

# Department of Education REGION VI – WESTERN VISAYAS SCHOOLS DIVISION OF AKLAN

March 27, 2020

DIVISION MEMORANDUM No. 100, s. 2020

# DISSEMINATION OF OFFICE MEMORANDUM OM-OSEC-2020-002 AND OM-OSEC-2020-003 BY THE DEPARTMENT OF EDUCATION

To: Assistant Schools Division Superintendent

Chief Education Supervisors Education Program Supervisors Public Schools District Supervisors

Heads of Public and Private Elementary, Secondary and Integrated Schools

All Others Concerned

- 1. Please find the attached Office Memorandum OM-OSEC-2020-002 by the Department of Education titled "GUIDANCE TO REGIONAL DIRECTORS FOR ACTION ON REQUESTS BY LOCAL GOVERNMENT UNITS TO USE DEPED SCHOOLS AS QUARANTINE OR ISOLATION AREAS FOR COVID-19," and Office Memorandum OM-OSEC-2020-003 titled "TEMPLATE TERMS AND CONDITIONS FOR THE USE OF DEPED SCHOOLS AS QUARANTINE OR ISOLATION AREAS," which is self-explanatory.
- For strict compliance.

MIGUEL MAC D. APOSIN EdD, CESO V Schools Division Superintendent

MMDA/srb



Website: http://www.depedaklan.org Email Address: aklan.1958@deped.gov.ph



# Republic of the Philippines Department of Education

26 MAR 2020

OFFICE MEMORANDUM OM-O S E C-2 0 2 0-002

# GUIDANCE TO REGIONAL DIRECTORS FOR ACTION ON REQUESTS BY LOCAL GOVERNMENT UNITS TO USE DEPED SCHOOLS AS QUARANTINE OR ISOLATION AREAS FOR COVID-19

- The President issued Proclamation No. 922 dated March 8, 2020, Declaring a State of Public Health Emergency Throughout the Philippines, in view of the COVID-19 public health situation. Section 2 of Proclamation No. 922, s. 2020, states that "(a)ll government agencies and LGUs are hereby enjoined to render full assistance and cooperation and mobilize the necessary resources to undertake critical, urgent, and appropriate response and measures in a timely manner to curtail and eliminate the Covid-19 threat".
- The Department of Education (DepEd) has received a growing number of requests by various Local Government Units (LGUs) for the use of DepEd schools as places for quarantine or isolation as part of their response to COVID-19.
- DepEd is fully cooperating with the Office of the President, the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF), and the Cabinet on decisions concerning COVID-19. DepEd is committed to render full assistance and cooperation, and to mobilize the necessary resources to undertake critical, urgent, and appropriate response and measures in a timely manner to curtail and eliminate the COVID-19 threat, as enjoined by the President's Proclamation 922.
- The matter of utilization of schools as quarantine or isolation areas has been discussed in the IATF. The agreement was that any decision concerning public schools should be made in consultation with DepEd, and in cooperation with DepEd officials on the ground and in compliance with the Department of Health (DOH) guidelines, with due consideration to specific conditions.
- Consistent with this agreement, one of the provisions of Memorandum Circular No. 2020-062 (March 21, 2020) issued by the Department of Interior and Local Government states:
  - 5.1.10. LGUs shall not use DepEd schools as quarantine or isolation areas. As a general rule, LGUs must refrain from using schools as quarantine or isolation areas unless explicitly allowed by the Department of Education and strictly following the guidelines it may set.
- DOH also issued Department Memorandum No. 2020-0123 (March 16, 2020) on Interim Guidelines on the Management of Surge Capacity through the Conversion of Public Spaces to Operate as Temporary Treatment and Monitoring Facilities for the Management of Persons Under Investigation and Mild Cases of Coronavirus Disease



2019 (COVID-19). Among the public spaces it identified are auditoriums, gymnasiums, classrooms, vacant hotels, courts, open fields with tents.

- 7. I hereby delegate to Regional Directors the responsibility to approve or deny requests by LGUs to use DepEd schools for quarantine and isolation purposes within their respective jurisdiction, based on evaluation of the request by the Schools Division Superintendent in consultation with the school heads and with the Department of Health.
- 8. In adherence to DOH Department Memorandum No. 2020-0123 and other applicable DOH and World Health Organization (WHO) guidelines, the evaluation of the request shall be guided by the following:
  - a. The LGU must state in its request the specific intended purpose or use for the school, and identify the particular facility in the school that will be used as well as the duration of their use, subject to extension, if necessary;
  - b. The LGU must show that all other facilities have been duly assessed and were found to be inadequate. Schools can be recommended only when no other facilities are available;
  - c. The LGU must present an assessment by the municipal, city, or provincial health officer that the facility within the school is suitable for the specific intended purpose;
  - d. The LGU must present the planned management of the facility, which shall be under the supervision of the City/Municipal Health Officer, as stated in DOH Department Memorandum No. 2020-0123, and must conform to existing DOH standards and guidelines, including, but not limited to, patient management, safety standards within the facility and immediate community, waste management/disposal, and other similar/related health requirements; and
  - e. The LGU request must include an undertaking: for the safekeeping of all property and valuables in the school premises during the operation of the facility; payment of utilities for the period; the conduct of the general cleaning and fumigation, and repair and/or replacement of damaged school facilities as a result of the use of the school; and, payment of expenses related to the setting-up, operation and clearing of the areas used.
- 9. When a request is granted by the Regional Director based on the recommendation by the concerned Schools Division Superintendent, the school heads must coordinate with the LGU on the following preparations before actual use of the facility for the intended purpose:
  - a. Designation and vacating of the approved school spaces/structures to be used by the LGU as quarantine or isolation areas, including removal of all chairs, tables, furniture, equipment and other school properties. Such approved school spaces/structures to be used as quarantine or isolation areas shall be cordoned off from the rest of the school;
  - b. Designation of sufficient number of comfort rooms and handwashing facilities to be used;

- c. Safekeeping and/or proper storage of all learning and education materials, resources, equipment, and school records;
- d. Documentation of the condition of school facilities and resources before use of the facility;
- e. Signing of the minimum Terms and Conditions (TAC) for the Use of DepEd Schools as Quarantine or Isolations Areas, as provided by the Regional Director; and
- f. All DepEd personnel involved in the preparation of the school premises shall strictly observe all existing health precautions and social distancing protocols of DepEd.
- 10. The LGU shall sign the TAC provided by the Regional Director. Should there be other terms to be agreed upon between the Schools Division Office (SDO) and the LGU, the SDO shall draft a Memorandum of Agreement (MOA) between the SDO and LGU, detailing the roles and responsibilities of the parties, among others. The TAC shall be attached to the MOA as an Annex and shall form an integral part of the MOA. In case of conflict between the MOA and the TAC, the TAC shall prevail.
- 11. The following documents are hereto enclosed as reference to evaluate the health-related undertaking by the LGUs:
  - Enclosure No. 1 Interim Guidelines on the Management of PUMs suspected with COVID-19 for Home Quarantine issued as DOH Memorandum No. 2020-0090
  - Enclosure No. 2 Interim Guidelines on the Management of Surge Capacity through the Conversion of Public Spaces to Operate as Temporary Treatment and Monitoring Facilities for the Management if PUIs and Mild Cases of COVID-19 issued by the Department of Health (DOH) as DOH Memorandum No. 2020-0123
  - Enclosure No. 3 Decontamination, Disinfection, and Sterilization practices issued by the DOH (Annex A4 of DOH Memorandum DOH Memorandum No. 2020-0072; which is also Annex A4 of DOH Memorandum No. 2020-0123)
  - Enclosure No. 4 Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19) by the World Health Organization
  - Enclosure No. 5 Minimum Standards for Social Distancing/Baseline Protocols to be observed in the workplace, travel, and home and private space and time of deployed personnel during the enhanced community quarantine by DepEd Task Force COVID-19
- 12. The Regional Directors shall devise an appropriate system for monitoring the use of schools within their jurisdiction as quarantine or isolation areas. For this purpose, DRRM coordinators shall provide support to the School Health and Nutrition personnel in monitoring the use of school facilities. In light of precautionary and social

distancing measures, offsite monitoring through close coordination with LGUs is encouraged; physical monitoring shall be done when deemed feasible.

- 13. For clarifications and concerns, contact the **DepEd Task Force COVID-19 Quick Response and Recovery Team** (DTF COVID-19 QRRT) at the Bureau of Learner Support Services through email at <a href="mailto:blss.shd@deped.gov.ph">blss.shd@deped.gov.ph</a> or at telephone number (02) 8632-9935.
- 14. For immediate dissemination and implementation.

LEONOR MAGTOLIS BRIONES

Secretary



# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

17 February 2020

# DEPARTMENT MEMORANDUM

No. 2020 - 0090

TO:

ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES;
DIRECTORS OF BUREAUS AND CENTERS FOR HEALTH
DEVELOPMENT; MINISTER OF HEALTH – BANGSAMORO
AUTONOMOUS REGION IN MUSLIM MINDANAO);
EXECUTIVE DIRECTORS OF SPECIALTY HOSPITALS AND
NATIONAL NUTRITION COUNCIL; CHIEFS OF MEDICAL
CENTERS, HOSPITALS, SANITARIA AND INSTITUTES;
PRESIDENT OF THE PHILIPPINE HEALTH INSURANCE
CORPORATION; DIRECTORS OF PHILIPPINE NATIONAL
AIDS COUNCIL AND TREATMENT AND REHABILITATION
CENTERS AND ALL OTHERS CONCERNED

SUBJECT:

Interim Guidelines on the Management of Persons Under Monitoring (PUMs) suspected with Coronavirus Disease 2019 (COVID-19) for Home Quarantine

# I. BACKGROUND

After a cluster of pneumonia cases of unknown etiology was reported in Wuhan City, Hubei Province of China last December 31, 2019, Chinese health authorities preliminarily identified the cause of this viral pneumonia as a new or novel type of coronavirus.

With an increasing number of cases spreading to various territories and confirmed human-to-human transmission, the World Health Organization declared the outbreak as a Public Health Emergency of International Concern (PHEIC) last January 30, 2020.

The Department of Health (DOH) hereby issues interim guidelines on the management of persons under monitoring (PUMs) suspected with Coronavirus Disease 2019 (COVID-19) for home quarantine.

# II. GENERAL GUIDELINES

A. Any person, regardless of nationality, race and age, who does not exhibit any sign nor symptom, has history of travel to other areas of China and/or history of exposure to a confirmed case of COVID-19, within the past 14 days, shall be required to undergo monitored home quarantine.

B. Any person, regardless of nationality, race and age, who exhibits fever or any symptom of lower respiratory illness, and has a history of travel to other countries with a confirmed case of COVID-19 but without any history of exposure, shall be advised to undergo monitored home quarantine.

C. Those undergoing home quarantine shall be prohibited to leave their rooms/homes where they are quarantined until they have been certified by the local health official to have finished the 14-day requirement for quarantine procedures.

D. Initial coordination should be done with the Local Government Epidemiologic Surveillance Unit on the logistical, administrative and clinical parameters to be standardized in any attempt to refer a PUM for transfer or consultation.

#### III. IMPLEMENTING GUIDELINES

# A. Room Isolation and Contacts of Persons Under Monitoring (PUM)

- Place the PUM alone in a well-ventilated room, preferably with toilet and bathroom. If this is not possible, maintain a distance of at least 1 meter from the PUM (e.g. sleep in a separate bed).
- Assign one person who is in good health as caretaker of the PUM.
- Visitors, family members and even caregivers are not allowed in the PUM's room, if possible.
- Confine activities of the PUM in his/her room only. If this is not possible, ensure that shared spaces (e.g. kitchen, bathroom) are well ventilated (e.g. keep windows open).

# B. Use of Disposable Surgical Mask

- The PUM should wear a surgical mask fitted tightly to the nose, mouth, and chin
  when in the same room with another household member or when talking to other
  people. The use of masks is not required for the person/s the PUM is/are
  interacting with.
- 2. If alone, the PUM is not required to wear a mask.
- Masks should not be touched or handled during use. If the mask gets wet or dirty with secretions, it must be changed immediately and disposed properly.
- 4. Discard the used mask after a maximum use of 8 hours. Masks are not reusable and should not be washed. After removal of mask, wash hands using water and soap, or rub hands with 70% alcohol or any hand disinfectant.

## C. Hand Hygiene Practice for ALL

- All PUMs and household members should perform hand hygiene following contact with PUM or if in contact with their immediate environment.
- 2. Perform hand hygiene by washing hands with soap and water. If hands are not visibly soiled, 70% alcohol or any alcohol-based hand rub can be used.
- When using soap and water, disposable paper towels to dry hands is desirable. If not available, use dedicated cloth towels and replace them when they become wet.
- 4. Hand hygiene should also be performed before and after preparing food, before eating, after using the toilet, and whenever hands look dirty.
- Address safety concerns (e.g. accidental ingestion by children and fire hazards) on the use of alcohol-based hand rubs.

# D. Respiratory Hygiene and Standard Precaution for ALL

 Respiratory hygiene/cough etiquette should be practiced by all at all times. Respiratory hygiene refers to covering the mouth and nose during coughing or sneezing using surgical masks, tissues, flexed elbow, sleeves of clothes, or inside the neckline of shirts, followed by hand hygiene.

 Avoid direct contact with body fluids, particularly oral or respiratory secretions, and feces. Use disposable gloves to provide oral or respiratory care and when handling feces, urine and waste. Wash hands before putting on and after removing gloves.
 CERTIFIED TRUE COPY

FEB 26 2020

CORAZON S. DELA CRUZ

KMITS - RECORDS SECTION

Department of Health

 Avoid other types of possible exposure to PUM or contaminated items in their immediate environment (e.g. avoid sharing toothbrushes, cigarettes, towels, washcloths, bed linen).

# E. Food Handling of PUM on Home Quarantine

- The assigned caretaker of the PUM shall serve their plates/meal trays only up to the room door.
- After eating, plates/meal trays should be picked up at the room door by the caretaker using disposable gloves to avoid contamination. Perform hand hygiene afterwards.
- Eating utensils and dishes should be cleaned with soap or detergent and water after use and may be re-used instead of being discarded.
- 4. Do not share eating utensils, dishes, and drinks with PUM.

# F. Disposal of Used Gloves, Tissues Papers, and Masks

- Immediately discard materials used to cover the mouth or nose into the trash or clean reusable items appropriately after use (e.g. wash handkerchiefs using regular soap or detergent and water).
- Gloves, tissues, masks and other waste generated by PUM should be placed in a container in PUM's room before disposal with other household waste.

# G. Cleaning and Disinfection

- PUMs are encouraged to clean and disinfect frequently touched surfaces such as bedside tables, doorknobs, 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 at least once daily with regular household disinfectant containing diluted bleach solution (1-part bleach to 99-parts water).
- 3. Clean clothes, bedclothes, bath and hand towels, etc. of PUM using regular laundry soap and water or machine wash at 60-90 °C with common household detergent, and sun-dry. Place used linen into a laundry bag. Do not shake soiled laundry. Additional measures may be needed to prevent unhygienic reuse of gloves, masks, avoid direct contact of the skin and clothes with the contaminated materials.
- 4. 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.

#### H. Reporting

- PUM who developed symptoms should be reported immediately to Regional Epidemiology and Surveillance Unit (RESU) or Local Surveillance Officer for transport to nearest health facility.
- All household members of PUM should be advised to seek immediate medical care when signs and symptoms developed.

For strict compliance of all concerned.

CERTIFIED TRUE COPY

FEB 26 2020

CORAZON/S. DEVA CRUZ

KMITS-RECORDS SECTION A

Department of Health

FRANCISCO T. DUQUE III, MD, MSc Secretary of Health

3



# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

March 16, 2020

DEPARTMENT MEMORANDUM No. 2020 - 0123

FOR:

ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES;
DIRECTORS OF BUREAUS, SERVICES, AND CENTERS FOR
HEALTH DEVELOPMENT(CHD); MINISTER OF HEALTH –
BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO
(MOH-BARMM); EXECUTIVE DIRECTORS OF SPECIALTY
HOSPITALS; CHIEFS OF MEDICAL CENTERS, HOSPITALS AND
SANITARIA; AND ALL OTHERS CONCERNED

SUBJECT:

Interim Guidelines on the Management of Surge Capacity through the Conversion of Public Spaces to Operate as Temporary Treatment and Monitoring Facilities for the Management of Persons Under Investigation and Mild Cases of Coronavirus Disease 2019 (COVID-19)

## I. BACKGROUND

On March 10, 2020, the Philippines was declared to be under Alert Level 4, Code Red Sublevel 2. Over the succeeding days, with the number of COVID-19 cases observed to rise, the capacities of all our health facilities are expected to be fully utilized.

In order to reduce the exposure of the general population to COVID-19 patients and enhance the surge capacity of our existing health facilities, the Department of Health (DOH) hereby issues these interim guidelines to provide guidance for health managers and among Local Government Units (LGU) to improve the surge capacity of the local health system by identifying and converting viable public spaces such as auditoriums, gymnasium, classrooms, vacant hotels, courts, open fields with tents, and the like as temporary treatment and monitoring facilities to manage COVID-19 PUIs and confirmed cases of mild COVID-19.

#### II. OBJECTIVE

This shall provide guidance in managing the potential surge of COVID-19 patients in different health facilities through the identification, assessment and conversion of viable public spaces into temporary treatment and monitoring facilities.

#### III. SCOPE AND COVERAGE

These interim guidelines shall cover all LGUs and health managers who require temporary treatment and monitoring facilities

# IV. GENERAL GUIDELINES

- A. Urban health centers and rural health units are enjoined to provide services for 24 hours, 7 days a week, or operate on an on call basis after office hours.
- B. The health manager or LGU may identify and consider converting public spaces into temporary treatment and monitoring facilities when necessary, to cater to the increasing number of Persons Under Investigation (PUI) and cases of COVID-19 patients with mild symptoms in the following conditions:
  - 1. Municipality, City, or Province has declared an enhanced community quarantine;
  - 2. Current health facilities are operating nearing its maximum surge capacity.
- C. Possible areas that may be converted include auditoriums, gymnasium, classrooms, vacant hotels, courts, and open fields with tents. They may consider partnership with Non-Government Agencies and Private Sector for the use of these public spaces.
- D. Operations of these temporary treatment and monitoring facilities shall be under the supervision of the City/Municipal Health Officer who shall assign a facility manager when necessary, and shall serve as an extension of their Urban Health Centers/Rural Health Units.
- **E.** These treatment facilities shall provide the following services:
  - 1. Outpatient Services
    - a) Consultation for patients experiencing mild respiratory symptoms (fever, cough, colds, etc.);
    - b) Provision of supportive treatment and psychosocial service;
  - 2.Treatment and monitoring services for PUIs who do not have optimal isolation space in their homes, and confirmed COVID-19 patients with mild symptoms, which includes vital signs monitoring, appropriate clinical management;
  - 3. Timely referral to appropriate health facilities as needed.
- F. The health manager or LGU may develop mechanisms to ensure coordination with Urban Health Centers/Rural Health Units and access to higher centers or health facilities that provide intensive care services and for proper and timely referral of patients as indicated in Department Memorandum No. 2020-0072, "Interim Guidelines for 2019 Novel Coronavirus Acute Respiratory Disease (2019-nCOV ARD) Response in Hospitals and Other Health Facilities (ANNEX A).

- G. Conversion of public spaces into temporary treatment and monitoring facilities shall follow principles and protocols related to Infection Prevention and Control. Confirmed COVID-19 patients may be placed in shared space or rooms. PUIs shall be separated in a different space/tent/room provided with individual enclosed spaces and separate entrance.
- **H.** The health manager or LGU shall ensure the provision of basic needs for patients, such as food, water, sanitation, and communication.
- I. The temporary treatment and monitoring facility shall be limited only to health workers and patients. No visitors shall be allowed in the area.
- J. The temporary treatment and monitoring facility shall provide for infection control measures, water, sanitation and hygiene facilities including but not limited to availability of toilets, solid waste management/disposal, vector control and other similar /related health requirements.

# V. SPECIFIC GUIDELINES

# A. Patient Management

- 1. Patients classified as Persons Under Investigation (PUI)
  - a) May be accommodated in temporary treatment and monitoring facilities provided they are in separate isolation rooms that meet the standards on converted private rooms detailed in Department Memorandum No. 2020-0062, "Guidelines on the Standards of Airborne Infection Isolation Room and Conversion of Private Rooms and/or Wards into Temporary Isolation Rooms for the Management of Patients Under Investigation (PUI) for 2019 Novel Coronavirus (nCOV)" (ANNEX B).
  - b) In compliance with Infection Prevention and Control standards, PUI cannot be cohorted together.
- Confirmed COVID-19 with mild symptoms, no comorbidities, and aged 18-60 years may be accommodated and managed in the converted treatment and monitoring facilities.
- 3.Confirmed COVID-19 with severe symptoms, with comorbidities, aged 0-18 or 60 years and above may be referred to the nearest Level 2 or Level 3 hospital accepting PUI or confirmed COVID-19 patients for appropriate management.

# **B.** Location Features

Identified space should:

- Be accessible within a maximum of two (2) hours to a Level 2 or Level 3 hospital accepting PUI or confirmed COVID-19 patients;
- 2. Have uninterrupted access to electricity, potable water source, and sewer line;

# C. Minimum Infrastructure Requirement

- Temporary treatment and monitoring facilities must be fully enclosed with adequate lighting;
- 2. There should be at least fan ventilation to be provided;
- 3. There should be a separate entrance and exit for the patients and healthcare workers;
- 4.The facility should be divided into three (3) zones namely: contaminated, buffer and sterile zones.
  - a) Contaminated Zone: serve as the area where patients are admitted/contained.
  - b) Buffer Zone: serves as an area for doffing of PPE, decontamination, and hand hygiene.
  - c) Sterile Zones: serves as holding area and entrance for healthcare workers, and the area for Personal Protective Equipment (PPE) donning of health workers.
- 5.Distance between patient beds should be maintained at least 3 feet apart on all sides;
- 6.Temporary partitions should be provided to ensure patient privacy (i.e. drapes or low walls) for COVID-19 patients placed in a shared space or room.
- 7.A backup supply of electricity and free-flowing water for at least 72 hours must be ensured, in case of water and power interruption;
- 8. The provision of fixed or temporary plumbing fixture per person must follow the following requirements:
  - a) Ratio requirements:
    - (1)One (1) water closet per 25 males and one (1) per 20 females
    - (2)One (1) urinal per 10-50 males, adding one (1) fixture for each additional 50 males
    - (3)One (1) lavatory for every 10 males and one (1) for every 10 females
    - (4)One (1) shower per 8 persons
  - b) Confirmed cases of COVID-19 may share toilets and showers. Regular disinfection should be practiced in accordance with DM 2020-0072 (see ANNEX A).
  - c) A dedicated toilet and shower for each PUI should be provided when possible. In cases where this arrangement is not feasible, the toilet/shower facilities must be disinfected after every use.
- 9. There may be provision or access to laundry services.

# D. Minimum Medicines, Medical Supplies, and Equipment Requirement:

- The LGU must ensure the availability of necessary medicines and medical supplies for supportive treatment and emergency care (Annex C);
- 2.The temporary treatment and monitoring facilities must have access to at least a secondary clinical laboratory and basic radiologic services such as X-ray.

# E. Minimum Human Resources Requirements:

- 1.The LGU may source from its health network or private sector partners the necessary human resources needed to operationalize the temporary treatment and monitoring facility to ensure a 24/7 operation.
- 2.Each temporary and treatment monitoring may have the following minimum human resource:
  - a) At least one (1) Physician per shift
  - b) At least three (3) Nurses per shift (1 Nurses: 12 Patients)
  - c) Support Staff
    - (1) At least two (2) security personnel per shift (1 for each entrance).
    - (2)At least one (1) maintenance staff per shift
- 3.The LGU may likewise provide the following additional human resources as the need arises:
  - a) At least one (1) pharmacist per shift (1 pharmacist:100 patients)
  - b) At least one (1) nutritionist-dietitian (1 ND:50 patients)
  - c) At least one (1) medical social worker per shift (1 MSW:25 patients)
  - d) At least five (5) food handlers: (10:100 patients)
- 4.The LGU should also ensure the availability of psychosocial interventions for healthcare workers deployed in these temporary treatment and monitoring facilities.

# F. Minimum Requirements for the Adherence to Infection Prevention and Control

- 1. Adequate Personal Protective Equipment (PPE) must be provided to both patients and all healthcare workers and deployed in these facilities, which may include:
  - a) For healthcare workers
    - (1)Surgical masks
    - (2)Gowns
    - (3)Goggles/face shields
    - (4)N95 respirators
  - b) For patients
    - (1)Surgical masks
- 2. Rational use of the provided PPE must be ensured.

# G. Minimum Requirements for Healthcare Waste Management

- 1.Segregation, collection, and handling of all waste generated from these temporary treatment and monitoring health facilities may abide by the principles of healthcare waste management.
- 2.LGUs may refer to DM No. 2020-0072 in Annex A for a more detailed guide on healthcare waste management for highly infectious waste and the appropriate treatment of soiled linens and clothes.

# H. Availability of Transport and Referral Protocols

- 1.All temporary treatment and monitoring facilities shall have access to at least a Type I Basic Life Support (BLS) Ambulance as defined in the Administrative Order No. 2018-0001, "Revised Rules and Regulations Governing the Licensure of Land Ambulances and Ambulance Service Providers."
- 2.All patients whose symptoms progressed may be referred to a facility with intensive care services. Referral to these health facilities may be in accordance with Department Memorandum No. 2020-0108, "Guidelines for Management of Patients with Possible and Confirmed COVID-19" and its amendments.

For guidance and strict compliance.

1

By Authority of the Secretary of Health

LILIBETH C. DAVID, MD, MPH, MPM, CESO I

Undersecretary of Health

Health Facilities Infrastructure and Development Team



# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

February 3, 2020

DEPARTMENT MEMORANDUM No. 2020 - <u>10072</u>

TO:

ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES;
DIRECTORS OF BUREAUS AND CENTERS FOR HEALTH
DEVELOPMENT; MINISTER OF HEALTH - BANGSAMORO
AUTONOMOUS REGION IN MUSLIM MINDANAO);
EXECUTIVE DIRECTORS OF SPECIALTY HOSPITALS AND
NATIONAL NUTRITION COUNCIL; CHIEFS OF MEDICAL
CENTERS, HOSPITALS, SANITARIA AND INSTITUTES;
PRESIDENT OF THE PHILIPPINE HEALTH INSURANCE
CORPORATION; DIRECTORS OF PHILIPPINE NATIONAL
AIDS COUNCIL AND TREATMENT AND REHABILITATION
CENTERS AND OTHERS CONCERNED

SUBJECT:

Interim Guidelines for 2019 Novel Coronavirus Acute Respiratory Disease (2019-nCoV ARD) Response in Hospitals and Other Health Facilities

## I. BACKGROUND

After a cluster of pneumonia cases of unknown etiology was reported in Wuhan City, Hubei Province of China last December 31, 2019, Chinese health authorities preliminarily identified the cause of this viral pneumonia as a new or novel type of coronavirus (2019-nCoV).

With an increasing number of cases spreading to various territories and confirmed human-to-human transmission, the World Health Organization declared the outbreak as a Public Health Emergency of International Concern (PHEIC) last January 30, 2020.

The Department of Health (DOH) hereby issues these interim guidelines for all health facilities and institutions whether public or private on the necessary precautions, preparations of the health facilities, and management of persons under investigation (PUI) and confirmed cases of the 2019-nCoV ARD.

#### II. GENERAL GUIDELINES

- 1. All Level 2 and Level 3 hospitals shall attend to all PUIs.
- 2. All hospitals and health facilities shall establish and maintain an Infection Prevention and Control Committee (IPCP) in the health facility, headed by an infection control physician and infection control nurse. The IPCP shall be responsible for the formulation, implementation, and monitoring of policies, guidelines, and procedures related to infection control. (Refer to the National Standards in Infection Control for Healthcare Facilities, 2009 Edition)



# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

February 3, 2020

DEPARTMENT MEMORANDUM No. 2020 - 10072

TO:

ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES;
DIRECTORS OF BUREAUS AND CENTERS FOR HEALTH
DEVELOPMENT; MINISTER OF HEALTH - BANGSAMORO
AUTONOMOUS REGION IN MUSLIM MINDANAO);
EXECUTIVE DIRECTORS OF SPECIALTY HOSPITALS AND
NATIONAL NUTRITION COUNCIL; CHIEFS OF MEDICAL
CENTERS, HOSPITALS, SANITARIA AND INSTITUTES;
PRESIDENT OF THE PHILIPPINE HEALTH INSURANCE
CORPORATION; DIRECTORS OF PHILIPPINE NATIONAL
AIDS COUNCIL AND TREATMENT AND REHABILITATION
CENTERS AND OTHERS CONCERNED

SUBJECT:

Interim Guidelines for 2019 Novel Coronavirus Acute Respiratory
Disease (2019-nCoV ARD) Response in Hospitals and Other Health
Facilities

#### I. BACKGROUND

After a cluster of pneumonia cases of unknown etiology was reported in Wuhan City, Hubei Province of China last December 31, 2019, Chinese health authorities preliminarily identified the cause of this viral pneumonia as a new or novel type of coronavirus (2019-nCoV).

With an increasing number of cases spreading to various territories and confirmed human-to-human transmission, the World Health Organization declared the outbreak as a Public Health Emergency of International Concern (PHEIC) last January 30, 2020.

The Department of Health (DOH) hereby issues these interim guidelines for all health facilities and institutions whether public or private on the necessary precautions, preparations of the health facilities, and management of persons under investigation (PUI) and confirmed cases of the 2019-nCoV ARD.

#### II. GENERAL GUIDELINES

- All Level 2 and Level 3 hospitals shall attend to all PUIs.
- 2. All hospitals and health facilities shall establish and maintain an Infection Prevention and Control Committee (IPCP) in the health facility, headed by an infection control physician and infection control nurse. The IPCP shall be responsible for the formulation, implementation, and monitoring of policies, guidelines, and procedures related to infection control. (Refer to the National Standards in Infection Control for Healthcare Facilities, 2009 Edition)

- A healthcare facility in a country where hospital associated 2019-nCoV ARD infections have been reported;
- (3) Direct contact with animals (if animal source is identified) in countries where the 2019-nCoV ARD is known to be circulating in animal populations or where human infections have occurred as a result of presumed zoonotic transmission

PUIs may present a range of signs and symptoms from mild, moderate, or severe illness; the latter includes severe pneumonia, ARDS, sepsis and septic shock. (See page 3 of Annex B for clinical manifestation of 2019-nCoV ARD) The criteria and the DOH decision tool (Annex C) shall be used to guide evaluation.

#### 2. Close Contact

Persons visiting patients or staying in the same close environment of a 2019-nCoV ARD confirmed case who are either:

- a) Within approximately 6 feet (2 meters), or within the room or care area, of a confirmed case for a prolonged period of time while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); OR
- b) Having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment.

Close contact can include caring for, living with, visiting, or sharing a health care waiting area or room with a confirmed case.

The epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

# C. Patient Screening

The objective of screening is to quickly identify people with a travel history to countries with ongoing transmission of 2019-nCoV ARD. All personnel in health facilities should be trained on the following 2019-nCoV ARD screening procedures:

- Screen at all points of entry to the health facility (to catch every patient and visitor).
- Use broad criteria to quickly identify all patients at risk (i.e. travel to China in the last 14 days).
- 3. Train screening staff on what to probe. e.g., Have you traveled overseas in the last 14 days? Did you travel to China? Have you visited any animal or seafood market? Did you visit any healthcare facility or sick person during your travel?
- 4. Train screening staff on what to do once a PUI is identified.
- Identify holding and isolation areas and healthcare workers who will perform further assessment of patients.
- 6. Ensure that effective triage checklist and patient flow are in place.
- 7. Ensure that necessary precautions are observed:
  - a) Designate a well-ventilated area.
  - b) Maintain a minimum 1-meter distance from patients.
  - c) Provide symptomatic patients with facemask for source control when possible.

- d) Perform hand hygiene frequently.
- e) Follow standard precautions and droplet precautions when evaluating patients with acute respiratory tract infections.
- 8. Once identified, immediately isolate PUIs in designated holding or isolation areas with full infection control precautions.
- There should be prompt reporting of cases to surveillance units for immediate contact tracing and quarantine measures. Ensure that the relevant contact numbers are readily available.

# D. Patient Triage

The objective of triage is to determine if patients have symptoms of 2019-nCoV ARD infection and if so, to promptly isolate them. Only health care personnel should perform triage.

- Triage should ideally be conducted in an isolation room with negative pressure and/or adequate ventilation.
- 2. Other respiratory hygiene supplies (such as facial tissues), trash cans, and hand hygiene facilities should be available inside the room.
- 3. Triage officers should wear the appropriate PPE.
- 4. Triage officers shall conduct a complete history and physical examination, and decide whether a patient fulfills the case definition or criteria for the specific Respiratory Infection of Pandemic or Outbreak Potential (RIPOP) in consultation with surveillance officers and consultant(s) in charge of EREIDs.
- 5. If patients are in queue (surge of patients), separate the "sick" from the "well" patients by 6 feet (2 meters), and ensure patients are at least 3 feet (1 meter) apart from each other.

# E. Referral for Admission

- Symptomatic contacts or PUIs should be considered for admission for close observation in a health facility.
- 2. Based on WHO guidelines, coordination with a health facility and/or health care provider should be done during the observation period. Medical personnel should be involved in reviewing the current health status of the contacts by phone and, ideally, by scheduled visits on a regular (e.g. daily) basis, performing specific diagnostic tests as necessary.
- Doctors and other health care professionals should give advance instructions on where to seek care when a contact becomes ill, what should be the most appropriate mode of transportation, when and where to enter the designated health care facility, and what infection control precautions should be followed.
- Once the receiving medical facility has been notified that a symptomatic contact will be referred to their facility, the facility should facilitate transport of patient to the facility.
- 5. The ill contact should be advised to perform respiratory hygiene and stand or sit as far away from others as possible or at least 3 feet (1 meter), when in transit and when in the health care facility.
- 6. 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 regular household cleaners or a diluted bleach solution, whichever is most appropriate.

#### F. Isolation Precautions

- 1. The duration of infectivity for 2019-nCoV ARD is unknown. While Standard Precautions should continue to be applied always, additional isolation precautions should be used during the duration of symptomatic illness and continued for 24 hours after the resolution of symptoms. (Annex A2)
- Given that little information is currently available on viral shedding and the potential for transmission of 2019-nCoV ARD, testing for viral shedding should assist the decision making when readily available.
- 3. Patient information (e.g. age, immune status and medication) should also be considered in situations where there is concern that a patient may be shedding the virus for a prolonged period.

# G. Notification

- 1. Designated disease surveillance officers in hospitals and other facilities shall be responsible for doing the preliminary assessment of suspected cases in their respective health facility and report accordingly using the form in *Annex D*.
- 2. Healthcare providers should immediately notify the infection control personnel at their healthcare facility and report any event of a possible case of 2019-nCoV ARD to the Municipal Health Officer (MHO) or City Health Officer (CHO) for verification and initial investigation. The MHO/CHO shall then report to the Regional Epidemiology Surveillance Unit (RESU) using the Event-Based Surveillance System (ESR) system of the Epidemiology Bureau (EB) of DOH.

# H. Clinical Management

- 1. There is no current evidence from RCTs to recommend any specific anti-2019-nCoV ARD treatment for PUIs or confirmed cases.
- All healthcare providers are advised to use the latest available clinical practice guidelines issued by local specialty societies and duly-endorsed by the DOH. In the interim, a separate issuance will be published by the DOH.

# I. Discharge and Follow-up

Due to the evolving nature of the etiology of 2019-nCOV, guidance for discharge criteria and management during follow-up shall be regularly updated and published in a separate issuance. In the interim, the following shall apply.

- Confirmed positive cases on admission SHOULD ONLY be discharged if ALL
  of the following conditions are fulfilled:
  - a. Two negative RT-PCR tests for 2019-nCoV ARD done 48 hours apart.
  - Afebrile and asymptomatic (including cough and respiratory symptoms) for 48 hours.
  - c. Laboratory and radiologic tests done according to clinical case management (e.g. chest x-ray WBC, platelet count, CPK, liver functions tests, plasma sodium) previously abnormal returning to normal
- 2. PUIs admitted as per DOH Decision Tool (Annex C), shall be discharged upon NEGATIVE 2019-nCoV ARD test from RITM. Until then PUIs shall be admitted in isolation even if asymptomatic. Repeat testing for patients with an initial negative nCoV test result may be performed if a high index for suspicion

for 20191-nCoV ARD remains despite an initial negative test result. Such conditions include, but are not limited, to the following:

- a. Clinical deterioration in the presence of an established disease etiology and with adequate treatment. A single negative test result, particularly if this is from an upper respiratory tract specimen, does not exclude infection. Repeat sampling and testing, preferably of lower respiratory specimen, is strongly recommended in severe or progressive disease. Consider a possible co-infection with 2019-nCoV.
- b. No other etiology for the patient's signs and symptoms has been identified despite work-up.
- c. Clinical specimen(s) initially sent was/were deemed to be unsatisfactory or insufficient (delay in transport and processing, only NPS or OPS was sent).
- For mortalities of 2019-nCoV ARD, refer to guidelines for Disposal and Shipment of the Remains of confirmed cases of 2019-nCoV ARD.
- 4. Hospital Disease Surveillance Officer shall report to the RESU within 24 hours the patients that have been discharged. The RESU shall then report to the DOH Regional Director and the 2019-nCoV ARD Task Force
  - a. One week after discharge, confirmed cases should submit to mandatory follow-up and retesting for chest x-ray, complete blood count, and other laboratory tests which previously yielded abnormal results.

# H. Sources of 2019-nCoV ARD Information and Advisories

- 1. Everyone is advised to refrain from sharing unverified reports and/or false news to avoid undue stress and worry due to misinformation.
- For announcements and public advisories, you may visit the following official DOH channels:
  - Website: https://www.doh.gov.ph/2019-nCoV
  - Facebook: <a href="https://www.facebook.com/OfficialDOHgov/">https://www.facebook.com/OfficialDOHgov/</a>
  - Twitter: <a href="https://twitter.com/DOHgov">https://twitter.com/DOHgov</a>
- DOH health promotion materials (e.g. infographics, social media cards among others) may be reproduced by hospitals and other health facilities for instructional use or to keep health workers and patients informed free of charge.

For strict compliance of all concerned.

RANCISCO T. DIPQUE III, MD, MS

Secretary of Health

# Annex A. Infection Prevention and Control Practices

# 1. HAND HYGIENE

- a. Proper handwashing is the single most effective way to prevent infections in the hospital.
- b. Hand hygiene practices in the health facility must be emphasized using the WHO Multimodal Hand Hygiene Strategy: 5 Moments of Hand Hygiene (Annex A1) and proper handwashing technique.
- c. The availability of alcohol-based hand rubs at point-of-care and other areas of the facility must be ensured.

# 2. ISOLATION PRECAUTION

To achieve effective interruption in the transmission of an infectious agent, it is essential to use two tiers of precautions (Annex A2)

- a. Standard Precautions for the care of all patients; AND
- b. Transmission-based precautions for patients with known or suspected disease spread by any of these routes: Airborne Precautions, Droplet Precautions or Contact Precautions

# 3. PERSONAL PROTECTIVE EQUIPMENT

- a. Appropriately wearing personal protective equipment (PPE), such as gloves, masks, and gowns, is also essential to protect healthcare workers from contact with infectious agents. The selection of PPE is based on the nature of the patient interaction and/or mode of transmission (Annex A3).
- b. Hand hygiene is always the first and the final step before wearing or after removing and disposing of PPE.

# 4. DECONTAMINATION, DISINFECTION AND STERILIZATION

Proper cleaning, disinfection and sterilization is one of the most effective ways of disrupting the transmission and spread of microorganisms in the healthcare setting. Existing protocols need to be strictly implemented by healthcare personnel (Annex A4).

#### 5. SPECIMEN COLLECTION

- All specimens collected for laboratory testing shall be regarded as potentially infectious.
- b. All Health Care Workers who will collect, handle or transport, perform testing any clinical specimens shall adhere rigorously to the standard precaution measures such as Personal Protective Equipment (i.e. gloves, laboratory gown, N95 Masks, face shield, etc.), and ensure biosafety practices are observed to minimize the possibility of exposure to pathogens.
- c. For further details of the guidelines kindly refer to the "Interim Laboratory Biosafety Guidelines for Handling and Processing Suspected 2019 Novel Coronavirus (2019 nCoV) Specimens" of Research Institute for Tropical Medicine.

# 6. SPECIMEN HANDLING, PROCESSING, PACKAGING AND TRANSPORT

To ensure that proper handling, processing, packaging and transport of laboratory specimens from suspected Person Under Investigation (PUI) is observed, please refer to the DOH Manual on Packaging and Transport of Laboratory Specimen for Referral and Interim Laboratory Biosafety Guidelines for Handling and Processing Suspected 2019-nCoV Specimens (http://bit.ly/2tdLr4x)

# 7. FLOW OF PATIENTS SUSPECTED TO BE INFECTIOUS

Early detection and placement of patients to appropriate areas in the health facility is critical in the prevention of spread of infectious diseases. For guidelines on the management of patients suspected to be infectious, kindly refer to the Interim Guidelines on the Preparedness and Response to Novel Coronavirus (2019-nCoV) issued.

Health facilities should ensure that all resources and contingencies needed to support the management of patients and for the implementation of infection prevention and control measures are adequately available.

#### 8. DISPOSAL OF INFECTIOUS BODY

For proper handling of infectious body, strict adherence to precautionary measures is a must. Kindly refer to the Guidelines on Disposal of Dead Persons from Dangerous Communicable Diseases for guidance.

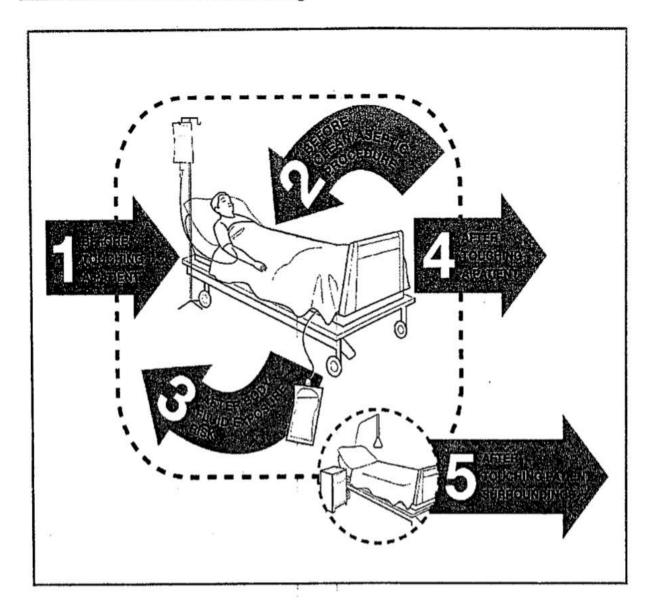
# 9. HEALTHCARE WASTE MANAGEMENT

- a. "Health Care Waste" (HCW) includes all the solid and liquid waste generated as a result of any of the following: (Annex A5)
  - i. Diagnosis, treatment, or immunization of human beings;
  - ii. Research pertaining to the above activities;
  - iii. Research using laboratory animals for the improvement of human health;
  - iv. Production or testing of biological products; and
  - v. Other activities performed by health care facilities.
- b. Management of health care waste, more specifically of the hazardous waste types (which include infectious waste) must be done through proper waste disposal to mitigate risks and potential health hazards to people exposed. Infectious waste should always be assumed to potentially contain a variety of pathogenic microorganisms that may enter the human body through the following routes:
  - i. through a puncture, abrasion, or cut in the skin
  - ii. through the mucous membrane
  - iii. by inhalation
  - iv. by ingestion

# 10. REFERENCES

Full WHO guidelines are available at Infection prevention and control of epidemicand pandemic-prone acute respiratory infections in health care. Retrieved from the following:

- https://www.who.int/publications-detail/infection-prevention-and-control-during-he alth-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125; and
- https://www.who.int/publications-detail/advice-on-the-use-of-masks-the-community
   -during-home-care-and-in-health-care-settings-in-the-context-of-the-novel-coronavi
   rus-(2019-ncov)-outbreak



# Source:

The patient zone, health-care area, and critical sites with inserted time-space representation of "My five moments for hand hygiene" (Figure I.21.5b). Reprinted by the World Health Organization from Sax, 2007 with permission from Elsevier. Retrieved from <a href="https://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906">https://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906</a>

eng.pdf:jsessionid=F58881D16DB6861F4F387CFD85E3A998?sequence=1

3

# Annex A2. Isolation Precautions

# A. Standard Precautions

Standard precautions are recommended for all hospitalized patients should consist
of hand hygiene and respiratory hygiene with cough etiquettes. This also includes
safe disposal of instruments and soiled linens.

 All healthcare workers should use appropriate barrier precautions to avoid skin and mucous membrane exposure when contact with blood or body fluids from any

patient.

 Gloves should be worn for contact with blood and body fluids, mucous membranes, or non-intact skin; when handling surfaces or items soiled with blood or body fluids; or for venipuncture or other procedures involving vascular access.

4. Gloves should be changed after each patient contact.

Masks and protective eyewear or face shields should be worn when procedures are likely to generate aerosols or droplets of blood or other body fluids.

6. Gowns should be worn for procedures that are likely to soil clothing.

- 7. Hands or skin contaminated with blood or body fluids should be washed immediately using soap and water. Hand hygiene should be done after removing gloves.
- 8. Precautions should be taken to prevent sharps or needlestick injuries. Needles should not be recapped, removed from disposable syringes, or manipulated by hand. After use, needles, disposable syringes, scalpels, and other disposable sharp instruments should immediately be placed in a designated puncture-resistant container.

 Mouthpieces and resuscitation devices should be readily available for use in areas where resuscitation procedures may be anticipated.

10. All healthcare workers with exudative skin lesions should not be involved in direct patient care or should not handle patient-care equipment until the condition has resolved.

# **B.** Transmission-based Precautions

 When standard precautions are not able to completely interrupt the route of transmission of certain infections, transmission-based precautions are implemented.

# C. Contact Precautions

- Contact Precautions are intended to prevent transmission of pathogens which are spread by direct or indirect contact with the patient or the patient's environment. It applies when there is presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission.
- 2. A single-patient room is preferred for patients who require Contact Precautions.
- 3. When a single-patient room is not available, consultation with the ICC is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate).

4. In multi-patient rooms, ≥3 feet spatial separation between beds is advised to reduce the opportunities for inadvertent sharing of items between the infected/colonized patient and other patients.

 Healthcare personnel caring for patients on Contact Precautions MUST wear a gown and gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment.  Donning PPE upon room entry and discarding before exiting the patient room is done to contain pathogens, especially those that have been implicated in transmission through environmental contamination.

# D. Droplet Precautions

- Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. Because these pathogens do not remain infectious over long distances in a healthcare facility, special air handling and ventilation are not required to prevent droplet transmission.
- 2. A single patient room is preferred for patients who require Droplet Precautions.
- 3. When a single-patient room is not available, consultation with the ICC is recommended.
- 4. Spatial separation of ≥3 feet and drawing the curtain between patient beds is especially important for patients in multi-bed rooms with infections transmitted by the droplet route.
- Healthcare personnel caring for patients on Droplet Precautions MUST wear a mask (a respirator is not necessary) for close contact with infectious patient; the mask is generally donned upon room entry.
- Patients on Droplet Precautions who must be transported outside of the room should wear a mask if tolerated and follow Respiratory Hygiene and Cough etiquette.

# E. Airborne Precautions

- 1. Airborne Precautions prevent transmission of infectious agents that remain infectious over long distances when suspended in the air (ie. rubeola virus [measles], varicella virus [chickenpox], M. tuberculosis, and SARS-CoV).
- 2. The preferred placement for patients who require Airborne Precautions is in an airborne infection isolation room (AIIR).
- 3. An AIIR is a single-patient room that is equipped with special air handling and ventilation capacity that meet international standards (i.e., monitored negative pressure relative to the surrounding area, 12 air exchanges per hour for new construction and renovation and 6 air exchanges per hour for existing facilities, air exhausted directly to the outside or recirculated through HEPA filtration before return)
- 4. It is best that isolation rooms are present in hospitals, emergency departments, and nursing homes that care for patients with M. tuberculosis.
- 5. In settings where Airborne Precautions cannot be implemented due to limited engineering resources (e.g., physician offices), masking the patient, placing the patient in a private room (e.g., office examination room) with the door closed, and providing N95 or higher level respirators or masks if respirators are not available for healthcare personnel will reduce the likelihood of airborne transmission until the patient is either transferred to a facility with an AIIR or returned to the home environment, as deemed medically appropriate.
- Healthcare personnel caring for patients on Airborne Precautions MUST wear a
  mask or respirator, depending on the disease-specific recommendations that is
  donned prior to room entry.

# Annex A3. Personal Protective Equipment (PPE)

#### A. Gloves

- 1. Gloves are used to prevent contamination of healthcare personnel hands when:
  - a) anticipating direct contact with blood or body fluids, mucous membranes, non-intact skin and other potentially infectious material
  - b) having direct contact with patients who are colonized or infected with pathogens transmitted by the contact route
  - c) handling or touching visibly or potentially contaminated patient care equipment and environmental surfaces.
- The healthcare personnel should use the following during specimen collection on a PUI: Double Gloves (preferably: Nitrile); Scrub suit; Disposable Laboratory Gown (impermeable/ breathable/ long sleeves/ back enclosure); Fit Tested N95 mask; Face shield / visor.
- During patient care, transmission of infectious organisms can be reduced by adhering to the principles of working from "clean" to "dirty" and confining or limiting contamination to surfaces that are directly needed for patient care.
- 4. It may be necessary to change gloves during the care of a single patient to prevent cross-contamination of body sites.
- It also may be necessary to change gloves if the patient interaction also involves touching portable computer keyboards or other mobile equipment that is transported from room to room.
- Discarding gloves between patients is necessary to prevent transmission of infectious material.
- Gloves must not be washed for subsequent reuse because microorganisms cannot be removed reliably from glove surfaces and continued glove integrity cannot be ensured.
- 8. When gloves are worn in combination with other PPE, they are put on last.
- Hand hygiene following glove removal further ensures that the hands will not carry
  potentially infectious material that might have penetrated through unrecognized
  tears or that could contaminate the hands during glove removal.

# B. Isolation Gowns

- Isolation gowns are used as specified by Standard and Transmission-Based Precautions to protect the HCW's arms and exposed body areas; and to prevent contamination of clothing with blood, body fluids, and other potentially infectious material.
- 2. When applying Standard Precautions, an isolation gown is worn only if contact with blood or body fluid is anticipated.
- When Contact Precautions are indicated, donning of both gown and gloves upon room entry is indicated to address unintentional contact with contaminated environmental surfaces.
- Gowns are usually the first piece of PPE to be donned. Full coverage of the arms
  and body front, from neck to the mid-thigh or below will ensure that clothing and
  exposed upper body areas are protected.
- 5. Isolation gowns should be removed before leaving the patient care area to prevent possible contamination of the environment outside the patient's room.
- 6. Isolation gowns should be removed in a manner that prevents contamination of clothing or skin. The outer, "contaminated" side of the gown is turned inward and rolled into a bundle, and then discarded into a designated container for waste or linen to contain contamination.

### C. Face Protection

# a. Face Masks

- Masks are used for three primary purposes:
  - a. Placed on HCWs to protect them from contact with infectious material from patients, example, respiratory secretions and sprays of blood or body fluids, consistent with Standard Precautions and Droplet Precautions;
  - Placed on HCWs when engaged in procedures requiring sterile technique to protect patients from exposure to infectious agents carried in a HCW's mouth or nose;
  - c. Placed on coughing patients to limit potential dissemination of infectious respiratory secretions from the patient to others (Respiratory Hygiene/Cough Etiquette).
- Masks may be used in combination with goggles to protect the mouth, nose and eyes, or a face shield may be used instead of a mask and goggles, to provide a more complete protection for the face

# b. Goggles

- The eye protection chosen for specific work situations depends upon the circumstances of exposure, other PPE used, and personal vision needs.
- Personal eyeglasses and contact lenses are NOT considered adequate eye protection.
- 3. Even if Droplet Precautions are not recommended for a specific respiratory tract pathogen, protection for the eyes, nose and mouth by using a mask and goggles, or face shield alone, is necessary when it is likely that there will be a splash or spray of any respiratory secretions or other body fluids.

# Annex A4. Decontamination, Disinfection and Sterilization

# A. Decontamination and Disinfection Practices

The following must be observed in the decontamination and disinfection practices:

- 1. Use appropriate hand hygiene, PPE (e.g., gloves), and isolation precautions during cleaning and disinfecting procedures.
- 2. Have clear instructions and provide feedback to the personnel on how to properly wear PPE appropriate for a surface decontamination and cleaning task.
- Discard used PPE by using routine disposal procedures or decontaminate reusable PPE as appropriate.
- Use standard cleaning and disinfection protocols to control environmental contamination.
- 5. Pay close attention to cleaning and disinfection of high-touch surfaces in patient-care areas (e.g., bed rails, carts, charts, bedside commodes, bed rails, doorknobs, or faucet handles)
- Ensure compliance by housekeeping staff with cleaning and disinfection procedures by putting up checklists.
- When contact precautions are indicated for patient care, use disposable patient-care items wherever possible to minimize cross-contamination with multiple-resistant microorganisms.

# B. Spaulding Classification for Disinfection & Sterilization of Healthcare Items

CLASSIFICATION	ITEM USE	GOAL	APPROPRIATE PROCESS
Critical Items	Items entering sterile tissue, the body cavity, the vascular system and non intact mucous membranes, e.g. surgical instruments	Objects will be sterile (free of all microorganisms including bacterial spores)	Sterilization (or use of single use sterile product)  Steam sterilization  Low temperature methods (ethylene oxide, peracetic acid, hydrogen peroxide plasma)
Semi-critical Items	Items that make contact, directly or indirectly, with intact mucous membranes or non intact skin, e.g. endoscopes, diagnostic probes (vaginal/rectal), anesthetic equipment	Objects will be free of all microorganisms, with the exception of high numbers of bacterial spores	High level disinfection Thermal disinfection Chemical disinfection (glutaraldehyde, OPA)  *It is always preferable to sterilize semi-critical items

			whenever they are compatible with available sterilization processes
Non-critical Items	Objects that come into contact with intact skin but not mucous membranes, e.g. crutches, BP cuffs	Objects will be clean	Low level disinfection Cleaning (manual or mechanical)

8.

70 at 1

,

1

9

#### Annex A5. Healthcare Waste

# A. Healthcare Waste Types

Healthcare waste (HCW) can be broadly categorized into "hazardous" and "non-hazardous" waste types, as listed below.

HAZARDOUS	NON-HAZARDOUS (General)	
<ul> <li>Sharps</li> <li>Infectious</li> <li>Pathological</li> <li>Anatomical</li> <li>Pharmaceutical</li> <li>Genotoxic</li> <li>Chemical</li> <li>Radioactive</li> <li>Pressurized Containers</li> </ul>	- Recyclable - Biodegradable - Residual	

Hazardous HCW, which includes infectious wastes, refers to waste that may pose a variety of environmental and health risks. Infectious waste is most likely to contain pathogens (bacteria, viruses, parasites, or fungi) in sufficient concentration or quantity to cause disease in susceptible hosts.

### B. Risks Associated with Health Care Waste

- All individuals coming into proximity with hazardous HCW are potentially at risk, including those who generate hazardous HCW, as well as those who either handle such waste or are exposed to it as a consequence of improper management.
- The main groups of people at risk to potential health hazards associated with HCW are the following:
  - a. HCF staff, e.g., doctors, nurses, auxiliaries, and maintenance personnel
  - b. Patients in the HCF or receiving home care
  - c. Visitors to the HCF
  - d. Workers providing support and allied services to the HCF, such as laundry
  - e. Workers transporting hazardous HCW to treatment, storage, and disposal facilities
  - f. Workers and operators of waste management facilities (e.g., sanitary landfill and Treatment, Storage, Disposal (TSD) facilities) including informal recyclers or scavenger.
- The General Public could also be at risk whenever hazardous HCW is abandoned or disposed of improperly.

#### C. Health Care Waste Disposal

- HCW that is properly treated with the applicable technology as stated in the Health Care Waste Management Manual can be disposed of in a sanitary landfill but must not be mixed with the municipal waste. Dedicated cells for the treated HCW must be provided in a sanitary landfill. To allow the disposal of HCW to the sanitary landfill, the following must be met:
  - The waste treatment facility/system passed the standards for microbial inactivation test;
  - b. The properly treated HCW passed the spore strip test;

- c. The waste treatment facility/system has a valid CPR from the DOH-Bureau of Health Devices and Technology (BHDT), and;
  d. The waste treatment facility is an EMB-registered TSD facility.

Annex B. Clinical Management of Severe Acute Respiratory Infection when Novel Coronavirus (2019-nCoV)
Infection is Suspected (Interim guidance as of January 28, 2020)

# Clinical management of severe acute respiratory infection when novel coronavirus (2019-nCoV) infection is suspected

Interim guidance 28 January 2020

WHO/nCoV/Clinical/2020.2



# Introduction

This is the first edition of this document for novel coronavirus, an adaption of WHO Clinical management of severe acute respiratory infection when MERS-CoV infection is suspected publication (2019).

This document is intended for clinicians taking care of hospitalised adult and paediatric patients with severe acute respiratory infection (SARI) when 2019-nCoV infection is suspected. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and provide to up-to-date guidance. Best practices for SARI including IPC and optimized supportive care for severely ill patients are essential.

This document is organized into the following sections:

- 1. Triage: recognize and sort patients with SARI
- 2. Immediate implementation of appropriate infection prevention and control (IPC) measures
- 3. Early supportive therapy and monitoring
- 4. Collection of specimens for laboratory diagnosis
- 5. Management of hypoxemic respiratory failure and acute respiratory distress syndrome (ARDS)
- 6. Management of septic shock
- 7. Prevention of complications
- 8. Specific anti-nCoV treatments
- 9. Special considerations for pregnant patients

These symbols are used to flag interventions:

- Oo: the intervention is beneficial (strong recommendation) OR the intervention is a best practice statement
- Don't: the intervention is known to be harmful.
- Consider: the intervention may be beneficial in selected patients (conditional recommendation) OR be careful when considering this intervention.

This document aims to provide clinicians with updated interim guidance on timely, effective, and safe supportive management of patients with 2019-nCoV and SARI, particularly those with critical illness.

The recommendations in this document are derived from WHO publications. <sup>14</sup> Where WHO guidance is not available, we refer to evidence-based guidelines. Members of a WHO global network of clinicians, and clinicians who have treated SARS, MERS or severe influenza patients have reviewed the recommendations (see Acknowledgements). For queries, please email <u>outbreak@who.int</u> with '2019-nCoV clinical question' in the subject line.

# Triage: early recognition of patients with SARI associated with 2019-nCoV infection

Triage: recognize and sort all patients with SARI at first point of contact with health care system (such as the emergency department). Consider 2019-nCOV as a possible etiology of SARI under certain conditions (see Table 1). Triage patients and start emergency treatments based based on disease severity.

Remarks: 2019-nCoV infection may present with mild, moderate, or severe illness; the latter includes severe pneumonia, ARDS, sepsis and septic shock. Early recognition of suspected patients allows for timely initiation of IPC (see Table 2). Early identification of those with severe manifestations (see Table 2) allows for immediate optimized supportive care treatments and safe, rapid admission (or referral) to intensive care unit according to institutional or national protocols. For those with mild illness, hospitalization may not be required unless there is concern for rapid deterioration. All patients discharged home should be instructed to return to hospital if they develop any worsening of illness.

# Table 1. Definitions of patients with SARI, suspected of 2019-nCoV infection\*

SARI

An ARI with history of fever or measured temperature ≥38 C° and cough; onset within the last ~10 days; and requiring hospitalization.5 However, the absence of fever does NOT exclude viral Infection.6

#### Surveillance case definitions for 2019-nCoV\*

- A. Patients with severe acute respiratory infection (fever, cough, and requiring admission to hospital), <u>AND</u> with no other etiology that fully explains the clinical presentation<sup>1</sup> <u>AND</u> at least one of the following:
  - a history of travel to or residence in the city of Wuhan, Hubei Province, 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.
- B. Patients with any acute respiratory illness AND at least one of the following:
  - close contact<sup>2</sup> 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 Wuhan, Hubei Province, 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 hospitalassociated 2019-nCov infections have been reported.

- 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.
- Working together in close proximity or sharing the same classroom environment with a nCoV patient
- Traveling together with a nCoV patient in any kind of conveyance
- Living in the same household as a nCoV patient

The epidemiological link may have occurred within a 14-day period from onset of illness in the case under consideration.

<sup>\*</sup>see https://www.who.int/health-topics/coronavirus for latest case definitions

<sup>1</sup> clinicians should also be alert to the possibility of atypical presentations in patients who are immunocompromised;

<sup>2:</sup> Close contact' is defined as:

# Table 2. Clinical syndromes associated with 2019-nCoV infection

Uncomplicated Illness	Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headache, muscle pain or malaise. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of dehydration, sepsis or shortness of breath.	
Mild pneumonia	Patient with pneumonia and no signs of severe pneumonia.  Child with non-severe pneumonia has cough or difficulty breathing + fast breathing: fast breathing (in breaths/min): <2 months, ≥60; 2–11 months, ≥50; 1–5 years, ≥40 and no signs of severe pneumonia.	
Severe pneumonia	Adolescent or adult: fever or suspected respiratory infection, plus one of respiratory rate >30 breaths/min, severe respiratory distress, or SpO₂ <90% on room air (adapted from [¹]).  Child with cough or difficulty in breathing, plus at least one of the following: central cyanosis or SpO₂ <90%; severe respiratory distress (e.g. grunting, very severe chest indrawing); signs of pneumonia with a general danger sign: inability to breastfeed of drink, lethargy or unconsciousness, or convulsions. Other signs of pneumonia may be present: chest indrawing, fast breathir breaths/min): <2 months, ≥60; 2–11 months, ≥50; 1–5 years, ≥40.² The diagnosis is clinical; chest imaging can exclude complications.	
Acute Respiratory Distress Syndrome <sup>7-9</sup>	Onset: new or worsening respiratory symptoms within one week of known clinical insult.  Chest imaging (radiograph, CT scan, or lung ultrasound): bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules.  Origin of oedema: respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g. echocardiography) to exclude hydrostatic cause of oedema if no risk factor present.  Oxygenation (adults):  • Mild ARDS: 200 mmHg < PaO₂/FiO₂ ≤ 300 mmHg (with PEEP or CPAP ≥5 cmH₂O, <sup>7</sup> or non-ventilated <sup>8</sup> )  • Moderate ARDS: 100 mmHg < PaO₂/FiO₂ ≤200 mmHg with PEEP ≥5 cmH₂O, <sup>7</sup> or non-ventilated <sup>8</sup> )  • Severe ARDS: PaO₂/FiO₂ ≤ 100 mmHg with PEEP ≥5 cmH₂O, <sup>7</sup> or non-ventilated <sup>8</sup> )  • When PaO₂ is not available, SpO₂/FiO₂ ≤315 suggests ARDS (Including in non-ventilated patients)  Oxygenation (children; note OI = Oxygenation Index and OSI = Oxygenation Index using SpO₂):  • Bilevel NN or CPAP ≥5 cmH₂O via full face mask: PaO₂/FiO₂ ≤ 300 mmHg or SpO₂/FiO₂ ≤264  • Mild ARDS (invasively ventilated): 4 ≤ OI < 8 or 5 ≤ OSI < 7.5  • Moderate ARDS (invasively ventilated): 0I ≥ 16 or OSI ≥ 12.3	
Sepsis <sup>10,11</sup>	Adults: life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction*. Signs of organ dysfunction include: aftered 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 laboratory evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia.  Children: suspected or proven infection and ≥2 SIRS criteria, of which one must be abnormal temperature or white blood cell count.	
Septic shock <sup>10,12</sup>	Adults: persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≥65 mmHg and serum lactate level >2 mmoVi  Children (based on [¹²]): any hypotension (SBP <5th centile or >2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children); prolonged capillary refill (>2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.  Ite respiratory infection; BP, blood pressure; bpm, beats/minute; CPAP, continuous positive already pressure; FIO₂, fraction of inspired oxygen; MAP, m	

Abbreviations: ARI, acute respiratory infection; BP, blood pressure; bpm, beats/minute; CPAP, continuous positive airway pressure; FIO2, fraction of inspired oxygen; MAP, mean arterial pressure; NIV, noninvasive ventilation; OI, Oxygenation Index; OSI, Oxygenation Index using SpO2; PaO2, partial pressure of oxygen; PEEP, positive end-expiratory pressure; SBP, systolic blood pressure; SD, standard deviation; SIRS, systemic inflammatory response syndrome; SpO2, oxygen saturation. \*If altitude is higher than 1000m, then correction factor should be calculated as follows: PaO3/FiO2x Barometric pressure/760.

The SOFA score ranges from 0 to 24 and includes points related to 6 organ systems: respiratory (hypoxemia defined by low PaO₂/FiO₂), coagulation (low platelets), fiver (high billirubin), cardiovascular (hypotension), central nervous system (low level of consciousness defined by Glasgow Coma Scale), and renal (low urine output or high creatinine). Sepsis is defined by an increase in the Sequential [Sepsis-related] Organ Failure Assessment (SOFA) score¹³ of ≥2 points. Assume the baseline score is zero if data are not available

# 2. Immediate implementation of appropriate IPC measures

IPC is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital (typically the Emergency Department). Standard precautions should always be routinely applied in all areas of health care facilities. Standard precautions include hand hygiene; use of PPE to avoid direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include prevention of needle-stick or sharps injury; safe waste management; cleaning and disinfection of equipment; and cleaning of the environment.

Table 2. How to implement infection prevention and control measures for patients with suspected or confirmed 2019-nCoV infection

At triage	Give suspect patient a medical mask and direct patient to separate area, an isolation room if available. Keep at least 1meter distance between suspected patients and other patients. Instruct all patients to cover nose and mouth during coughing or sneezing with tissue or flexed elbow for others. Perform hand hygiene after contact with respiratory secretions
Apply droplet precautions	Droplet precautions prevent large droplet transmission of respiratory viruses. Use a medical mask if working within 1-2 metre s of the patient. Place patients in single rooms, or group together those with the same etiological diagnosis. If an etiological diagnosis is not possible, group patients with similar clinical diagnosis and based on epidemiological risk factors, with a spatial separation. When providing care in close contact with a patient with respiratory symptoms (e.g. coughing or sneezing), use eye protection (face-mask or goggles), because sprays of secretions may occur. Limit patient movement within the institution and ensure that patients wear medical masks when outside their rooms.
Apply contact precautions	Droplet and contact precautions prevent direct or indirect transmission from contact with contaminated surfaces or equipment (i.e. contact with contaminated oxygen tubing/interfaces). Use PPE (medical mask, eye protection, gloves and gown) when entering room and remove PPE when leaving. If possible, use either disposable 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. Ensure that health care workers refrain from touching their eyes, nose, and mouth with potentially contaminated gloved or ungloved hands. Avoid contaminating environmental surfaces that are not directly related to patient care (e.g. door handles and light switches). Ensure adequate room ventilation. Avoid movement of patients or transport. Perform hand hygiene.
Apply airborne precautions when performing an aerosol generating procedure	Ensure that healthcare workers performing aerosol-generating procedures (i.e. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use PPE, including gloves, long-sieeved gowns, eye protection and fit-tested particulate respirators (N95 or equivalent, or higher level of protection). (The scheduled fit test should not be confused with user seal check before each use.) Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, meaning negative pressure rooms with minimum of 12 air changes per hour or at least 160 litres/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary individuals in the room. Care for the patient in the same type of room after mechanical ventilation commences.

Abbreviations: ARI, acute respiratory infection; PPE, personal protective equipment

# 3. Early supportive therapy and monitoring

Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock.

Remarks: Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO₂ ≥90% in non-pregnant adults and SpO₂ ≥92-95 % in pregnant patients. ¹² 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 SpO₂ ≥94%; otherwise, the target SpO₂ is ≥90%. ⁴ All areas where patients with SARI are cared for should be equipped with pulse oximeters, functioning oxygen systems and disposable, single-use, oxygen-delivering interfaces (nasal cannula, simple face mask, and mask with reservoir bag). Use contact precautions when handling contaminated oxygen interfaces of patients with nCoV infection.

Use conservative fluid management in patients with SARI when there is no evidence of shock.

Remarks: Patients with SARI should be treated cautiously with intravenous fluids, because aggressive fluid resuscitation may worsen oxygenation, especially in settings where there is limited availability of mechanical ventilation. 16

Give empiric antimicrobials to treat all likely pathogens causing SARI. Give antimicrobials within one hour of Initial patient assessment for patients with sepsis.

Remarks: Although the patient may be suspected to have nCoV, administer appropriate empiric antimicrobials within ONE hour of identification of sepsis.<sup>17</sup> Empiric antibiotic treatment should be based on the clinical diagnosis (community-acquired pneumonia, health care-associated pneumonia [if infection was acquired in healthcare setting], or sepsis), local epidemiology and susceptibility data, and treatment guidelines. Empiric therapy includes a neuraminidase inhibitor for treatment of influenza when there is local circulation or other risk factors, including travel history or exposure to animal influenza viruses.<sup>18</sup> Empiric therapy should be de-escalated on the basis of microbiology results and clinical judgment.

Do not routinely give systemic corticosteroids for treatment of viral pneumonia or ARDS outside of clinical trials unless they are indicated for another reason.

Remarks: A systematic review of observational studies of corticosteroids administered to patients with SARS reported no survival benefit and possible harms (avascular necrosis, psychosis, diabetes, and delayed viral clearance). A systematic review of observational studies in influenza found a higher risk of mortality and secondary infections with corticosteroids; the evidence was judged as very low to low quality due to confounding by indication. A subsequent study that addressed this limitation by adjusting for time-varying confounders found no effect on mortality. Finally, a recent study of patients receiving corticosteroids for MERS used a similar statistical approach and found no effect of corticosteroids on mortality but delayed lower respiratory

tract (LRT) clearance of MERS-CoV.<sup>22</sup> Given lack of effectiveness and possible harm, routine corticosteroids should be avoided unless they are indicated for another reason. See section 6 for the use of corticosteroids in sepsis.

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

Remarks: Application of timely, effective, and safe supportive therapies is the cornerstone of therapy for patients that develop severe manifestations of 2019-nCoV.

Understand the patient's co-morbid condition(s) to tailor the management of critical illness and appreciate the prognosis.
Communicate early with patient and family.

Remarks: During intensive care management of SARI, determine which chronic therapies should be continued and which therapies should be stopped temporarily. Communicate proactively with patients and families and provide support and prognostic information. Understand the patient's values and preferences regarding life-sustaining interventions.

#### Collection of specimens for laboratory diagnosis

WHO guidance on specimen collection, processing, and laboratory testing, including related biosafety procedures, is available.<sup>23</sup>

- Collect blood cultures for bacteria that cause pneumonia and sepsis, ideally before antimicrobial therapy. DO NOT delay antimicrobial therapy to collect blood cultures.
- Collect specimens from BOTH the upper respiratory tract (URT; nasopharyngeal and oropharyngeal) AND lower respiratory tract (LRT; expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) for 2019-nCoV testing by RT-PCR. Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients).
- Serology for diagnostic purposes is recommended only when RT-PCR is not available.<sup>23</sup>

Remarks: Use appropriate PPE for specimen collection (droplet and contact precautions for URT specimens; airborne precautions for LRT specimens). When collecting URT samples, use viral swabs (sterile Dacron or rayon, not cotton) and viral transport media. Do not sample the nostrils or tonsils. In a patient with suspected novel coronavirus, especially with pneumonia or severe illness, a single URT sample does not exclude the diagnosis, and additional URT and LRT samples are recommended.<sup>23</sup> LRT (vs. URT) samples are more likely to be positive and for a longer period.<sup>23</sup> Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients). Sputum induction should be avoided due to increased risk of increasing aerosol transmission.

Remarks: Dual infections with other respiratory viral infections have been found in SARS and MERS cases. At this stage we need detailed microbiologic studies in all suspected cases. Both URT and LRT specimens can tested for other respiratory viruses, such as influenza A and B (including zoonotic influenza A), respiratory syncytial virus, parainfluenza viruses, rhinoviruses, adenoviruses, enteroviruses (e.g. EVD68), human metapneumovirus, and endemic human coronaviruses (i.e. HKU1, OC43, NL63, and 229E). LRT specimens can also be tested for bacterial pathogens, including Legionella pneumophila.

- In hospitalized patients with confirmed 2019-nCoV infection, repeat URT and LRT samples should be collected to demonstrate viral clearance. The frequency of specimen collection will depend on local circumstances but should be at least every 2 to 4 days until there are two consecutive negative results (both URT and LRT samples if both are collected) in a clinically recovered patient at least 24 hours apart. If local infection control practice requires two negative results before removal of droplet precautions, specimens may be collected as often as daily.
- Management of hypoxemic respiratory failure and ARDS
- Recognize severe hypoxemic respiratory failure when a patient with respiratory distress is falling standard oxygen therapy. Remarks: Patients may continue to have increased work of breathing or hypoxemia even when oxygen is delivered via a face mask with reservoir bag (flow rates of 10-15 L/min, which is typically the minimum flow required to maintain bag inflation; FiO<sub>2</sub> 0.60-0.95). Hypoxemic respiratory failure in ARDS commonly results from intrapulmonary ventilation-perfusion mismatch or shunt and usually requires mechanical ventilation.
- High-flow nasal oxygen (HFNO) or non-invasive ventilation (NIV) should only be used in selected patients with hypoxemic respiratory failure. The risk of treatment failure is high in patients with MERS treated with NIV, and patients treated with either HFNO or NIV should be closely monitored for clinical deterioration.

Remark 1: HFNO systems can deliver 60 L/min of gas flow and FiO<sub>2</sub> up to 1.0; paediatric circuits generally only handle up to 15 L/min, and many children will require an adult circuit to deliver adequate flow. Compared to standard oxygen therapy, HFNO reduces the need for intubation.<sup>24</sup> Patients with hypercapnia (exacerbation of obstructive lung disease, cardiogenic pulmonary oedema), hemodynamic instability, multi-organ failure, or abnormal mental status should generally not receive HFNO, although emerging data suggest that HFNO may be safe in patients with mild-moderate and non-worsening hypercapnia.<sup>25</sup> Patients receiving HFNO should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Evidence-based guidelines on HFNO do not exist, and reports on HFNO in MERS patients are limited.<sup>26</sup>

Remark 2: NIV guidelines make no recommendation on use in hypoxemic respiratory failure (apart from cardiogenic pulmonary oedema and post-operative respiratory failure) or pandemic viral illness (referring to studies of SARS and pandemic influenza).<sup>27</sup> Risks include delayed intubation, large tidal volumes, and injurious transpulmonary pressures. Limited data suggest a high failure rate when MERS patients receive NIV.<sup>28</sup> Patients receiving a trial of NIV should be in a monitored setting and cared for by experienced personnel capable of endotracheal intubation in case the patient acutely deteriorates or does not improve after a short trial (about 1 hr). Patients with hemodynamic instability, multiorgan failure, or abnormal mental status should not receive NIV.

Remark 3: Recent publications suggest that newer HFNO and NIV systems with good interface fitting do not create widespread dispersion of exhaled air and therefore should be associated with low risk of airborne transmission.<sup>29-31</sup>

Endotracheal intubation should be performed by a trained and experienced provider using airborne precautions.

Remarks: Patients with ARDS, especially young children or those who are obese or pregnant, may desaturate quickly during intubation. Pre-oxygenate with 100% FiO<sub>2</sub> for 5 minutes, via a face mask with reservoir bag, bag-valve mask, HFNO, or NIV. Rapid sequence intubation is appropriate after an airway assessment that identifies no signs of difficult intubation<sup>32</sup>.

The following recommendations in this section pertain to mechanically ventilated patients with ARDS. 17,33 These focus on adults; consensus-based recommendations for children are available. 34

Implement mechanical ventilation using lower tidal volumes (4–8 ml/kg predicted body weight, PBW) and lower inspiratory pressures (plateau pressure <30 cmH<sub>2</sub>O).

Remarks: This is a strong recommendation from a clinical guideline for patients with ARDS,<sup>33</sup> and is suggested for patients with sepsis-induced respiratory failure who do not meet ARDS criteria.<sup>17</sup> The initial tidal volume is 6 ml/kg PBW; tidal volume up to 8 ml/kg PBW is allowed if undesirable side effects occur (e.g. dyssynchrony, pH <7.15). Hypercapnia is permitted if meeting the pH goal of 7.30-7.45. Ventilator protocols are available.<sup>35</sup> The use of deep sedation may be required to control respiratory drive and achieve tidal volume targets. Although high driving pressure (plateau pressure—PEEP) may more accurately predict increased mortality in ARDS compared to high tidal volume or plateau pressure,<sup>36</sup> RCTs of ventilation strategies that target driving pressure are not currently available.

- In patients with severe ARDS, prone ventilation for >12 hours per day is recommended.

  Remarks: Application of prone ventilation is strongly recommended for adult and paediatric patients with severe ARDS<sup>33</sup> but requires sufficient human resources and expertise to be performed safely. 37,38
- Use a conservative fluid management strategy for ARDS patients without tissue hypoperfusion.

  Remarks: This is a strong guideline recommendation;<sup>17</sup> the main effect is to shorten the duration of ventilation. See reference [<sup>39</sup>] for details of a sample protocol.
- In patients with moderate or severe ARDS, higher PEEP instead of lower PEEP is suggested.

Remarks: PEEP titration requires consideration of benefits (reducing atelectrauma and improving alveolar recruitment) vs. risks (end-inspiratory overdistension leading to lung injury and higher pulmonary vascular resistance). Tables are available to guide PEEP titration based on the FiO<sub>2</sub> required to maintain SpO<sub>2</sub>. A related intervention of recruitment manoeuvres (RMs) is delivered as episodic periods of high continuous positive airway pressure [30–40 cm H<sub>2</sub>O], progressive incremental increases in PEEP with constant driving pressure, or high driving pressure; considerations of benefits vs. risks are similar. Higher PEEP and RMs were both conditionally recommended in a clinical practice guideline. For PEEP, the guideline considered an individual patient data meta-analysis of 3 RCTs. However, a subsequent RCT of high PEEP and prolonged high-pressure RMs showed harm, suggesting that the protocol in this RCT should be avoided. Monitoring of patients to identify those who respond to the initial application of higher PEEP or a different RM protocol, and stopping these interventions in non-responders, is suggested.

In patients with moderate-severe ARDS (PaO<sub>2</sub>/FiO<sub>2</sub> <150), neuromuscular blockade by continuous infusion should not be routinely used.

Remarks: One trial found that this strategy improved survival in patients with severe ARDS (PaO<sub>2</sub>/FiO<sub>2</sub> <150) without causing significant weakness, <sup>43</sup> but results of a recent larger trial found that use of neuromuscular blockage with high PEEP strategy was not associated with survival when compared to a light sedation strategy without neuromuscular blockade <sup>44</sup>. Continuous neuromuscular blockade may still be considered in patients with ARDS in certain situations: ventilator dyssnchony despite sedation, such that tidal volume limitation cannot be reliably achieved; or refractory hypoxemia or hypercapnia.

In settings with access to expertise in extracorporeal life support (ECLS), consider referral of patients with refractory hypoxemia despite lung protective ventilation.

Remarks: A recent guideline made no recommendation about ECLS in patients with ARDS.<sup>33</sup> Since then, an RCT of ECLS for patients with ARDS was stopped early and found no statistically significant difference in the primary outcome of 60-day mortality between ECLS and standard medical management (including prone positioning and neuromuscular blockade).<sup>45</sup> However, ECLS was associated with a reduced risk of the composite outcome of mortality and crossover to ECLS,<sup>45</sup> and a post hoc Bayesian analysis of this RCT showed that ECLS is very likely to reduce mortality across a range of prior assumptions.<sup>46</sup> In patients with MERS-CoV infection, ECLS vs. conventional treatment was associated with reduced mortality in a cohort study.<sup>47</sup> ECLS should

only be offered in expert centres with a sufficient case volume to maintain expertise and that can apply the IPC measures required for 2019-nCoV patients.<sup>48</sup>

- Avoid disconnecting the patient from the ventilator, which results in loss of PEEP and atelectasis. Use in-line catheters for alrway suctioning and clamp endotracheal tube when disconnection is required (for example, transfer to a transport ventilator).
- Management of septic shock
- Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥65 mmHg AND lactate is ≥2 mmol/L, in absence of hypovolemia.

  Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] <5th centile or >2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children); prolonged capillary refill (>2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.

Remarks: In the absence of a lactate measurement, use MAP and clinical signs of perfusion to define shock. Standard care includes early recognition and the following treatments within 1 hour of recognition: antimicrobial therapy and fluid loading and vasopressors for hypotension.<sup>49</sup> The use of central venous and arterial catheters should be based on resource availability and individual patient needs. Detailed guidelines are available for the management of septic shock in adults<sup>17</sup> and children.<sup>2,3,12</sup>

- In resuscitation from septic shock in adults, give at least 30 ml/kg of isotonic crystalloid in adults in the first 3 hours. In resuscitation from septic shock in children in well-resourced settings, give 20 ml/kg as a rapid bolus and up to 40-60 ml/kg in the first 1 hr.
- Do not use hypotonic crystalloids, starches, or gelatins for resuscitation.
- Fluid resuscitation may lead to volume overload, including respiratory failure. If there is no response to fluid loading and signs of volume overload appear (for example, jugular venous distension, crackles on lung auscultation, pulmonary oedema on imaging, or hepatomegaly in children), then reduce or discontinue fluid administration. This step is particularly important where mechanical ventilation is not available. Alternate fluid regimens are suggested when caring for children in resource-limited settings<sup>50</sup>

Remarks: Crystalloids include normal saline and Ringer's lactate. Determine need for additional fluid boluses (250-1000 ml in adults or 10-20 ml/kg in children) based on clinical response and improvement of perfusion targets. 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. Consider dynamic indices of volume responsiveness to guide volume administration beyond initial resuscitation based on local resources and experience. These indices include passive leg raises, fluid challenges with serial stroke volume measurements, or variations in systolic pressure, pulse pressure, inferior vena cava size, or stroke volume in response to changes in intrathoracic pressure during mechanical ventilation.

Starches are associated with an increased risk of death and acute kidney injury vs. crystalloids. The effects of gelatins are less clear, but they are more expensive than cyrstalloids.<sup>51,52</sup> Hypotonic (vs. isotonic) solutions are less effective at increasing intravascular volume. Surviving Sepsis also suggests albumin for resuscitation when patients require substantial amounts of crystalloids, but this conditional recommendation is based on low-quality evidence.<sup>17</sup>

- Administer vasopressors when shock persists during or after fluid resuscitation. The initial blood pressure target is MAP ≥65 mmHg in adults and age-appropriate targets in children.
- If central venous catheters are not available, vasopressors can be given through a peripheral IV, but use a large vein and closely monitor for signs of extravasation and local tissue necrosis. If extravasation occurs, stop infusion. Vasopressors can also be administered through intraosseous needles.
- If signs of poor perfusion and cardiac dysfunction persist despite achieving MAP target with fluids and vasopressors, consider an inotrope such as dobutamine.

Remarks: Vasopressors (i.e. norepinephrine, epinephrine, vasopressin, and dopamine) are most safely given through a central venous catheter at a strictly controlled rate, but it is also possible to safely administer them via peripheral vein<sup>53</sup> and intraosseous needle. Monitor blood pressure frequently and titrate the vasopressor to the minimum dose necessary to maintain perfusion and prevent side effects. Norepinephrine is considered first-line in adult patients; epinephrine or vasopressin can be added to achieve the MAP target. Because of the risk of tachyarrhythmia, reserve dopamine for selected patients with low risk of tachyarrhythmia or those with bradycardia. In children with cold shock (more common), epinephrine is considered first-line, while norepinephrine is used in patients with warm shock (less common).

No RCTs have compared dobutamine to placebo for clinical outcomes. 17

#### Prevention of complications

Implement the following interventions (Table 3) to prevent complications associated with critical illness. These interventions are based on Surviving Sepsis<sup>17</sup> or other guidelines, <sup>54-57</sup> and are generally limited to feasible recommendations based on high quality evidence.

Table 3. Prevention of complications

Anticipated Outcome	Interventions
Reduce days of invasive mechanical ventilation	<ul> <li>Use weaning protocols that include daily assessment for readiness to breathe spontaneously</li> <li>Minimize continuous or intermittent sedation, targeting specific titration endpoints (light sedation unless contraindicated) or with daily interruption of continuous sedative infusions</li> </ul>
Reduce incidence of ventilator- associated pneumonia	<ul> <li>Oral intubation is preferable to nasal intubation in adolescents and adults</li> <li>Keep patient in semi-recumbent position (head of bed elevation 30-45°)</li> <li>Use a closed suctioning system; periodically drain and discard condensate in tubing</li> <li>Use a new ventilator circuit for each patient; once patient is ventilated, change circuit if it is soiled or damaged but not routinely</li> <li>Change heat moisture exchanger when it malfunctions, when soiled, or every 5-7 days</li> </ul>
Reduce incidence of venous thromboembolism	<ul> <li>Use pharmacological prophylaxis (low molecular-weight heparin [preferred if available] or heparin 5000 units subcutaneously twice daily) in adolescents and adults without contraindications. For those with contraindications, use mechanical prophylaxis (intermittent pneumatic compression devices).</li> </ul>
Reduce incidence of catheter- related bloodstream infection	<ul> <li>Use a checklist with completion verified by a real-time observer as reminder of each step needed for sterile insertion and as a daily reminder to remove catheter if no longer needed</li> </ul>
Reduce Incidence of pressure ulcers	Turn patient every two hours
Reduce incidence of stress ulcers and gastrointestinal bleeding	<ul> <li>Give early enteral nutrition (within 24–48 hours of admission)</li> <li>Administer histamine-2 receptor blockers or proton-pump inhibitors in patients with risk factors for GI bleeding. Risk factors for gastrointestinal bleeding include mechanical ventilation for ≥48 hours, coagulopathy, renal replacement therapy, liver disease, multiple comorbidities, and higher organ failure score</li> </ul>
Reduce incidence of ICU-related weakness	Actively mobilize the patient early in the course of illness when safe to do so

#### 8. Specific anti-Novel-CoV treatments and clinical research

- There is no current evidence from RCTs to recommend any specific anti-nCoV treatment for patients with suspected or confirmed 2019-nCoV infection.
- Unlicensed treatments should be administered only in the context of ethically-approved clinical trials or the Monitored Emergency Use of Unregistered Interventions Framework (MEURI), with strict monitoring. https://www.who.int/ethics/publications/infectious-disease-outbreaks/en/
- Clinical characterization protocols are available, at the WHO 2019 nCoV website:

  <a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019">https://www.who.int/emergencies/diseases/novel-coronavirus-2019</a>. WHO has established Global 2019-nCoV Clinical Data Platform, for member countries to contribute. Contact <a href="mailto:EDCARN@who.int">EDCARN@who.int</a> for additional questions.

#### 9. Special considerations for pregnant patients

- Pregnant women with suspected or confirmed 2019-nCoV infection should be treated with supportive therapies as described above, taking into account the physiologic adaptations of pregnancy.
- The use of Investigational therapeutic agents outside of a research study should be guided by individual risk-benefit analysis based on potential benefit for mother and safety to fetus, with consultation from an obstetric specialist and ethics committee.
- Emergency delivery and pregnancy termination decisions are challenging and based on many factors: gestational age, maternal condition, and fetal stability. Consultations with obstetric, neonatal, and intensive care specialists (depending on the condition of the mother) are essential.

#### Acknowledgements

The original version of this document was developed in consultation with International Forum for Acute Care Trialists (InFACT), ISARIC and Surviving Sepsis Campaign. The following individuals contributed to or reviewed the current version. Confidentiality and declarations of Interest were collected and reviewed.

WHO: April Baller, Janet Diaz, Dina Pfeifer, Maria Van Kerkhove, Satoko Otsu, Richard Peabody.

Non-WHO experts: Neill Adhikan, Sunnybrook Health Sciences Centre and University of Toronto; Yaseen Arabi, King Saud Bin Abdulaziz University for Health Sciences, Saudi Arabia; Kenneth Baillie, University of Edinburgh, UK; Gail Carson University of Oxford, ISARIC; Charles David Gomersall The Chinese University of Hong Kong; Jake Dunning, Public Health England, UK; Rob Fowler, University of Toronto, Canada; Susan Gerber, Centers for Disease Control and Prevention, USA; Frederick Hayden, University of Virginia, USA; Peter Horby University of Oxford, ISARIC; David Hui, Chinese University of Hong Kong, Hong Kong SAR; Yae-Jean Kim, Sungkyunkwan University, Samsung Medical Center, Korea; Srinivas Murthy, University of British Columbia, Canada; Norio Ohmagari, M.D., M.Sc., Ph.D, WHO Collaborating Centre for Prevention, Preparedness and Response to Emerging Infectious Diseases, National Center for Gjobal Health and Medicine Hospital Toyama, Tokyo Japan; Yinzhong Shen Shanghai Public Health Clinical Center, Fudan University Naoki Shimizu; Tim Uyeki, Centers for Disease Control and Prevention, USA.

#### References

- Rosjo H, Varpula M, Hagve TA, et al. Circulating high sensitivity troponin T in severe sepsis and septic shock: distribution, associated factors, and relation to outcome. Intensive Care Med 2011;37:77-85.
- Pocket book of hospital care for children: Guidelines for the management of common childhood illnesses [http://www.who.int/maternal\_child\_adolescent/documents/child\_hospital\_care/en/i]. 2nd ed. Geneva: WHO; 2013.
- Gunnerson KJ, Shaw AD, Chawla LS, et al. TIMP2\*IGFBP7 biomarker panel accurately predicts acute kidney injury in high-risk surgical patients. J
  Trauma Acute Care Surg 2016;80:243-9.
- Oxygen therapy for children: a manual for health workers [http://www.who.int/maternal\_child\_adolescent/documents/child-oxygen-therapy/en/].
   Geneva: WHO; 2016.
- Global Epidemiological Surveillance Standards for Influenza [http://www.who.int/influenza/resources/documents/influenza\_surveillance\_manual/en/].
   Geneva: WHO: 2014.
- Shalhoub S, Farahat F, Al-Jiffri A, et al. IFN-alpha2a or IFN-beta1a in combination with ribavirin to treat Middle East respiratory syndrome coronavirus pneumonia: a retrospective study. J Antimicrob Chemother 2015;70:2129-32.
- ARDS Definition Task Force, Ranieri VM, Rubenfeld GD, et al. Acute respiratory distress syndrome: the Berlin Definition. JAMA 2012;307:2526-33.
- 8. Riviello ED, Kiviri W, Twagirumugabe T, et al. Hospital Incidence and Outcomes of the Acute Respiratory Distress Syndrome Using the Kigali Modification of the Berlin Definition. Am J Respir Crit Care Med 2016;193:52-9.
- Khemani RG, Smith LS, Zimmerman JJ, Erickson S, Pediatric Acute Lung Injury Consensus Conference Group. Pediatric acute respiratory distress syndrome: definition, incidence, and epidemiology: proceedings from the Pediatric Acute Lung Injury Consensus Conference. Pediatr Crit Care Med 2015;16:S23-40.
- Singer M, Deutschman CS, Seymour CW, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). JAMA 2016;315:801-10.
- 11. Goldstein B, Giroir B, Randolph A, International Consensus Conference on Pediatric Sepsis. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics. Pediatr Crit Care Med 2005;6:2-8.
- 12. Davis AL, Carcillo JA, Aneja RK, et al. American College of Critical Care Medicine Clinical Practice Parameters for Hemodynamic Support of Pediatric and Neonatal Septic Shock. Crit Care Med 2017;45:1061-93.
- 13. Vincent JL, Moreno R, Takala J, et al. The SOFA (Sepsis-related Organ Failure Assessment) score to describe organ dysfunction/failure. On behalf of the Working Group on Sepsis-Related Problems of the European Society of Intensive Care Medicine. Intensive Care Med 1996;22:707-10.
- Infection prevention and control of epidemic-and pandemic prone acute respiratory infections in health care [http://www.who.int/csr/bioriskreduction/infection\_control/publication/en/]. Geneva: WHO; 2014.
- 15. Infection prevention and control during health care for probable or confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection: Interim guidance. Geneva: WHO; 2015.
- 16. Schultz MJ, Dunser MW, Dondorp AM, et al. Current challenges in the management of sepsis in ICUs in resource-poor settings and suggestions for the future. Intensive Care Med 2017;43:612-24.
- 17. Rhodes A, Evans LE, Alhazzani W, et al. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016. Intensive Care Med 2017;43:304-77.
- 18. Clinical management of human infection with pandemic (H1N1) 2009; revised guidance
- [http://www.who.int/csr/resources/publications/swineflu/dinical\_management/en/]. Geneva: WHO; 2009
- Stockman LJ, Bellamy R, Garner P. SARS: systematic review of treatment effects. PLoS Med 2006;3:e343.
- 20. Rodrigo C, Leonardi-Bee J, Nguyen-Van-Tam J, Lim WS. Corticosteroids as adjunctive therapy in the treatment of influenza, Cochrane Database Syst Rev 2016;3:CD010406.
- 21. Delaney JW, Pinto R, Long J, et al. The influence of corticosteroid treatment on the outcome of influenza A(H1N1pdm09)-related critical illness. Crit Care 2016;20:75.
- 22. Arabi YM, Mandourah Y, Al-Hameed F, et al. Corticosteroid Therapy for Critically III Patients with Middle East Respiratory Syndrome. Am J Respir Crit Care Med 2018;197:757-67.
- 23. Laboratory testing for Middle East Respiratory Syndrome Coronavirus: Interim guidance [http://www.who.int/csr/disease/coronavirus\_infections/mers-laboratory-testing/en/], Geneva: WHO; 2018.
- 24. Ou X, Hua Y, Liu J, Gong C, Zhao W. Effect of high-flow nasal cannula oxygen therapy in adults with acute hypoxemic respiratory failure: a metaanalysis of randomized controlled trials. CMAJ 2017;189:E260-E7.
- 25. Lee MK, Choi J, Park B, et al. High flow nasal cannulae oxygen therapy in acute-moderate hypercapnic respiratory failure. Clin Respir J 2018;12:2046-56.
- 26. Luo Y, Ou R, Ling Y, Qin T. The therapeutic effect of high flow nasal cannula oxygen therapy for the first imported case of Middle East respiratory syndrome to China [Chinese]. Zhonghua Wei Zhong Bing Ji Jiu Yi Xue 2015;27:841-4.

- Rochwerg B, Brochard L, Elliott MW, et al. Official ERS/ATS clinical practice guidelines: noninvasive ventilation for acute respiratory failure. Eur Respir J 2017;50.
- Arabi YM, Arifi AA, Balkhy HH, et al. Clinical course and outcomes of critically ill patients with Middle East respiratory syndrome coronavirus infection. 28. Ann Intern Med 2014;160:389-97.
- Leung CCH, Joynt GM, Gomersall CD, et al. Comparison of high-flow nasal cannula versus oxygen face mask for environmental bacterial 29. contamination in critically ill pneumonia patients: a randomized controlled crossover trial. J Hosp Infect 2019;101:84-7.
- Hui DS, Chow BK, Lo T, et al. Exhaled air dispersion during high-flow nasal cannula therapy versus CPAP via different masks. Eur Respir J 2019;53. 30. Hul DS, Chow BK, Lo T, et al. Exhaled air dispersion during noninvasive ventilation via helmets and a total facemask. Chest 2015;147:1336-43.
- 31. Detsky ME, Jivraj N, Adhikari NK, et al. Will This Patient Be Difficult to Intubate?: The Rational Clinical Examination Systematic Review. JAMA 2019;321:493-503.
- Fan E, Del Sorbo L, Goligher EC, et al. An Official American Thoracic Society/European Society of Intensive Care Medicine/Society of Critical Care 33. Medicine Clinical Practice Guideline: Mechanical Ventilation in Adult Patients with Acute Respiratory Distress Syndrome. Am J Respir Crit Care Med 2017;195:1253-63.
- Rimensberger PC, Cheifetz IM, Pediatric Acute Lung Injury Consensus Conference G. Ventilatory support in children with pediatric acute respiratory distress syndrome: proceedings from the Pediatric Acute Lung Injury Consensus Conference. Pediatr Crit Care Med 2015;16:S51-60.

  35. ARDS Network Tools, 2014. (Accessed 25 July, 2018, at <a href="http://www.ardsnet.org/tools.shtml">http://www.ardsnet.org/tools.shtml</a>.)
- Amato MB, Meade MO, Slutsky AS, et al. Driving pressure and survival in the acute respiratory distress syndrome, N Engl J Med 2015;372:747-55. 36.
- Messerole E, Peine P, Wittkopp S, Marini JJ, Albert RK. The pragmatics of prone positioning. Am J Respir Crit Care Med 2002;165:1359-63. 37.
- Guerin C, Reignier J, Richard JC, et al. Prone positioning in severe acute respiratory distress syndrome. N Engl J Med 2013;368:2159-68. 38.
- National Heart L, and Blood Institute Acute Respiratory Distress Syndrome Clinical Trials Network, Wiedemann HP, Wheeler AP, et al. Comparison 39 of two fluid-management strategies in acute lung injury, N Engl J Med 2006;354:2564-75.
- Briel M, Meade M, Mercat A, et al. Higher vs lower positive end-expiratory pressure in patients with acute lung injury and acute respiratory distress 40. syndrome: systematic review and meta-analysis. JAMA 2010;303:865-73.
- Writing Group for the Alveolar Recruitment for Acute Respiratory Distress Syndrome Trial Investigators, Cavalcanti AB, Suzumura EA, et al. Effect of Lung Recruitment and Titrated Positive End-Expiratory Pressure (PEEP) vs Low PEEP on Mortality in Patients With Acute Respiratory Distress Syndrome: A Randomized Clinical Trial. JAMA 2017;318:1335-45.
- Goligher EC, Kavanagh BP, Rubenfeld GD, et al. Oxygenation response to positive end-expiratory pressure predicts mortality in acute respiratory 42. distress syndrome. A secondary analysis of the LOVS and ExPress trials. Am J Respir Crit Care Med 2014;190:70-6.
- Papazian L, Foret JM, Gacouin A, et al. Neuromuscular blockers in early acute respiratory distress syndrome. N Engl J Med 2010;363:1107-16. 43.
- National Heart L, Blood Institute PCTN, Moss M, et al. Early Neuromuscular Blockade in the Acute Respiratory Distress Syndrome. N Engl J Med 44. 2019;380:1997-2008.
- Combes A, Hajage D, Capellier G, et al. Extracorporeal Membrane Oxygenation for Severe Acute Respiratory Distress Syndrome. N Engl J Med 45. 2018;378:1965-75.
- Goligher EC, Tomlinson G, Hajage D, et al. Extracorporeal Membrane Oxygenation for Severe Acute Respiratory Distress Syndrome and Posterior 46. Probability of Mortality Benefit in a Post Hoc Bayesian Analysis of a Randomized Clinical Trial. JAMA 2018;320:2251-9.
- Alshahrani MS, Sindi A, Alshamsi F, et al. Extracorporeal membrane oxygenation for severe Middle East respiratory syndrome coronavirus. Ann 47 Care 2018;8;3, Intensive
- Combes A, Brodie D, Bartlett R, et al. Position paper for the organization of extracorporeal membrane oxygenation programs for acute respiratory adult patients. Am J Respir Crit Care Med 2014;190:488-96. 48 failure in
- Levy MM, Evans LE, Rhodes A, The Surviving Sepsis Campaign Bundle: 2018 update. Intensive Care Med 2018;44:925-8.
- Lamontagne F, Meade MO, Hebert PC, et al. Higher versus lower blood pressure targets for vasopressor therapy in shock: a multicentre pilot 50. randomized controlled trial. Intensive Care Med 2016;42:542-50.
- Rochwerg B, Alhazzani W, Gibson A, et al. Fluid type and the use of renal replacement therapy in sepsis: a systematic review and network meta-51. Intensive Care Med 2015;41:1561-71. analys
- Rochwerg B, Alhazzani W, Sindi A, et al. Fluid resuscitation in sepsis: a systematic review and network meta-analysis. Ann Intern Med 52. 2014:161 347-55.
- Loubani OM, Green RS. A systematic review of extravasation and local tissue injury from administration of vasopressors through peripheral 53. is catheters and central venous catheters. J Crit Care 2015;30:653 e9-17. intrav
- Schmidt GA, Girard TD, Kress JP, et al. Official Executive Summary of an American Thoracic Society/American College of Chest Physicians Clinical Practice Guideline: Liberation from Mechanical Ventilation in Critically III Adults. Am J Respir Crit Care Med 2017;195:115-9.
- Muscedere J, Dodek P, Keenan S, et al. Comprehensive evidence-based clinical practice guidelines for ventilator-associated pneumonia: prevention. 55 J Crit Care 2008;23:126-37.
- Klompas M, Branson R, Eichenwald EC, et al. Strategies to prevent ventilator-associated pneumonia in acute care hospitals: 2014 update. Infect 56. Control Hosp Epidemiol 2014;35:915-36.
- Marschall J, Mermel LA, Fakih M, et al. Strategies to prevent central line-associated bloodstream infections in acute care hospitals: 2014 update. 57. Infect Control Hosp Epidemiol 2014;35:753-71.

#### © World Health Organization 2020. All rights reserved.

This is a draft. The content of this document is not final, and the text may be subject to revisions before publication. The document may not be reviewed, abstracted, quoted, reproduced, transmitted, distributed, translated or adapted, in part or in whole, in any form or by any means without the permission of the World Health Organization.

Annex C. Decision Tool for Novel Coronavirus Assessment for Bureau of Quarantine and Hospitals (Version as of January 30, 2020)

Fever ≥38°C (current fever or with thistory of fever)	Respiratory Infection (cough AND/OR colds)	Travel History for the past 14 days in China	History of Exposure	Case Category/ Intervention
+	+	+	+	Category: Patient Under Investigation (PUI)
+	+	+	-	Bureau of Quarantine (BoQ)  • Gives mask and isolate PUI
+	+	-	+	Collects and evaluates the BoQ Health Declaration Card     Endorses patient for admission in a hospital.
+	-	+	+	Arranges transportation of PUI to hospital
-	+	+	+	Hospitals  Completes the case investigation form (CIF)
+	-	+	-	Trained hospital staff collects specimens (nasopharyngeal swab [NPS] and oral pharyngeal swab [OPS]) and sends to
-	+	+	-	RITM. (NPS/OPS must be collected upon admission and after 24 to 48 hours)
+	-	-	+	Coordinates with RESU for reporting and transport of specimens
-	+	-	+	Manages PUI accordingly
-	-	+	+	Category: Person under Monitoring*  Bureau of Quarantine  Collects and evaluates the BoQ Health Declaration Card  Advises person to go on self-quarantine for 14 days, monitor body temperature daily, and observe any signs and
-	•	+	-	symptoms of respiratory infection  If symptoms worsen, immediately notify the nearest hospital for consultation and provide travel history  Centers for Health Development  Monitor strictly those who are self-quarantined
		•	+	*Anyone who came from other parts of the world with confirmed 2019-nCoV ARD infection except China, has no history of exposure, but with fever and/or cough, is considered Person under Monitoring and is advised to go on self-quarantine for 14 days

<sup>1</sup> History of exposure Include:

Close contact is defined as:

o Working together in close proximity or sharing the same classroom environment with a nCoV patient o Traveling together with a nCoV patient in any kind of conveyance

o Living in the same household as a nCoV patient

b. visiting/working in a live animal market in China

a. close contact who took care, handled specimens and/or lived with a confirmed case of 2019-nCoV infection; or

o 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

c. direct contact with animals in China with circulating 2019-nCoV in human and animals



WHO Case ID (International): \_

# Interim case reporting form for 2019 Novel Coronavirus (2019-nCoV) of confirmed and probable cases

WHO Minimum Data Set Report Form

	alth authority: LD_LD_J/LM_JLM	J/LYJLYJLYJLYJ
Reporting institution:		
Reporting country:		
Case classification:	□ Confirmed	□ Probable
Detected at point of entry		If yes, date [D][D]/[M][M]/[Y][Y][Y][Y]
Section 1: Patient informat	ion	
Unique Case Identifier (used in c	ountry):	_
Date of Birth: [D][D]/[M][N	//Y[_Y[_Y_]Y or estim	ated age: [][] in years
if < 1 year old, [][]	in months or if < 1 month, [][	_] in days
Sex at birth: D Male	□ Female	
Place where the case was diagno	osed: Country:	<u></u>
Admin Level 1 (province):	Admin	Level 2 (district):
Patient usual place of residency:	Country:	
Admin Level 1 (province):	Admin	Level 2 (district):
Section 2: Clinical informati	on	
Patient clinical course		120
Date of onset of symptoms:		[_Y_][_Y_]    Asymptomatic   Unknown
Admission to hospital:	□ No □ Yes □ Unknow	
First date of admission to hospit	al: [D][D]/[M][M]/[Y][Y	[_Y_]Y_]
Name of hospital:		-
Date of isolation:	LDJLDJ/LMJLMJ/LYJLY	LYJLYJ
Was the patient ventilated:	□ No □ Yes □ Unknown	
Health status (circle) at time of r	eporting: recovered / not recov	ered / death / unknown
Date of death, if applicable:	[D][D]/[M][M]/[Y][Y]	[\][\]
Patient symptoms (check all re	ported symptoms):	
☐ History of fever / chills	☐ Shortness of breath	□ Pain (check all that apply)
☐ General weakness	□ Diarrhoea	( ) Muscular ( ) Chest
□ Cough	□ Nausea/vomiting	( ) Abdominal ( ) Joint
□ Sore throat	☐ Headache☐ Irritability/Confusion☐	
Runny nose     Other, specify		
Patient signs :	/ F	
Temperature: [][] o°C	/ G P	
Check all observed signs:	a Como	□ Abnormal lung X-Ray findings
□ Pharyngea exudate	□ Coma	a Abriothia lung A-Ray indings
☐ Conjunctival injection	<ul> <li>Dyspnea / tachypnea</li> <li>Abnormal lung auscu</li> </ul>	tation
Seizure     Other, specify:	Abnormal lung auscu	lation

Pregnancy (trimester:)	□ Post-partum (< 6 weeks)		
<ul> <li>Cardiovascular disease, including hypertension</li> </ul>	□ Immunodeficiency, including HIV		
□ Diabetes	Renal disease		
□ Liver disease	□ Chronic lung disease		
□ Chronic neurological or neuromuscular disease	□ Malignancy		
□ Other, specify:			
ection 3: Exposure and travel information in th	ne 14 days prior to symptom onset (prior to reporting if		
symptomatic)			
Occupation: (tick any that apply)	- 1		
□ Student □ Health care worker	Other, specify:		
□ Working with animals □ Health laboratory w	5 Mg		
Has the patient travelled in the 14 days prior to sympt			
If yes, please specify the places the patient travelled:			
" yes, present charm, and harman	City		
Country	CILV		
Country 1.	city		
1.			
1. 2. 3. Has the patient <b>visited any health care facility(ies)</b> in	the 14 days prior to symptom onset?   No  Yes  Unkn		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact with a person with No Yes Unknown If yes, contact setting (check all that apply):	the 14 days prior to symptom onset? □ No □ Yes □ Unkn acute respiratory infection in the 14 days prior to symptom onset?		
1. 2. 3.  Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with □ No □ Yes □ Unknown  If yes, contact setting (check all that apply): □ Health care setting □ Family setting □ W	the 14 days prior to symptom onset? □ No □ Yes □ Unkn acute respiratory infection in the 14 days prior to symptom onset?		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact with a person with No Yes Unknown If yes, contact setting (check all that apply):	the 14 days prior to symptom onset? □ No □ Yes □ Unkn acute respiratory infection in the 14 days prior to symptom onset?		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting Was the patient had contact with a probable or configure No Yes Unknown	the 14 days prior to symptom onset? □ No □ Yes □ Unknacute respiratory infection in the 14 days prior to symptom onset?  Fork place □ Unknown □ Other, specify:		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting W Has the patient had contact with a probable or confi	the 14 days prior to symptom onset? □ No □ Yes □ Unknacute respiratory infection in the 14 days prior to symptom onset?  Fork place □ Unknown □ Other, specify:		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting W Has the patient had contact with a probable or confi	the 14 days prior to symptom onset? □ No □ Yes □ Unknown acute respiratory infection in the 14 days prior to symptom onset?  Fork place □ Unknown □ Other, specify: □  Irmed case in the 14 days prior to symptom onset?:		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting Whas the patient had contact with a probable or confict No Yes Unknown If yes, please list unique case identifiers of all probations Case 1 identifier.  Case 2 identifyes, contact setting (check all that apply):	the 14 days prior to symptom onset?		
1. 2. 3. Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting Whas the patient had contact with a probable or confict No Yes Unknown If yes, please list unique case identifiers of all probations Case 1 identifier.  Case 2 identifyes, contact setting (check all that apply):	the 14 days prior to symptom onset? □ No □ Yes □ Unknown acute respiratory infection in the 14 days prior to symptom onset?  //ork place □ Unknown □ Other, specify:		
1	the 14 days prior to symptom onset? □ No □ Yes □ Unknacute respiratory infection in the 14 days prior to symptom onset?  Vork place □ Unknown □ Other, specify:		
1. 2. 3.  Has the patient visited any health care facility(ies) in Has the patient had close contact with a person with Possible	the 14 days prior to symptom onset?		
1. 2. 3.  Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown  If yes, contact setting (check all that apply): Health care setting Family setting Whas the patient had contact with a probable or confict No Yes Unknown  If yes, please list unique case identifiers of all probations Case 1 identifier.  Case 2 identifyes, contact setting Check all that apply): Health care setting Family setting Whas No Case 1 identifiers of all probations Case 2 identifiers of all probations Case 1 identifiers.  Health care setting Family setting What No Case 2 identifiers of all probations of the case setting What No Case 2 identifiers of the case 2 identifiers of the case 3 identifiers of the case 4 identifiers of the case 5 identifiers of the case 6 identifie	the 14 days prior to symptom onset?		
1. 2. 3.  Has the patient visited any health care facility(ies) in Has the patient had close contact¹ with a person with No Yes Unknown If yes, contact setting (check all that apply): Health care setting Family setting Whas the patient had contact with a probable or confict No Yes Unknown If yes, please list unique case identifiers of all probations Case 1 identifier.  Case 2 identifyes, contact setting (check all that apply): Health care setting Family setting Whas No Yes, location/city/country for exposure: Have you visited any live animal markets in the 14 day	the 14 days prior to symptom onset?		

<sup>&</sup>lt;sup>1</sup> Close contact' is defined as: 1. 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 of a nCoV patient. 2. Working together in close proximity or sharing the same classroom environment with a with nCoV patient. 3. Traveling together with nCoV patient in any kind of conveyance. 4. Living in the same household as a nCoV patient



# Republic of the Philippines Department of Health OFFICE OF THE SECRETARY

February 4, 2020

DEPARTMENT MEMORANDUM No. 2020 - 0062

TO:

ALL UNDERSECRETARIES AND ASSISTANT SECRETARIES;
MINISTER OF HEALTH – BANGSAMORO AUTONOMOUS
REGION IN MUSLIM MINDANAO (MOH-BARMM); CENTERS
FOR HEALTH DEVELOPMENT (CHD), BUREAU AND SERVICE
DIRECTORS; EXECUTIVE DIRECTORS OF SPECIALTY
HOSPITALS; CHIEFS OF MEDICAL CENTERS, HOSPITALS

AND SANITARIA; AND OTHERS CONCERNED

SUBJECT:

Guidelines on the Standards of Airborne Infection Isolation Room and Conversion of Private Rooms and/or Wards into Temporary Isolation Rooms for the Management of Patients Under Investigation (PUI) for 2019 Novel Coronavirus (nCoV)

In response to the current or potential influx of Patients Under Investigation (PUI) for 2019 Novel Coronavirus (nCoV) in our health facilities, all DOH Hospitals are hereby urged to comply with the patient placement guidelines and isolation standards adopted from the CDC Guidelines and Standards for Transmission-based Precautions. This shall facilitate the management of PUIs and prevent the transmission of the virus within the health facility.

## I. For health facilities with Airborne Infection Isolation Room (AIIR), the following standards shall be followed:

#### A. Isolation of Patients Under Investigation for nCoV Patients

- 1. Place patient with known or suspected nCoV
- Airborne Infection Isolation Room (AIIR).
- 3. While transfer to AIIR or discharge from the facility is pending, put face mask on the patient and isolate in an examination room with the door closed. The patient must not be placed in any room where room exhaust is re-circulated within the building without high-efficiency particulate air (HEPA) filtration.
- 4. Follow CDC guidelines on placement of patient with known or suspected nCoV infection and adhere to standard, contact, and airborne precautions (ANNEX A).

#### B. Standards of Airborne Infection Isolation Room (AIIR)

- AIIR must be single-occupancy rooms with negative pressure relative to the surrounding areas.
- There must be at least six (6) air changes per hour, or twelve (12) air changes per hour for newly constructed or renovated rooms.

- 3. Air exhaust should be directed away from people and air intakes. If this is not possible, air must be filtered through a HEPA filter before recirculation.
- Doors must be kept closed except when entering or leaving the room. Minimize unnecessary entry and exit.
- Air pressure must be monitored daily with visual indicators (e.g smoke tubes, flutter strips), regardless of the presence of differential pressure sensing devices (e.g. manometers).
- 6. For the standard floor plan for AIIR, refer to ANNEX B.

# II. For facilities with limited Airborne Infection Isolation Rooms, private rooms may be utilized for the management of PUIs.

#### A. Conversion of Single Private Room

For the conversion of private rooms to isolation rooms, the following guidelines must be followed:

- 1. Use private rooms at the end of the hallway for conversion into a temporary isolation room. It must be away from the stairs and nurses' station.
- Keep doors closed except when entering or leaving the room. Entry and exit should be minimized.
- Keep the windows in the converted isolation rooms open regardless of use and nonuse of air conditioning. Windows connecting to hallways should not be opened.
- 4. The use of air conditioning in the isolation room is allowed provided it is not part of the general air conditioning system of the facility.
- Use temporary portable solutions, such as exhaust fans or unidirectional fans, to create a negative pressure environment in the converted area. Discharge air directly outside, away from people and air intakes, or through HEPA filters before introducing to other air spaces.
- All healthcare personnel shall strictly adhere to hand hygiene following the World Health Organization's Multimodal Hand Hygiene Strategy: 5 Moments of Hand Hygiene.
- 7. Place wall-mounted alcohol-based hand rubs at point of care and outside the isolation room.
- Medical supplies needed for patient care shall be made readily available at point of care.
- Ensure that the relatives or carers of minors and elderly patients are provided with Personal Protective Equipment (PPEs). Instructions on the appropriate use and disposal of PPEs must be provided.
- 10. Refer to ANNEX C for the Proposed Floor Plan for Converted Private Room. If access to a lavatory in the ante room is not feasible, wall mounted alcohol-based hand rubs are recommended.

#### B. Conversion of Ward

Wards may also be utilized for the management of PUIs. For the conversion of wards into isolation rooms, the following guidelines must be followed:

- 1. Follow the same guidelines for conversion of private rooms.
- Place cohorted PUIs in a converted ward room provided that they have the same test results. Do not include patients with pending confirmatory test results in the cohort.

- General ward rooms must have adequate ventilation with at least 60 L/s of air flow per patient.
- All patient beds should be placed at least three (3) feet apart with a curtain separator for privacy.

#### III. Exclusive Use of Converted Private Rooms and Wards

Private rooms and wards converted into isolation rooms must not be used for the management and treatment of patients other than PUIs until after appropriate environmental cleaning and disinfection procedures are undertaken.

#### IV. Additional Information on Isolation Rooms

Additional reference materials on establishment and types of isolation rooms are listed on ANNEX D.

For guidance and strict compliance.

By Authority of the Secretary of Health:

LILIBETH C. DAVID, MD, MPH, MPM, CESO I

Undersecretary of Health

Health Facilities Infrastructure and Development Team

## CDC STANDARD, CONTACT, AND AIRBORNE INFECTION PRECAUTIONS FOR PATIENT WITH KNOWN OR SUSPECTED 2019-nCoV

(Source: https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html)

- Once in an Airborne Infection Isolation Room (AIIR), the patient's facemask may be removed. Transport and movement of the patient outside of the AIIR must be limited to medically-essential purposes. When not in an AIIR (e.g. during transport), patients must wear a facemask to contain secretions.
- Personnel entering the room must use PPEs, including respiratory protection (i.e. fit-tested disposable N95 mask).
- Only essential personnel must enter the room. Staffing policies must be strictly observed to minimize the number of healthcare professionals (HCP) who enter the room.
- 4. Facilities must take precautions to minimize the risk of transmission and exposure to other patients and other HCP.
- Facilities must keep a log of all persons who provide care and enter the room or care areas of these patients.
- 6. Dedicated or disposable noncritical patient-care equipment must be used (e.g., blood pressure cuffs). If equipment will be used for more than one patient, clean and disinfect such equipment before use on another patient according to manufacturer's instructions.
- 7. HCP entering the room after a patient vacates the room must use respiratory protection. Standard practice for pathogens spread by the airborne route (e.g., measles, tuberculosis) is to restrict unprotected individuals, including HCP, from entering a vacated room until sufficient time has elapsed for enough air changes to remove potentially infectious particles. Currently, there is no data on how long 2019-nCoV remains infectious in the air. In the interim, apply a similar time period before entering the room without respiratory protection as used for pathogens spread by the airborne route (e.g., measles, tuberculosis). In addition, the room should undergo appropriate cleaning and surface disinfection before it is returned to routine use.
- HCP must perform hand hygiene before and after contacts with patients, potentially infectious material and PPE, including gloves.
- Healthcare facilities must ensure that hand hygiene supplies are readily available in every care location.

#### STANDARDS AND FLOOR PLAN FOR AIRBORNE INFECTION ISOLATION ROOM

	Department of Health			
ROOM DATA SHEET			HEALTH FACILITY DEVELOPMENT BUREAU	
Department:	Department: Room Title:			
NURSING WARDS	ISOLATION ROOM (TYPICAL)	250B-NU-RDS-07		
UIREMENTS:				
ities needed	EQUIPMENT AND ACCESSORY CHECKLIST	QUANTITY	REMARKS	
ospital bed from a	Television  Waste bin w/ yellow lining  Waste bin w/ black lining  Water Heater	1 1 1	Infectious general	
s in the vicinity of	Console, bedhead	1		
or in sitting area	FURNITURE AND FIXTURE CHECKLIST	QUANTITY	REMARKS	
d other personal	Hospital bed, adjustable; with adjustable side rails	1		
th	Chair, upright; stacking Footstool	1		
	Bench, cushioned Table, side; with cabinet	1		
	Table, överbed Closet, wardrobe	1		
m. Nurse may feed or wash patient, in the absence of a relative or watcher		1 1	8	
	Cabinet, PPE Water closet	1		
	Lavatory Shower set	1		
	ADDITIONAL EQUIPMENT & ENGINEERING TERMINALS	QUANTITY	REMARKS	
	Window curtain rail Bedhead light w/ night lamp Outlet, 10A,2P,240V, duplex	1 1 7	fluorescent, 20W grounding type, universal	
Nursing Ward	Outlet, 10A,2P,240V, single Nurse call station, emergency Outlet, antenna/Cable Smoke Detector	1 1 1	universal for emergency light w/ pendant switch	
	Department: NURSING WARDS  UIREMENTS: Ities needed  wheelchair or on a stretcher cospital bed from a trolley and vice versa is in the vicinity of cout assistance or in sitting area d other personal  th diagnostic equipment eck on patients lean up activities o patient	Department: NURSING WARDS  UIREMENTS:  Ities needed  wheelchair or on a stretcher  ospital bed from a trolley and vice versa s in the vicinity of out assistance or in sitting area  the diagnostic equipment eck on patients clean up activities opatient, in the absence of  Department:  NURSING WARDS  EQUIPMENT AND ACCESSORY CHECKLIST  Television Waste bin w/ yellow lining Water Heater Console, bedhead  FURNITURE AND FIXTURE CHECKLIST Hospital bed, adjustable; with adjustable side rails Chair, upright: stacking Footstool Bench, cushloned Table, side; with cabinet Table, overbed Closet, wardrobe Lavatory, wall-hung Concealed floor drain Cabinet, PPE Water closet Lavatory Shower set  ADDITIONAL EQUIPMENT & ENGINEERING TERMINALS Window curtain rail Bedhead light w/ night lamp Outlet, 10A,2P,240V, duplex  Outlet, 10A,2P,240V, single Nurse call station, emergency Outlet, antenna/Cable	ROOM DATA SHEET  Department: NURSING WARDS  DIREMENTS:  Ities needed  Waste bin w/ pellow lining trolley and vice versa s in the vicinity of out assistance or in sitting area  The personal  The pers	

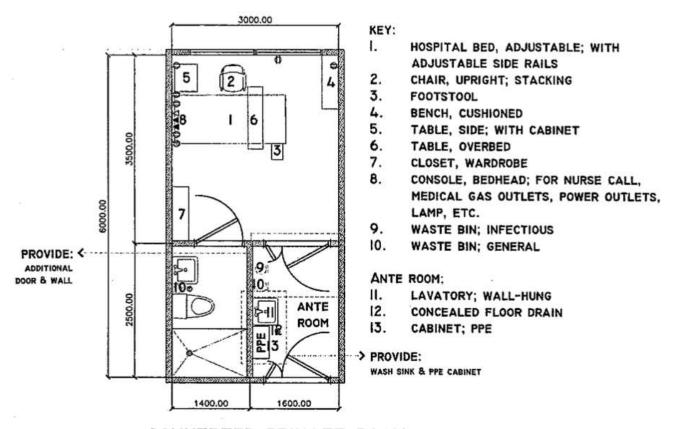
Hospital: 250-Bed (Level 3)	ROOM DAT	Department of Health HEALTH FACILITY DEVELOPMENT BUREAU		
Updated Reference:	Department:	Room Title:	Reference Sheet Number:	
April 2016	NURSING WARDS	ISOLATION ROOM (TYPICAL)	250B-NU-RDS-07B	
TECHNICAL DESIGN DATA	:			
ENVIRONMENTAL CONDITIONS	DESIGN DATA	ENVIRONMENTAL CONDITIONS	DESIGN DATA	
AIR		LIGHTING AND VISUAL		
Outdoor air temperature (°C)	ave. local station temp, reading	General Illumination (LUX)	250	
Room temperature (°C)	23	Night illumination (LUX)	50	
Mechanical ventilation		Task illumination (LUX)	500	
Volume (cu.m./hrperson)	25	Color rendering	essential:DESIRABLE:unnecessary	
Velocity (m./min.)	30.	Standby light	ESSENTIAL:desirable:unnecessary	
Pressure Differential:		Emergency light	ESSENTIAL:desirable:unnecessary	
Negative Pressure (Pa)	10	Daylight	essential:DESIRABLE:unnecessary	
Positive Pressure (Pa)	NA	View out	essential:DESIRABLE:unnecessary	
% Dust filtration	93%-99%@ 1 micron	Privacy	ESSENTIAL: desirable: unnecessary	
Humidity (%RH)	50.	Black out	essential:desirable:UNNECESSARY	
Cooling load (TR)	0.75			
SOUND		SAFETY		
Acceptable sound level (db)	40	Accessible hot surface:	,NA	
Speech privacy	essential:DESIRABLE:unnecessary	Maximum temperature (°C)	NA .	
Quality which cannot be	tonal Impact	Domestic hot water:	at lavatory	
tolerated		Maximum temperature (°C)	70	
		Access limit	medical staff, relatives/watcher & patient	
		Fire risk	LOW: medium: high	
		Other risks	NA NA	

Hospital:			Department of Health	
250-Bed (Level 3)	ROOM DATA SHEET		HEALTH FACILITY	
			DEVELOPMENT BUREAU	
Updated Reference:	Department:	Room Title:	Reference Sheet Number:	
April 2016	NURSING WARDS	ISOLATION ROOM (TYPICAL)	250B-NU-RDS-07C	
TECHNICAL DESIGN D	ATA:		D SPACE COMPONENTS:	
DIRECT SERVICES	DESIGN DATA			
Disposal	hospital solid waste type: A & G	1	6000	
Hot Water	required at shower		3700 2300	
Cold Water	req'd at lav & toilet fixtures	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Drainage	req'd at lav, toilet fixt. & floor	1 1	5 62544000 TOO	
Medical Oxygen	.30 lpm @ 4.0 Bar	8	2 6 3	
Medical Vacuum	40 lpm @ 450mm Hg	900	1 2 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Compressed Air	NA NA	7	الرقيا	
Steam	NA NA	<u> </u>	P - P -	
Others	suction outlet required	1		
DIRECT DEMANDS ON	I FLOOR AND WALL	1		
Loading	NA NA	*		
Spillage	SLIGHT:occasional:frequent			
Foot Traffic	light:MEDIUM:heavy	KEY SCALE 1:100 M		
Wheel Traffic	light:MEDIUM;heavý	Hospital bed, adjusta adjustable elde ralls	medical gas outlets, power	
Impacts	NA NA	2 Chair, upright; stackli 3 Footstool	outlets, lamp, etc. 9 Waste bin, infectious	
Abrasion	NA NA	4 Bench, cushloned 5 Table, side; with cabi	10 Waste bin, general	
Easy Maintenance	ESSENTIAL: desirable: unnecessary	6 Table, overbed 7 Closet, wardrobe		
Vibration Free	ESSENTIAL:desirable:unnecessary		12 Concealed floor drain 13 Cabinet, PPE	
Door Set	bed, wheelchair, &		is decire, i.e.	
	stretcher trolley access	SPACE DEMANDS (Total	Minimum Space Required In sq.m.):	
Windows	clear, solar control,	Space Components	Minimum Space Required/Component (sq.m.)	
	privacy control			
Internal Glazing	none			
4.0.00				
11 - 1	Management Access 12 agreement to annual contract of the second contract of	REGULATIONS AND NO	OTES:	
		1		
	The second control of the second control of	1		
		1		
	4	4		

20 **4** 0

\*

#### PROPOSED FLOOR PLAN FOR CONVERTED PRIVATE ROOM



CONVERTED PRIVATE ROOM

#### ADDITIONAL REFERENCE MATERIALS ON ISOLATION ROOMS

1. Administrative Order No. 2012-0012, "Rules and Regulations Governing the New Classification of Hospitals and Other Health Facilities in the Philippines," as amended.

Refer to A.O. No. 2012-0012-A, "Amendment to Administrative Order (A.O.) No. 2012-0012 entitled "Rules and Regulations Governing the New Classification of Hospitals and Other Health Facilities in the Philippines"

2. Administrative Order No. 2016-0042, "Guidelines in the Application for Department of Health Permit to Construct (DOH-PTC)"

Refer to the following documents:

- Annex H-6A, "Checklist for Review of Floor Plans, Level 1 Hospital"
- Annex H-6B, "Checklist for Review of Floor Plans, Level 2 Hospital"
- Annex H-6C, "Checklist for Review of Floor Plans, Level 3 Hospital"
- 3. Total Alliance Health Partners International (TAHPI), "International Health Facility Guidelines"

Refer to Chapter IV, "Isolation Rooms" (Visit: https://bit.ly/3bbu45L)

 Centers for Disease Control and Prevention (2007). "2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Setting", updated July 2019. <a href="https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html">https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html</a>

# ANNEX C (List of Medicines and Medical Supplies)

Medicine	Medical Supplies and Equipment
Antipyretic	Monitoring
Paracetamol 500mg tablets	Thermometer (Thermal scanner or digital)
Paracetamol 200mg/ ampule	Sphygmomanometer
Respiratory Medications:	Pulse Oximeters
Lagundi 300mg tor 600mg tablets 300mg/ 5mL, 60mL Syrup	Stethoscopes
Ipratropium + Salbutamol 500mcg + 2.5mg x2.5mL (unit dose) Respiratory	Airway
Salbutamol 1mg/mL 2.5mL nebule	Oxygen Tanks
Butamirate Citrate 50mg tablet	Oxygen Cannula (Adult and Pediatric)
Anti-Inflammatory Medications:	Bag Valve- Mask (Adult and Pediatric)
Hydrocortisone 100mg, 200mg or 500mg powder vial	Laryngoscope and Blade (Adult and Pediatric)
Antidiarrheal Medications	Nebulizer
Oral Rehydration Salts	Nebulizing kits
Loperamide 2mg Capsule	ET Tubes of varying sizes
Others	Circulation
Clonidine 75mcg/ tab Clonidine 150 mcg/mL, 1mL ampule	Intravenous Set (IV Cannula, Macro/Microset) Soluset
IV Fluids (PLR, PNSS, D5LR, D5IMB) Sterile water for IV meds preparation	Syringes (1cc, 3cc, 5cc, 10cc and 30 syringe)
Epinephrine ampule	Sterile needles (varied gauges)

Others Supplies and Equipment	
Surgical tapes of different sizes (for IV insertion and intubation)	
Cotton balls	
Sterile gauze	
Surgical gloves (sterile & non-sterile)	
Tongue Depressor	
Sterile cotton swab	
Tourniquet	
Isopropyl alcohol	
Povidone Iodine	
 Disinfectant solutions	
Surgical Masks	
Gowns	
Goggles/ Face shields	
N95 Respirators	
Liquid antibacterial hand soap	
Bed linens, pillows and cases	
Color coded solid wastes disposal bins and plastic bags	
 Wheel chair	
IV Stand	

1

.

# Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)

Interim guidance 19 March 2020



On 30 January 2020, the WHO Director-General determined that the outbreak of coronavirus disease (COVID-19) constitutes a Public Health Emergency of International Concern. As the outbreak continues to evolve, Member States are considering options to prevent introduction of the disease to new areas or to reduce human-to-human transmission in areas where the virus that causes COVID-19 is already circulating.

Public health measures to achieve these goals may include quarantine, which involves the restriction of movement, or separation from the rest of the population, of healthy persons who may have been exposed to the virus, with the objective of monitoring their symptoms and ensuring early detection of cases. Many countries have the legal authority to impose quarantine. Quarantine should be implemented only as part of a comprehensive package of public health response and containment measures and, in accordance with Article 3 of the International Health Regulations (2005), be fully respectful of the dignity, human rights and fundamental freedoms of persons.<sup>2</sup>

The purpose of this document is to offer guidance to Member States on implementing quarantine measures for individuals in the context of the current COVID-19 outbreak. It is intended for those who are responsible for establishing local or national policy for the quarantine of individuals and for ensuring adherence to infection prevention and control (IPC) measures.

This document is informed by current knowledge of the COVID-19 outbreak and by considerations undertaken in response to other respiratory pathogens, including the severe acute respiratory syndrome coronavirus (SARS-CoV), the Middle East respiratory syndrome (MERS)-CoV and influenza viruses. WHO will continue to update these recommendations as new information becomes available.

#### Quarantine of persons

The quarantine of persons is the restriction of activities of or the separation of persons who are not ill but who may been exposed to an infectious agent or disease, with the objective of monitoring their symptoms and ensuring the early detection of cases. Quarantine is different from isolation, which is the separation of ill or infected persons from others to prevent the spread of infection or contamination. Quarantine is included within the legal framework of the International Health Regulations (2005), specifically:

- Article 30 Travellers under public health observation;
- Article 31 Health measures relating to entry of travellers;
- Article 32 Treatment of travellers.<sup>2</sup>

Member States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to legislate and to implement legislation, in pursuit of their health policies, even if this involves the restriction of movement of individuals.

Before implementing quarantine, countries should properly communicate such measures to reduce panic and improve compliance.<sup>1</sup>

- Authorities must provide people with clear, up-to-date, transparent and consistent guidelines, and with reliable information about quarantine measures.
- Constructive engagement with communities is essential if quarantine measures are to be accepted.
- Persons who are quarantined need to be provided with health care; financial, social and psychosocial support; and basic needs, including food, water, and other essentials. The needs of vulnerable populations should be prioritized.
- Cultural, geographic and economic factors affect the effectiveness of quarantine. Rapid assessment of the local context should evaluate both the drivers of success and the potential barriers to quarantine, and they should be used to inform plans for the most appropriate and culturally accepted measures.

#### When to use quarantine

Introducing quarantine measures early in an outbreak may delay the introduction of the disease to a country or area or may delay the peak of an epidemic in an area where local transmission is ongoing, or both. However, if not implemented properly, quarantine may also create additional sources of contamination and dissemination of the disease.

In the context of the current COVID-19 outbreak, the global containment strategy includes the rapid identification of laboratory-confirmed cases and their isolation and management either in a medical facility<sup>3</sup> or at home.<sup>4</sup>

WHO recommends that contacts of patients with laboratory-confirmed COVID-19 be quarantined for 14 days from the last time they were exposed to the patient.

For the purpose of implementing quarantine, a contact is a person who is involved in any of the following from 2 days before and up to 14 days after the onset of symptoms in the patient:

- Having face-to-face contact with a COVID-19 patient within 1 meter and for >15 minutes;
- Providing direct care for patients with COVID-19 disease without using proper personal protective equipment;
- Staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering) for any amount of time;
- Travelling in close proximity with (that is, within 1 m separation from) a COVID-19 patient in any kind of conveyance;
- and other situations, as indicated by local risk assessments.<sup>5</sup>

#### Recommendations for implementing quarantine

If a decision to implement quarantine is taken, the authorities should ensure that:

- the quarantine setting is appropriate and that adequate food, water, and hygiene provisions can be made for the quarantine period;
- · minimum IPC measures can be implemented;
- minimum requirements for monitoring the health of quarantined persons can be met during the quarantine period.

# Ensuring an appropriate setting and adequate provisions.

The implementation of quarantine implies the use or creation of appropriate facilities in which a person or persons are physically separated from the community while being cared for

Appropriate quarantine arrangements include the following measures.

- Those who are in quarantine must be placed in adequately ventilated, spacious single rooms with en suite facilities (that is, hand hygiene and toilet facilities).
   If single rooms are not available, beds should be placed at least 1 metre apart.
- Suitable environmental infection controls must be used, such as ensuring are adequate air ventilation, air filtration systems, and waste-management protocols.
- Social distance must be maintained (that is, distance of at least 1 metre) between all persons who are quarantined.
- Accommodation must provide an appropriate level of comfort, including:
  - provision of food, water, and hygiene facilities;

- protection for baggage and other possessions;
- appropriate medical treatment for existing conditions;
- communication in a language that those who are quarantined can understand, with an explanation of their rights, services that will be made available, how long they will need to stay and what will happen if they get sick; additionally, contact information for their local embassy or consular support should be provided.
- Medical assistance must be provided for quarantined travellers who are isolated or subject to medical examinations or other procedures for public health purposes.
- Those who are in quarantine must be able to communicate with family members who are outside the quarantine facility.
- If possible, access to the internet, news, and entertainment should be provided.
- Psychosocial support must be available.
- Older persons and those with comorbid conditions require special attention because of their increased risk for severe COVID-19.

Possible settings for quarantine include hotels, dormitories, other facilities catering to groups, or the contact's home. Regardless of the setting, an assessment must ensure that the appropriate conditions for safe and effective quarantine are being met.

When home quarantine is chosen, the person should occupy a well-ventilated single room, or if a single room is not available, maintain a distance of at least 1 metre from other household members, minimize the use of shared spaces and cutlery, and ensure that shared spaces (such as the kitchen and bathroom) are well ventilated.

# Minimum infection prevention and control measures.

The following IPC measures should be used to ensure a safe environment for quarantined persons.

#### 1. Early recognition and control

- Any person in quarantine who develops febrile illness or respiratory symptoms at any point during the quarantine period should be treated and managed as a suspected case of COVID-19.
- Standard precautions apply to all persons who are quarantined and to quarantine personnel:
  - Perform hand hygiene frequently, particularly after contact with respiratory secretions, before eating, and after using the toilet. Hand hygiene includes either cleaning hands with scap and water or with an alcohol-based hand rub. Alcohol-based hand rubs are preferred if hands are not visibly dirty; hands should be washed with soap and water when they are visibly dirty.

- Ensure that all persons in quarantine are practicing respiratory hygiene and are aware of the importance of covering their nose and mouth with a bent elbow or paper tissue when coughing or sneezing and then immediately disposing of the tissue in a wastebasket with a lid and then performing hand hygiene.
- Refrain from touching the eyes, nose and mouth.
- A medical mask is not required for persons with no symptoms. There is no evidence that wearing a mask of any type protects people who are not sick.

#### 2. Administrative controls

Administrative controls and policies for IPC within quarantine facilities include but may not be limited to:

- establishing sustainable IPC infrastructure (for example, by designing appropriate facilities) and activities;
- educating persons who are quarantined and quarantine personnel about IPC measures. All personnel working in the quarantine facility need to have training on standard precautions before the quarantine measures are implemented. The same advice on standard precautions should be given to all quarantined persons on arrival. Both personnel and quarantined persons should understand the importance of promptly seeking medical care if they develop symptoms;
- developing policies to ensure the early recognition and referral of a suspected COVID-19 case.

#### 3. Environmental controls

Environmental cleaning and disinfection procedures must be followed consistently and correctly. Cleaning personnel need to be educated about and protected from COVID-19 and ensure that environmental surfaces are regularly and thoroughly cleaned throughout the quarantine period.

- Clean and disinfect frequently touched surfaces such as bedside tables, bed frames and other bedroom furniture – daily with regular household disinfectant containing a diluted bleach solution (that is, 1-part bleach to 99 parts water). For surfaces that cannot be cleaned with bleach, 70% ethanol can be used.
- Clean and disinfect bathroom and toilet surfaces at least once daily with regular household disinfectant containing a diluted bleach solution (that is, 1-part bleach to 99 parts water).
- Clean clothes, bed linens, and bath and hand towels using regular laundry soap and water or machine wash at 60-90 °C (140-194 °F) with common laundry detergent, and dry thoroughly.
- Countries should consider implementing measures to ensure that waste is disposed of in a sanitary landfill and not in an unmonitored open area.
- Cleaning personnel should wear disposable gloves when cleaning surfaces or handling clothing or linen soiled with body fluids, and they should perform hand hygiene before putting on and after removing their gloves.

# Minimum requirements for monitoring the health of guarantined persons.

Daily follow up of persons who are quarantined should be conducted within the facility for the duration of the quarantine period and should include screening for body temperature and symptoms. Groups of persons at higher risk of infection and severe disease may require additional surveillance owing to chronic conditions or they may require specific medical treatments.

Consideration should be given to the resources and personnel needed and rest periods for staff at quarantine facilities. This is particularly important in the context of an ongoing outbreak, during which limited public health resources may be better prioritized for health care facilities and case-detection activities.

Respiratory samples from quarantined persons, irrespective of whether they have symptoms, should be sent for laboratory testing at the end of the quarantine period.

#### References

- 1. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV). In: World Health Organization/Newsroom [website]. Geneva: World Health Organization; 2020 (<a href="https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov), accessed 29 February 2020).
- 2. Key considerations: quarantine in the context of COVID-19. In: Social Science in Humanitarian Action: A Communication for Development Platform [website]. New York: UNICEF, Institute of Development Studies; 2020 (https://www.socialscienceinaction.org/resources/february-2020-social-science-humanitarian-action-platform/, accessed 29 February 2020).
- 3. World Health Organization. <u>Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected.</u> (accessed 16 March 2020).
- World Health Organization. Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts: interim guidance, 17 March 2020. Geneva: World Health Organization; 2020 (accessed 17 March 2020).
- 5. World Health Organization. <u>Global Surveillance for human infection with coronavirus disease (COVID-19):</u> interim guidance,

6. World Health Organization. Advice on the use of masks 29 January 2020. Geneva: World Health Organization; 2020 in the community, during home care and in health care (accessed 16 March 2020). settings in the context of COVID-19: interim guidance, WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication. © World Health Organization 2020. Some rights reserved. This work is available under the CC BY-NC-SA 3.0 IGO licence.

WHO reference number: WHO/2019-nCoV/IHR\_Quarantine/2020.2





#### Republika ng Pilipinas

#### Kagawaran ng Edukasyon

Tanggapan ng Pangalawang Kalihim

DepEd Task Force COVID-19 MEMORANDUM No. 025

25 March 2020

For: Execom and Mancom Members

SDS and All Others Concerned

Subject: MINIMUM STANDARDS FOR SOCIAL DISTANCING/

BASELINE PROTOCOLS TO BE OBSERVED IN THE WORKPLACE, TRAVEL, AND HOME AND PRIVATE SPACE AND TIME OF DEPLOYED PERSONNEL

DURING THE ENHANCED COMMUNITY

QUARANTINE

This memorandum is being issued pursuant to the directive of the Secretary to the DepEd Task Force COVID-19 to "prepare for the baseline protocols to be observed in the workplace, travel, and home and private space and time of the deployed personnel, and the coordination mechanism for the effective implementation of these," per Office Memorandum OO-OSEC-2020-001, titled Authorization of Office and Field Work for Identified Critical Services in Areas Covered by the Enhanced Community Quarantine, or "to issue the uniform and minimum standards for social distancing within the workplace, during travel, and in private premises and activities," per DM 43, s. 2020, titled Guidelines on the Alternative Work Arrangements in the Department of Education in Light of the Covid-19 Stringent Social Distancing Measures.

#### 1. Guidelines on work arrangement

#### a. Personnel on work-from-home

- i. The following factors shall be considered when identifying the personnel that will make up the skeletal workforce:
  - (1) The overall health of the personnel. Personnel considered as highrisk individuals shall be prioritized for home-from-work arrangement. "Persons who are at high risk of being infected" are elaborated as "those sixty (60) years old and above, those who are immunocompromised or with co-morbidities, and pregnant women," based on the Memorandum from the Executive Secretary, IATF-MEID and DOH





#### Office of the Undersecretary for Administration (OUA)

[Administrative Service (AS), Information and Communications Technology Service (ICTS), Disaster Risk Reduction and Management Service (DRRMS), Bureau of Learner Support Services (BLSS), Baguio Teachers' Camp (BTC), Central Security & Safety Office (CSSO)]

Department of Education, Central Office, Meralco Avenue, Pasig City Rm 519, Mabini Bldg; Mobile: +639260320762; Tel: +63286337203, +63286376207 Email: usec.admin@deped.gov.ph; Facebook/Twitter@depedtayo

- (2) Distance between the residence of the personnel and the office (workstation) (e.g., those who reside outside the National Capital Region and require daily travel shall be prioritized for home-from-work arrangement, if a service cannot be provided)
- All personnel who are on work-from-home arrangement are advised to observe applicable preventive measures contained in this memorandum (Item No. 2).

#### b. Personnel on skeletal workforce

- Those part of the skeletal workforce shall be provided with a door-to-door vehicle service where applicable preventive measures (as enumerated in Item No. 2 of this memorandum), including social distancing, shall be strictly observed. The vehicle used for transportation shall be cleaned and disinfected after every trip.
- Proper orientation on safety and precautionary measures including social distancing of passengers shall be provided to the drivers.
- The skeletal workforce shall report only during their assigned schedule or as necessary.
- iv. The skeletal workforce shall adhere to the preventive measures enumerated in Items No. 2 and No. 3 of this memorandum.
- v. The Central Office Task Force COVID-19 and similar task forces at the Regional Offices, Division Offices and Schools are enjoined to formulate implementing rules on the above items.

#### General preventive measures for the skeletal workforce (Based on DOH Circular No. 2020-0039)

#### a. Respiratory etiquette

- Cough and sneeze into tissue or into shirt sleeve if tissue is not available.
  Dispose used tissues properly and disinfect hands immediately after a
  cough o sneeze.
- Avoid touching the mouth, eyes, and nose to help slow the spread of the virus.
- iii. The use of masks, which provides a physical barrier from COVID-19 by blocking large-particle respiratory droplets propelled by coughing or sneezing, is only recommended for:
  - (1) Persons caring for the sick
  - (2) Healthcare workers attending to patients with respirate infections/symptoms (cough/cold)
  - (3) Persons with respiratory infection/symptoms

- iv. People in good health do not need to use face masks, except in crowded places where social distancing is not feasible.
- b. Hand hygiene. Perform regular and thorough handwashing with soap and water. Use alcohol-based hand sanitizers containing at least 60 ethanol or isopropanol when soap and water are not available.

#### c. Social distancing measures

- i. Whenever possible, keep a distance of at least 3 feet or 1 meter away from other people to reduce the possibility of person-to-person transmission. This distance should be observed even as to apparently healthy persons without symptoms.
- ii. Offer telecommuting and replace in-person meetings in the workplace with video or telephone conferences.

#### d. Environmental measures

- Clean frequently-touched surfaces and objects, including tables, doorknobs, desks, and keyboards.
- Maintaining the environment clean, especially common-use areas and those with touchpoints such as elevators, railings, staircases, light switches and the like.
- iii. Make dispensers with alcohol-based hand rub available in public areas.

### 3. Practical measures for the offices at the DepEd Central, Regional, Division, Facilities and/or Schools while on skeletal workforce

- a. One major consideration when determining the skeletal workforce to report to the office is the workspace. The number of personnel to report each day shall permit strict observance of social distancing within the office.
- b. All personnel who are reporting as part of the skeletal workforce shall always have the "mindset" and be conscious to behave as if they may be possibly be infected with the virus, albeit asymptomatic, and may be potentially exposing their colleagues to the virus.
- c. All reporting staff must as much as possible stay only in their respective workstations, and avoid moving around the office.
- d. Talking closely between personnel during reporting hours is highly discouraged. Talking is also discouraged in common areas such as near the water dispenser or the photocopier.

e. All personnel are advised to always carry their own pens with them so that they use it when filling-out log-sheets at the entrance.

f. All personnel are advised to wash their hands with soap upon armyal

DepEd Complex before entering their respective offices.

- g. Doors may be slightly opened so that feet or elbows may be used when opening and closing them, instead of opening them through the doorknobs.
- h. Social distancing—keeping a distance of at least 3 feet or 1 meter away from other people—shall be strictly observed at all times in the entire DepEd complex.
- i. Personnel who manifests symptoms of respiratory infection shall be immediately provided with appropriate health care and automatically removed of the skeletal workforce. Likewise, personnel who will have exposure to a confirmed case, or whose household members will be eventually categorized as Person Under Monitoring or Person Under Investigation shall immediately disclose such information to their immediate supervisor for appropriate referral and intervention.

The DepEd Task Force COVID-19 welcomes suggestions and ideas on how social distancing and other preventive measures can be further practiced in the workplace. Such feedback and other concerns may be e-mailed at medical.nursing@deped.gov.ph.

For proper guidance.

ALAIN DEL B. PASCUA
Undersecretary

Chairperson, DepEd Task Force COVID-19







#### Republic of the Philippines

#### Department of Education

26 HAR 2020

OFFICE MEMORANDUM OM-O S E C-2 0 2 0-003

#### TEMPLATE TERMS AND CONDITIONS FOR THE USE OF DEPED SCHOOLS AS QUARANTINE OR ISOLATIONS AREAS

Regional Directors To:

Schools Division Superintendents

Public Elementary and Secondary School Heads

All Others Concerned

- The Department of Education (DepEd), through Office Memorandum OM-OSEC-2020-002, issued its Guidance to Regional Directors for Action on Requests by Local Government Units (LGUs) to Use Deped Schools as Quarantine or Isolation Areas For COVID-19.
- 2. Paragraph 9 (e) of the said memorandum requires signing of the minimum Terms and Conditions (TAC) for the Use of DepEd Schools as Quarantine or Isolation Areas before actual use of the facility for the intended purpose. Furthermore, paragraph 10states that:
  - 10. The LGU shall sign the TAC provided by the Regional Director. Should there be other terms to be agreed upon between the Schools Division Office (SDO) and the LGU, the SDO shall draft a Memorandum of Agreement (MOA) between the SDO and LGU, detailing the roles and responsibilities of the parties, among others. The TAC shall be attached to the MOA as an Annex and shall form an integral part of the MOA. In case of conflict between the MOA and the TAC, the TAC shall prevail.
- In view of the foregoing, the following enclosed templates shall be 3. accomplished:
  - Enclosure No. 1 -Letter of the School Head to the LGU communicating the Approval by the Regional Director of the request for the use of school as temporary quarantine or isolation facility
  - Enclosure No. 2 -Terms and Conditions for the Use of DepEd School by the Local Government Unit as a Temporary Quarantine or Isolation Facility of Last Resort with School Inventory
- For strict compliance.

ONOR MAGTOMS BRIONES Secretary

	Date
NAME Designation Office Address	
Re: Approval by the Regional O	ffice of
Dear,	
This has reference to your request for to SCHOOL), as temporary quarantine or isolation public health situation.	
The Department of Education Regional of approved the request, subject to the attached mitthe Use of DepEd School by the Local Government Facility of Last Resort" with annexed School Investional relative to the request.	inimum "Terms and Conditions for nt Unit as A Quarantine or Isolation
Kindly sign the Terms and Conditions and conformity.	the School Inventory to signify your
	Sincerely,
	(School Head)

# TERMS AND CONDITIONS FOR THE USE OF DEPED SCHOOL BY THE LOCAL GOVERNMENT UNIT AS A TEMPORARY QUARANTINE OR ISOLATION FACILITY OF LAST RESORT

The Local Government Unit of the City/Muni	icipality of
with office address at	, and represented by
, Mayor, hereinafter referre	d to as the "LGU", has requested
from the DepEd-Regional Office of	, as represented by
, Regional Director, herein	nafter referred to as the "RO", the
use of(Name of School), with address at	H 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
and School Head, (Name of School Head), as a t	emporary quarantine or isolation
facility relative to the COVID-19 public health situ	ation.

The request is made under the following premises:

The President issued Proclamation No. 922 dated March 8, 2020, "Declaring a State of Public Health Emergency Throughout the Philippines", in view of the COVID-19 public health situation;

Section 2 of Proclamation No. 922, s. 2020, states that "(a)ll government agencies and LGUs are hereby enjoined to render full assistance and cooperation and mobilize the necessary resources to undertake critical, urgent, and appropriate response and measures in a timely manner to curtail and eliminate the Covid-19 threat";

The LGU needs a temporary quarantine or isolation facility relative to its response to the COVID-19 public health situation and it has no other available place or structure for use, thus it submitted a request to the RO for the use of the (Name of School), hereinafter referred to as the "School", as a quarantine or isolation facility of the LGU, subject to OFFICE MEMORANDUM OM-OSEC-2020-002;

The RO, acting on the recommendation of the Schools Division Office, approved the request, in adherence to applicable guidelines of the Department of Health (DOH) and the World Health Organization (WHO), and other pertinent laws and rules, and upon a clear showing by the LGU of the need to use the School as a temporary quarantine or isolation facility due to absence of other available facility as certified by the provincial/city/municipal health officer, as well as a presentation by the LGU of its planned management of the facility under the supervision of the city/municipal health officer, subject to DOH and other relevant guidelines;

The approval of the RO was conditioned upon the undertaking of the LGU for the safekeeping of all property and valuables in the school premises during the operation of the facility, payment of all expenses including utilities in relation to its use of the School as a temporary quarantine or isolation facility, the conduct of the general cleaning and fumigation, and repair and/or replacement of damaged or lost school facilities as a result of, and incidental to, the use of the school by the LGU.

Foregoing premises considered, the LGU commits and binds itself to the following terms and conditions set by the DepEd in its use of the School as a temporary quarantine or isolation facility of last resort:

#### I. SCOPE

This Terms and Conditions (TAC) pertains to the use of (NAME OF THE SCHOOL) as a temporary quarantine or isolation facility of the LGU in relation to the COVID-19 outbreak during the period of Public Health Emergency under Proclamation No. 922, s. 2020. The School may only be used by the LGU for this purpose if classes are not being conducted therein.

Quarantine of persons is defined as the separation of persons who are not ill, but who may be exposed to an infectious agent or disease, with the objective of monitoring symptoms and early detection of COVID-19 cases.

Isolation refers to the separation of ill or infected persons from others, so as to prevent the spread of infection or contamination.

#### II. ROLES AND RESPONSIBILITIES

#### A. The LGU shall:

- Prepare the areas approved by the RO to be used as temporary quarantine or isolation facility in the School, and shall not require students/pupils and DepEd personnel to be engaged in the preparation of the School for this purpose. The LGU shall vacate the designated areas and remove education equipment and resources therefrom, under the supervision and guidance of the School.
- Use only the specified School area and facilities approved by the RO to be used as quarantine or isolation facility.
- Take charge of the management and maintenance of the School used as a quarantine or isolation facility, under the supervision of the city/municipal health officer, and in accordance with the applicable guidelines of the DOH and the WHO, cited in OFFICE MEMORANDUM OM-OSEC-2020-002, and other applicable laws, rules and guidelines.

- Cordon off the identified quarantine or isolation facility from the rest of the School premises or facilities.
- Provide measures to ensure the safety and security of the School.
- Provide all resources and equipment required for the use of the School as a quarantine or isolation facility.
- Ensure that water supply will be sufficient and there will be no cooking in the School during its use as a quarantine or isolation facility.
- Ensure compliance with the sanitation and health standards applicable
  to the School before, during and after its use by the LGU as a quarantine
  or isolation facility, including disinfecting the premises used and
  ensuring the use of personal protective equipment (PPE).
- 9. Facilitate and provide for the general cleaning, maintenance and upkeep of School premises, structures, facilities, equipment, and resources, and repair and replace them if damaged, destroyed or lost as a result of their use by the LGU as a quarantine or isolation facility. Such repair and replacement shall be completed prior to the return of the use of the School to the School Head.
- 10. Clean up and fumigate the School within a maximum period of one week after its use by the LGU as a quarantine or isolation facility during the public health emergency. The proper health authorities shall certify whether the School is fit for education use subsequent to the fumigation, in accordance with pertinent guidelines of the DOH and other applicable rules and issuances.
- 11. Pay for utilities during its use of the School as a quarantine or isolation facility, and until it has returned the use of the School to its School Head for education use and the School Head has accepted the same.
- Ensure that the School and facilities be restored to their original or better state, compared to their condition upon commencement of their use as quarantine or isolation facility by the LGU.
- Prior to return by the LGU of the use of the School to the School Head, secure clearance from the School with respect to the LGU's compliance with the TAC.

#### B. The School shall:

- Identify the School spaces/structures/comfort rooms and handwashing facilities approved by the RO to be used as temporary quarantine or isolation facility. School areas beyond those approved by the RO shall be off limits to the LGU and users of the quarantine or isolation facility.
- 2. In preparation for the use of the School as temporary quarantine or isolation facility, ensure proper storage and safekeeping of all learning and education equipment, resources, materials and school records. The School shall provide supervision and guidance to the LGU in the vacating of designated School spaces/structures and removal of education equipment and resources therefrom by the LGU, provided that all DepEd personnel involved in the preparation of the school premises shall strictly observe all existing health precautions and social distancing protocols of DOH and WHO.
- Prepare and implement work protocols that would not require DepEd personnel to report to the School for the performance of regular functions during the period the School is used as quarantine or isolation facility.
- 4. Inform the LGU of any damage, destruction, or loss of School facilities and resources due to, or incidental to, the use of the School, if any, to serve as basis for repair, maintenance, and/or replacement by the LGU after use of the School as quarantine or isolation facility.
- Have the authority to monitor and access the School, subject to strict observance of safety and health requirements applicable to the quarantine or isolation facility.

#### C. The LGU and the School

- The School shall make a School Inventory and record the condition of school premises, structures, facilities, equipment and resources immediately prior to use, and after the use and fumigation of the School as a quarantine or isolation facility by the LGU. The Inventory prior to use shall be signed by both the School Head and Mayor and shall form an integral part of this TAC (See Annex A).
- Any and all expenses relative to the preparation and operation of the School as a temporary quarantine or isolation facility as well as the clearing, fumigation and restoration of the School to its educational use shall be shouldered by the LGU.

The School and LGU shall each designate focal person/s who shall be responsible for coordination between the Parties to ensure compliance with this TAC.

#### III. GENERAL PROVISIONS

- The LGU shall use the School as a temporary quarantine or isolation facility only upon its showing to the RO that there is no other available space or structure which can be used for that purpose. The use of the School as a temporary quarantine or isolation facility of last resort is a continuing requirement. Should a place or structure which can be used for this purpose become available, the LGU shall terminate its use of the School as a quarantine or isolation facility.
- 2. This TAC shall take effect upon its execution, and shall be in full force and effect for a period of (Indicate number of days approved by the RO) days during the period of Public Health Emergency under Proclamation No. 922, s. 2020, unless mutually extended by the LGU and the RO in writing, or sooner terminated by either the LGU or the RO upon fifteenday written notice for valid reasons.

Notwithstanding the lifting of the said Public Health Emergency, the responsibilities and obligations of the LGU under this TAC shall subsist until fully complied with.

- When warranted by compelling circumstances, the RO may amend, modify or supplement this TAC for valid reasons, upon prior written notice to the LGU.
- 4. The LGU represents and warrants that it has the requisite power and authority to make, deliver, and comply with the provisions of this TAC, and has taken all the necessary action to duly and validly authorize the execution, delivery and performance of this TAC.
- Should there be any conflict between the provisions of this TAC and other Agreements between the LGU and the DepEd through the Regional Office, Schools Division Office or the School, this TAC shall prevail.

# By: Signature over Printed Name City/Municipal Mayor Date:

REPUBLIC OF THE PE CITY/MUNICIPALITY	( OF) s.	s.
Before me, a not personally appeared th	ary public for and in the City of e following:	, this
Name	Competent Evidence of Identity	Date/Place Issued
School Head		
Mayor		
A Quarantine or Isolat pages, including An Acknowledgment is we and voluntary act and	for the Use of DepEd School by to ion Facility with School Inventor nex A-School Inventory and ritten, and they acknowledged to deed.  HAND AND SEAL, on the date	ry consisting of () the page on which this me that the same are their free
	N	OTARY PUBLIC
Doc. No; Page No; Book No; Series of 2020.		

#### INVENTORY OF FACILITIES OF (NAME OF SCHOOL) FOR USE AS TEMPORARY QUARANTINE OR ISOLATION FACILITY

Designated Facilities for Use as Temporary Quarantine or Isolation Facility:

	Facility (Gymnasium, Room, etc.)	Item (Furniture and Fixture, Equipment, etc)	Quantity	Condition
Other R	emarks on Premis	es/Structures/Fac	ilities	
		lame		
ignatu	d by: re over Printed N School Head	lame		
ignatu	re over Printed N		onforme:	
5	re over Printed N School Head		onforme: Signature over Mayo	