Cheatsheet for Doctors:

SPREAD OF COVID-19:

Confirmed:
Person to person spread via contact (e.g. shaking a hand of someone who is infected then touching your face)

Possible:
Airborne spread for up to 3 hours Faeco-oral spread (virus shed in faeces)

Unlikely:
Mother-to-child transmission

INCUBATION PERIOD:

97.5% of people develop symptoms within 2 – 14 days of contact
Average: 5 days after contact
Maximum: 27 days after contact

PERSON UNDER INVESTIGATION:

Apply latest case definition from NICD
Persons with acute respiratory illness with sudden onset of at least one of the following:

- Cough
- Sore throat
- Shortness of breath,
- Fever [≥ 38°C or subjective history of fever]

Other possible symptoms patients may present with: fatigue/myalgia/headache/loss of sense of taste or smell/diarrhoea/vomiting and nausea

HIGH RISK PATIENTS:

In the last 14 days

- Close contact with a confirmed or probably COVID-19 case
- Lived in or travelled to an area with local transmission of COVID-19
- Worked in, or attended a healthcare facility where patients with COVID-19 are being treated without PPE

ASSESSMENT AND TRIAGE OF COVID-19 CASES:

Mild disease

- Sp02≥95%
- Respiratory rate <25 (*ages5-12 <30)*
- Heart rate <120 (*ages5-12 <130)*
- Temperature 36-39ºC
- Normal mental status

Able to safely self-quarantine

- Separate bedroom available for patient to home-quarantine in
- Patient able to contact, and return to, helathcare facility in case of deterioration

Not a high risk of deterioration

- Ages <65 years
- No cardiac or pulmonary comorbidities
- No other debilitating comorbidities (e.g. cancer)

Mild disease **AND** Able to self-quarantine **AND** low risk	Mild disease **AND** Low risk **AND** Unable to self-quarantine	Severe disease **AND** High risk
Home-quarantine	Refer to quarantine site	Refer to hospital

DIFFERENTIAL DIAGNOSES OF COVID-19:

Diff Dx	Ix	Rx
• Influenza • TB • Bacterial pneumonia • Atypical Pneumonia • If low immunity: PJP	• Sputum MCS +/- MTB GXP • Urine LAM • FBC and diff • Blood cultures • NP or OP swabs for viral / atypical pathogens • CXR • Urine Legionella Ag	• CAP e.g. **coamoxyclav** • Atypical pneumonia e.g. **azithromycin** • Severe Influenza or with risk factors: **oseltamivir** • TB: **RHZE** • PJP e.g. **cotrimoxazole**

MANAGEMENT OF COVID-19:

Supportive medical management

1. Conservative fluid management (Ringers Lactate or 0.9% NS)
2. Management of fever (antipyretics ie. Paracetamol)
3. Management of hypoxaemia (early administration of supplemental oxygen)

If ventilation is required prior to transport to ICU
AC Volume control

- Low tidal volume (4-6mL/kg)
- Increase respiratory rate (±20bpm)
- **High PEEP** (>5cmH2O)

Pressure control more commonly used in ICU setting

Infection Control and PPE:

Educating and screening patients:	Assessing/caring for COVID-19 case:	Aerosol-generating procedure in COVID-19:
• Medical/surgical mask • Maintain 2 metres between you and patient	• Goggles or faceshield • Medical/surgical facemask • Gown or plastic apron • Non-sterile gloves	• Goggles or faceshield • Respirator (N95 or FFP2) • Gown or plastic apron • Non-sterile gloves

TESTING COVID-19 SUSPECTS:

Preferred tests :

- Nasopharyngeal and oropharyngeal swabs
- Sputum
  (if productive cough – DO NOT INDUCE)

Other testing modalities:

- Broncho-alveolar lavage
- Fibro-bronchoscope brush biopsy
- Blood
- Rapid tests

IHOW TO STORE AND TRANSPORT SPECIMENS:

- Close the lid of the tube or plastic container
- Label the specimen with the patient's initials, surname and date of birth
- Place an NHLS barcode on the specimen
- Place the specimen, with the NHLS requisition form and Specimen Submission form, into the NHLS plastic specimen bag
- Take the specimen directly to the lab, otherwise place into a cooler box with one block of ice, and seal the cooler box (specimen must be kept between 2-8^{o}C)
- Label the cooler box with "COVID-19" and the laboratory address, if you do not have an onsite lab and need to courier the specimen

FORM COMPLETION:

For all PUIs (to be submitted electronically to NICD):

- PUI form
- Contact Line list

To accompany all specimens:

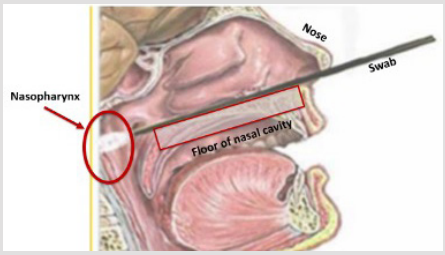
- NHLS Requisition form
- Specimen Submission form

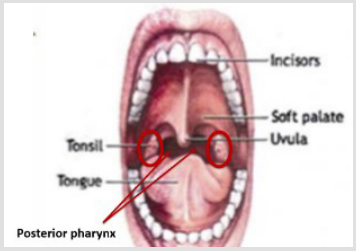
TFor all COVID-19 confirmed cases:

- NMC Case Notification form
- Inform NICD doctor via hotline

HOW TO TAKE A NASOPHARYNGEAL SWAB:

1. Measure the distance from the nose to the ear (this is how far you need to insert the swab into the nose)
2. Gently insert swab into one nostril, aiming backwards, along the floor of the nasal cavity, until the nasopharynx is reached
3. If resistance is encountered during insertion of the swab, remove it and try the other nostril
4. Gently rotate the swab and hold in place for a few seconds, then slowly withdraw the swab
5. If you have the universal transport medium, unscrew the cap and insert the swab directly into the vial. Break plastic shaft at the break point so that it can fit in the tube
6. If you are using a dry swab, insert the swab into the plastic swab container





HOW TO TAKE AN OROPHARYNGEAL SWAB:

1. Ask the patient to tilt their head back and open mouth wide
2. Hold the tongue down with a tongue depressor, and ask the patient to say "AHHHH"
3. Using a new swab (separate to the nasopharyngeal swab), swab each tonsil first, then the posterior pharynx in a "figure 8" movement
4. Avoid swabbing the soft palate
5. Do not touch the tongue with the swab tip as this procedure can induce the gag reflex
6. If you have the universal transport medium, insert the swab directly into the same vial containing the nasopharyngeal swab
7. If you are using a dry swab, insert the swab into its own plastic swab container

Further work-up for COVID-19:

Bloodwork

FBC
- Bacterial pneumonia

General markers of infection
- CRP
- ESR
- IL-6
- LDH
- D-Dimer
- Ferritin

(raised infective markers may indicate a worse prognosis)

PCT
- Should be NORMAL unless patient has a superimposed bacterial infection

Signs of multi-organ failure
- ALT/AST/Bili (liver failure)
- Creatinine (renal failure)
- Troponins and CK-MB (heart failure)

(higher mortality rate in patients presenting with multi-organ failure)

Radiology

Chest x-ray
- Bilateral areas of ground-glass opacities
- Pleural effusions
- Consolidations

CT scan
- Ground glass opacities peripherally
- Consolidations "Crazy paving pattern"

Point of care ultrasound
- Pleural line thickening
- Increasing B-lines within specific zones
- Consolidations with air bronchograms

Right to care™ Treating Health Seriously

COVID 19 CORONA VIRUS DISEASE