

Supplementary standard to the Infection Prevention and Control Practice Standard

Risk management principles for oral health during the
COVID-19 pandemic

23 March 2022

Dental Council
Te Kaunihera Tiaki Niho

COVID-19 risk management principles for oral health

Introduction

This document supplements the Infection Prevention and Control Practice Standard and provides risk management principles for oral health during the COVID-19 pandemic.¹ 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, **across all levels**) and other government, national or regional restrictions. The Council recognises the obligations under Te Tiriti o Waitangi to ensure access to care for Māori.

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 infection control measures commensurate with the level of that risk.

Providing care to patients

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 patient's vaccination status.

Under the [Code of Health and Disability Service Consumers' Rights](#) (the Code), patients have the right to freedom from discrimination, to be treated with respect, and the right to services of an appropriate standard.

The Ministry of Health position, supported by the Council, is that appropriate justification is needed if a health service is proposing to refuse access to services or to not comply with rights under the Code. The onus is on the provider to make that justification.

Justification should be made based on a risk assessment that considers both the provider and the patient, the other patients they see, and the requirements outlined in Clause 3 of the Code which states:

- 1.(3) Every consumer has the right to be provided with services that take into account the needs, values, and beliefs of different cultural, religious, social, and ethnic groups, including the needs, values, and beliefs of Māori.

The Ministry is of the view that in most cases, with vaccinated staff and other precautions in place, that the risks are unlikely to be high enough to provide sufficient justification to not follow the Code. In other words, denying access to health care on the basis of vaccination status is unacceptable.²

¹ Council standards are set under section 118i of the Health Practitioners Competence Assurance Act 2003

² Ministry of Health position statement on pre-consultation testing of unvaccinated individuals in healthcare settings, 25 November 2021. Available on <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-information-health-professionals/covid-19-advice-all-health-professionals#position>

The Dental Council expects oral health practitioners to consider relevant risk factors when determining how best to manage patients during the COVID-19 pandemic, including the patient's vaccination status as part of their medical history.

Following risk assessment, appropriate management may include referral of the patient, or deferral of treatment. Practitioners must follow the requirements in this supplement to the Infection Prevention and Control Practice Standard.

Planning use of infection control measures

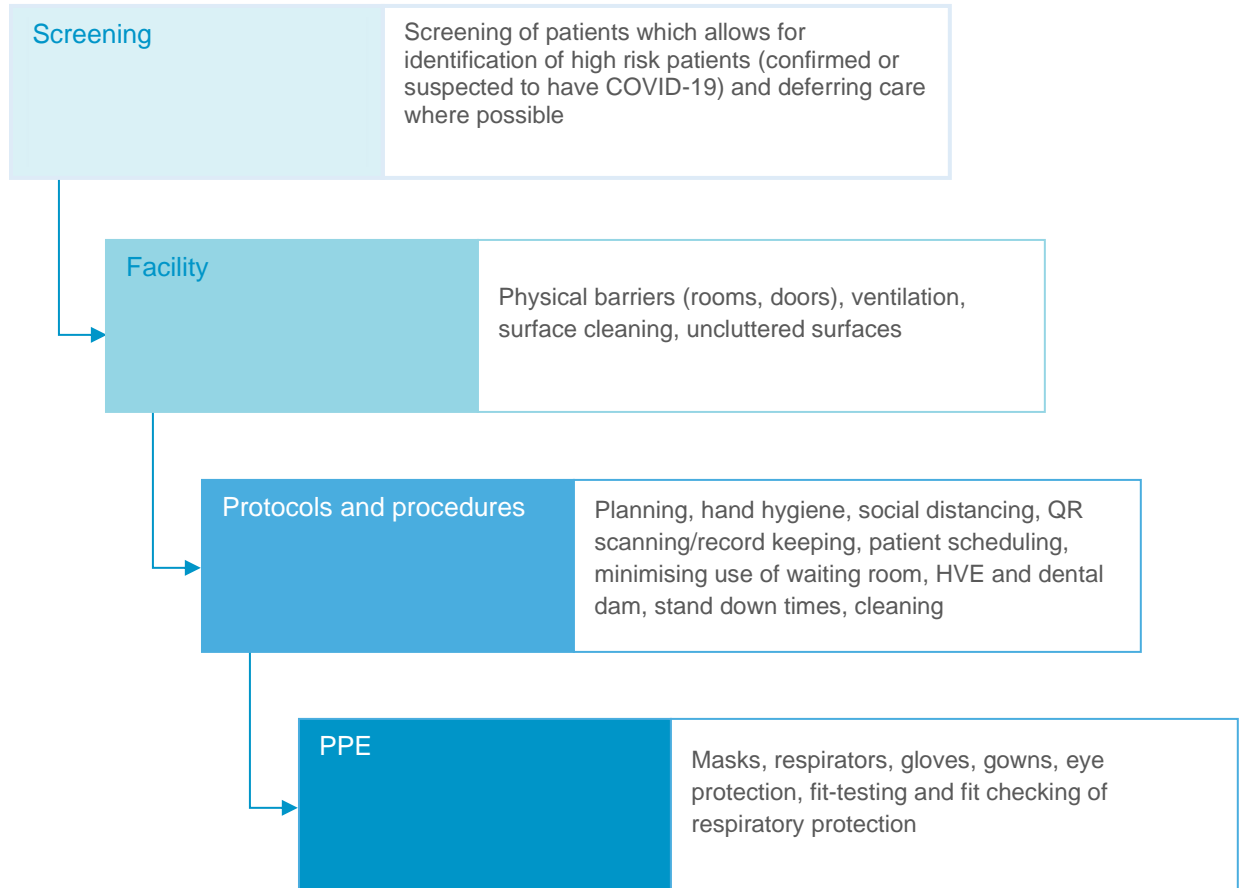
Mitigating the risk of COVID-19 transmission when providing oral health services has specific challenges, due to the closeness of oral health care, duration of interaction, and inability for patients to wear a mask during care.

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.

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 [Ministry of Health](#).

Patients present an unknown risk until clinical and epidemiological risk factors have been assessed.

Figure 2 illustrates screening for COVID-19 and classification of patients as either low or high risk.

Apply discretion to raise or lower patient risk depending on the results of patient screening, level of community transmission or other relevant risk factors. The level of the protection framework that applies in your area indicates the extent and risk of community transmission in the region.

It is not expected that practitioners will require every patient to be tested for COVID-19 and have a negative test result before providing care. The use of approved rapid antigen testing (RAT) for surveillance testing by businesses in New Zealand has been introduced. Practitioners are encouraged to follow advice from the [Ministry of Health](#) on the use of RAT testing.

Facilities and cleaning

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. 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 high-risk patients.³

Particular consideration should be given to appropriate reprocessing procedures for relative analgesia equipment (for example nasal hoods, circuit tubing, gauge) after use; including steam sterilisation.

Ventilation and air purification recommendations

The Council strongly recommends dental practices 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 rates with increased air change rates to eliminate stagnant areas.⁴
- 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 to encourage a small negative pressure within treatment areas, thereby ensuring airflows can be managed to flow from clean areas to treatment areas before being safely exhausted to atmosphere.
- The Council does not consider that all treatment areas need to meet the more strict requirements of Airborne Infection Isolation Room/negative pressure rooms.
- Additional benefits can be achieved through the use of portable HEPA filtration which could include secondary UV-C treatment to improve air quality⁵, 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.

³ Clean and then disinfect in two separate steps, or if a combined cleaning and disinfecting product is used – apply and wipe surface twice

⁴ 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.

⁵ To be effective, airflow needs to be in direction from HEPA filter to UV-C

- The use of ventilation engineers with installation experience in healthcare settings is strongly recommended.
- For multi-chair facilities: Investigate options for improving ventilation. As an additional infection prevention and control measure, where appropriate consider the use of multiple portable HEPA filtration units which could include secondary UV-C treatment. Seek technical advice on the most beneficial solution for your facility.

Stand down time

Stand down time for confirmed or suspected COVID-19 cases 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 high risk patients. The stand down time applies from when the patient leaves the room, regardless of the procedure(s) performed.

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

For high-risk patients:

- Figure 3 illustrates the stand down requirements. Wait at least 10 minutes into the stand down period before following a 2-step cleaning and disinfecting process.
- 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.

When required under the COVID-19 protection framework - 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.

Consider the scheduling and movement of patients with serious pre-existing health conditions that may make them particularly vulnerable to severe illness from COVID-19. For example: providing care at the start of day, minimise their contact with others.

Limit the number of support people in the treatment area to one. At minimum, the support person must wear 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, especially 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 of COVID-19.

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 high-risk patients. Figure 3 illustrates patient management, room, PPE and stand down time requirements.

Figure 2: Patient screening for COVID-19

1. Do you or any member of your household have COVID-19 or are you waiting for a COVID-19 test result? (not a routine surveillance test result)
2. Are you required to self-isolate?
3. Do you have ANY of the following symptoms now, or in the last 14 days?
 - Fever, acute cough or shortness of breath
 - Muscle aches, loss of smell, sore throat
 - Generally feeling unwell with no other likely diagnosis
4. Do you have any other reason to think that you are at risk of having COVID-19?

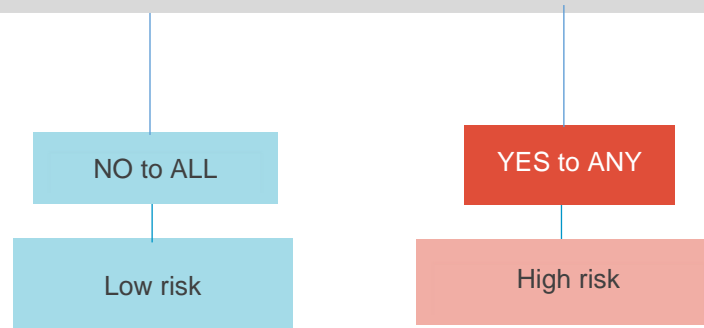






Figure 3: Patient management, room, PPE and stand down time requirements

Follow the risk-based precautions set out in the table below. Apply discretion to raise or lower measures depending on the results of patient screening, level of community transmission or other relevant risk factors. The level of the protection framework that applies in your area indicates the extent and risk of community transmission in the region.

The table below represents minimum standards. Based on your assessment of risk - you may choose to use precautions that offer a higher level of protection.

	Low risk of transmission Patient has no clinical or epidemiological risk factors for COVID-19	High risk of transmission Patient is confirmed or suspected to have COVID-19
Patient management 	<ul style="list-style-type: none"> • Patient's own face covering or a medical mask on entering and exiting the practice • Maintain 2 metre physical distancing where possible and practical. This is of particular importance within multi chair clinics 	<ul style="list-style-type: none"> • Defer care where possible until the patient is well • If care cannot be deferred, schedule the patient to minimise face-to face interaction with others (e.g., end-of-session, end-of-day) • Provide a medical mask for the patient on entering and exiting the practice • Maintain 2 metre distancing where possible and practical
Room requirements 	<ul style="list-style-type: none"> • Well ventilated room recommended • Standard treatment room (where care is normally provided) 	<p>For patients confirmed to be infected:</p> <ul style="list-style-type: none"> • An Airborne Infection Isolation Room (AIIR) is preferred <p>If not available, treat the patient in a single room, well ventilated, door closed and not positively pressured</p> <p>For suspected patients:</p> <ul style="list-style-type: none"> • Well ventilated room • Single room, door closed • Display an alert sign on the closed door
PPE 	Standard requirement	Standard requirement

	Standard requirement ⁶	Long sleeve, fluid resistant gown										
	<ul style="list-style-type: none"> • Safety glasses that have side protection, or • Goggles, or • Full face shield 	<ul style="list-style-type: none"> • Safety glasses that have side protection, or • Goggles, or • Full face shield 										
	At minimum, medical/surgical mask (type IIR or level 2) ⁷	P2/N95 (single use) ⁸										
<p>Stand down time from when patient leaves the room</p> 	N/A	<table border="1"> <tr> <th colspan="2" data-bbox="1226 589 1957 630">Air changes per hour (ACH)</th> </tr> <tr> <td colspan="2" data-bbox="1226 634 1957 695">Stand down time (described in minutes) from when the patient leaves the room</td> </tr> <tr> <td data-bbox="1226 699 1444 816">1-5 or unknown</td> <td data-bbox="1451 699 1957 816"> <ul style="list-style-type: none"> • Standard: 30 • High volume evacuation (HVE) used: 25 • HVE & dental dam used: 20 </td> </tr> <tr> <td data-bbox="1226 821 1444 938">6-9</td> <td data-bbox="1451 821 1957 938"> <ul style="list-style-type: none"> • Standard: 20 • HVE used: 15 • HVE & dental dam used: 10 </td> </tr> <tr> <td data-bbox="1226 943 1444 1019">≥ 10</td> <td data-bbox="1451 943 1957 1019"> <ul style="list-style-type: none"> • Standard: 15 • HVE and/or dental dam used: 10 </td> </tr> </table>	Air changes per hour (ACH)		Stand down time (described in minutes) from when the patient leaves the room		1-5 or unknown	<ul style="list-style-type: none"> • Standard: 30 • High volume evacuation (HVE) used: 25 • HVE & dental dam used: 20 	6-9	<ul style="list-style-type: none"> • Standard: 20 • HVE used: 15 • HVE & dental dam used: 10 	≥ 10	<ul style="list-style-type: none"> • Standard: 15 • HVE and/or dental dam used: 10
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⁶ This means the outer protective clothing you normally wear (gown, scrubs, tunics etc.). Ensure proper cleaning of the forearm up to the elbow when performing hand hygiene when short sleeve is worn.

⁷ If you choose to use a P2/N95 for low-risk patients, disposable respirators can be used during a session, up to 4 hours – but must be changed within a session when visibly dirty, damaged, or wet.

⁸ 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.

Acknowledgements

The Council acknowledges the following documents, clinical and expert advice that informed and guided the Council in establishing this supplementary standard.

NHS England and NHS Improvement. (2021, November 24). COVID-19: Infection prevention and control for dental care services (Autumn/Winter 2021/22)

<https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-infection-prevention-and-control-dental-appendix>

UK Public Health England Guidance. (2021, September 29). *COVID-19: Infection prevention and control dental appendix*. <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19-infection-prevention-and-control-dental-appendix>

SDCEP Scottish Dental Clinical Effectiveness Programme. (2020, September 25). *Mitigation of aerosol generating procedures in dentistry. A rapid review*.

SDCEP Scottish Dental Clinical Effectiveness Programme. (2021, April 19). *Mitigation of aerosol generating procedures in dentistry. A rapid review. Version 1.2*. <https://www.sdcep.org.uk/wp-content/uploads/2021/04/SDCEP-Mitigation-of-AGPs-in-Dentistry-Rapid-Review-v1.2-April-2021.pdf>

Centers for Disease Control and Prevention (CDC). (2003). *Guidelines for environmental infection control in healthcare facilities* [Air | Background | Environmental Guidelines | Guidelines Library | Infection Control | CDC](#)

Australian Dental Association. (2021, October 22). *Risk Management principles for dentistry. During the COVID-19 pandemic* <https://www.ada.org.au/Covid-19-Portal/Dental-Professionals>

Dental Council NZ clinical advisory group

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