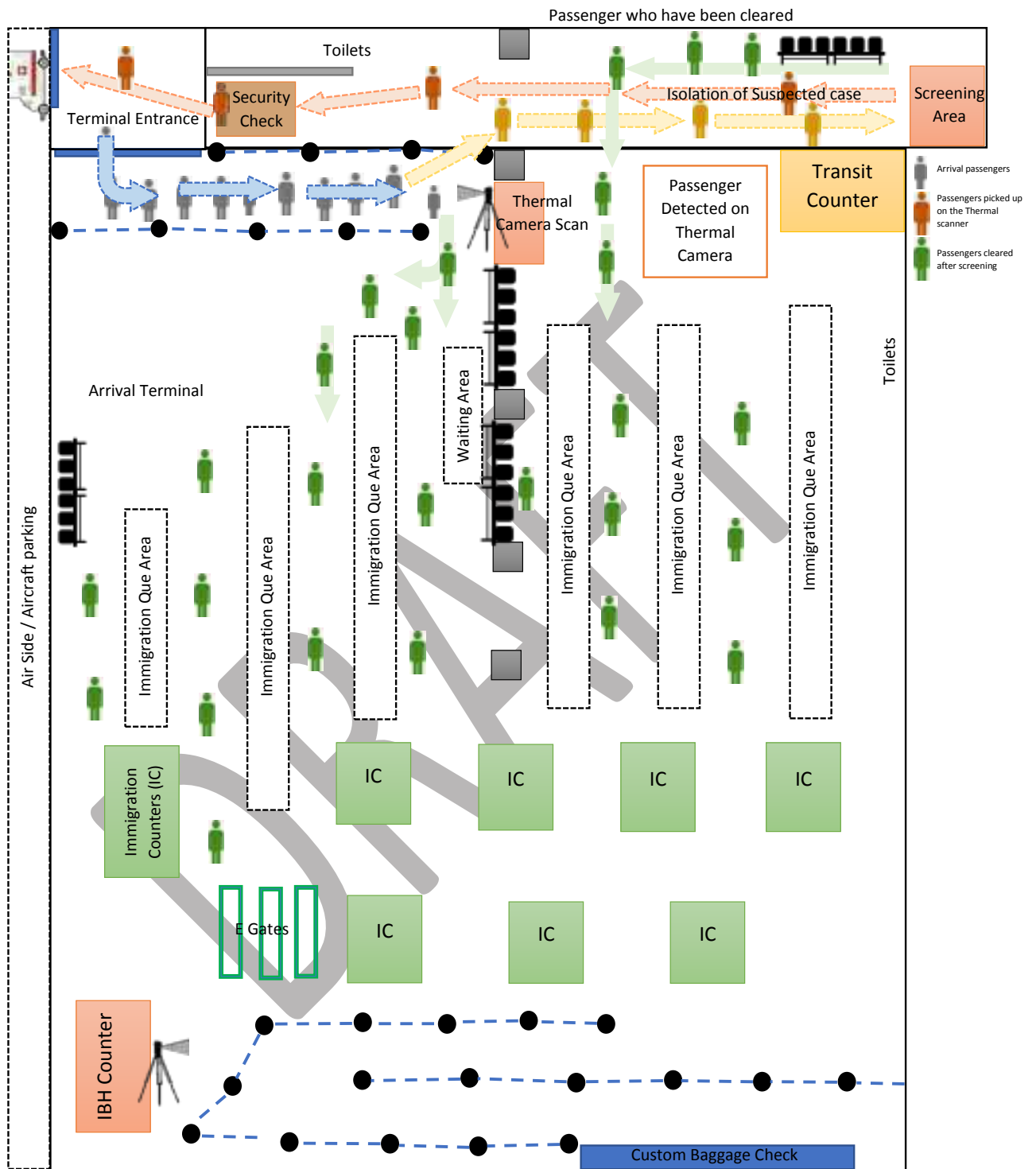
## Airport surveillance flow chart



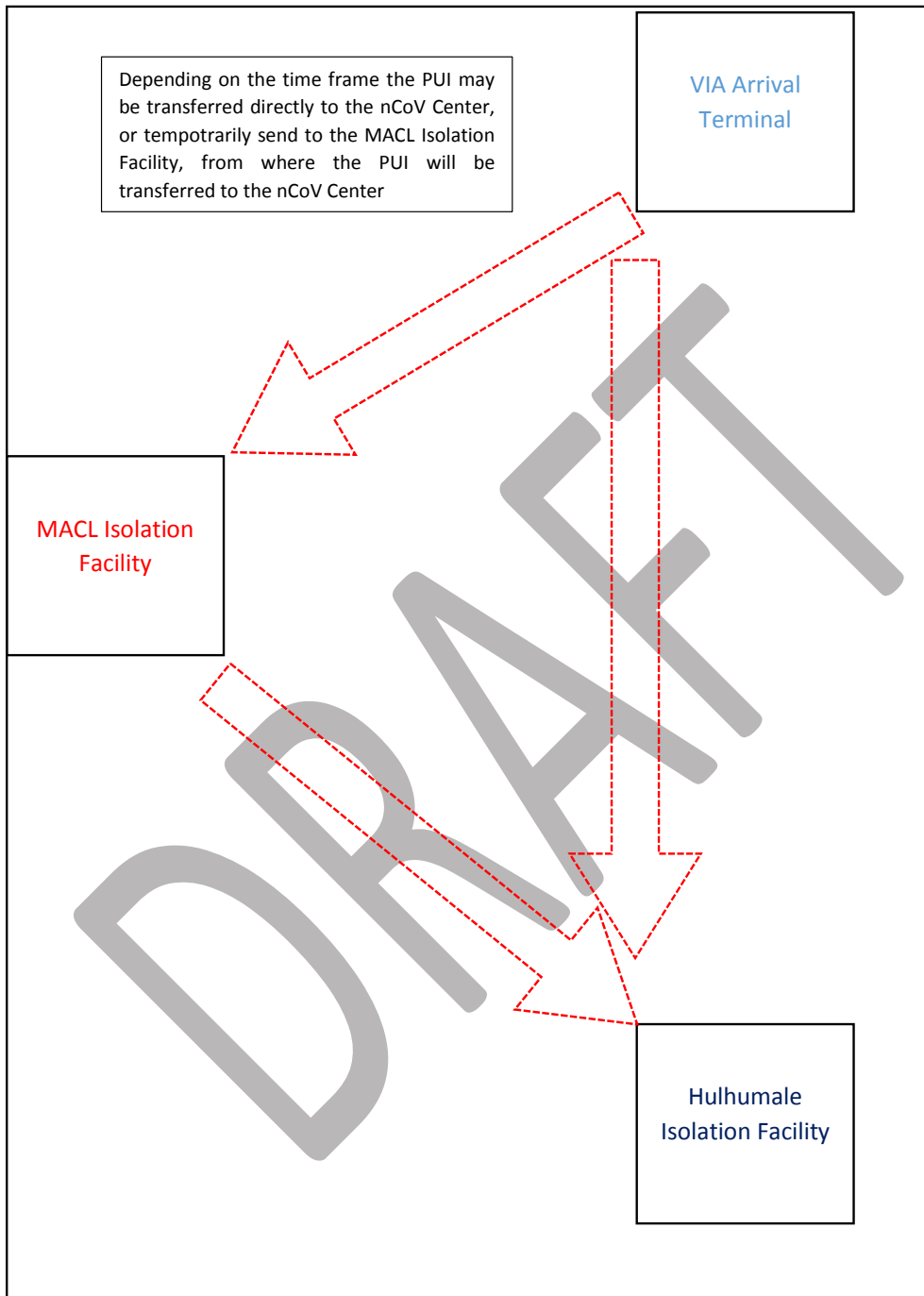
## Seaport Surveillance Flow chart



## Proposed Design to relocate thermal Camera at VIA



## Schematic Diagram of the route of transfer of a suspected nCoV case



# Daily Surveillance Data Sheet

[illegible]

\*send the information in an excel sheet

## Task Checklist for border health staff to use whenever a suspected nCoV case gets identified (fits the case definition criteria)

Name of Org	Task	Focal person	Contact number/Emergency number (Hotline)	Email address	Tick
HPA	Assess the situation Get				
International Border health (IBH)	1. Inform airline operator and ground operators that a suspected nCoV case has been detected at the screening area and therefore the aircraft has to be quarantined until clearance can be given by the IBH 2. Give the passenger information (Passport)				
Airport Operator (MACL, Island Aviation, GIA)	3. Quarantine the aircraft until health clearance given by IBH	OCC Terminal D.O	3337238 7972047	-	
Immigration	4. Passport control and visa	Mohamed Zakee – principal Immigration Officer Ahmed Mubeen - principal Immigration Officer	7716063 7782088	<a href="mailto:mohamedzaki@immigration.gov.mv">mohamedzaki@immigration.gov.mv</a> mubeen@immigration.gov.mv	

Airline	5.					
Operators						
Customs						
AVESCOM						
MNDF						
MPS						
Ministry of Tourism						
CAA						
MPL						
Employer (for an Expatriate worker)						

## Contact Tracing form

Will be separately attached as an excel sheet

The screenshot shows a Microsoft Excel spreadsheet titled "Contact tracing form" (Worksheet: 2). The spreadsheet is set to a grid of 26 columns (A-Z) and 30 rows (1-30). The header row (Row 1) is highlighted in blue and contains the following text:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

The spreadsheet is currently empty, with the first row (Row 1) highlighted in blue. The status bar at the bottom indicates "Formulas" and "Data".