

RUCN-CDP COVID-19 module updates

Module	Lesson	Old content	Updated content
Module 1: COVID-19: The basics for the UCC setting	What is COVID?	The majority of cases (~80%) result in mild-moderate respiratory symptoms including a dry cough, shortness of breath and a fever* (≥ 37.5 degrees, without another immediately apparent cause such as urinary tract infection or cellulitis*)	COVID-19 presents as a mild illness in approximately 80% of cases. Evidence suggests the most common symptoms are fever, cough, dyspnoea, malaise, fatigue, loss of taste and/or smell, and sputum/respiratory secretions. Loss of smell and/or taste are more common presenting symptoms than initially thought, seen in approximately 50% and 40% of cases, respectively.
		The incubation period from time of exposure to developing symptoms may be up to 14 days (median 5-6 days).	For the purposes of routine contact tracing, cases are considered infectious from 48 hours prior to symptom onset. More conservative periods (e.g. 72 hours prior to illness onset) may be considered in high risk settings. This should be at the discretion of the public health unit (PHU).
		Severe cases are seen in patients who develop a secondary bacterial pneumonia or ARDS (acute respiratory distress syndrome) and whom require critical care and mechanical ventilation.	Supportive measures, such as intensive care admission and/or mechanical ventilation are required for severe case of COVID-19 and related such as pneumonia, hypoxemic respiratory failure/ARDS, sepsis and septic shock, cardiomyopathy and arrhythmia, acute kidney injury, and complications from prolonged hospitalization, including secondary bacterial and fungal infections, thromboembolism, gastrointestinal bleeding, and critical illness polyneuropathy/myopathy (CDC, 2021)
		Removal of germs such as the virus that causes COVID-19 requires thorough cleaning followed by disinfection. Current evidence suggests that COVID-19 may remain viable for hours to days on surfaces made from a variety of materials.	Removal of germs such as the virus that causes COVID-19 requires thorough cleaning followed by disinfection. Evidence remains mixed to specific time limits of the viability of COVID-19 to remain on surfaces. Various environmental factors may play a role in the proliferation of virus on surfaces and in space. Review your local guidelines on infection prevention or visit link below.
		List of symptoms	Updated
		Patients considered high risk They present with the above clinical symptoms. They have travelled overseas and have onset of symptoms within 14 days of return. They have been in close contact with a confirmed coronavirus (COVID-19) case with onset of symptoms within 14 days. They are a confirmed coronavirus (COVID-19) case.	Replaced with link to testing site. Accordion of decisions factors and high-risk groups for testing
		Staff testing	Added in Staff Surveillance
		More information on getting tested for COVID-19 can be found on the DHHS website or via your health service.	Updated link and removed old criteria

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Module 1: COVID-19: The basics for the UCC setting	Hand Hygiene		Updated WHO Hand Hygiene links as they no longer existed.	
			Added ASQCHS references	
	Personal Protective Equipment (PPE)		<p>Added to P2/N95 section</p> <ul style="list-style-type: none"> At all times Healthcare workers must wear a N95/P2 respirator's when providing care to high-risk suspected and confirmed COVID-19 cases, regardless of the amount of time in contact When undertaking an aerosol-generating procedure (AGP) on a person assessed as low-risk suspected, high-risk suspected or a confirmed COVID-19 case When providing care to a person assessed as low-risk suspected, high-risk suspected or a confirmed COVID-19 case and there is a risk of aerosol-generating behaviours. When closely interacting with returned travellers at ports of entry or hotel quarantine locations, including performing testing for COVID-19 <p>When providing care to low-risk suspected COVID-19 cases if the risk of community transmission is increased in line with the Victorian Health Service Guidance and Response to COVID-19 Risks (VHSGR) COVID Active and COVID Peak stages.</p>	
			<p>Donning</p> <ul style="list-style-type: none"> Edited surgical mask to link to current recommendations 	
			<p>How to fit and remove PPE print out</p> <ul style="list-style-type: none"> Removed link no longer exists Noting similar on DHHS 	
	Key considerations to the UCC	..changed your clothes (including your shoes) and completed hand washing. Ideally you would not enter another area at all, unless completely necessary.		Removed
		Interventions such as nebulised medication, non-invasive ventilation and suctioning MUST NOT be undertaken outside a hospital setting, this includes AV transport.		
		In general, coronaviruses are unlikely to survive for long once droplets produced by coughing or sneezing dry out.		Removed – evidence inconclusive

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Module 1: COVID-19: The basics for the UCC setting	Care in the clinical environment	If a visitor attends a confirmed case in your setting, the visitor must wear PPE and should be carefully donned and doffed by a person experienced in infection prevention and control requirements. Linen; Bag linen inside the patient room. Ensure wet linen is double bagged and will not leak. Reprocess linen as per standard precautions. Dispose of all waste as clinical waste. Clinical waste may be disposed of in the usual manner. Meal Trays suspected or confirmed COVID-19 patients should be taken from room by primary caregiver using standard precautions.	Removed – outdated New information in link with environmental cleaning.
	Keeping family and friends safe		Added DHHS links to infection control measures.

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Module 2 - COVID-19: Assessment and management of the stable patient in the UCC setting	Introduction	Studies have shown 80% of patients will predominantly experience mild-moderate disease. A smaller proportion progress to having severe disease (14%) and ultimately critical disease (6%) (WHO China 2020).	COVID-19 presents as a mild illness in approx 80% of cases, with the remaining 20% progressing to moderate to severe disease requiring hospitalisation (Department of Health, 2021).
		The current case definition of COVID-19 has been outlined by the DHHS as;	Changed to current testing criteria:
		It is highly transmissible in elderly and those with underlying diseases such as; hypertension, heart disease and diabetes. Children typically are asymptomatic or display mild respiratory symptoms with severe symptoms of COVID-19 to be more uncommon. Nonetheless, each lesson provides special considerations for the paediatric patient who may present to your UCC.	Removed, outdated evidence
		COVID-19 is mainly spread from person to person through airborne droplets that are coughed or sneezed out by an infected person. People may also get a COVID-19 infection by touching something that has the virus on it (direct contact) and then touching their own mouth, nose, or eyes.	COVID-19 is mainly spread from person to person through respiratory droplets, small particles (aerosols), direct physical contact with an infected individual, and indirectly through contaminated objects and surfaces contact (Department of Health, 2021). Further research is required to determine the relative risks of transmission with each circumstances and setting. We know that aerosol transmission and direct contact contribute to a higher risk than indirect contact, such as on surfaces and objects.
			Case definition table updated and DoH link added
		Added definition of confirmed and suspected COVID-19	

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Module 2 - COVID-19: Assessment and management of the stable patient in the UCC setting	Introduction	<p>Updated Clinical Symptoms:</p> <p>The mean incubation period is 5-6 days, with a range from 1-14 days. The disease is generally slow onset in terms of severity (unlike influenza) with a 1 week prodrome of myalgias, cough, low grade fevers gradually leading to more severe trouble breathing in the second week of illness.</p> <p>The following have been described as the most common symptoms with the percentage of patients experiencing them:</p> <ul style="list-style-type: none"> • Fever (88%) • Dry cough (67%) • Fatigue (38%) • Sputum production (33%) • Shortness of breath (19%) • Headache 13% • Myalgia or arthralgia (15%) • Chills (11%) • Nausea or vomiting (5%) • Diarrhoea (4%) 	<p>The mean incubation period is 5-6 days, with a range from 1-14 days. The disease is generally slow onset in terms of severity (unlike influenza), however deterioration can be rapid. Monitor for clinical progression of the disease and rapid progressive respiratory failure, particularly around day 5 to 10 after the onset of symptoms (National COVID-19 Clinical Evidence Taskforce, 2021).</p> <p>The following have been described as the most common symptoms associated with COVID-19:</p> <p>Most Common:</p> <ul style="list-style-type: none"> • Fever • Cough • Dyspnoea • Malaise • Fatigue • Loss of taste and/or smell • Increased Sputum/respiratory secretions <p>Other symptoms include:</p> <ul style="list-style-type: none"> • headache, • Sore throat • Shortness of breath • Myalgia • Rhinorrhoea • Chills • Vomiting <p>Atypical symptoms may include chest pain, diarrhoea, and conjunctivitis.</p>
		<p>Updated link below:</p> <p>Severity Classification according to Australian guidelines for the clinical care of people with COVID-19(v44.0)</p>	Updated to version 44.0
		Added in paediatric considerations of disease.	New table
	Triage	added	Infection prevention and control Creating coronavirus (COVID-19) zones in acute care facilities link

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Module 2 - COVID-19: Assessment and management of the stable patient in the UCC setting	Triage	COVID-19 Epidemiology Questions updated	<p>Added:</p> <ul style="list-style-type: none"> Have travelled to areas with higher prevalence of COVID-19 through international or domestic travel? <p>Updated definitions of ‘high-risk’ settings.</p> <ul style="list-style-type: none"> Do you live in or have you visited a high-risk setting such as, but not limited to: <ul style="list-style-type: none"> health care facilities; residential aged care facilities; residential care facilities; crowded or high-density housing; Aboriginal and Torres Strait Islander communities (particularly in rural and remote areas) correctional and detention facilities; homeless shelters and residential/crisis hostels; mining sites; and food processing, distribution and cold storage facilities, including abattoirs
	COVID-19 Investigations	Removed content COVID-19 PCR Testing – Removed (table) Where testing is available, it is important to always follow the most up to date guidelines and recommendations. This is to ensure testing is performed only on those who meet clinical criteria and that correct procedure is followed when undertaking testing. As of Tuesday 14 April 2020, Epidemiological factors no longer directly impact on the level of suspicion of COVID-19 as it is now largely based on clinical presentation. At the time of writing, testing of asymptomatic patients was NOT recommended.	removed
		PCR collecting video – link no longer works	removed
		Updated DHHS information about discharge and care in community	
	Management	New information	Oxygen therapy using a Hudson mask (6L/min) is not an AGP and should be used as indicated.
		Photo – flip cards Removed text regarding outdated PPE information	Added in TIER 3 picture
		Oxygen Reservoir Mask/Non-Rebreather mask	Added: Aerosol generated procedure when used at 15L/min

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Module 2 - COVID-19: Assessment and management of the stable patient in the UCC setting	Management	Updated MODERATE indicators of illness to	Stable adult patient presenting with respiratory and/or systemic symptoms or signs. <ul style="list-style-type: none"> • Prostration, severe asthenia, fever > 38° C or persistent cough • No clinical or laboratory indicators of clinical severity or respiratory impairment • Able to maintain oxygen saturation above 92% (or above 90% for patients with chronic lung disease) with up to 4 L/min oxygen via nasal prongs
		Removed: adjunct therapies as relies on history and new evidence. Adjunct therapies include DVT prophylaxis, limiting fluid administration, and antibiotics in the setting of bacterial pneumonia.	Evolving evidence
		Updated CRITICAL indicators of illness to	Adult patient meeting any of the following criteria: <ul style="list-style-type: none"> • Respiratory failure • Occurrence of severe respiratory failure (PaO₂/FiO₂ < 200), respiratory distress or acute respiratory distress syndrome (ARDS). This includes patients deteriorating despite advanced forms of respiratory support (non-invasive ventilation (NIV), high-flow nasal oxygen (HFNO)) OR patients requiring mechanical ventilation. • OR other signs of significant deterioration • hypotension or shock • impairment of consciousness • other organ failure • Management recommendations include: • Respiratory support provided via High-flow nasal oxygen (HFNO) therapy, Non-Invasive ventilation, Early intubation and transfer • Adjunct therapies as indicated for serve illness

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Module 2 - COVID-19: Assessment and management of the stable patient in the UCC setting	Disposition and transfer	New information	<p>COVID-19 Positive Care Pathways program</p> <p>The COVID-19 Positive Care Pathways program provides care for people who have tested positive for COVID-19. The program ensures local health services and community health providers are aware of people with COVID-19 in their areas. Surveillance and monitoring of these patients is ideally provided in the home through telehealth or other remote monitoring platforms. If the clinical care needs of the patient are higher or clinical state deteriorates then the COVID-19 Positive Care Pathways program can plan and guide transfer to certain hospitals that have been identified to receive COVID-19 patients (COVID-19 Streaming hospitals).</p> <p>For more information refer to your local guidelines and procedures or visit the DHHS website link for Clinical guidance and resources - COVID-19: COVID-19 Positive Care Pathways</p>
		<p>The DHHS recommends the following for patients requiring hospital admission:</p> <p>Patients requiring hospital admission who are considered clinically stable, should be driven to hospital in private vehicle by an existing close contact when possible.</p>	Removed information
		DHHS Victoria recommends suspected or confirmed COVID-19 patients wear a <u>surgical mask</u> for transfer.	

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Module 3 - COVID-19: Assessment and management of the unstable patient in the UCC setting	Introduction	"Over 4 million confirmed cases of COVID-19 have been reported in 187 countries worldwide with over 318,000 people dying as a result of the virus."	To date there has been 235,175,106 confirmed cases of COVID-19, including 4,806,841 deaths, reported to WHO. ("WHO Coronavirus (COVID-19) Dashboard", 2021)
		Thankfully, in Australia, COVID-19 case numbers have remained.....	Remove
			RESPIRATORY PATHOPHYSIOLOGY OF COVID 19 New content and section added.
	Triage and initial assessment	Remove recommendation of 3 level PPE	Refer to DHHS link and latest guidelines for PPE.
		CPR and COVID19 sub heading added: Removed ACEM PPE matrix picture due to updated information	Replaced with recommendations from Australian Resuscitation Council link to National COVID-19 Clinical Evidence Taskforce Version 2.1 guideline - Cardiopulmonary resuscitation of adults with covid-19 in healthcare settings https://covid19evidence.net.au/wp-content/uploads/FLOWCHART-6-CPR-IN-HOSPITAL-V2.1.pdf?e=210929-33412
		Summary table of HCW PPE requirements for procedures,	Removed Summary table, no reference so could not replace.
		Non-Invasive respiratory support	Added in taskforce link.
		Airway	RCH COVID airway checklist updated - PDF
	Mechanical Ventilation	Consideration for MV	Added: Current reports suggest that Prone positioning ventilation is effective in improving hypoxia associated with COVID-19. This should be done in the context of a hospital guideline that includes suitable personal protective equipment (PPE) for staff and which minimises the risk of adverse events, e.g. accidental extubation.
	Nursing Management of the Patient		Added: Appropriate PPE at all times
	Therapeutic medication management	Antibiotic use	Removed: outdated evidence
		Other medication	The science regarding the use of anti-viral medication in the treatment of COVID-19 continues to emerge. Description of the trials happening nationally and internationally are outside the scope of this module. For further information on current treatments visit the link below: Taskforce link
	Goals of Care		Added link to care of the deceased person DHHS.
Health and wellbeing		Removed Four corners story link and 100 days since first recorded COVID case.	