Clinical Decision Support for Suspect Adult COVID-19 for Acute Hospitals

Use this tool if the patient has fever/chills and/or signs/symptoms of respiratory tract infection

Actions:

For Patient: alcohol gel hands, put on a surgical mask and be appropriately isolated (minimum requirement is social distancing > 1m (ideally 2m).

For IPC: Use contact and droplet precautions and avoid unnecessary or ineffective aerosol generating procedures (AGPs)*.

Addressograph here

Signs and Symptoms:

Most common:

Cough	Shortness of breath	Myalgia
Fatigue	Fever	

Less common:

Anorexia	Sputum production	Sore throat
Dizziness	Headache	Rhinorrhea
Haemoptysis	Nausea/vomiting	Diarrhoea
Abdominal pain	Conjunctival congestion	Chest pain

Red flags:

Consider critical care early for assessment:

- RR > 30 breaths/min
- Severe respiratory distress
- New onset SpO_2 < 90% on room air
- New onset confusion
- Hypotension
- Oliguria > 12 hours
- Initial INEWS ≥ 7
- Clinically deteriorating patient with INEWS ≥ 5

Risk factors for severe disease:

Ischaemic heart disease	Hypertension
Cerebrovascular disease	Type II diabetes
Obesity	Active malignancy in last 5 years
Chronic lung disease	Chronic renal disease,
Chronic liver disease	Extremely medically vulnerable

Monitor all non-pregnant adult patients using the INEWS, follow escalation and response protocols.

IRISH NATIONAL EARLY WARNING SYSTEM (INEWS) Scoring Key

SCORE	3	2	1	0	1	2	3
Respiratory Rate (bpm)	≤ 8		9 - 11	12 - 20		21 - 24	≥ 25
SpO_2 (%)	≤ 91	92 - 93	94 - 95	≥ 96			
Inspired O_2 (FiO_2)				Air			Any O_2
Systolic BP (mmHg)	≤ 90	91 - 100	101 - 110	111 - 249	≥ 250		
Heart Rate (BPM)		≤ 40	41 - 50	51 - 90	91 - 110	111 - 130	≥ 131
ACVPU/ CNS Response				Alert (A)			New Confusion (C), Voice (V), Pain (P), Unresponsive (U)
Temp (°C)	≤ 35.0		35.1 - 36.0	36.1 - 38.0	38.1 - 39.0	≥ 39.1	

Consider admission for:

- INEWS ≥ 3 ***OR***
- Clinical Judgement ***OR***
- Home or psychosocial circumstances not suitable for isolation

Initial management:

- Oxygen for sats ≥ 94% (88-92% in chronic hypoxic lung disease)
- Community acquired pneumonia (CAP) antibiotics (local antimicrobial guideline)
- Anti-virals (as per Acute Hospitals guideline)
- Paracetamol (for fever and/or myalgia)
- Don't forget VTE prophylaxis

Preliminary Tests & Investigations:

COVID** swab	ABG/ VBG	CXR
Blood cultures	FBC	U&E, LFTs
Coagulation screen	CRP	Troponin
Creatinine Kinase	LDH	d-dimer
Ferritin		

***Refer to www.hpsc.ie*

Fluid management:

COVID-19 may cause severe lung injury, which can be aggravated by excess intravenous fluid administration.

IV fluids should only be given if there is a clinical indication such as hypotension; raised lactate or the patient is unable to tolerate oral fluids.

WHEN TO ESCALATE TO CRITICAL CARE:

Consider critical care review in a patient with a INEWS ≥ 7 or clinically deteriorating patient with a INEWS ≥ 5.
The decision to admit to ICU rests with the duty anaesthesiology/critical care team.

***Aerosol generating procedures (AGPs):**

- Intubation, bronchoscopy and certain chest physiotherapy – should occur in a single room and with the **minimum** staff present and using airborne precautions, www.hpsc.ie
- Non-invasive ventilation and high-flow nasal oxygen therapy are AGPs and are **NOT** recommended outside of isolation rooms, senior decision makers should be involved. Individuals who use NIV at home should continue this therapy in an isolation room.

(Nebulisers and throat/nasal swabbing are NOT aerosol generating.)

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Clinician's Name: **Signature:** **MCRN/PIN:** **Date/Time:** DD/MM/YY HH:MM