

Deskguide for outpatient consultation in hospital in the context of coronavirus disease (COVID-19)

Generic for country adaptation (based on the Philippines vs of 12th May)

Introduction

- What is the COVID-19?

COVID-19 is a respiratory tract infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is a newly emergent virus. Genetic sequencing of the virus suggests that SARS-CoV-2 is a betacoronavirus closely linked to the SARS virus.

- What are clinical features of COVID-19?

Common symptoms noted for COVID-19 include fever, cough and shortness of breath. Other common symptoms noted in coronavirus infections include runny nose, sore throat, headache and malaise. However, patients can be afebrile in the early stages of infection, with only chills and respiratory symptoms. Incubation period is usually 4-6 days and a contact may get COVID-19 symptoms in 2-14 days.

Most people with COVID-19 develop mild or uncomplicated illness, approximately 15% develop severe disease requiring hospitalization and oxygen support and 5% require admission to an intensive care unit. Older patients and those with comorbidities, such as cardiovascular disease and diabetes mellitus, have increased risk of severe disease and mortality. They may present with mild symptoms but have high risk of deterioration and should be admitted to a designated unit for close monitoring.

- What are the treatment options?

No vaccine or specific treatment for 2019-nCoV infection is currently available. Treatment is supportive and based on the patient's clinical condition.

- How is COVID-19 transmitted?

Being within approximately 2 meters (6 feet) of a patient with COVID-19 for a prolonged period of time and having direct contact with infectious secretions from a patient with COVID-19 can transmit the virus. Asymptomatic infected patients may also transmit the virus. Transmission is believed to occur through respiratory droplets from coughing and sneezing. Aerosol transmission is also possible in case of protracted exposure to elevated aerosol concentrations in closed spaces. Please also pay attention to transmission through other bodily secretions such as sputum, saliva, serum or contact with faeces and urine where the virus can also be found.

- About this guide

This new virus is highly contagious and has quickly spread globally. Hence, we developed this guideline by incorporating existing national guidelines with WHO recommendations, UK's guidelines and China's guidelines to improve capacity of health workers in low-and-middle-income countries in response to the COVID-19 pandemic.

Patient assessment and triage

Assess sick adults, 'walk-in' outpatient in the context of possible COVID-19 following the below procedures:

1. **Ask** their age, symptoms and travel & contact history (proper personal protective equipment is needed in this process):
 - Age?
 - Fever? (temperature >100F or 38°C)
 - Cough/ sore throat, dry (1/5 with sputum) and new/worse than their usual?
 - 'Flu' symptoms e.g. headache, muscle ache, or a 'cold' or loss of smell?
 - Shortness of breath or difficult breathing?
 - Travel/residence history: travel to or residence in a country/area (barangay) reporting local transmission of COVID-19?
 - Contact history: *close contact** with a confirmed/probable COVID-19 case (see next section for case definition)?

**Definition of close contact: any of the following*

- Providing direct care without proper personal protective equipment (PPE) including well-fitting N95 mask, eye protection, impermeable gown and surgical gloves, to a confirmed/probable COVID-19 patient;
- Staying in the same close environment (incl. workplace, classroom, household, gatherings) with a confirmed/probable COVID-19 patient;
- Traveling together in close proximity within 1 meter (3 feet) in any kind of conveyance with a confirmed/probable COVID-19 patient for more than 15 minutes.

2. **Identify** suspects of COVID-19 according to symptoms, travel and contact history

Suspect case is a person who is presenting with any of the conditions below:

- All *severe acute respiratory infection** cases where NO other etiology that fully explains the clinical presentation.
- *Influenza-like illness** cases with any one of the following
 - With no other etiology that fully explains the clinical presentation AND a history of travel to or residence in an area that reported local transmission of COVID-19 during the 14 days prior to symptom onset.
 - With contact to a *confirmed** or *probable** case of COVID-19 in the two days prior to onset of illness of the probable/confirmed COVID-19 case until the time the probable/confirmed COVID-19 case became negative on repeat testing.
- Individuals with fever or cough or shortness of breath or other respiratory signs or symptoms fulfilling any one of the following conditions:
 - Aged 60 years and above
 - With a comorbidity
 - Assessed as having a high-risk pregnancy
 - Health worker

**Influenza-like illness (ILI):*

A condition with sudden onset (within 3 days of presentation and fever should be measured at the time of presentation) of fever of $\geq 38^{\circ}\text{C}$ and cough or sore throat in the absence of other diagnoses.

**Severe acute respiratory infection (SARI):*

An acute respiratory illness with onset during the previous 7 days requiring overnight hospitalization. A SARI case should meet the ILI case definition AND any one of the following:

- Shortness of breath or difficulty of breathing
- Severe pneumonia of unknown etiology, acute respiratory distress, or severe respiratory disease possibly due to novel respiratory pathogens (such as COVID-19).

**Probable COVID-19 case:*

A suspect case who fulfills any of the following conditions:

- Whom tested for COVID-19 is inconclusive;
- Whom tested positive for COVID-19 but whose test was not conducted in a national or subnational reference laboratory or officially accredited laboratory for COVID-19 confirmatory testing.

**Confirmed COVID-19 case:*

Any individual, irrespective of presence or absence of clinical signs and symptoms, who was laboratory confirmed for COVID-19 in a test conducted at the national reference laboratory, a subnational reference laboratory, and/or DOH-certified laboratory facility.

3. **Assess** the severity of their disease using recommended tools below

- **Tool1 - CRB65:** Use this tool to calculate the score if you don't have an oximeter

Feature	Measure	Score	<i>Confusion* mental state 1-8: name, age, recognition of two persons (e.g. doctor, nurse), date of birth, address recall (e.g. 42 West Street), time, date of Philippine Independence Day (June 12), year, name of the National Hero (Jose Rizal), count backwards 20 → 1</i>
Confusion	Abbreviated mental test* score ≤ 8	1	
Respiratory Rate	>30/minute	1	
Blood Pressure	Systolic < 90 or Diastolic ≤ 60 mmHg	1	
65	Or older	1	

- **Tool2 - NEWS** UK national early warning score. If you have an oximeter, use this tool to calculate the score. Rates given for adults (non-pregnant).

NEWS sign	Score			
	0	1	2	3
Respiratory rate	12-20	9 – 11	21-24	≥25 or ≤8
Pulse (per minute)	51-90	91-110 or 41-50	> 110	≥131 or ≤40
Temperature (°C)	36.1-38.0	38.1-39.0 or 35.1-36.0	≥39.1	≤35.0
Systolic blood pressure (mmHg)	111 - 219	101-110	91-100	≤90 or ≥220
SpO ₂ (not on oxygen) by oximeter	≥96	94-95	92-93 or on oxygen	≤91
Level of consciousness	Alert			Unresponsive to voice or pain

Or use a similar sepsis/severe illness identification tool. In <5 child e.g. Integrated Maternal, Newborn and Child Health Strategy- 'danger signs'.

- **Decide the severity of the disease**

Severity	Assessment
Severe	CRB65 is 3-4 or NEWS with any single 3 or total of 5 and above
Moderate	CRB65 is 1-2 or NEWS total score is 2-4
Mild	CRB65 is 0 or NEWS total score is <2

4. Manage patients based on classification and severity

- **Triage strategies**

Classification	Severity	Triage strategies	Reporting	COVID-19 specific test
Not a suspect	Mild	Refer to emergency room or other clinic for appropriate work-up and management	No need	No need
	Moderate			
	Severe	Admit in general wards or send to intensive care ward		
Suspect	Mild	Be quarantined at home or barangay isolation units for general treatment*	Inform RESU; Complete CIF	Prioritized suspects*: Collect serum, NPS+OPS (in 1 VTM/UTM) for NAT and a lower respiratory tract specimen if possible
	Moderate	Send to designated COVID-19 isolation area for reassessment* and general treatment* Be quarantined at home or barangay isolation units for general treatment* where COVID-19 isolation area is not available and make an appointment for reassessment*		
	Severe	Admit in COVID-19 wards or send to intensive care ward; Patients who refuse admission must be referred for disposition to RESU		

Note: RESU – Regional Epidemiology and Surveillance Unit; CIF – Case Investigation Form; NPS – nasopharyngeal swab; OPS – oropharyngeal swab; VTM – viral transport medium; UTM – universal transport medium; NAT – nuclear acid testing

- ***Reassessment**

Actions	Conditions
Admit to COVID-19 wards	If CRP > 100 or lymphocytes < 1,100 micro g/L If more breathless or any vital sign getting worse If ill with a chronic (co-morbid) disease or frailty
Home care and general treatment*	If improved, not breathless, RR < 20 and CRB65 is 0-1 or NEWS total score is <2

- ***General treatment**

Symptomatic treatment:

If dehydrated, give oral rehydration salts / fluids. If fever give Paracetamol or Ibuprofen.

Differential diagnosis: Use your regular standard treatment guideline for more information on diagnosis and treatment of likely disease (even if also a COVID-19 suspect). COVID-19 symptoms and signs overlap with the usual common diseases. Anyone with fever or a cough may actually have other febrile illness such as:

Cough or difficult breathing, ask and look for signs and symptoms of the common causes e.g.

- Upper respiratory disease: symptomatic treatment
- Pneumonia, if the respiratory/breathing rate is raised (20 or more in an adult), and a raised pulse and fever, also consider an X-ray test, then give an antibiotic, e.g. Amoxicillin
- Past asthma wheeze worse step up inhaler treatment
- TB if has a cough > 2 weeks, or night sweats, also send 2 sputum for a TB test.

Fever signs and symptoms of other common diseases causing fever including:

- Malaria (in affected areas/ seasons) do a rapid diagnostic test (RDT) and if positive, give antimalarial ACT treatment
- Urinary tract infection if frequency or burning passing urine, do a urine test and start antibiotic.
- Diarrhoea - give oral rehydration salts /extra fluids.

- ***Prioritized suspects for COVID-19 tests**

The following shall be prioritized for testing:

- Suspect cases who are assessed as severe;
- Suspect cases meeting any of the following:
 - Aged 60 years and above
 - With a comorbidity
 - Assessed as a high-risk pregnancy
 - Health workers.

5. **Educate** patients when home quarantine is needed

- **Key messages of COVID-19**

- Incubation period: usually 4-6 days: a contact may get COVID-19 symptoms in 2 – 14 days.
- There is no cure for COVID-19 virus, we treat the symptoms, take plenty of fluids.

- **Hygiene and protection during home quarantine**

- Patients and their family members are strongly recommended to wear masks if available. Cover the mouth and nose with your bent elbow or tissue when you cough or sneeze if mask is not available. Dispose of the used tissue immediately and perform hand hygiene.
- Wash hands with soap under running water frequently; or by use of alcohol-based hand rub/sanitizer if water is not available. However, if hands are visibly soiled you need to wash hands rather than use a sanitizer.
- Avoiding touching your eyes, nose, and mouth (especially with unwashed hands).
- Use separate cutlery, plates, towels.
- Double bag waste and leave aside 3 days then put in the waste bin.
- Independent living area with frequent ventilation and disinfection;
- Avoid contacting with infants, pregnant women, the elderly and people with weak immune functions at home;
- Keep 2 meters (6 feet) distance from each other.
- Do not have visitors at home whether family or friends
- Do not use public transport at this time
- Do not go to crowded places -places of worship (churches, mosques) burials, weddings, markets, restaurants/bars, football viewing centers etc.

- **Monitoring and communication during home quarantine**

- Go urgently to a hospital/ doctor if very breathless/ difficult breathing (breathing rate > 25/ min) or if heart rate > 120, or temp > 38°C, or mentally confused. Tell patient how to measure these and to pay close attention to any changes of physical condition. Say the difficult breathing may start about 7 - 9 days after illness started and occurs in 1 in 5 people. Seek help urgently as you may need oxygen and intensive care e.g. a ventilator.
- Tell which hospital to go to, plan on how to get there, if very difficult breathing.
- Exchange telephone numbers with the health worker, and ring for advice, especially if becoming more ill/ breathless.

6. **Communicate** with barangay health worker

Share the health record with the Barangay Health Emergency Response Team in the district where the patients live in when they need home quarantine. Ask the barangay health worker to follow up patients and their family members who lived together with them in case they develop any symptoms or get worse. Please follow the below procedures for communication:

- Fill out patient card (see below) in carbon paper to get three copies for patients who need home quarantine according to the triage strategies listed in page 5;
- Ask the patient to keep one copy for own record and bring the other copy to the barangay health worker, keep another copy in hospital and enter the data into an Excel sheet for hospital record.

Patient Card	
<i>Patient record (filled out by hospital doctor/nurse)</i>	
Patient name	
Patient address	
Contact number	
Classification (tick)	Person under monitoring / Person under investigation for COVID-19
Treatment (if person under investigation)	
Doctor's name	
Doctor's institution	
Doctor's contact number	
<i>Follow-up notes (filled out by Barangay Health Emergency Response Team -BHERT)</i>	
Name of health worker	
Contact number	
Follow-up notes	
<p><i>Instructions for Barangay Health Emergency Response Team:</i></p> <p><i>Please follow up the patient and their family members who lived together everyday by phone. When 1) the person under monitoring or their family members develop any symptoms including fever, shortness of breath, cough or other respiratory symptoms, or 2) the person under investigation gets worse or their family members develop above symptoms, fill out the second part of this card and ask them to bring this to the doctor listed in the first part.</i></p>	

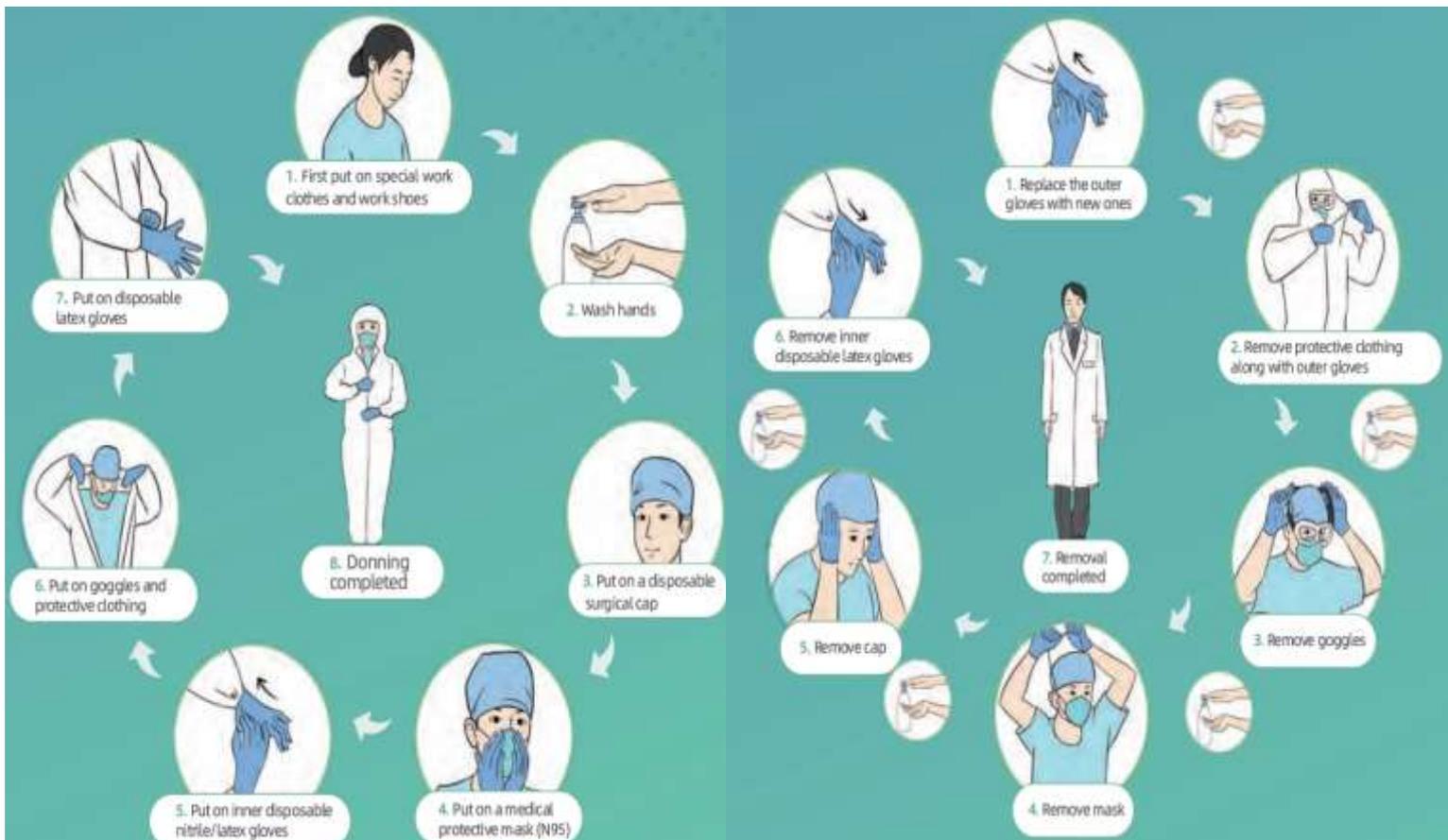
Protect yourself and others

COVID-19 is spread by droplet sprays from coughs, sneezes or just talking - so keep 2 meters apart, also by direct contact (with nose secretions or contact with the droplets coughed out) when touching a surface. Don't touch your nose, mouth and eyes, and wash hands carefully and often with soap and running water.

Use standard precautions

These are measures taken together to limit the transmission of infections. They include the following:

- Wash hands carefully, after any contact with people or surfaces
- Cough onto a tissue (or the elbow sleeve), bin tissues, and wash hands
- Use personal protective equipment (PPE) based on risk assessment e.g. gloves, mask, visor (protection for the eyes), gowns etc. attending to suspect cases of COVID-19.
- Put the patient in a room with good ventilation.
- Safe handling, cleaning and disinfection of patient care equipment
- Cleaning - items like beds, trolleys and other surfaces should be cleaned and decontaminated correctly.
- Safe handling with gloves and cleaning of soiled linen.
- Waste management - make sure all contaminated commodities like gloves, masks are disposed of appropriately.
- Sharps – use safe injection practices and dispose of sharps appropriately.



References

1. Royal College of Physicians. National Early Warning Score (NEWS) 2: Standardizing the assessment of acute-illness severity in the NHS. Updated report of a working party. London: RCP; 2017. 77p.
2. Republic of the Philippines Department of Health. Algorithm for triage of patients with possible Covid-19 infection in health care facilities. Manila: DOHgovph; 2020. 1p.
3. China National Health Commission. Chinese Clinical Guidance for COVID-19 Pneumonia Diagnosis and Treatment (7th edition). Beijing: NHC; 2020. 12 p.
4. World Health Organization. Clinical management of severe acute respiratory infection when novel coronavirus (2019-nCoV) infection is suspected: interim guidance, 28 January 2020. World Health Organization; 2020.
5. Office of the Secretary Republic of the Philippines Department of Health. Revised Administrative Order No. 2020-0012 "Guidelines for the Inclusion of the Coronavirus Disease 2019 (COVID-19) in the List of Notifiable Diseases for Mandatory Reporting to the Department of Health" dated March 17, 2020. Manila: DOHgovph; 9 Apr 2020. 23p
6. Liang TB. Handbook of Covid-19 prevention and treatment. Zhejiang: Zhejiang University School of Medicine; 2020. 68 p.
7. Razai MS, Doerholt K, Ladhani S, Oakeshott P. Coronavirus disease 2019 (covid-19): a guide for UK GPs. BMJ. 2020 Mar 6;368.
8. World Health Organization. Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts. Updated February 4, 2020.