

Western Health COVID-19 Personal Protective Equipment (PPE) Guidelines 09.06.2021 V9.10



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Purpose

To provide staff with effective and safe Personal Protective Equipment (PPE) during the COVID-19 response during the 4 levels of Victorian COVID risk (COVID Ready, COVID Alert, COVID Active and COVID Peak which is determined by the Department of Health).

Appropriate and correct use of PPE provides protection to both staff and patients, whilst not using PPE unnecessarily.

For further guidance on appropriate PPE use for COVID-19 and tuberculosis, measles, chickenpox, disseminated shingles, other respiratory viruses, carbapenemase producing organisms, *Candida auris* and infective gastroenteritis, a risk matrix is included in [Appendix A – PPE Matrix for Non- COVID-19 Setting](#).

Western Health bases this guideline on the DHHS's Guidance for the use of PPE in healthcare workers, found [here](#).

Target Audience

This guideline is relevant to all Western Health staff, with no exceptions.

Context

COVID-19 is transmitted via infectious droplets produced by infected people when they breathe, cough, sneeze or speak, coming into contact with our mucous membranes (eyes, nose and mouth). These droplets can also land on surfaces. Touching one of these surfaces, then touching our mucous membranes, can also lead to infection.

Adherence to standard precautions is highly effective at reducing the transmission from contact and droplet transmission, regardless of patient infectious status; by assuming every person is potentially infected or colonised with a pathogen that could be transmitted.

Standard precautions are necessary to help prevent exposure/infection by asymptomatic or pre- symptomatic carriers of COVID-19.

All staff are encouraged to complete the Western Health Standard and Transmission Based Precautions Training Module.

The information contained within this course can help to keep you, your colleagues and our patients safe. Infection prevention is everybody's responsibility. [Please click here](#) to access the course via Welearn.

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Definitions and Abbreviations

All sites	All sites include Sunshine Hospital (including the Joan Kirner Women's and Children's), Footscray Hospital, The Williamstown Hospital, Hazeldean Transitional Care and Sunbury Day Hospital.
Aerosols	Microscopic particles < 5 µm in size that are the residue of evaporated droplets and are produced when a person coughs, sneezes, shouts, or sings. These particles can remain suspended in the air for prolonged periods of time and can be carried on normal air currents in a room or beyond, to adjacent spaces or areas receiving exhaust air.
Aerosol generating behaviour (AGB)	Behaviours that generate aerosols including but not limited to screaming, shouting, crying out, vomiting and kicking.
Aerosol generating procedure (AGP)	A procedure that generates aerosols. At Western Health this has been separated into low risk and high-risk aerosol generating procedures based on risk to staff and the patient's immediate environment. The specific high-risk ones described in this document are included in the DHHS guidelines.
<u>Airborne transmission based precautions</u>	<p>A set of practices used for patients known or suspected to be infected with agents transmitted person-to- person by the airborne route. It is used in conjunction with Standard precautions</p> <ul style="list-style-type: none"> • This includes the use of negative pressure ventilation isolation rooms, or if none available the use of a single room with the door closed. • Priority for negative pressure ventilation rooms is given to high risk infections such as TB, Measles and Chickenpox as these are more highly infectious than COVID-19. • It also includes the use of a P2/N95 respirator mask which is used in conjunction with Standard precautions. • In the context of COVID-19 P2/N95 respirators are only required for all aerosol generating procedures in a confirmed COVID-19 case and for high risk classified aerosol generating procedures in all suspected cases. <p>It also includes the appropriate use gloves and eye protection when there is a risk of blood and body substance as well as from droplets as part of Standard precautions.</p>
BBFE	Blood and body fluid exposure
Cloth Masks	Non-medical cloth masks (or other face coverings) can be used by staff outside of the work environment and in the community. Cloth masks are not defined as PPE but play a role in preventing exposure to COVID-19 and reducing its transmission. Please refer to this link from the Department of Health and Human Services (DHHS) for more advice about masks and face coverings in the community.
<u>Contact transmission based precautions</u>	A set of practices used to prevent transmission of infectious agents that are spread by direct or indirect contact with the patient or the patient's environment. This is required specifically for all CPO, <i>C auris</i> and infective gastroenteritis. In low risk infectious organisms this may mean effective use of Standard precautions with plastic apron, bare below elbow and hand hygiene. In high risk infections it will include the use of standard precautions as well as use of long sleeve isolation gown. During shortages of long sleeve isolation disposable gowns, a long sleeve cloth gown can be worn with a plastic apron which protects the front of the gown from risk of splash from blood and body substances or aerosols.

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COVID Risk Level Ratings	The Victorian Government has developed 4 risk level ratings ranging from low to very high. These risk levels are influenced by COVID-19 prevalence within Victoria or geographical area, prevalence of COVID-19 cases in at-risk communities and the number of COVID-19 cases of an unknown source over a particular timeframe. 1. COVID Ready 2. COVID Alert 3. COVID Active 4 COVID Peak
Droplets	Small particles of moisture generated when a person coughs or sneezes, or when water is converted to a fine mist by an aerator or shower head. These particles, intermediate in size between drops and droplet nuclei, can contain infectious microorganisms and tend to quickly settle from the air such that risk of disease transmission is usually limited to persons in close proximity (e.g. at least 1 metre) to the droplet source.
<u>Droplet transmission based precautions</u>	A set of practices used for patients known or suspected to be infected with agents transmitted by respiratory droplets. This includes the use of surgical masks as well as all aspects of Standard precautions to protect staff eyes, nose and mouth (i.e. safety goggles or full face shield, plastic apron)
<u>Full face shields</u>	Full face shields provide greater protection than safety goggles as well as protect the mask front. Safety goggles are an alternative if a face shield is not tolerated. Eye protection should be worn whenever there is the risk of splash or splattering of blood or body fluids, secretions, excretions or exposure to droplets. Please refer to the ' Face Shield Use During the COVID-19 Pandemic ' QRG located on the Western Health Coronavirus Site for more information.
<u>High risk area</u>	High-Risk Areas are defined as: <ul style="list-style-type: none"> Intensive Care Units* Discuss PPE requirements with nurse/intensivist in charge at the start of the shift Emergency Departments (including during initial triaging) and associated radiology Designated COVID-19 Wards COVID-19 Testing Clinics Vaccination Hubs N.B. Other wards/clinical areas may be considered high-risk areas depending on volume and risk profile of patients at the time
<u>Long sleeve isolation gown</u>	This can be a water impervious disposable gown or a cloth gown worn with a plastic apron
<u>Powered air-purifying respirator (PAPR)</u>	A device incorporating a half facepiece, full facepiece or hood which provides the wearer with air filtered through a powered filtering unit, comprising of a filter or filters and an electrically operated blower unit.
<u>Patient surroundings</u>	All inanimate surfaces that are touched by or in physical contact with the patient (such as bed rails, bedside table, bed linen, invasive devices, dressings, personal belongings and food) and surfaces frequently touched by healthcare workers while caring for the patient (such as monitors, knobs and buttons).
<u>Patient Contact</u>	For the purpose of this guideline, patient contact refers to any activity that involves touching a patient, touching a patient's immediate surroundings or belongings, or entering the same room as a patient. If you are unsure if your work involves patient contact, please discuss with your manager.
<u>Standard precautions</u>	Work practices that constitute the first-line approach to infection prevention and control in the healthcare environment. These are recommended for the treatment and care of all patients regardless of risk. Standard precautions are frequently used alone, and in conjunction with Droplet, Contact and Airborne precautions based on risk of infection from the infectious agent.

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	<ul style="list-style-type: none"> • These include bare below the elbow (short sleeves, no watches, wrist jewellery, plain wedding band and no nail enhancements) which allows for effective hand hygiene up to the elbow, • Hand hygiene as per 5 Moments in hand hygiene • Use of plastic apron for direct patient contact if there is a risk that staff uniform may become contaminated with blood or body substance or when caring for other patients during the course of the day. • It includes the appropriate use of gloves, mask and eye protection when there is a risk of blood and body substance as well as droplets as well as, respiratory cough etiquette, reprocessing of reusable medical devices, aseptic technique, sharps/waste disposal, appropriate handling of linen, and routine environmental cleaning.
Suspected COVID-19 patients	<p>Low-risk suspected A low-risk suspected COVID-19 patient is a person awaiting the results of a test, where they may have symptoms that could be consistent with coronavirus (COVID-19) but have no epidemiological risk factors – as determined by the Victorian Health Service Guidance and Response to COVID-19 Risk levels (active during COVID Ready and COVID Alert levels) noting this can change at short notice.</p> <p>High-risk suspected (equates to DHHS probable case) A high-risk COVID-19 patient is a person who has a compatible clinical illness and meets one or more of the following epidemiological criteria, noting this can change at short notice. Victorian Health Service Guidance and Response to COVID-19 Risk levels (active during COVID Active and COVID Peak levels)</p> <p>In the 14 days prior to illness onset:</p> <ul style="list-style-type: none"> • Was a close contact of a confirmed or suspected COVID-19 case • Travelled internationally • Associated with an outbreak or cluster • From a Residential Aged Care Facility (until Infection Prevention Unit OR Respiratory Assessment Clinic HMOs have reviewed facility status) • Lived in or visited a geographically localised area at high risk as determined by public health unit • Was employed in an area where there is an increased risk of coronavirus (COVID-19) transmission for example, <ul style="list-style-type: none"> ○ hotel quarantine workers or any workers at ports of entry, ○ aged care workers/ healthcare workers working in a location where there are active outbreaks ○ other high-risk industries (such as abattoirs) where there are known cases /or high levels of community transmission <p>Until exposure to these epidemiological risks is excluded, the patient should managed as a Low-risk COVID-19 case - during times of COVID Ready and COVID Alert risk level High-risk COVID-19 case during times of COVID Active and COVID Peak risk level</p> <p>Current COVID risk rating levels can be checked via the following link: https://www.dhhs.vic.gov.au/victorian-health-service-guidance-and-response-covid-19-risks#current-risk-rating</p>

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Quarantine	A period of time during which a person is isolated in a single room, own bathroom, during their incubation period to prevent onwards transmission of infection. For COVID-19 this is for 14 days from date of last known exposure or separation from an outbreak area or close contact of a confirmed case. This group is also referred to as "at-risk".
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The COVID-19 vaccine prevents symptomatic and severe disease.

Until further data is available on the impact of transmission, PPE is still required after COVID-19 vaccination.

Victorian Health Service Guidance and Response to COVID-19 Risk levels

The Victorian Health Service Guidance and Response to COVID-19 Risks (VHSGR) has been developed to inform health service responses and interventions in response to changing risks of COVID-19 transmission in the community. The VHSGR has developed four risk ratings, ranging from low (**COVID Ready**) to very high (**COVID Peak**). These risk ratings will be used by the DH to determine what the COVID-19 transmission risk rating is at a State, geographic region (e.g., suburb, LGA etc.) or individual health service level.

When there is a change in COVID transmission risk identified by the DH, a decision can be made to change the risk rating at short notice in response to a sudden surge in cases which will be communicated to health services. The current risk rating map for Victoria can be checked by clicking [here](#).

This will mean that health services where the risk is low will be able to continue with service provision, but services in high-risk areas will need to adopt the relevant interventions and processes to reduce COVID-19 transmission risk which includes increased PPE usage. This will assist in future proofing the WH PPE guidelines.

Table 1 (below) Victorian Health Service Guidance and Response to COVID-19 Risk Levels. Refer to [Appendix B](#) for the relevant PPE requirements for each risk level.



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Staff use of PPE

PPE required for all staff

In response to the COVID-19 pandemic, PPE usage at Western Health have been defined from Tier 0 to Tier 3 according to the level of patient risk for COVID-19 and type of clinical procedure being undertaken in conjunction with the [Victorian Health Service Guidance and Response \(VHSGR\)](#) to COVID-19 risk level ratings.

Given the current risk profile of COVID-19 and in accordance with DHHS's guidance found [here](#), Western Health is currently only implementing Tiers 1-3.

Please note this means Tier 0 (Standard Precautions) is currently NOT applicable to any staff at Western Health until further notice except for staff working in non-clinical administration areas.

Staff working in non-clinical administration areas such as staff offices or in meeting rooms are currently not required to wear a surgical mask where physical distancing can be maintained as per the [current VHSGR COVID risk level](#). This may change at short notice, e.g., if risk level escalated to **COVID Active** and **COVID Peak**.

Surgical masks must still be worn in all settings at our hospitals. This includes all patient-facing and public areas at all sites. An exception exists for staff who are still required to wear P2/N95 masks as part of Tier 3 precautions. **N.B.** Refer to [Table 2](#) or [Table 3](#) for more information.

All visitors are still required to wear surgical masks,

Eye protection is required in the following situations.

- Clinical areas with patients suspected or confirmed COVID-19 or patient in quarantine.
- Rooms where aerosol generating procedures (AGPs) are being performed
- Interactions with patients who have aerosol generating behaviours (AGBs)
- When there is a risk of splashes from blood or body substances (i.e. standard precautions).
- All patient-facing areas When **COVID Active** and **COVID Peak** risk levels are activated.

Eye protection is otherwise optional in Tier 1 during activation of **COVID Ready** and **COVID Alert** risk levels.

Refer to the **'Face Shield and Eye Protection'** QRG located on the [Western Health Coronavirus Site](#) for further information.

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COVID-19 Western Health Tiers, Applicability and Context Examples

Table 2 (below) defines the current PPE Tiers, Applicability and Context Examples at Western Health, it should also be read in conjunction with the Victorian Health Service Guidance and Response to COVID-19 risks levels - [Appendix B](#)

Tier	Applicability	Context Examples
<p>Tier 1</p> <p>(COVID Standard Precautions, Standard and droplet)</p>	<p>During COVID Ready and COVID Alert risk levels.</p> <p>Applies to all areas of the health service including in areas of higher clinical risk, where the person IS NOT suspected or confirmed to have COVID-19 and IS NOT IN quarantine.</p> <p>Eye protection is not required during times of COVID Ready and COVID Alert risk levels in Victoria except as part of standard precautions.</p> <p>When Victorian risk levels are escalated to COVID Active and COVID Peak - eye protection will be required.</p>	<ul style="list-style-type: none"> Staff not involved in direct care of suspected or confirmed COVID-19 patients. COVID-19 vaccination hubs Undertaking surgery or AGPs* on patients with a negative COVID-19 clinical risk screen and/or laboratory test result. Patients wearing masks (with bedside curtains pulled 3/4 between side patients if safe/practical). Approved AGP therapy in patients cleared or not suspected of COVID-19 in designated areas (Safe Use of Respiratory Therapy QRG). Community settings when providing non-contact care/support. Patients with AGBs* who are not suspected OR confirmed COVID-19 patients OR in quarantine. ENT/maxillofacial surgery during COVID Ready and COVID Alert risk rating levels with eye protection
<p>Tier 2</p> <p>(Standard, Droplet and contact precautions)</p>	<p>During COVID Ready and COVID Alert risk levels</p> <p>Providing care to a person who is low-risk suspected to have COVID-19 (excluding when undertaking an AGP* or there is a risk of AGBs*)</p> <p>During COVID Active and COVID Peak risk levels ALL low risk suspected patients move into Tier 3</p>	<ul style="list-style-type: none"> Providing routine nursing or medical care to low- risk suspected COVID-19 patient Patient transfer within a facility of low-risk suspected COVID-19 patients Cleaning/disinfection of room where there has been NO high-risk AGP* performed or if 30 mins has elapsed since the AGP* COVID-19 testing community sites incl. Western Health COVID-19 testing clinics, excluding port of entry testing locations Undertaking testing for patients not in a high risk work area – see Tier 3 Family members/visitors to low-risk suspected COVID-19 patient at hospital.

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Tier	Applicability	Context Examples
		<ul style="list-style-type: none"> • Staff at ambulance arrival and handover areas where the patient is low-risk suspected for COVID-19. • Handling deceased persons with low-risk suspected COVID-19 patients • Community settings when providing care involving touching client/contact with blood/body fluids. • Staff caring for a patient where their history cannot be obtained during COVID Ready and COVID Alert risk levels in Victoria as determined by Department of Health
<p>Tier 3 (Standard, Airborne and contact precautions)</p>	<p>During COVID Ready and COVID Alert risk levels</p> <ol style="list-style-type: none"> 1. At ALL times when providing care to a high-risk suspected COVID-19 OR confirmed COVID-19 OR quarantined patients regardless of the amount of time spent with patient 2. Undertaking an AGP* on a person who is low-risk suspected COVID-19 OR high-risk suspected COVID-19 OR Confirmed COVID-19 or quarantined patient 3. Providing care to a person with low-risk OR high-risk suspected COVID-19 and there is a risk of AGBs (i.e. screaming, shouting, yelling, singing or other abusive behaviours) 4. Where a patient's history cannot be obtained during activation of COVID Active and COVID Peak risk levels, they should be considered as a high-risk COVID-19 case until further screening information can be obtained. 	<p>High risk hospital work areas:</p> <ul style="list-style-type: none"> • Wards with confirmed cases of coronavirus (COVID-19) plus wards with high-risk suspected cases during the COVID ready/alert phase OR wards with suspected cases, quarantined patients, Emergency Departments and ICUs* during the COVID active/peak phase • where the Chief Health Officer (or their delegate) notifies a hospital that there is community transmission in an area proximate to that hospital, that hospital's: ward(s) treating any high-risk suspected cases of coronavirus (COVID-19) emergency departments; and intensive care units* • Cleaning and disinfection of a room where there has been an AGP* performed within the previous 30 mins during COVID Active and COVID Peak risk rating levels • Handling deceased persons with high-risk suspected OR confirmed COVID-19 OR quarantined patient • All ENT/maxillofacial surgery during COVID Active and COVID Peak risk rating levels • Family members/visitors to high-risk suspected COVID-19 patients in hospital.

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Tier	Applicability	Context Examples
	<p>5. Anyone who has worked in or volunteered at a hotel quarantine site and/or other port of entry in the last 14 days (excluding RACS where the risk of transmission is low during COVID Ready and COVID Alert levels)</p> <p>During activation of COVID Active and COVID Peak risk levels</p> <p>1. At ALL times when providing care to low-risk OR high-risk suspected COVID-19 OR confirmed COVID-19 OR quarantined patients regardless of the amount of time spent with patient</p>	<ul style="list-style-type: none"> Staff caring for a patient where their history cannot be obtained during activation of COVID Active and COVID Peak risk levels by the Department of Health. Staff undertaking COVID testing at port of entry (at all 4 COVID risk levels) AND community testing locations including Western Health COVID-19 testing clinics during activation of COVID Active and COVID Peak levels Vaccination hubs (N.B. staff working in vaccination hubs will need to wear an N95/P2 mask, as well as eye protection but a single use plastic apron is appropriate in this setting) <p>*N.B. Discuss PPE requirements with nurse/intensivist in charge at the start of the shift</p>

*Refer to [Table 4](#) for definitions of AGPs and AGBs

COVID-19 PPE Tier Requirements for all Staff (Table 3)

Suspected COVID-19 cases are categorised as low or high risk by the treating medical team. The allocation of risk only relates to room allocation and patient cohorting as outlined in the '**COVID-19 Testing Criteria, Risk Categorisation, De-isolation and Cohorting Guideline**' QRG located on the [Western Health Coronavirus Site](#).

COVID-19 PPE Tier requirements are summarised in a poster format for Maternity ('**COVID-19 PPE Maternity Poster**'), Newborn Services ('**COVID-19 PPE Newborn Services Poster**') and all other Western Health services ('**Western Health COVID-19 PPE Guideline**') which are located in the PPE section of the [Western Health Coronavirus Site](#). For context examples please refer to [Table 2](#).

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Table 3 – COVID-19 PPE Tier Requirements for all Staff (also found at this link <https://coronavirus.wh.org.au/wp-content/uploads/2021/01/COVID-19-PPE-Poster-Tiers-1-3.pdf>)

COVID-19 PPE							COVID READY	COVID ALERT	COVID ACTIVE	COVID PEAK	
	Hand hygiene, bare below elbow	Disposable gloves	Single use plastic apron	Disposable long sleeved isolation gown	Surgical mask	P2 / N95 respirator	Eye protection - face shield (preferred) or safety goggles				
TIER 1 Standard COVID precautions	✓	As per Standard Precautions. Gloves do not negate the need for hand hygiene.	✓ If contact likely between clothing and patient, surrounding environment or bodily fluids.	OR ✓ If copious blood or bodily fluids.	✓	✗	✓ As per Standard Precautions, AGPs and AGBs.	<ul style="list-style-type: none"> Applies to all areas of the health service including in areas where the patient is NOT suspected or confirmed to have COVID-19 and IS NOT IN Quarantine. Surgical masks worn by all staff in public/patient facing areas, public shared areas and non-public facing areas where physical distancing cannot be maintained. Eye protection not required. 		<ul style="list-style-type: none"> Eye protection is required for all areas where the patient is NOT suspected or confirmed to have COVID-19 and IS NOT IN quarantine. Surgical masks worn by all staff in public/patient facing areas, public shared areas and non-public facing areas where physical distancing cannot be maintained. 	
TIER 2 Droplet and contact precautions	✓	✓	✗	✓	✓	✗	✓	<ul style="list-style-type: none"> Providing care to low-risk suspected patients (excluding AGP and AGB)* Providing care to a patient where their history cannot be obtained until further screening information can be obtained. Eye protection is required. For staff undertaking COVID-19 testing at community testing locations including Sunshine RACs. 		<ul style="list-style-type: none"> As per above for Tier 1. Providing care to ALL low risk suspected COVID-19 patients moves to Tier 3. 	
TIER 3 Airborne and contact precautions	✓	✓	✗	✓	✗	✓	✓	<ul style="list-style-type: none"> At all times providing care to a high-risk suspected, OR confirmed COVID-19 OR quarantine patient. Undertaking an Aerosol Generating Procedure (AGP)* on a person who is low-risk suspected OR high-risk suspected OR confirmed COVID-19 OR quarantined patient. Providing care to a patient with low-risk OR high-risk suspected COVID-19 and there is a risk of Aerosol Generating Behaviours (AGBs)* i.e. screaming, shouting, yelling, singing or other abusive behaviours. For staff undertaking testing at port of entry COVID-19 testing locations. Anyone who has worked in or volunteered at a hotel quarantine or volunteered at a hotel quarantine and/or other port of entry in the last 14 days. 		<ul style="list-style-type: none"> Providing care to a patient where their history cannot be obtained until further screening information can be obtained. At all times providing care to a low-risk OR high-risk suspected OR confirmed COVID-19 OR quarantined patient. Undertaking an Aerosol Generating Procedure (AGP)* on a person who is low-risk suspected OR high-risk suspected OR confirmed COVID-19 OR quarantined patient. Providing care to a patient with low-risk OR high-risk suspected COVID-19 and there is a risk of Aerosol Generating Behaviours (AGBs)* i.e. screaming, shouting, yelling, singing or other abusive behaviours. For staff undertaking COVID-19 testing at community testing locations including Sunshine RACs AND port of entry testing locations. 	
*Please refer to the Western Health PPE guidelines and associated documents for further information on determining risk category and for definitions on AGPs and AGBs.							PPE Spotters / Buddies		PPE spotters instituted in high risk areas and any areas with suspected/confirmed or quarantined patients. Spotters step down to PPE Buddies when no such patients present.		
COVID-19 Date: 3/5/2021, Version: 8 Author: Maura Canning, Approved by: Paul Eleftheriou									PPE Spotters (supernumerary) in place in all COVID-19 designated areas and departments with suspected or confirmed COVID-19 or quarantined patients.		

Risk Categorisation for PPE

For further explanation of the risk categorisation process, see the 'COVID-19 Testing Criteria, Risk Categorisation, De-isolation and Cohorting Guideline' QRG located on the [Western Health Coronavirus Site](https://coronavirus.wh.org.au).

A more comprehensive matrix that includes all PPE requirements for different infections requiring transmission-based precautions can be found in [Appendix A – PPE Matrix for Non-COVID-19 Setting](#).

The PPE requirements for low risk and high-risk suspected OR quarantined patients are the same as confirmed cases.

Patients who do not have suspected COVID-19, but who require quarantine due to overseas travel or exposure to COVID-19, require the same PPE as high-risk suspected cases.

Refer to the 'Operating Theatres' section of the DHHS ['Coronavirus \(COVID-19\) Infection Prevention and Control Guideline'](#) for specific operating room PPE guidance.

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P2/N95 Respirator Mask Usage in Inpatient Settings

Staff **are required** to wear a P2/N95 mask at all times in high-risk areas and clinical settings **when there is a high risk suspected OR confirmed COVID-19 OR quarantined patient (refer to Appendix B for Tier context against COVID risk levels)**. Extended-use of PPE should be used as appropriate.

Please note, these areas or settings are subject to change thus it is imperative to refer to [Table 2](#) and [3](#), and discuss with your line manager for the latest updates.

The following is a **list of areas and clinical settings for suspected and confirmed COVID-19 or quarantined patients based on the Victorian Health Service Guidance and Response to COVID-19 Risk Levels (subject to change)**:

- **All** Emergency Departments
 - During **COVID Ready** risk level activation normal ED triage and risk assessment protocols
 - During **COVID Alert** risk level activation consider COVID service plans
 - During **COVID Active** risk level activation implement COVID service plans
 - During **COVID Peak** risk level activation escalated service plans implemented
 - COVID-19 Wards (ward locations subject to change **during activation to COVID Active and COVID Peak risk levels**)
 - **Intensive Care Units*** (if negative pressure isolation rooms/hoods have exceeded capacity)
 - Tier 1 with no suspected COVID patients in ICU during **COVID Ready** and **COVID Alert** risk levels
 - Tier 3 with suspected COVID patients in ICU during the 4 COVID risk levels if not in negative pressure room as per Appendix B
- *N.B. Discuss PPE requirements with nurse/intensivist in charge at the start of the shift**
- Vaccination hubs (**N.B. staff working in vaccination hubs will need to wear an N95/P2 mask, as well as eye protection but a single use plastic apron is appropriate in this setting**)
 - Hazeldean (currently closed) (following activation of **COVID Active** and **COVID Peak** risk levels)
 - Aged Care Liaison Service (following activation of **COVID Active** and **COVID Peak** risk levels)
 - Other wards/clinical areas with a high risk of patients incubating COVID-19 (e.g. Footscray 3B following activation of **COVID Active** and **COVID Peak** risk levels).
 - Where aerosol generating procedures (AGPs) are performed outside of single rooms with closed doors ([refer to Table 4 for full list of AGP's](#)).

P2/N95 Respirator Mask Usage During Airway Management Procedures In Theatre Settings

Please note: Advice for the use of P2/N95 Respirator Masks as per **Appendix B** is in relation to **COVID Peak** risk levels. This advice is in addition to advice contained within [Table 2](#) and 'COVID-19 PPE Tier Requirements for all Staff' section of this document with regards to P2/N95 Respirator Mask use.

Staff performing airway management procedures must wear P2/N95 for all patients during **COVID Peak** risk levels. This advice is in addition to PPE requirements as described in this document.

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There is additional guidance for staff in the Maternity and Newborn Services settings. Please refer to the PPE section of the [Western Health Coronavirus Site](#) for the 'COVID-19 PPE Maternity Poster' and 'COVID-19 PPE Newborn Services Poster'.

P2/N95 Respirator Mask Related Pressure Injuries

With increased PPE usage across Western Health, in particular with the newer cupped P2/N95 Respirator Masks specifically for longer periods of time, there is a risk some staff may experience changes to their skin including pressure injuries.

Western Health has taken a precautionary approach in regard to protective dressings which are **NOT** to be used on the face under P2/N95 Respirator Masks as they may impair the seal and not provide protection.

For preventative measures refer to the '**Facial pressure injuries and skin issues from PPE**' QRG located on the [Western Health Coronavirus Site](#).

Clinical Settings Where P2/N95 Respirator Mask Usage Is Not Required

Clinical and non-clinical staff who work in the following areas or clinical settings, **are not required** to wear a P2/N95 Respirator Mask when:

1. Undertaking surgery or AGPs on patients who are not suspected or confirmed to have COVID19 risk factors (Refer to [Table 4](#))
2. Working at a **COVID-19 testing clinics** (Tier 2 PPE precautions as per [Table 2](#) are sufficient) unless in **COVID Active** and **COVID Peak** risk levels (Tier 3 PPE is then required)
3. Managing patients who exhibit aerosol-generating behaviours such as shouting (refer to [Table 4, Point 1](#)) who are not confirmed nor suspected of COVID-19

PPE for Aerosol Generating Procedures (AGPs)

All clinical and non-clinical staff must wear a P2/N95 Respirator Mask for all high risk AGP's with suspected or confirmed COVID-19 patients:

1. When entering the patient room.
2. During the AGP.
3. For 30 minutes after the AGP has been performed.

Please check with the nurse in charge if unsure.

[Appendix A – PPE Matrix for Non-COVID-19 Setting](#) provides guidance for PPE required for low risk and high risk AGPs

[Table 4](#) provides describes low risk and high risk AGPs in addition to activities that do not meet the criteria of aerosol generating procedures.

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High, Low and No Risk Aerosol Generating Procedures (Table 4)

HIGH RISK AEROSOL GENERATING PROCEDURES (AGPs)

1. Aerosol Generating Behaviours (AGBs)
 - Patients who are agitated, delirious, acutely disturbed, have a behavioural disturbance from a mental health condition or exhibit aerosol-generating behaviours such as shouting, vomiting or kicking.
2. Nebulisers
3. Sputum and/or cough induced by saline nebulisers (**N.B.** Induced sputum – sputum specimen produced for diagnostic tests (i.e. Mycobacterium testing) by aerosol administration (nebuliser) of a saline solution, causing patient to cough deeply.
4. All oxygen therapy delivered via Venturi mask¹
5. Non-invasive ventilation¹ (*for neonatal resuscitation where CPAP/IPPV is required, only staff in close proximity to the neonate need to wear an N95 mask. All other staff should remain 1.5m away whilst AGP occurring*)
6. Airway suction without/before intubation
7. Manual ventilation before intubation
8. Tracheal intubation³
9. Tracheostomy
10. Laryngeal mask insertion³ **assumption high aerosol generation / coughing similar to intubation*
11. Neonatal mechanical ventilation where an uncuffed endotracheal tube is used
12. Extubation
13. Chest compressions
14. Defibrillation
15. Bronchoscopy
16. Ear Nose & Throat (ENT) surgery/endoscopy **assumption high aerosol generation at sites of viral replication (activated during COVID Active and COVID Peak risk levels only)*
17. Head and Neck surgery **assumption high aerosol generation at sites of viral replication similar to ENT*
18. Neurosurgery that includes breach of or access via sinuses **assumption high aerosol generation at sites of viral replication similar to ENT*
19. Maxillofacial surgery/emergency dental procedures that use tools generating aerosols (for example high speed hand piece, ultrasonic scaler) **assumption high aerosol generation at sites of viral replication similar to ENT*
20. Dacryocystorhinostomy and other ophthalmological procedures that breach the nasal mucosa **assumption high aerosol generation at sites of viral replication similar to ENT*
21. Gastroscopy and colonoscopy **assumption high aerosol generation at sites of viral replication similar to ENT*
22. Transoesophageal echocardiography **assumption high aerosol generation at sites of viral replication similar to ENT*

LOW RISK AEROSOL GENERATING PROCEDURES (AGPs)

1. Insertion/removal of NGT
2. Oxygen therapy 6 L/min or above delivered via Hudson mask, non-rebreather mask or High Flow Nasal Cannula (as referenced by McGain et al²)
3. Nitrous Oxide for sedation of children
4. Closed (in-line) endotracheal tube suction
5. Mechanical ventilation (excluding neonatal mechanical ventilation where an uncuffed endotracheal tube is used)
6. Laparoscopic surgery* *assumption that low probability of significant viral titres in peritoneal tissue and mostly contained in abdomen as pneumoperitoneum*

1. Safe use of respiratory therapy at Western, [Western Health Coronavirus Site](#)
2. McGain F. et al [Aerosol generation related to respiratory interventions and the effectiveness of a personal ventilation hood](#) Critical Care and Resuscitation. June 2020 (Epub)
3. Intubation, laryngeal mask insertion and other 'airway management procedures' require a P2/N95 mask if the patient is suspected or positive for COVID-19. Please refer to Theatre PPE and Staff Movement guidance, [Western Health Coronavirus Site](#)

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PRACTICES NOT DEEMED AEROSOL GENERATING PROCEDURES (AGPs)

1. Collecting a nasopharyngeal or deep nasal swab
2. Oxygen therapy less than 6L/min delivered via nasal cannula, Hudson mask or non-rebreather mask

Powered Air Purifying Respirators (PAPRs)

When there is a high probability of airborne transmission due to infectious agents or procedures, sound scientific principles support the use of Powered Air Purifying Respirators (PAPRs) – also known as ‘Halo Masks’ – to prevent transmission. PAPRs can be more comfortable to wear than P2/N-95 Respirator Masks especially over long time-periods.

Western Health will only allocate a PAPR to staff members in exceptional circumstances. For further guidance refer to the ‘Respiratory Protection Program Guideline’ on the [Western Health Coronavirus Site](#).

PPE Removal Principles

For donning and doffing posters and other related resources please refer to the ‘**PPE selection and use**’ section of the [Western Health Coronavirus Site](#).

- a. Unless masks are damp or soiled, they should be worn for the duration of a clinic or shift, or until a break is taken (whichever is shorter in duration) or after performing an AGP, or when in close proximity to an AGB or after showering a patient (refer to [Table 4](#)).
- b. When a mask or other disposable PPE is removed during a shift in the clinical setting, it must be disposed of in yellow clinical waste bin and replaced with hand hygiene before and after.
- c. When a mask or other disposable PPE is removed during a shift in the non-clinical settings, it must be disposed of in either a clinical waste bin or the designated mask waste bins found in non-clinical areas.
- d. Single use face shields and safety goggles must be removed and disposed of after each use or when going on a break (refer to ‘**Face Shield and Safety Goggle Usage QRG**’). Only approved BOYE reusable face shields© and reusable goggles can be cleaned and disinfected.
- e. Masks **can** be worn outside of clinical areas (e.g. between wards, in reception areas).
- f. Long-sleeved isolation gowns can be worn between patient rooms if the patients are cohorted according to their COVID-19 status and are not on transmission-based precautions for any other infectious indication.
- g. Long-sleeved isolation gowns are **not** to be worn outside of clinical areas (e.g. between wards, in reception areas, in tea rooms).
- h. Glove removal and hand hygiene must be completed in accordance with the ‘5 Moments for Hand Hygiene’ principles during and after each patient encounter.

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- i. Double gloving is not a recommended practice for routine patient care as hand hygiene is not performed. Gloves do not negate the need for hand hygiene and increase risk of self-contamination and poses a patient safety risk for healthcare-associated infections.

Staff Supplying PPE

Western Health **does not** endorse staff purchasing their own PPE as appropriate PPE is provided to all staff free of charge.

Exceptions can be made for the BOYE face shield[®], which staff can purchase at their own cost given face shields are an approved PPE item from the Western Health guidelines and it is currently an authorised option from the state PPE supply chain. If staff choose to purchase this face shield, they are responsible for cleaning it using the approved method outlined in the **'Face Shield and Eye Protection'** QRG located on the [Western Health Coronavirus Site](#).

Patient use of PPE

Patient use of masks can help to protect staff, other patients and visitors. Masks help stop droplets spreading when someone speaks, laughs, coughs, or sneezes, including patients who may have COVID-19 but feel well (asymptomatic) or who are in the early phase of the virus and not yet showing symptoms (pre-symptomatic). Masks also protect the wearer (the patient) from being exposed to any droplets.

Patient mask usage aligns with the Victorian Government requirement for all Victorians to wear a mask within a hospital.

In addition to mask usage, where safe and practical, the side curtains between inpatients should be pulled three-quarters to act as a physical barrier from droplets from the patient next to them.

A risk assessment should be taken for patients where close supervision is required (e.g. risk of falls, risk of self-harm), and those patients at risk may be best placed in a location where they will be more readily visible to staff (e.g. closest to the door).

Patient Surgical Mask Usage

All inpatients are required to wear a level 1 surgical mask that covers both their mouth and nose at all times when they are anywhere outside their assigned bedroom. Patients should be encouraged to perform hand hygiene before and after they leave their bedroom.

Whilst an inpatient is in their assigned bedroom or in the immediate vicinity of their assigned bed (including in shared rooms), the use of a surgical mask is not mandatory, but is strongly encouraged.

All outpatients are required to wear a face mask at all times when they are anywhere within Western Health facilities. Staff are able to make exceptions for patients that:

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- Do not tolerate a mask due to their clinical or cognitive condition (e.g. agitated patients, third stage of labour).
- Are unable to remove their own mask.
- Are having treatment or interventions where a mask would be contraindicated (e.g. oxygen therapy via a mask).
- Patients should change their mask when it gets moist or is soiled. Patients should be provided enough masks to allow them to use a new mask when appropriate and be given instructions on where to place used masks, to allow for these masks to be disposed of into the clinical waste.

Patient Visitor use of PPE

Please refer to the latest version of the ['Western Health Visitation QRG'](#) located on the [Western Health Coronavirus Site](#) for PPE guidance in the case of patient visitors at Western Health.

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Appendices

Appendix A - PPE Matrix for Non-COVID-19 Setting

For the COVID-19 Cohorting Matrix, please refer to 'COVID-19 Testing Criteria, Risk Categorisation, De- isolation and Cohorting Guideline' located on the [Western Health Coronavirus Site](#).

	No Infectious Alerts	Respiratory (Influenza & other viruses)	Measles / VZV = Negative Pressure	TB = Negative Pressure	CPO Candida auris Infective Gastro
Infection Prevention Transmission Risk Precautions	STANDARD	DROPLET	AIRBORNE	AIRBORNE	CONTACT
Gloves	# BBFE	# BBFE	# BBFE	# BBFE	YES
Gown (Long-sleeved isolation or plastic apron)	Bare below Elbow + Plastic apron for BBFE and direct patient care	Bare below Elbow + Plastic apron for BBFE and direct patient care	Bare below Elbow + Plastic apron for BBFE and direct patient care	Bare below Elbow + Plastic apron for BBFE and direct patient care	Isolation Gown
Eye / Face Protection	Face Shield (preferred) or Safety goggles (as required)	Face Shield (preferred) or Safety goggles	Face Shield (preferred) or Safety goggles (as required)	Face Shield (preferred) or Safety goggles (as required)	Face Shield (preferred) or Safety goggles (as required)
Routine direct patient care	NIL	Surgical Mask as per routine Droplet	P2/N95 Mask if UNKNOWN	P2/N95 Mask As per routine	Surgical mask
Low Risk aerosol generating procedure	Surgical mask Use side patient curtain as barrier		Surgical mask For IMMUNE staff		Surgical mask Use side patient curtain as barrier
High risk aerosol generating procedure or aerosol generating behavior (AGB)	Surgical mask Use side patient curtain as barrier				

BBFE - Blood and Body Fluid Exposure risk as part of Standard precautions (including from Droplets)
* P2/N95 mask if ENT / Maxillofacial surgery.

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Appendix B - Victorian Health Service Guidance and Response to COVID-19 Risk Levels

For PPE requirements based on current Victorian COVID-19 risk level (N.B. This is subject to change)

	COVID Ready	COVID Alert	COVID Active	COVID Peak
Tier 1 PPE (Standard COVID precautions)	<ul style="list-style-type: none"> Applies to all areas of the health service including in areas where the patient is NOT suspected or confirmed to have COVID-19 and IS NOT IN Quarantine Surgical masks worn by all staff in public/patient facing areas, public shared areas and non-public facing areas where physical distancing cannot be maintained Eye protection recommended according to standard precautions 		<ul style="list-style-type: none"> Eye protection is required for all patient facing areas. Surgical masks worn by all staff at all times within Western Health. 	
Tier 2 PPE (Droplet and contact precautions)	<ul style="list-style-type: none"> Providing care to low-risk suspected patients (excluding AGP and AGB) Providing care to a patient where their history cannot be obtained until further screening information can be obtained Eye protection is required For staff undertaking COVID-19 testing at community testing locations including Sunshine RACs 		<ul style="list-style-type: none"> Not utilised for providing care to any suspected or quarantined COVID-19 patient (see Tier 3) 	
Tier 3 PPE (Airborne and contact precautions)	<ul style="list-style-type: none"> At all times providing care to a high-risk suspected, OR confirmed COVID-19 OR quarantine patient Undertaking an Aerosol Generating Procedure (AGP) on any suspected, confirmed OR quarantined COVID-19 patient Providing care to a patient with suspected COVID-19 and there is a risk of Aerosol Generating Behaviours (AGBs) i.e. screaming, shouting, yelling, singing or other abusive behaviours For staff undertaking testing at port of entry COVID-19 testing locations Providing care to anyone who has worked in or volunteered at a hotel quarantine or volunteered at a hotel quarantine and/or other port of entry in the last 14 days Providing care to acutely unwell patients prior to completion of risk assessment. 		<ul style="list-style-type: none"> Providing care to a patient prior to COVID-19 clearance. At all times providing care to a suspected, OR confirmed COVID-19 OR quarantined patient Undertaking an Aerosol Generating Procedure (AGP) on a person who is low-risk suspected OR high-risk suspected OR confirmed COVID-19 OR quarantined patient Providing care to a patient with low-risk OR high-risk suspected COVID-19 and there is a risk of Aerosol Generating Behaviours (AGBs) i.e. screaming, shouting, yelling, singing or other abusive behaviours For staff undertaking COVID-19 testing at community testing locations including Sunshine RACs AND port of entry testing locations 	
PPE Spotters / Buddies	<p><i>PPE spotters instituted in high risk areas and any areas with suspected/ confirmed or quarantined patients</i></p>		<p>PPE Spotters in place in all COVID designated areas and departments with suspected or confirmed COVID or quarantined patients</p>	

[DH Victorian health service guidance and response to COVID-19 risks](#) – current risk rating map and resource.