POWH ED Initial Management of COVID-19

DRAFT v0.74

The Prince of Wales Hospital
& Health Services
Department of Emergency
Medicine

Personal Protective Equipment in ED

- Single room in ED "hot zone' preferred, prioritised for higher risk/ active respiratory symptoms/ need for Aerosol Generating Procedures (AGP)
- Surgical mask on patient.
- Standard precautions for all patients- in particular hand hygiene.
- Droplet and contact precautions during patient care (gown, glove, eye protection, surgical mask (NOT P2/N95)
- Airborne precautions for AGP or severe symptoms– gown, gloves, eye protection, P2/N95 mask
- 'Buddy' when doffing (removing) PPE.
- Latest guide is at http://cec.health.nsw.gov.au/keep-patients-safe/Coronavirus-COVID-19/Guidance-for-health-professionals

Definitions & Diagnosis

- The current case definition is found at: *https://www.health.nsw.gov.au/Infectious/diseases/Pages/2019-ncov-case-definition.aspx*
- See also: *POWH ED and ICU Flu and COVID Plan 2020* for local testing guideline and isolation guidelines. (ED SharePoint)
- SARS-Cov-2 PCR is highly specific, but only moderately sensitive for diagnosis. De-isolation decisions should be discussed with ID.
- The index of suspicion will increase if a patient displays typical features of COVID-19 pneumonia such as bilateral infiltrates on chest X-ray and/or lymphopaenia

Stage	Clinical Indicators	Investigations	Management
Mild	Mild respiratory symptoms. May require symptomatic support or evaluation of alternative diagnoses. No oxygen requirement.	SARS-CoV-2 PCR according to current guidelines +/- CXR	Manage out of hospital if safely possible using ID/ PHU follow-up services. Provide advice for when to return, GP letter. https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2014_025.pdf If admission required based on comorbidities/ social situation- respiratory, ID or Aged Care depending on dominant clinical picture. Recommend paracetamol. Avoid NSAIDs.
Moderate/ Severe	Respiratory symptoms and radiological changes evident. Peak risk of deterioration 5-8 days after onset of symptoms. <u>Moderate</u> SaO2 >92% on O2 up to 4LNP (or >90% if CLD) <u>Severe</u> Respiratory rate >30/min Escalating O2 requirement	SARS-CoV-2 PCR plus full respiratory panel. CXR vBG FBC CRP EUC LFT D dimer, troponin LDH, Ferritin Procalcitonin	Admit under respiratory, ID or Aged Care depending on dominant clinical picture. Supplemental oxygen – aiming for SaO2 >94% May adjust target 88-92% if chronic lung disease. • Nasal prongs up to 4L/min • Hudson Mask (HM) 6 to 10L/min • Non-rebreather (NRB) mask up 10 to 15L/min • Consider prone position Discuss/ document any appropriate limitations of care in the notes AND complete the *Resuscitation Plan– Adult* form, including details for any surrogate decision-maker. This discussion should be commenced at the earliest possible time after diagnosis, and is required prior to ICU referral. • Oseltamivir if suspected influenza co-infection/ pending result • DVT prophylaxis • Restrictive fluid strategy for confirmed or strongly suspected COVID-19: IVF only if clinically dehydrated or not drinking. • Antibiotics as per eTG to cover Community Acquired Pneumonia (CAP) if co- or super-infection suspected • Use puffer and spacer if bronchodilator needed (NOT nebulisers) Non-invasive Ventilation (NIV) or High Flow Nasal Prongs (HFNP) carry a high risk for aerosol production and should only be considered after discussion with AMO with an agreed aerosol risk mitigation plan (e.g. in negative pressure room, aerosol PPE).
Critical	Respiratory failure or other significant organ dysfunction. Shock/ other organ failure	As above	As above plus ICU referral to consider intubation. <u>Referral triggers:</u> • requiring >6L HM to maintain SaO2 >92% (or accepted target as above) OR rapidly worsening work of breathing/ tachypnoea/ hypoxia/ haemodynamic instability • If agreed for ICU/ intubation: COVID intubation team 24/7: page 44347

References:

ACEM COVID-19 Clinical Guidelines for Emergency for Emergency Medicine Departments in Australia and New Zealand V 1.0
The Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines V1
National COVID-19 Clinical Evidence Taskforce

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