Infection Prevention and Control Practice Standard

Supplementary risk management principles for oral health during the COVID-19 pandemic



COVID-19 risk management principles for oral health services

Introduction

This document supplements the Infection Prevention and Control Practice Standard and provides risk management principles for oral health during the COVID-19 pandemic¹. This must be read in conjunction with Ministry of Health and COVID-19 government guidance. This standard applies when providing oral health services alongside the Aotearoa New Zealand COVID-19 protection framework (also referred to as the traffic light system) and other government, national or regional restrictions.

Evidence continues to emerge, and national and international learnings continue to improve our understanding of how to reduce the risk of COVID-19 transmission. All oral health care providers must continually develop their understanding of COVID-19, and exercise their professional judgement in applying new knowledge and strategies for reducing COVID-19 transmission risk.

As with every health care interaction, practitioners need to assess the risk to their own safety and that of their staff, and implement appropriate evidence-based measures commensurate with the level of that risk.

The Dental Council has an expectation that oral health practitioners will not refuse to treat those who are unvaccinated. Under the Code of Health and Disability Service Consumers' Rights, patients have the right to freedom from discrimination, to be treated with respect, and the right to services of an appropriate standard; which may include referral.

The introduction of vaccine certificates/passes has provided some validity to the concept that unvaccinated individuals should be managed differently to individuals who are vaccinated, because of their public health risk. The Ministry of Health advised that changes to legislation will make it clear that access to essential services, including healthcare services, will not be restricted based on vaccination status.

Vaccination status is one of many risk factors for infection and transmission. This standard provides for the delivery of care to both vaccinated and unvaccinated patients with risk mitigations.

Planning using infection control measures

Mitigating the risk of COVID-19 transmission when providing oral health services has specific challenges, due to the closeness of oral health care, duration of interaction, and inability for patients to wear a mask during care.

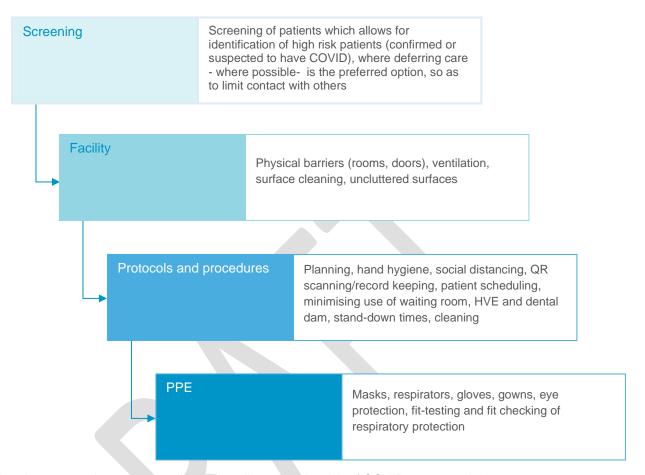
Practitioners must plan how to effectively manage the risk of COVID-19 transmission within their specific practice setting to enable care to be provided safely, in a safe environment.

This will involve developing protocols and processes using infection control measures within a framework that reflects the 'hierarchy of controls', typically used for hazard management.

Figure 1 illustrates the application of infection control measures that can be used to manage COVID-19 transmission risk in the dental setting.

Council standards are set under section 118i of the Health Practitioners Competence Assurance Act 2003

Figure 1: Application of the hierarchy of controls for COVID-19 risk management in dentistry



Applying these control measures collectively, will reduce the risk of COVID-19 transmission.

Screening

Develop protocols for screening of staff, patients and visitors entering the oral health care facility.

Screening patients to assess their COVID -19 risk plays a significant role in mitigating COVID-19 risk in the dental setting.

All patients must be screened prior to their appointment and confirmed on arrival. Results of screening must be validated by the oral health practitioner at the start of the appointment.

Case definitions do change from time to time and are available from MOH.

Patients present an unknown risk until respiratory and epidemiological risk factors have been assessed. A patient's risk may be reduced depending on:

- lack of symptoms
- their vaccination status
- or a negative COVID-19 test result within 72 hrs of their appointment, without symptoms.

Apply discretion to raise or lower patient risk depending on the results of patient testing, screening, level of community transmission or other relevant risk factors.

Figure 2 illustrates screening clinical and epidemiological risk factors for COVID-19.

Facilities

Prepare facilities to include signage, physical distancing, good hygiene, and patient flow.

Remove all unnecessary items from the waiting room, such as magazines and toys, and keep surfaces clear and clean. Regularly clean surfaces and high-touch surfaces (door handles, chair arms, reception counter etc.).

Provide supplies for respiratory hygiene and cough etiquette, including alcohol-based hand rub (ABHR) containing at least 60% alcohol, tissues, and lined, no-touch receptacles for disposal, at healthcare facility entrances, waiting rooms, and patient check-ins.

Follow standard cleaning processes for low-risk patients. Follow a 2-step cleaning and disinfecting process for moderate and high-risk patients.

Ventilation and air purification recommendations

The Council strongly recommends dental practices to explore ways to improve indoor air quality in treatment, waiting and recovery rooms, by exploring ventilation systems, airflows and air patterns, and the interaction of air conditioning systems in their practice environment.

Key principles to consider include:

- Improve air circulation with increased air change rates.²
- For treatment spaces, the extraction of potentially contaminated air from the space at a greater rate than the rate of air entering the space is of paramount importance. This creates a negative airflow, but not a negative pressure room. The Council does not consider that all treatment areas need to be Airborne Infection Isolation Room/negative pressure rooms. The extracted air needs to be exhausted safely.
- Additional benefits can be achieved through HEPA filters and UV-C to improve air quality³, but does not replace the requirement for effective air circulation.
- Any solution requires regular and ongoing maintenance to ensure its effectiveness.
- A proposed solution should also advise on temperature, humidity and noise control to ensure suitable working environments for practitioners and staff.
- The use of ventilation engineers with installation experience in healthcare settings is strongly recommended.

Stand down time

Stand down time is important due to the airborne nature of the COVID-19 virus. Stand down times vary depending on how well ventilated a space is (expressed as air changes per hour).

Stand down time is required for only high and moderate risk patients, irrespective of the care provided.

² Between 6-10 air changes per hour (ACH) is considered good practice. International standards for dental environments differ, ranging between 6ACH, 10ACH or 12 – 15ACH.

³ To be effective, airflow needs to be in direction from HEPA filter to UV-C

Times are reduced with procedure-related measures aimed at reducing the extent and contamination of aerosols and splatter, for example, HVE and dental dam.

For moderate and high-risk patients:

- Wait at least 10 minutes after the patient has left the room before following a 2-step cleaning and disinfecting process. Figure 3 illustrates the stand down requirements.
- If cleaning occurs within the stand down time for the room, wear a P2/N95 respirator.
- Instruments can be removed from the room for cleaning by clinical staff leaving the room, but limit room exit and entry during the stand down time.

People management

Management of numbers of people in facilities is important.

Practices must prominently display the New Zealand COVID Tracer QR code at the entrance of the facility, and people must scan in or register their contact details. Practices should establish and maintain a contact register for all people entering the practice including date and time of entry and exit, and the person's phone and email details, to enable contact tracing.

Ask patients to arrive as close as possible to their appointment time to limit time with others in common areas.

Limit the number of support people in the treatment area to one. Offer the support person a medical mask instead of their own mask/face covering.

Team management

If team members are unwell, they must stay home, and if appropriate, get a COVID-19 test.

Screen staff daily for symptoms of COVID-19. Practitioners may consider staff surveillance testing, using MOH approved tests, in areas with active community transmission.

Practitioners should plan for the impact of a positive COVID-19 case in the oral health team. Practitioners may consider separation of 'teams' to reduce the impact of a staff presentation.

PPE

PPE serves as the last line of defense against the transmission of COVID-19. COVID-19 spreads via droplets and aerosols when a person breathes, speaks, coughs or sneezes.

Since transmission is through droplet or airborne particles, specified transmission-based precautions are required for moderate or high-risk patients. Figure 3 illustrates patient management, room, PPE and stand down time requirements.

Figure 2: Patient screening for COVID-19

Do you have COVID-19 or are you waiting for a COVID-19 test result?
 Are you required to self-isolate?
 Do you have ANY of the following symptoms now, or in the last 14 days?

 Fever, cough, shortness of breath
 Muscle aches, loss of smell, sore throat
 Generally feeling unwell with no other likely diagnosis

 YES to ANY

Presentation of a valid My Vaccine Pass

A patient who presents with a negative PCR test result within 72 hours of appointment without any symptoms, regardless of their vaccination status, is considered a low-risk patient

NO

Moderate risk

High risk

YES

Low risk

Figure 3: Patient management, room, PPE and stand down time requirements

Follow the following risk-based precautions. Apply discretion to raise measures depending on the results of patient testing, screening, level of community transmission or other relevant risk factors.

	Low risk of transmission	Moderate risk of transmission	High risk of transmission	
	Patient has no clinical or epidemiological risk factors for COVID-19 and is vaccinated OR	Patient has no known clinical or COVID-19 epidemiological risk factors, but there is no evidence that the patient is fully vaccinated	Patient is confirmed or suspected to have COVID-19, or have clinical and epidemiological risk	
	Patient presents with a negative PCR test result within 72 hours of appointment without any symptoms			
Patient management	 Presentation of a valid My Vaccine Pass Provide medical mask for the patient on entering and exiting the practice 	 Schedule the patient to minimise face-to- face interaction with others (e.g., end-of- session, end-of-day) 	 Schedule the patient to minimise face-to face interaction with others (e.g., end-of- session, end-of-day) 	
	Maintain 2 metre physical distancing where possible and practical	 Provide medical mask for the patient on entering and exiting the practice 	 Provide a medical mask for the patient on entering and exiting the practice 	
		Maintain 2 metre physical distancing where possible and practical	Maintain 2 metre distancing where possible and practical	
Room requirements	Well ventilated room recommended	Well ventilated room recommended	For patients confirmed to be infected:	
	Standard treatment room (where care is normally provided)	Single room, door closed wherever possible	an Airborne Infection Isolation Room (AIIR) is preferred If not available, treat the patient in a single room, well ventilated, door closed and not	
			positively pressured	
			For suspected patients:	
			Well ventilated room recommended	
			single room, door closed	
			Display an alert sign on the closed door	
PPE				
The same of the sa	Standard requirement	Standard requirement	Standard requirement	

Standard requirement⁴ Stand down time from patient leaving the room Stand down time (described in minutes) - can be measured from the time in the unset is last used during the procedure. Stand down time (described in minutes) - can be measured from the time in the unset is last used during the procedure. Stand down time (described in minutes) - can be measured from the time in the unset is last used during the procedure. Standard: 20 - HyE & dental dam used: 10 Standard: 20 - HyE & dental dam used: 10 "When ventilation is poor (e.g., 1-2 ACH) or ACH is unknown, use of high volume suction is considered essential. If this is not possible, and down period of up to 80 minutes should be considered, or an alternative procedure adopted	Stand down time from patient leaving the room Stand down time from patient leaving the room N/A Stand down time from patient leaving the room N/A Stand down time from patient leaving the room N/A Stand down time time the instrument is last used during the procedure. N/A Stand down time (described in minutes) - can be measured from the time the procedure. N/A Stand down time (described in minutes) - can be measured from the time the procedure. N/A Stand down time (described in minutes) - can be measured from the time the procedure. N/A Standard: 20 - Standard: 20 - HVE a dental dam used: 10 Standard: 15 - HVE a dental dam used: 10 N/A Standard: 20 - HVE a dental dam used: 10 Standard: 20 - HVE adental dam used: 10	(1-1)	Ctorodonal no surino no ont				
• Goggles, or • Full face shield At minimum, medical/surgical mask Level IIR At minimum, medical/surgical mask Level IIR P2/N95 ^{5,6} P2/N95 (single use) Air changes per hour (ACH) Stand down time from patient leaving the room N/A Air changes per hour (ACH) Stand down time (described in minutes) - can be measured from the time the instrument is last used during the procedure. *When ventilation is poor (e.g., 1-2 ACH) or ACH is unknown, use of high volume suction is considered essential. If this is not possible, a stand down period of up to 60 minutes should be considered, or an alternative	• Goggles, or • Full face shield At minimum, medical/surgical mask Level IIR P2/N95 ^{5,6} Stand down time from patient leaving the room N/A Air changes per hour (ACH) Stand down time (described in minutes) - can be measured from the time the instrument is last used during the procedure. P2/N95 ^{5,6} P2/N95 (single use) ⁵ P2/N95 (single use) ⁵ Standard: 30 • Standard: 20 • High volume evacuation (HVE) used: 15 • HVE used: 15 • HVE & dental dam used: 10 *When ventilation is poor (e.g., 1-2 ACH) or ACH is unknown, use of high volume suction is considered *When ventilation is poor (e.g., 1-2 ACH) or ACH is unknown, use of high volume suction is considered	9-1-12	Standard requirement	Standard requirement ⁴		Long sleeve, fluid resistant gown	
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⁴ This means the outer protective clothing you normally wear (gown, scrubs, tunics etc.). It can be short sleeve or long sleeve. When long sleeve, change between patients. When short sleeve, change between patients OR alternatively wear a plastic apron over it and change the apron between patients. Ensure proper cleaning of the forearm up to the elbow when performing hand hygiene when short sleeve is worn.

⁵ Fit tested, and fit checked at the time of use. Respiratory protection can also be achieved using: half or full-face reusable respirator with P2 filter, supplied air respirator (SAR), or powered air-purifying respirator (PAPR). If P2/N95 is not available due to supply shortages, you can use KN95 purchased only from reputable medical suppliers – be aware of counterfeit products which will provide insufficient respiratory protection.

⁶ Disposable respirators can be used during a session, up to 4 hours – and must be changed when visibly dirty, damaged, or wet.

Other practice settings

Multi chair clinics

Room and stand down requirements cannot be met for moderate and high-risk patients for more than one patient at a time. This creates a barrier to access care, in particular for patients under 12 years of age who are currently ineligible for vaccination.

To alleviate this, for MODERATE risk patients under 12 years of age for multi chair clinics ONLY:

- a multi chair clinic can be used as long as enough space is maintained in the clinic so that
 patients and their support person are able to maintain a distance of at least 2 metres from others
 when entering and exiting the clinic.
- b. support people are low risk.
- c. stand down times do not apply.
- d. Rooms with up to four chairs, at minimum:
 - investigate options for improving ventilation, and as an additional infection prevention and control measure consider the use of multiple portable HEPA filtration + UV-C units spread throughout the room (with airstream entering filter first). Seek technical advice on the most beneficial use of these units, and any improvements in ventilation that can be made.
- e. Rooms with more than four chairs, at minimum:
 - consult with a ventilation expert to maximise air circulation, direct airflow away from other pods as much as possible, and explore air purification.
 - explore whether dividers (up to 2m in height) to create pods of up to four chairs, are suitable and provide additional protection to others, within your specific environment.

Multi chair clinics treating moderate risk patients over the age of 12, must meet the room and stand down requirements as defined in Figure 3.

Do not treat a high-risk patient in a multi chair clinic unless the room requirement for a high-risk patient can be met.

Dental technology

When dental technicians and clinical dental technicians have face-to-face interaction with a patient, they must apply the patient risk assessment and follow the defined standard and transmission-based precautions. If they only handle dental appliances (cleaned and disinfected), then standard precautions apply.

Acknowledgements

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