Transmissible Major Viral Infections Practice Standard

Including Introduction
Foreword

Standards Framework for Oral Health Practitioners

The Dental Council (‘the Council’) is legally required to set standards of clinical competence, cultural competence and ethical conduct to be observed by all registered oral health practitioners (‘practitioners’) \(^1\). This means that compliance to the Council’s standards by practitioners is mandatory.

The Council has established a Standards Framework which defines the ethical principles, professional standards and practice standards that govern all practitioners. Collectively, the ethical principles, professional standards and practice standards form the Standards Framework, and define the standards of ethical conduct, clinical and cultural competence that all practitioners must meet.

There are five ethical principles that practitioners must adhere to at all times.

Practitioners must:

- put patient interests’ first
- ensure safe practice
- communicate effectively
- provide good care
- maintain public trust and confidence.

Each of the five ethical principles is supported by a number of professional standards which articulate what a practitioner must do to ensure they achieve the ethical principles. The professional standards are, in turn, supported by practice standards which relate to specific areas of practice that require more detailed standards to enable practitioners to meet the professional standards and ethical principles.

The TMVI standard is a practice standard.

A copy of the Standards Framework is available on the Dental Council’s website.

Compliance

The standards set by the Council are minimum standards which are used by the Council, the public of New Zealand, competence review committees, professional conduct committees, the Health and Disability Commissioner, the Health Practitioners Disciplinary Tribunal and the courts, to measure the competence, performance and conduct of practitioners.

A failure to meet the Council’s standards and adhere to the ethical principles could result in Dental Council involvement and may impact on the practitioner’s practice.

Sometimes factors outside of a practitioner’s control may affect whether or not, or how, they can meet the standards. In such circumstances, practitioners are expected to adhere to the ethical principles, demonstrate insight and use their professional judgement to determine appropriate behaviour.

Practitioners must be able to justify their behaviour when this is contrary to the standards, and document their reasons.

\(^1\) Section 118(i) of the Health Practitioners Competence Assurance Act 2003
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**Introduction**

This introduction provides an explanation of the reasons for, and commentary upon, the Transmissible Major Viral Infections practice standard ('TMVI practice standard'). The introduction does not form part of the TMVI practice standard.

**Duty of Care**

The Health and Disability Commissioner Code of Health and Disability Services Consumers’ Rights Regulations 1996 (‘the code’) provides that every consumer has the right to have services provided with reasonable care and skill which comply with legal, professional, ethical, and other relevant standards. The code further provides that every consumer has the right to information that a reasonable consumer, in that consumer’s circumstances, needs to make an informed choice or give informed consent; and to honest and accurate answers to questions relating to the service.

In accordance with the ethical principles of the Standards Framework, oral health practitioners (‘practitioners’) have a responsibility to put their patients’ interests first, and to protect those interests by practising safely, providing good care and communicating effectively.

A key element of safe practice is preventing the transmission of hepatitis B virus (‘HBV’), hepatitis C virus (‘HCV’) and human immunodeficiency virus (‘HIV’) to patients. HBV, HCV and HIV are collectively referred to as Transmissible Major Viral Infections (‘TMVIs’).

**Purpose**

The purpose of this practice standard is to set minimum standards that must be observed by all practitioners, to prevent the transmission of TMVIs specifically from practitioner to patient.

**Exposure-prone procedures**

The greatest risk of transmission of TMVIs to patients within oral health practice occurs when an infected practitioner performs exposure-prone procedures.

Exposure–prone procedures (‘EPPs’) can be defined as:

- The simultaneous presence of a health-care provider’s hands and a needle or other sharp instrument or object (e.g. bone spicule or tooth), in a poorly visualised or highly confined anatomic site, including the mouth.

EPPs present a risk of injury to the practitioner’s hands that may result in the exposure of the patient’s tissues to the blood of the practitioner.

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2 Right 4(1) Health and Disability Commissioner Code of Health and Disability Services Consumers’ Rights Regulations 1996
3 Right 4(2) Health and Disability Commissioner Code of Health and Disability Services Consumers’ Rights Regulations 1996
4 Right 6(2) Health and Disability Commissioner Code of Health and Disability Services Consumers’ Rights Regulations 1996
5 Right 6(3) Health and Disability Commissioner Code of Health and Disability Services Consumers’ Rights Regulations 1996
Infection prevention and control practices

Current medical and scientific literature shows that the most effective means of preventing TMVI transmission in health care settings is by strict adherence to standard precautions and established infection prevention and control practices⁶, including the appropriate use of barrier precautions and the safe handling of sharp items. Standard precautions decrease the opportunity of direct exposure to blood and body fluids for both practitioners and patients.

HBV Vaccination

Immunisation is a key means of protection against HBV. The Dental Council (‘the Council’) strongly recommends that practitioners be vaccinated for HBV if testing confirms they are not already immune and not infected; and re-tested to confirm immunity following vaccination.

Evidence of immunity to HBV infection is demonstrated by the presence of antibodies to the HBV surface antigen (Anti-HBs) at a level of >10IU/L at some point after infection and/or vaccination, and absence of the HBV surface antigen (HBsAg).

If vaccination does not successfully establish immunity, it is recommended that practitioners be referred for specialist advice, perhaps for consideration of alternative methods of vaccine administration, and be offered HBV specific immunoglobulin following recognised exposure to HBV infection.

TMVI infected practitioners

If infection with a TMVI is confirmed, the Council recommends that a practitioner is under the regular care of a suitably qualified specialist medical practitioner/s, such as a specialist infectious diseases physician, specialist gastroenterologist, hepatologist or similar.

TMVI panel

The Council has a TMVI panel, and all TMVI infected practitioner cases and infected registration applicants’ cases will be referred by the Registrar of the Council to the TMVI panel.

The TMVI panel will consider the case and develop an overall management plan including testing and reporting requirements, a determination of when the practitioner can recommence performing EPPs; and if required, may make orders placing limitations on practice.

The objective of the TMVI panel is to work collaboratively with the practitioner’s specialist medical practitioner in supporting their return to health. It is expected that with treatment the majority of TMVI infected practitioners could achieve adequate viral suppression⁷, or will be cured⁸, to allow them to recommence performing EPPs.

The TMVI panel membership comprises of the Council chair, a Council laymember, and two medical specialists with expertise in the management of TMVi's.

The TMVI panel operates under delegation of the Council for the management of practitioner TMVI cases, and acts in an advisory capacity on the fitness for registration of applicants seeking registration or restoration to the Register.

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⁶ Set out in the Council’s Practice Standard on Control of Cross Infection in Dental Practice
⁷ For HBV and HIV
⁸ For HCV
Students and non-registered staff

Recommendations for students\(^9\), and non-registered staff assisting with clinical activities, are made with the primary aim of protecting the public.

**Initial testing:**

The Council strongly recommends that students are tested to determine their HCV, HIV and HBV\(^{10}\) status before commencing any Council–accredited programme of study to ensure patient safety; infection with these viruses may affect a practitioner’s ability to register and practise in the future.

The Council strongly recommends that non-registered staff members are tested when they commence employment to determine their HBV status and whether vaccination against HBV is indicated.

**HBV vaccination:**

It is strongly recommended that all students and non-registered staff members are vaccinated for HBV if not already immune and not infected when tested, and re-tested to confirm immunity following vaccination.

**Following exposure:**

The Council strongly recommends that students and non-registered staff members who may have been exposed to HBV, HCV or HIV are tested to determine their serological status and obtain medical advice regarding appropriate post-exposure prophylaxis and follow-up testing. This applies even when immunity to HBV has previously been determined.

Exposure may result through personal risk behaviour, non-occupational exposure to potentially infected body fluids (e.g. accident scene) or occupational accidents (e.g. contaminated sharps injury).

**Patient exposure to the blood of a student or non-registered practitioner:**

If a student or non-registered staff member sustains an injury resulting in exposure of a patient’s tissues to the blood of the student or staff member (typically during an EPP), the procedures in standard 18 of the practice standard should be followed, as applicable.

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\(^9\) Students enrolled in Dental Council–accredited programmes of study

\(^{10}\) If already immune to HBV, testing for HBV is not necessary
Transmissible Major Viral Infections (TMVI) Practice Standard
Initial testing for HBV, HCV and HIV

1. When applying for registration as an oral health practitioner you must be tested to determine your serological status in relation to the hepatitis C virus (‘HCV’) and human immunodeficiency virus (‘HIV’). You must also either supply: evidence of immunity to the hepatitis B virus (‘HBV’) as required by the Dental Council (‘the Council’); or undergo testing to determine serological status in relation to HBV.

2. Further testing for HBV, HCV and HIV infection is only necessary if required by the Council, or recommended by a medical practitioner.

Following exposure

3. Following exposure to HBV, HCV or HIV you must:
   - be tested promptly to determine your serological status. This applies even when immunity to HBV has previously been determined. Exposure may result through personal risk behaviour, non-occupational exposure to potentially infected body fluids (e.g. accident scene) or occupational accidents (e.g. contaminated sharps injury)
   - promptly obtain medical advice regarding appropriate post-exposure prophylaxis which, if deemed necessary by a medical practitioner, is ideally administered within 72 hours of exposure to HBV, and as soon as possible following exposure to HIV. Post-exposure prophylaxis is especially important if you do not have immunity to HBV. There is no post-exposure prophylactic regime following exposure to HCV at this time
   - undergo required follow-up testing.

4. In the event you sustain a contaminated sharps injury resulting in exposure of the patient’s tissues to your blood (typically while performing an EPP), you must follow the applicable procedure in standard 18.

Positive test results for HBV, HCV and HIV

5. In the event of a positive test result which indicates HBV, HCV or HIV infection:
   - stop performing EPPs immediately and do not recommence performing EPPs until permitted by the TMVI panel or the Council in writing
   - promptly advise the Registrar of the Council in writing
   - consult a medical practitioner for determination of further tests and referral to a specialist medical practitioner/s for ongoing care
   - undergo further testing to confirm infection and determine viral load, as the measure of infectivity

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11 Collectively referred to as Transmissible Major Viral Infections (“TMVIs”)
• submit further test results and related medical reports to the Registrar of the Council. If infection with HBV, HCV or HIV is confirmed, your case will be referred to the Council’s TMVI panel.

6. If you are a TMVI infected practitioner, or have a test result indicating HBV, HCV or HIV infection, you must not perform EPPs unless you are permitted in writing to do so by the TMVI panel or the Council.

7. Appendix A of the practice standard provides a summary of the process to be followed in the event of a positive test result for HBV, HCV or HIV.

Further testing

HBV

8. If you test positively for HBsAg and/or HBeAg you must undergo an HBV DNA test, to confirm active infection and measure viral load.

9. If the HBV viral load is greater than 1000 IU/ml, this is considered infectious.

10. If the HBV viral load is consistently maintained at a level lower than 1000 IU/ml, the TMVI panel may permit you to recommence performing EPPs.

HCV

11. If you test positively for anti-HCV you must undergo an HCV RNA test to confirm your infectious status. Anti-HCV (hepatitis C virus antibodies) do not neutralise the hepatitis C virus and do not provide protection against this viral infection.

12. A positive test result for HCV RNA indicates infected status.

13. The TMVI panel may permit you to recommence performing EPPs if you are HCV RNA negative (non-infected). It is expected that the majority of HCV infected practitioners will be cured with treatment. If you have not achieved a cure, you must not perform EPPs unless written approval has been given by the TMVI panel or the Council.

HIV

14. If you test positively for the presence of HIV antibodies and/or HIV antigen you must undergo a western blot and/or a HIV RNA test to confirm infection and an HIV RNA test to determine viral load.

15. You must have consistent high level suppression of HIV RNA, with the overwhelming majority of blood test results showing an undetectable level of HIV RNA to perform exposure-prone procedures. The undetectable level of HIV RNA is defined by the lowest detectable level of the assay used.
Notification obligations

16. In accordance with section 45 of the Health Practitioners Competence Assurance Act 2003:

- If you know or suspect you are infected with HBV, HCV or HIV you must promptly inform the Registrar of the Council of all the circumstances, in writing.

- If you have reason to believe an HBV, HCV or HIV infected oral health practitioner is not complying with their obligations under the practice standard or any Council requirements, you must promptly give the Registrar of the Council written notice of all the circumstances. The same obligation applies to any organisation that supplies health services, any employer of the infected practitioner, or any medical officer of health.

- If you have reasonable grounds to believe a registered oral health practitioner is infected with HBV, HCV or HIV, and that the infected practitioner is unable to perform the functions required of them because of that infection, you must promptly give the Registrar of the Council written notice of all the circumstances. The same obligation applies to any organisation that supplies health services, any employer of the infected practitioner, or any medical officer of health.

17. You must inform patients of your HBV, HCV or HIV status if you are:

- TMVI infected and sustain an injury resulting in exposure of the patient's tissues to your blood (typically while performing an EPP). Follow the procedure prescribed in standard 18A of the practice standard.

- Not known to be infected with a TMVI, however subsequent to an injury resulting in exposure of the patient's tissues to your blood, you have a positive test result from the test taken at the time of injury. Follow the procedure prescribed in standard 18B of the practice standard.
Patients exposed to the blood of a practitioner

18. In the event you sustain an injury resulting in exposure of the patient’s tissues to your blood, (typically while performing an EPP) you must follow the applicable procedure below:

<table>
<thead>
<tr>
<th>A. When you know you are TMVI infected, you must:</th>
<th>B. When you are not known to be infected with a TMVI, you must:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stop work immediately and apply first aid procedures to the wound</td>
<td>• Stop work immediately and apply first aid procedures to the wound</td>
</tr>
<tr>
<td>• Inform the patient of the incident, and your infected status immediately</td>
<td>• Inform the patient of the incident</td>
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<tr>
<td>• Inform the TMVI panel immediately and follow their advice</td>
<td>• Recommend the patient seek immediate advice from a specialist medical practitioner/s regarding testing to determine their serological status in relation to HBV, HCV and HIV, appropriate post-exposure prophylaxis, and follow up requirements; this advice may be sought from the Infectious Diseases Team (or Emergency Department) of their regional hospital</td>
</tr>
<tr>
<td>• Inform the patient that he/she will be contacted by a medical practitioner from the Council’s TMVI panel who will explain the risks associated with the incident and offer the appropriate medical advice; and</td>
<td>• Undergo testing for HBV, HCV and HIV to determine your serological status at the time of injury</td>
</tr>
<tr>
<td>• Document the incident:</td>
<td>• Document the incident:</td>
</tr>
<tr>
<td>o Name and details of the patient</td>
<td>o Name and details of the patient</td>
</tr>
<tr>
<td>o The name of the injured practitioner</td>
<td>o The name of the injured practitioner</td>
</tr>
<tr>
<td>o Date and time of the exposure</td>
<td>o Date and time of the exposure</td>
</tr>
<tr>
<td>o Nature of the incident, and how it occurred</td>
<td>o Nature of the incident, and how it occurred</td>
</tr>
<tr>
<td>o Actions taken; including who was informed of the incident and your infected status, and when</td>
<td>o Actions taken; including who was informed and when</td>
</tr>
<tr>
<td>• Complete relevant ACC forms</td>
<td>o The patient’s consent, or refusal, for medical advice; and</td>
</tr>
<tr>
<td>If the sharps item <strong>was first contaminated by contact with the patient</strong>, you must additionally:</td>
<td>• Complete relevant ACC forms</td>
</tr>
<tr>
<td>• Inform the TMVI panel that the injury sustained was from an item that was first contaminated by contact with the patient</td>
<td>If the sharps item <strong>was first contaminated by contact with the patient</strong>, you must additionally:</td>
</tr>
<tr>
<td></td>
<td>• Promptly seek specialist medical advice regarding the appropriateness of post-exposure prophylaxis for yourself</td>
</tr>
<tr>
<td></td>
<td>• Undergo follow up testing at 1 month, 3 months and 6 months following exposure</td>
</tr>
</tbody>
</table>

If you have a **positive test result** from the test taken at the time of injury, you must:

- immediately stop performing EPPs
- immediately inform the patient of your positive test result
- follow the process in Appendix A of the practice standard

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12 A list of regional hospital contact numbers is available on the Dental Council website
Appendix A: Summary of the process following positive test results for HBV, HCV and HIV

What constitutes a positive test result?
- **HBV**
  - +ve for HBsAg and/or HBeAg
- **HCV**
  - +ve for anti-HCV
- **HIV**
  - +ve for HIV antibodies and/or HIV antigen

If you have a positive test result:
- Stop performing exposure-prone procedures (EPPs) immediately and do not recommence performing EPPs until permitted by the TMVI panel or the Dental Council in writing
- Promptly advise the Registrar of the Council in writing
- Consult a medical practitioner for determination of further tests and referral to a specialist medical practitioner for ongoing care

- Undergo further testing to confirm infection and determine viral load. For the relevant virus this must include:
  - HBV: HBV DNA
  - HCV: HCV RNA
  - HIV: HIV RNA (+/- western blot)

- Submit results of further tests and related medical reports to the Registrar of the Council
  - If infection is confirmed, your case will be referred to the TMVI panel

The TMVI panel:
- Will develop an overall management plan including testing and reporting requirements and a determination of when you can recommence performing EPPs
- May make orders placing limitations on your practice, if required
- Will work collaboratively with your specialist medical practitioner in supporting your return to health and to practice, when possible

Viral load levels that the TMVI panel may consider safe for you to perform EPPs:
- **HBV**
  - HBV DNA level maintained lower than 1000IU/ml
- **HCV**
  - HCV RNA negative ‘(non-infected status)’
- **HIV**
  - Majority of HIV RNA tests undetectable as defined by assay

Do not recommence performing EPPs until permitted in writing

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1 Individual consideration will be given to practitioners who have not achieved a cure of HCV infection