

# GUIDELINES FOR THE MANAGEMENT OF NOVEL CORONAVIRUS (2019-nCoV)

Health Policies and Standards Department  
Health Regulation Sector (2020)

## INTRODUCTION

Dubai Health Authority (DHA) is the responsible entity for regulating, licensing and monitoring health facilities and healthcare professionals in the Emirate of Dubai. The Health Regulation Sector (HRS) is an integral part of DHA and was founded to fulfil the following overarching strategic objectives:

Objective #1: Regulate the Health Sector and assure appropriate controls are in place for safe, effective and high-quality care.

Objective #2: Position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

Objective #3: Direct resources to ensure happy, healthy and safe environment for Dubai population.

## ACKNOWLEDGMENT

This document is developed for the management of the Novel Coronavirus, in collaboration with Preventive Medicine Section (PMS), Public Health Protection Department (PHPD). The Health Policy and Standards Department (HPSD) would like to acknowledge and thank these professionals for their dedication toward improving the quality and safety of healthcare services.

### **The Health Regulation Sector**

### **Dubai Health Authority**

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## EXECUTIVE SUMMARY

This is the first edition of the Guidelines for Management of Novel Coronavirus (2019-nCoV). This document is based on current knowledge of the situation in China and other countries where cases of Novel Coronavirus have been identified and is aligned with current international guidelines and circulars issued by DHA related to the subject. This is to ensure public and patient health protection and to ensure efficiency and integrity of procedures applied to handle cases of Coronavirus, in all DHA licensed health facilities. DHA will update these recommendations as new information becomes available.

## DEFINITIONS

**Suspected nCoV-2019:** is defines as a Patient present with upper or lower respiratory symptoms

“With or Without Fever” AND any of the following:

- A history of travel to China in the 14 days prior to symptoms onset.
- Has cared for/come into contact with an individual or animal known or strongly suspected to have 2019-nCoV within 14 days.

OR

A patient with Severe Acute Respiratory Infections (SARI) with no other lab result that explains illness

**Confirmed case:** is defined as a suspected case with laboratory confirmation of nCoV-2019 infection through 2019-nCoV PCR test.

**Laboratory diagnosis:** at this stage, the laboratory testing for 2019-nCoV is performed at the Latifa Hospital Laboratory ONLY. All samples from suspected cases should be send to Dubai Health Authority (DHA) where laboratory testing is performed to confirm a clinically suspected case and to screen contacts.

**Healthcare Personnel (HCP):** refers to all persons, paid and unpaid, working in healthcare settings engaged in patient care activities, including: patient assessment for triage, entering examination rooms or patient rooms to provide care or clean and disinfect the environment, obtaining clinical specimens, handling soiled medical supplies or equipment and coming in contact with potentially contaminated environmental surfaces.

## ABBREVIATIONS

<b>ABHR</b>	:	Alcohol Based Hand Rub
<b>AOCC</b>	:	Airport Operations Control Centre
<b>DHA</b>	:	Dubai Health Authority
<b>EU</b>	:	European Union
<b>FFP</b>	:	Filtering Face Piece
<b>HCP</b>	:	Health Care Personnel
<b>HPSD</b>	:	Health Policies and Standards Department
<b>HRS</b>	:	Health Regulation Sector
<b>IDMS</b>	:	Infectious Disease Notification System
<b>MERS</b>	:	Middle East Respiratory Syndrome
<b>nCoV</b>	:	Novel Coronavirus
<b>NIOSH</b>	:	National Institute for Occupational Safety and Health
<b>PCR</b>	:	Polymerase Chain Reaction
<b>PHPD</b>	:	Public Health Protection Department
<b>PMS</b>	:	Preventive Medicine Section
<b>PPE</b>	:	Personal Protective Equipment
<b>PUI</b>	:	Patient Under Investigation
<b>SARI</b>	:	Severe Acute Respiratory Infections
<b>SARS</b>	:	Severe Acute Respiratory Syndrome
<b>WHO</b>	:	World Health Organization

## 1. BACKGROUND

Coronaviruses are a large family of viruses that are common in many different species of animals including humans. There are four main sub-groupings of coronaviruses, known as alpha, beta, gamma, and delta. Human coronaviruses were first identified in the mid-1960s.

The seven coronaviruses that can infect people are:

Common human coronaviruses

1. 229E (alpha coronavirus)
2. NL63 (alpha coronavirus)
3. OC43 (beta coronavirus)
4. HKU1 (beta coronavirus)

Other human coronaviruses

5. MERS-CoV - beta coronavirus that causes Middle East Respiratory Syndrome (MERS)
6. SARS-CoV - beta coronavirus that causes severe acute respiratory syndrome, or (SARS)
7. 2019 Novel Coronavirus (2019-nCoV)

Globally people are commonly infected with human coronaviruses 229E, NL63, OC43, and HKU1. These illnesses usually only last for a short period. Symptoms may include runny nose, headache, cough, sore throat, fever and a general feeling of being unwell.

Sometimes coronaviruses that infect animals can evolve into a new human coronavirus and infect humans. Three recent examples of this are MERS-CoV, SARS-CoV and 2019-nCoV.



Recent reports from World Health Organization (WHO) confirmed that Novel (new) Coronavirus 2019-nCoV is a new strain of coronavirus that was first identified in a cluster of pneumonia cases in Wuhan City, Hubei Province of China.

Most cases shown respiratory symptoms, fever, shortness of breath and pneumonia. Currently, there is no known treatment or vaccine available for either people or animals. Intensive supportive care with the treatment of symptoms is the main approach to manage the infection in people. People with cardiopulmonary disease, immune-deficient, infants and older adults are prone to such infections.

## **2. SCOPE**

2.1. Provide directions to Dubai Health Authority (DHA) licensed Health Facilities and Healthcare Professionals to manage patients with suspected or confirmed coronavirus infection.

## **3. PURPOSE**

- 3.1. Identify and isolate infected patients and inform DHA.
- 3.2. Management of patients with suspected or confirmed coronavirus infection.
- 3.3. To prevent spread of Coronavirus related infections.

## **4. APPLICABILITY**

4.1. All DHA licensed Health Facilities and Healthcare Professionals.

## 5. RECOMMENDATION ONE: CASE DEFINITION FOR NOVEL CORONAVIRUS

5.1. The case definition for 2019-nCoV is as follows:

5.1.1. Patient present with upper or lower respiratory symptoms “With or Without Fever” AND any of the following:

- a. A history of travel to China in the fourteen (14) days prior to symptoms onset.
- b. Has cared for/come into contact with an individual or animal known or strongly suspected to have 2019-nCoV within 14 days

**OR**

5.1.2. Patient with Severe Acute Respiratory Infections (SARI) with no other laboratory result that explains illness.

**Note:** For a diagrammatic representation of Case definition of a suspected 2019-nCoV case, refer to **Appendix 1a**.

5.2. A case is a confirmed case if a suspected case with laboratory confirmation of nCoV-2019 infection through 2019-nCoV, Polymerase Chain Reaction (PCR) test.

5.3. For the management of suspected 2019-nCoV case as per location, refer to **Appendix 1b**.

5.4. For the management of contact cases, refer to **Appendix 1c**.

5.5. For the management of confirmed 2019-nCoV case, refer to **Appendix 1d**.

## 6. RECOMMENDATION TWO: ADMINISTRATIVE MEASURES

- 6.1. Provide dedicated waiting areas for symptomatic patients.
- 6.2. Prevent overcrowding, especially in the emergency department.
- 6.3. Ensure patients with symptoms of any respiratory infection (e.g. cough, runny nose, fever) inform the front desk/reception on arrival and immediately take appropriate preventive measures (e.g. patients and people accompanying wear a surgical mask upon entry to contain cough, follow triage procedures) to reduce spread of infection.
- 6.4. Ensure adherence to standard, contact and airborne precautions.
  - 6.4.1. Promote hand hygiene and respiratory hygiene as essential preventive measures. Ensure availability of educational materials such as posters about hand hygiene and respiratory etiquette.
  - 6.4.2. Ensure adequate supplies of Personal Protective Equipment (PPE) e.g. surgical masks, N95 masks, gloves etc. and other infection prevention and control supplies (e.g. hand hygiene supplies) are available for Healthcare Personnel (HCP) as well as patients.
  - 6.4.3. Monitor Healthcare professional's compliance with standard precautions and provide mechanisms for improvement as needed.
- 6.5. Implement engineering controls to reduce or eliminate exposures from infected individuals e.g. physical barriers or partitions to guide patients through triage areas, appropriate air-handling systems that are properly maintained etc.

- 6.6. Establish a well-equipped triage station at the entrance of health facility, supported by trained staff.
- 6.7. Ensure access to prompt laboratory testing for identification of the etiologic agent.
- 6.8. Appropriately isolate hospitalized patients.
- 6.9. Ensure isolation rooms with negative pressure with separate bathrooms are available and functioning correctly and are appropriately monitored for airflow and exhaust handling.
- 6.10. Ensure availability of adequately ventilated single rooms with attached bathrooms in the absence or in case of non-availability of negative pressure isolation rooms.
- 6.11. Have contingency plans if the demand for PPE or other infection control materials exceeds the available supply.
- 6.12. Post signs in public areas reminding symptomatic patients to alert healthcare professionals.
- 6.13. Limit visitor access and movement within the health facility.
- 6.14. Ensure an adequate patient to staff ratio.
- 6.15. Provide adequate education and refresher training for Healthcare professionals regarding 2019-nCoV diagnosis, how to obtain specimen testing, appropriate PPE use, triage procedures including patient placement, how and to whom 2019-nCoV cases should be reported, procedures to take following unprotected exposures (i.e., not wearing recommended PPE) to suspected 2019-nCoV patients at the health facility.

- 6.16. Establish a surveillance process for acute respiratory infections potentially caused by nCoV among Healthcare professionals.
- 6.17. Ensure that Healthcare professionals and the public understand the importance of promptly seeking medical care.
- 6.18. Ensure that specific persons have been designated within the health facility who are responsible for communication with DHA and dissemination of information to other HCP at the health facility.
- 6.19. Ensure safe waste management, proper linen cleaning and utilization, environmental cleaning and sterilization of patientcare equipment.

**Note:** Refer to the Hospital Preparedness Checklist in **Appendix 2**.

## 7. RECOMMENDATION THREE: HEALTHCARE PROFESSIONAL PREPAREDNESS

- 7.1. Be up to date on the latest information about signs and symptoms, diagnostic testing and case definitions for 2019-nCoV.
- 7.2. Adhere to standard contact and airborne precautions including the use of eye protection.
- 7.3. Implement preventative measures before patient arrival, upon arrival and throughout the duration of the affected patient's presence in the health facility.
- 7.4. Be alert for patients who meet the criteria for suspected cases or confirmed cases.
- 7.5. Ensure rapid triage and isolation of patients with symptoms of suspected 2019-nCoV or other respiratory infection (e.g., fever, cough).

- 7.6. Admit suspected cases of 2019-nCoV in negative pressure room (s)/implement strict standard, contact and airborne. If negative pressure room not available, place patients in adequately ventilated single rooms with separate bathroom.
- 7.7. In case of no inpatient service, transfer the patient with suspected 2019-nCoV to a health facility with an inpatient setting.
- 7.8. Apply the WHO-5 Moments for Hand Hygiene approach before touching a patient, before any clean or aseptic procedure is performed, after exposure to body fluid, after touching a patient and after touching a patient's surroundings **Appendix 3**.
- 7.9. Source, control measures for suspected patients (e.g. surgical masks for suspect patients).
- 7.10. Remain at home and notify the health facility, if the healthcare professionals themselves are unwell.

## **8. RECOMMENDATION FOUR: PREVENT TRANSMISSION IN HEALTH FACILITIES**

- 8.1. To facilitate the early identification of cases of suspected 2019-nCoV infection, healthcare facilities should encourage healthcare professionals to have a high level of clinical suspicion.
- 8.2. For prevention of transmission apply standard precautions hygiene measures as mentioned below:
  - 8.2.1. All patients should cover their nose and mouth with a tissue or elbow when coughing or sneezing.

- 8.2.2. Perform hand hygiene after contact with respiratory secretions.
- 8.2.3. Proper Hand hygiene techniques, include either cleansing hands with soap and water or an Alcohol Based Hand Rub (ABHR)
  - a. ABHR are preferred if hands are not visibly soiled.
  - b. Wash hands with soap and water when they are visibly soiled.
- 8.2.4. Offer surgical masks to patients with suspected 2019-nCoV infection while they are in waiting areas.
- 8.2.5. Appropriate and consistent use of PPE to reduce the spread of pathogens. Refer **Appendix 4** the appropriate use of masks.
- 8.2.6. Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly. Thoroughly cleaning environmental surfaces with water and detergent and applying commonly used hospital level disinfectants are effective.
- 8.2.7. Medical devices and equipment, laundry, food service utensils and medical waste should be managed in accordance with safe routine procedures.
- 8.3. Precaution measures for contact, suspected or confirmed cases:
  - 8.3.1. In addition to using standard precautions, all individuals, including family members, visitors and healthcare professionals, should use contact and airborne precautions before entering the room where suspected or confirmed 2019-nCoV patients are admitted.

- 8.3.2. Patient should be placed in an isolation room with negative pressure (if available) or in an adequately ventilated, single room with separate bathroom.
- 8.3.3. Where possible, a team of healthcare professionals should be designated to care exclusively for suspected or confirmed cases to reduce the risk of transmission.
- 8.3.4. Healthcare professionals should wear fit-tested N95 mask, eye protection, gloves and impermeable apron/gown.
- 8.3.5. The use of boots and coverall is not required during routine care.
- 8.3.6. After patient care, appropriate doffing and disposal of all PPE's and hand hygiene should be carried out.
- 8.3.7. Use, a new set of PPE for every patient treated.
- 8.3.8. Equipment should be either single-use/disposable or dedicated equipment (e.g., stethoscopes, blood pressure cuffs and thermometers).
- 8.3.9. If equipment needs to be shared among patients, clean and autoclaved or disinfect with ethyl alcohol 70%, it between use for each patient.
- 8.3.10. Healthcare professionals should refrain from touching eyes, nose or mouth with potentially contaminated gloved or bare hands.
- 8.3.11. Avoid moving and transporting patients out of their room or area unless medically necessary.
- 8.3.12. Use designated portable X-ray equipment and/or other designated diagnostic equipment.



- 8.3.13. If transport is required, use predetermined transport routes to minimize exposure for staff, other patients and visitors, and have patients use a surgical masks.
- 8.3.14. Ensure that HCP who are transporting patients perform hand hygiene and wear appropriate PPE.
- 8.3.15. Notify the area receiving the patient of any necessary precautions as early as possible before the patient's arrival.
- 8.3.16. Routinely clean and disinfect surfaces, which is contacted by the patient.
- 8.3.17. Limit the number of healthcare professionals, family members and visitors who come in contact with a suspected and confirmed 2019-nCoV patient.
- 8.3.18. Maintain a record of all persons entering the patient's room, including all staff and visitors.
- 8.3.19. Ensure that healthcare professionals performing aerosol-generating procedures (i.e. aspiration or open suctioning of respiratory tract specimens, intubation, cardiopulmonary resuscitation, bronchoscopy) abide by the following:
- a. Perform procedures in an adequately ventilated room, that is, natural ventilation with airflow of at least 160 L/s per patient or in negative pressure rooms with at least twelve (12) air changes per hour and controlled direction of airflow when using mechanical ventilation.

- b. Wear fit-tested N95 masks, eye protection, gloves and impermeable apron/gown.
- c. When healthcare professionals put on a disposable particulate respirator, they must always perform the seal check.
- d. Limit the number of HCP present in the room to the absolute minimum required for the patient's care and support.

## 9. RECOMMENDATION FIVE: MANAGING LABORATORY SPECIMENS

### 9.1. Sample Collection

9.1.1. Lower respiratory specimens such as sputum, endotracheal aspirate, or Broncho alveolar lavage should be collected when possible. If patients do not have signs or symptoms of lower respiratory tract infection or lower tract specimens are not possible or clinically indicated, nasopharyngeal specimens should be collected (similar to MERS sample collection).

9.2. Coordinate for sample transportation to DHA with Microbiology & Infection Control Unit, Virology Laboratory, Latifa Women & Children Hospital.

9.3. Currently, the laboratory testing for 2019-nCoV is performed at the Latifa Hospital laboratory ONLY. All samples from suspected cases should be sent to DHA laboratories where testing is performed to confirm a clinically suspected case and to screen contacts.

- 9.4. All samples sent to the laboratory shall only be taken from individuals who meet the case definition as mentioned above.
- 9.5. All specimens collected for laboratory investigations should be regarded as potentially infectious.
- 9.6. Healthcare professionals who collect, handle or transport any clinical specimens should adhere rigorously to the following standard precaution measures and biosafety practices to minimize the possibility of exposure to pathogens:
- 9.6.1. Ensure that Healthcare Professionals who collect specimens use appropriate PPE (i.e. Wear fit-tested N95 masks, eye protection, gloves and impermeable apron/gown).
- 9.6.2. If the specimen is collected with an aerosol-generating procedure, personnel should wear a particulate respirator at least as protective as a National Institute of Occupational Safety and Health (NIOSH) certified N95, European Union (EU) standard Filter Face Piece (FFP2), or the equivalent.
- 9.6.3. Ensure that all personnel who transport specimens are trained in safe handling practices and spill decontamination procedures.
- 9.6.4. Place specimens for transport in leak-proof specimen bags (i.e., secondary containers) 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 (i.e., the primary container) and a clearly written laboratory request form.

9.6.5. Ensure that laboratories in health facilities adhere to appropriate biosafety practices and transport requirements, according to the type of organism being handled.

9.6.6. Deliver all specimens by hand. DO NOT use pneumatic-tube systems to transport specimens.

9.7. Fill the Patient Under Investigation (PUI) form and submit it to Latifa Hospital with the specimen.

**Note:** Latifa Hospital Laboratory **will not** accept the specimen without the completed PUI form.

9.7.1. Laboratory Specimens should be disposed appropriately.

## 10. RECOMMENDATION SIX: MANAGEMENT OF CASES IN OUTPATIENT FACILITIES

10.1. All outpatient facilities with the following specialties shall provide an emergency room to isolate patients upon receiving suspected cases, till the case is transferred to a hospital:

10.1.1. General Medicine

10.1.2. Family Medicine

10.1.3. ENT

10.1.4. Pediatrics

10.2. In case of a suspected case at a DHA licensed Outpatient Facility, the health facility management shall coordinate with Dubai Ambulance for the patient to be transferred to a nearby Hospital.

10.3. The health facility shall maintain a logbook of suspected cases.

## 11. RECOMMENDATION SEVEN: REPORTING

11.1. Health Facilities have to report any suspected and confirmed cases of 2019-nCoV based on case definition immediately to the Preventive Medicine Section, Public Health Protection Department through the following ways of notification:

11.1.1. Direct phone call to the following numbers:

- a. **+971562253800**
- b. **+971562256769**

11.1.2. For infectious diseases electronic notification to DHA

- a. Private Sector: Online DHA Reporting System: [Sheryan \(IDNS\)](#)
- b. Government Sector: SALAMA System

11.1.3. Fill the Patient Under Investigation (PUI) form **Appendix 5**, scan and send it to the following emails:

- a. Elrasheed Aamir Mohammed Aamir- [aaaamir@dha.gov.ae](mailto:aaaamir@dha.gov.ae)
- b. Suha Adam Almhbob Abbas- [saabbas@dha.gov.ae](mailto:saabbas@dha.gov.ae)
- c. Asma Hassan Mohammed Abd Allah- [ashabdallah@dha.gov.ae](mailto:ashabdallah@dha.gov.ae)
- d. Asma Elmaki Mukhtar Ahmed- [aeahmed@dha.gov.ae](mailto:aeahmed@dha.gov.ae)

- 11.2. Healthcare professionals should immediately notify both infection control personnel at their health facility and DHA in the event of a PUI for 2019-nCoV.
- 11.3. Specimens should be collected as soon as possible once a PUI is identified regardless of time of symptom onset.
- 11.4. To increase the likelihood of detecting 2019-nCoV infection, it is recommended to collect and test multiple clinical specimens from different sites, including all three-specimen types; lower respiratory, upper respiratory.

## 12. RECOMMENDATION SEVEN: PUBLIC AWARENESS AND EDUCATING

- 12.1. To avoid getting infected and spreading the coronavirus, it is important to abide by the following:

### 12.1.1. Maintain Hygiene

- a. Hand Hygiene- Wash your hands often with soap and water for a minimum of twenty (20) seconds. If soap and water are not available, use an alcohol-based hand sanitizer.
- b. Coughing Etiquettes - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.

12.1.2. Avoid touching your eyes, nose and mouth with unwashed hands.

12.1.3. Avoid close contact with people who are unwell.

12.1.4. Stay home when you are unwell.

12.1.5. Clean and disinfect frequently touched objects and surfaces.

12.1.6. Social Distancing–in advanced crisis, stay away from crowded places like schools, malls, airports etc.

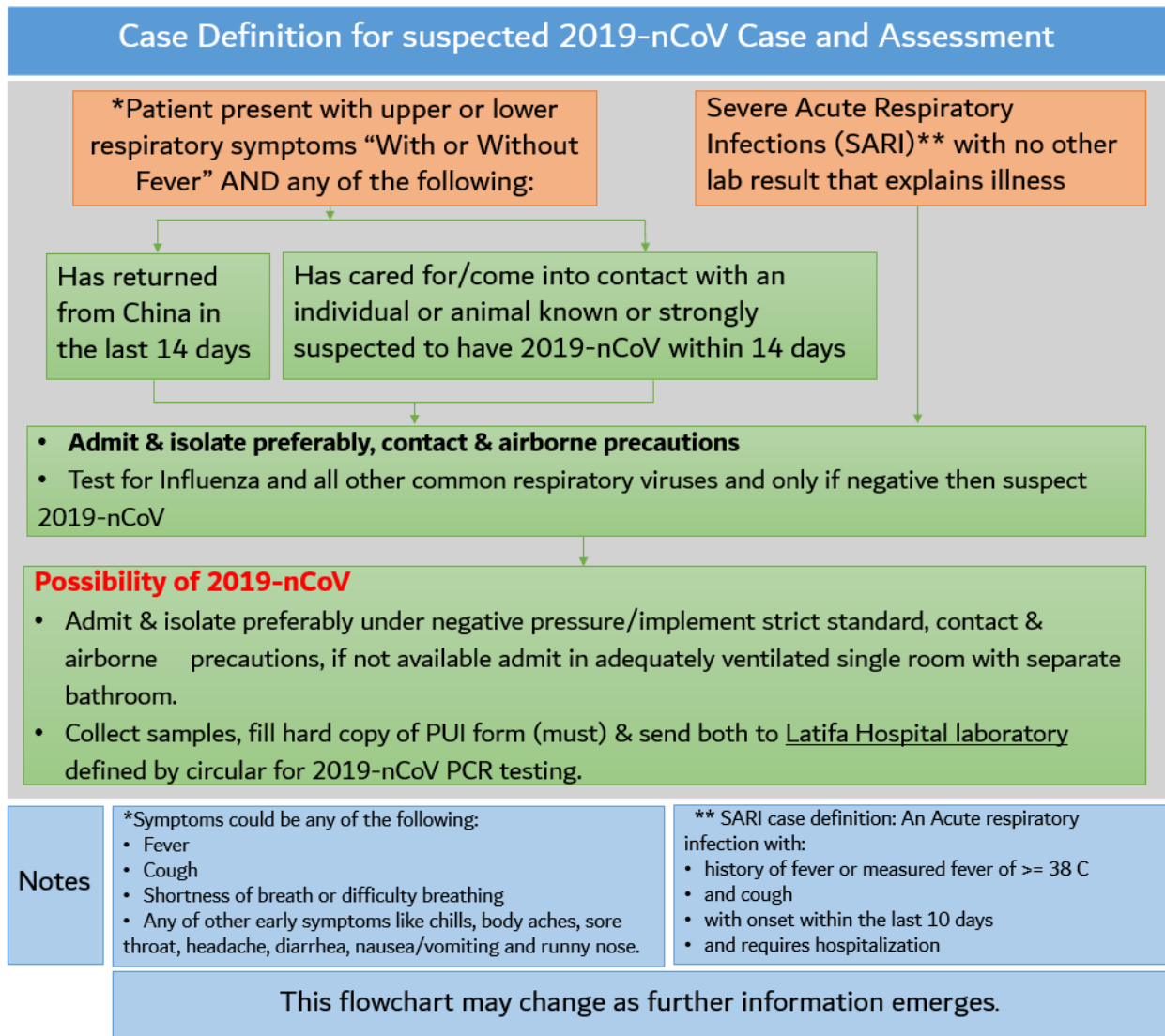
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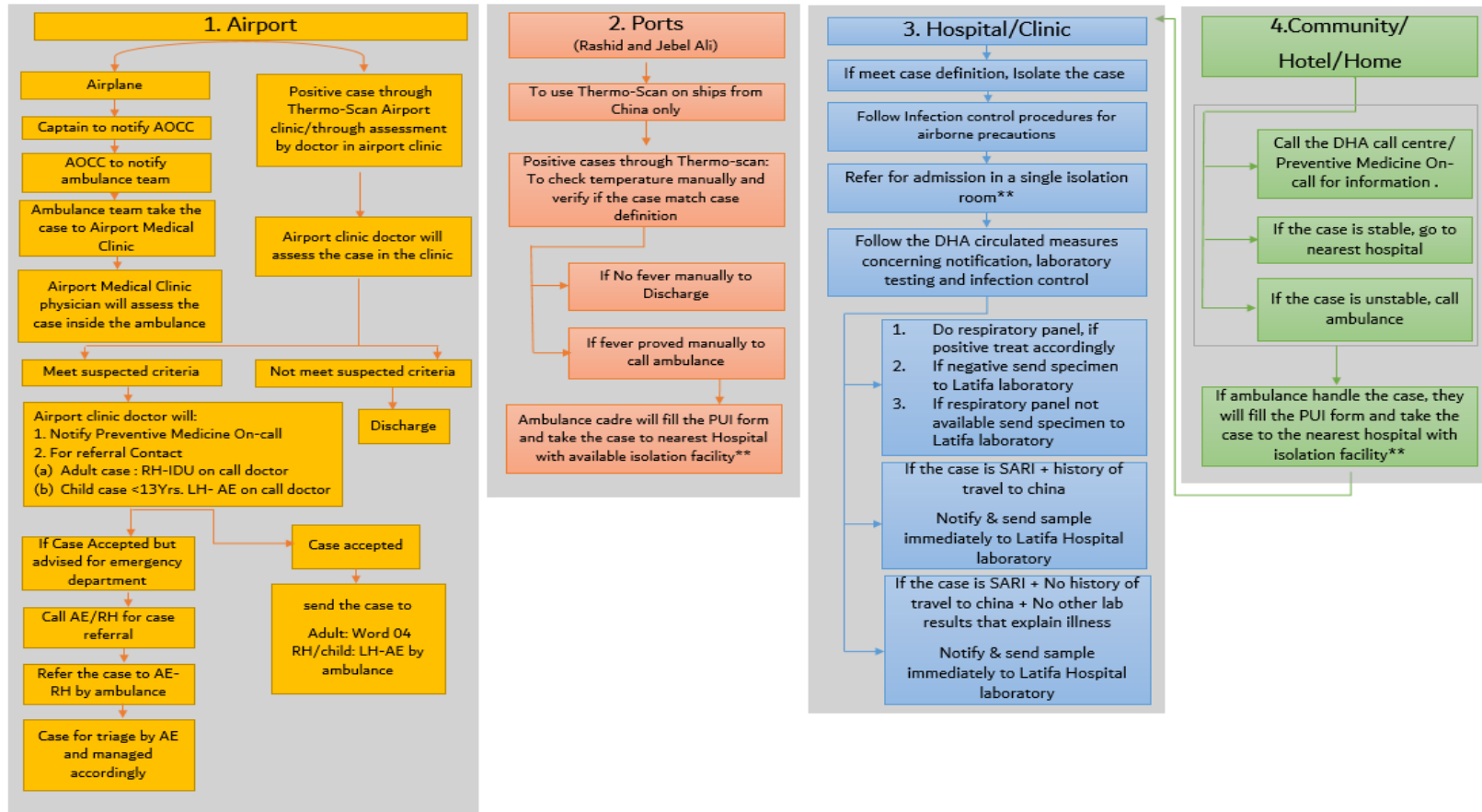
## APPENDICIES

### APPENDIX 1a: CASE DEFINITION OF SUSPECTED 2019-nCoV CASE



**APPENDIX 1b: MANAGEMENT PATHWAY FOR SUSPECTED CASES PER LOCATION**

\*Pathway for Suspected 2019-nCoV based on case definition in Dubai detected in the following locations

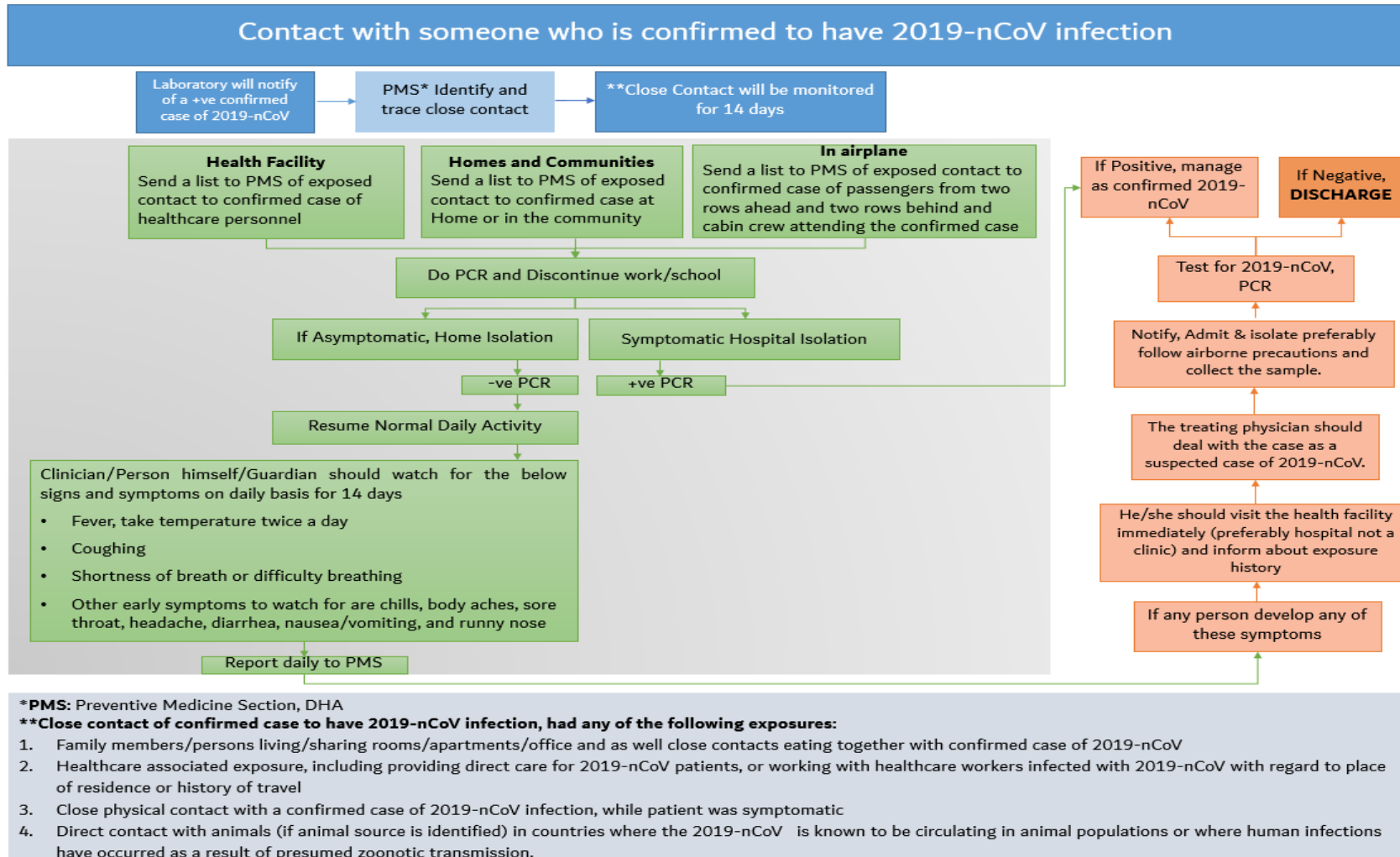


**Note**

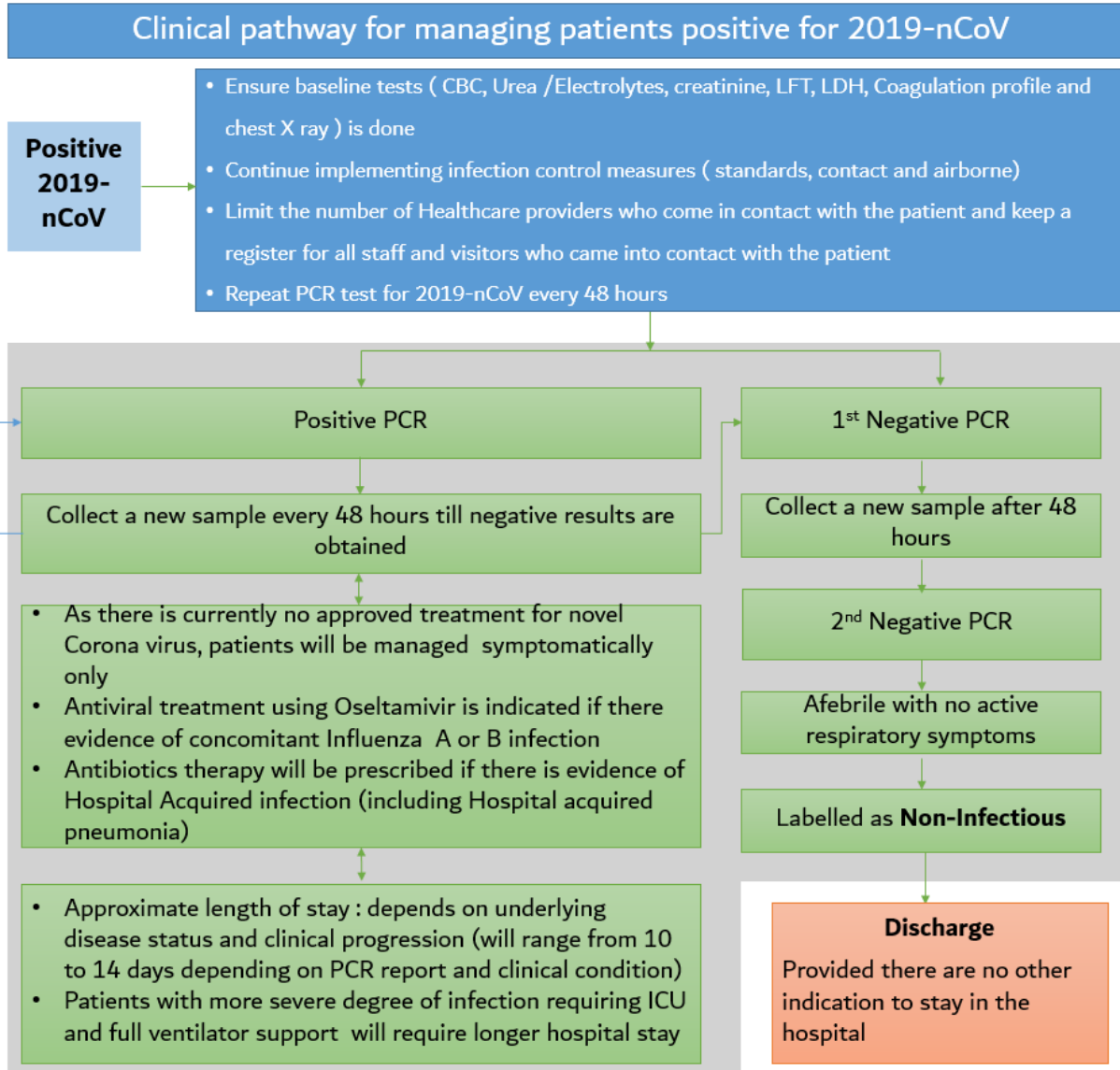
\* In dealing with any suspected case to follow Infection control procedures for airborne precautions

\*\* Single Isolation room- negative pressure not needed

## APPENDIX 1c: MANAGEMENT PATHWAY FOR A CONTACT CASES



**APPENDIX 1d: MANAGEMENT PATHWAY FOR CONFIRMED 2019 nCoV CASE**



## APPENDIX 2: HOSPITAL PREPAREDNESS CHECKLIST FOR 2019-nCoV

Name of the Hospital: \_\_\_\_\_

Location: \_\_\_\_\_

Date of Audit: \_\_\_\_/\_\_\_\_/\_\_\_\_

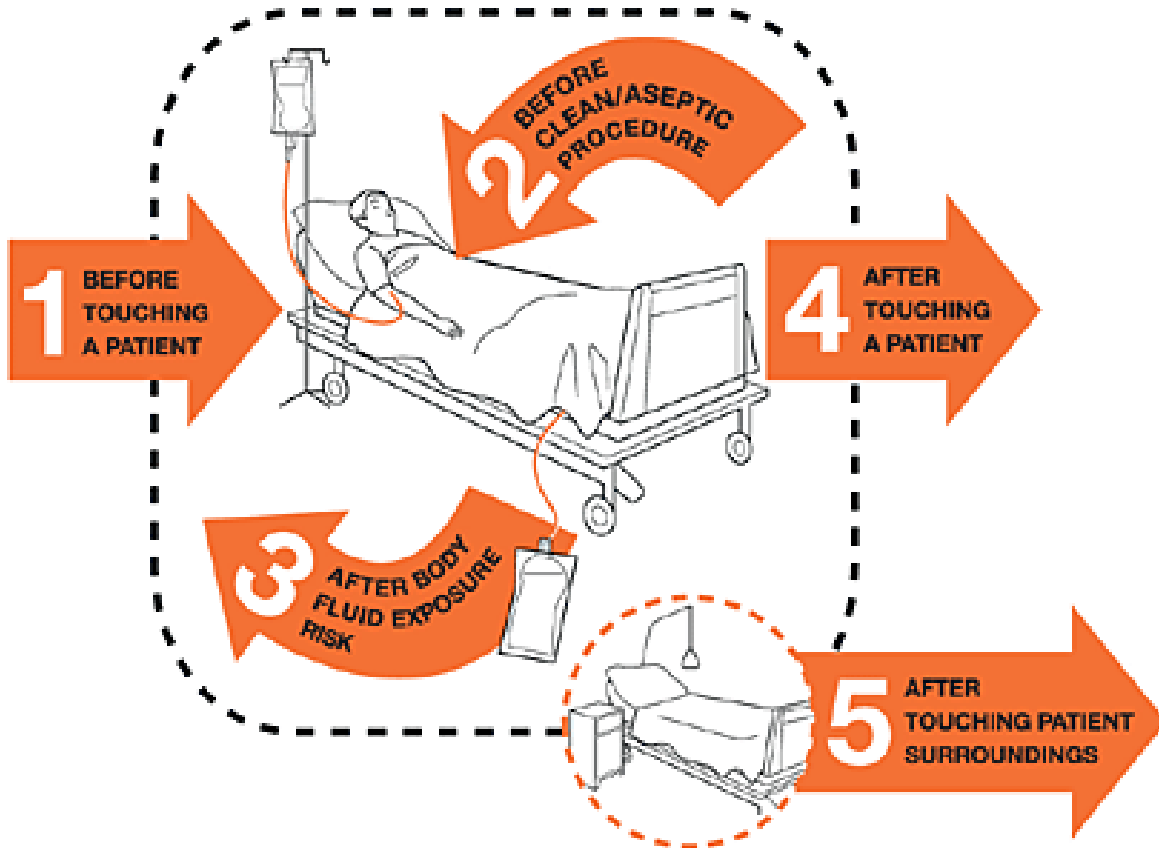
Number of Isolation Rooms: \_\_\_\_\_ Location: \_\_\_\_\_

	Description	Yes	No	N/A	Remarks
1.	Ensure the health facility's infection prevention and control policies are consistent with the Dubai Health Authority (DHA) Circulars related to the subject and DHA Guidelines for Management of Novel Coronavirus.				
2.	Review and implement procedures for rapidly identifying and isolating suspected 2019-nCoV patients in Outpatient Departments and Emergency Departments.				
3.	Assure ability to implement triage activities based on general infection control precautions to minimize cross infection.				
4.	Ensure that negative pressure airborne infection isolation rooms with separate bathrooms, are available and functioning correctly, are appropriately monitored for airflow and exhaust handling.				
5.	Ensure availability of adequately ventilated single rooms with separate bathrooms, where negative pressure isolation rooms may not be available.				
6.	Ensure High-Efficiency Particulate Air (HEPA) filter are maintained regularly and the maintenance is documented.				
7.	Availability of Personal Protective Equipment (PPE) like Surgical masks, N95 mask, goggles and other infection prevention and control supplies (e.g., hand hygiene supplies) the health facility staff protection (as required) and source control for infected patients.				
8.	Contingency plan if the demand for PPE or other supplies exceeds supply.				
9.	Review plans for implementation of surge capacity procedures and crisis standards of care. This includes collaboration with DHA Public Health and Protection Department and Public Hospitals.				

10.	Procedures for laboratory submission of specimens for 2019-nCoV testing.				
11.	Assess effectiveness of environmental cleaning procedures. Provide education/refresher training for environmental services personnel regarding 2019-nCoV <sup>1</sup> .				
12.	Policies and procedures for monitoring and managing HCP with potential for exposure to 2019-nCoV, including ensuring that HCP have ready access for medical consultation.				
13.	Provide education and refresher training to Healthcare Professionals for Diagnosis of 2019-nCoV, obtaining specimen for testing, appropriate PPE use, triage procedures; including patient placement and 2019-nCoV case reporting and procedures following unprotected exposure to suspected 2019-nCoV patients at the health facility.				
14.	Procedure in place for a HCP or healthcare professional who is a contact of a confirmed case.				
15.	Dedicated assigned trained Healthcare Professional Team to handle suspected/positive cases.				
16.	Plans for visitor access and movement within the health facility.				
17.	Record of all persons entering the patients room including all staff and visitors				
18.	Proper disposal of infectious medical waste.				
19.	Appropriate handling of contaminated linen.				
20.	Ensure that specific individuals have been designated to communication with Public Health and Protection Department and dissemination information to other Healthcare Professionals at the Health Facility.				

<sup>1</sup> All trainings should be properly documented

APPENDIX 3: WHO- 5 MOMENTS FOR HAND HYGIENE



#### APPENDIX 4: APPROPRIATE USE OF MASKS

WHEN TO USE A MASK
<ul style="list-style-type: none"> <li>• If you are healthy, you only need to wear a mask if you are taking care of a person with suspected 2019-nCoV infection.</li> </ul>
<ul style="list-style-type: none"> <li>• Wear a mask if you are coughing or sneezing.</li> </ul>
<ul style="list-style-type: none"> <li>• Masks are effective only when used in combination with frequent hand-cleaning with alcohol-based hand rub or soap and water.</li> </ul>
<ul style="list-style-type: none"> <li>• If you wear a mask, then you must know how to use it and dispose of it properly.</li> </ul>
HOW TO PUT ON, USE, TAKE OFF AND DISPOSE MASKS
<ul style="list-style-type: none"> <li>• Before putting on a mask, clean hands with alcohol-based hand rub or soap and water.</li> </ul>
<ul style="list-style-type: none"> <li>• Cover mouth and nose with mask and make sure there are no gaps between your face and the mask.</li> </ul>
<ul style="list-style-type: none"> <li>• Avoid touching the mask while using it; if you do, clean your hands with alcohol-based hand rub or soap and water.</li> </ul>
<ul style="list-style-type: none"> <li>• Replace the mask with a new one as soon as it is damp and do not re-use single-use masks.</li> </ul>
<ul style="list-style-type: none"> <li>• To remove the mask: remove it from behind (do not touch the front of mask); discard immediately in a closed bin; clean hands with alcohol-based hand rub or soap and water.</li> </ul>



**APPENDIX 5: INTERIM 2019-nCoV PATIENT UNDER INVESTIGATION (PUI) FORM**

**Interim 2019 novel coronavirus (2019-nCoV) patient under investigation (PUI) form**

*As soon as possible, notify and send completed form to Preventive Medicine Section*

**NOTIFIER INFORMATION**

Health Facility Name: \_\_\_\_\_

Date of Notification: \_\_\_\_/\_\_\_\_/\_\_\_\_

Interviewer's Name: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Physician's Name: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**PATIENT INFORMATION**

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

Patient Emirate ID/Passport No. : \_\_\_\_\_

Patient Health Record Number/MRN: \_\_\_\_\_

Sex: Male  Female

Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_

Residency:  UAE resident  Non-UAE

Nationality: \_\_\_\_\_ Mobile No.: \_\_\_\_\_

Patient address: \_\_\_\_\_

**Medical History**

Date of onset: \_\_\_\_/\_\_\_\_/\_\_\_\_

Does the patient have the following signs and symptoms? (Check all that apply)

Fever  Cough  Sore throat  Shortness of breath

**In the 14 days before symptom onset, did the patient:**

Does the patient has History of travel to china  Y  N  Unknown

Spend time in Wuhan City, China?  Y  N  Unknown

If yes, Date traveled to Wuhan City \_\_\_\_\_

Does the patient live in Wuhan City?  Y  N  Unknown

Date of arrived from Wuhan City/ Other city in China \_\_\_\_\_

Have close contact with a person who is under investigation for 2019-nCoV while that person was ill?

Y  N  Unknown

Have close contact with a laboratory-confirmed 2019-nCoV case while that case was ill?

Y  N  Unknown

**Additional Patient Information:**

Is the patient a health care worker?

Y  N  Unknown

Have history of being in a healthcare facility (as a patient, worker, or visitor) in Wuhan City, China?

Y  N  Unknown

Is patient a member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which nCoV is being evaluated?

Y  N  Unknown

Does the patient have these additional signs and symptoms (check all that apply)?

Chills  Headache  Muscle aches  Vomiting

Abdominal pain  Diarrhea  Other,

Specify \_\_\_\_\_

**Diagnosis (select all that apply):**

Pneumonia (clinical or radiologic)  Y  N

Acute respiratory distress syndrome  Y  N

**Comorbid conditions (check all that apply):**

Pregnancy  Diabetes  Cardiac disease  Hypertension  Chronic pulmonary disease

Chronic kidney disease  Chronic liver disease  Immunocompromised

None  Unknown  other, specify \_\_\_\_\_

Is/was the patient: Hospitalized  Y  N If yes, admission date \_\_\_\_\_

Admitted to ICU.  Y  N

If yes, intubated  Y  N on ECMO  Y  N Patient died.  Y  N

Does the patient have another diagnosis/etiology for their respiratory illness?

Y  N  Unknown If yes, specify \_\_\_\_\_

**Respiratory diagnostic results:**

Test	Positive	Negative	Pending	Not done
Influenza rapid Ag <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influenza PCR <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MERS- CoV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RSV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. metapneumovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parainfluenza (1-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adenovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rhinovirus/enterovirus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coronavirus (OC43, 229E, HKU1, NL63)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>M. pneumoniae</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>C. pneumoniae</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**For DHA use only**

**Specimens for 2019-nCoV testing:**

Specimen type	Specimen ID	Date collected	Sent to NRL*
NP swab			<input type="checkbox"/>
OP swab			<input type="checkbox"/>
Sputum			<input type="checkbox"/>
BAL fluid			<input type="checkbox"/>
Tracheal aspirate			<input type="checkbox"/>
Stool			<input type="checkbox"/>
Urine			<input type="checkbox"/>
Serum			<input type="checkbox"/>
Other, specify			<input type="checkbox"/>

\* National Reference Laboratory