Australasian College
for Emergency Medicine

Statement on Exposure Prone Procedures (Clinician to Patient Transmission)

Document review

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V1	Nov-2020	Approved by Council of Advocacy, Practice and Partnerships
V2	Apr-2026	Minor wording changes, general format updates, and addition of Aotearoa New Zealand context

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1. Purpose and Scope

This document outlines the position of the Australasian College for Emergency Medicine (ACEM) on the role of routine testing of emergency department (ED) healthcare workers (HCWs) in the prevention of potential transmission of blood borne viruses (BBVs) to patients if exposure prone procedures (EPPs) are performed.

This statement applies to ACEM members, trainees and all healthcare workers who work in EDs across Australia and Aotearoa New Zealand.

2. Definitions

Exposure Prone Procedures

Australia

EPPs are procedures where there is a risk of HCW injury, resulting in exposure of the patient's open tissues to the blood of the HCW. These procedures include those where the HCW's hands (whether gloved or not) may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth) inside a patient's open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times. [1]

Aotearoa New Zealand

EPPs are characterised by the potential for direct contact between the skin (usually finger or thumb of the health care worker) and sharp surgical instruments or needles in body cavities or in poorly visualised or confined body sites including the mouth. [2]

Standard Universal Precautions

Standard precautions are work practices required to achieve a basic level of infection prevention and control, which should be performed universally for all patients, regardless of perceived infectious status. Such practices include hand hygiene, use of PPE, safe disposal of sharps, aseptic 'non-touch' techniques for invasive procedures, appropriate reprocessing of reusable instruments/equipment, environmental cleaning, waste management, respiratory hygiene and cough etiquette, and the appropriate handling of linen. [3]

3. Background

Exposure prone procedures carry a potential risk for transmission of BBV to both HCWs and patients. The risk comes from:

1. HCWs becoming infected with BBV from affected patients
2. HCWs who have a BBV and transmit the virus to a patient

3.1 Australia

In response to the second of these risks the Australian Health Practitioner Regulation Agency (Ahpra) has supported a Communicable Diseases Network of Australia (CDNA) recommendation that all HCWs who undertake EPPs should be tested for BBVs at least once every three years. [1] As part of its registration (or re-registration) requirements, Ahpra requires a mandatory declaration by individuals on whether they perform EPPs in their role. [4]

The CDNA suggests a number of EPPs, listed immediately below, as being pertinent to emergency/trauma care. [1] It is important to note that, in emergency/trauma situations, there is a possible risk that non-EPPs may escalate into an EPP that is not listed. Consideration of the EPP definition in Section 2 is recommended.

- Open head injuries
- Facial and jaw fracture reductions
- Extensive soft tissue trauma
- Rectal examination in the presence of suspected pelvic fracture
- Deep suturing to arrest haemorrhage
- Internal cardiac massage

3.2 Aotearoa New Zealand

The Health Regulatory Authorities of New Zealand (HRANZ) and the Medical Council of New Zealand recommend in their joint guidelines [2] that HCWs who perform EPPs must know their hepatitis C virus (HCV) and human immunodeficiency virus (HIV) status, but that mandatory screening of HCWs for HCV or HIV is not advised. Mandatory screening of HCWs for hepatitis B virus (HBV) is recommended for those HCWs who perform, or may perform, EPPs. Frequency of screening should include consideration of the HCW's level of immunity and the risk of the activities undertaken by the HCW.

4. ACEM Position

- ACEM endorses that all HCWs working in EDs should practice in a way that ensures patients are not exposed to BBVs. The most effective means of preventing BBV transmission in health care settings is by strict adherence to standard (universal) precautions and established infection control practices. [7]
- While EPPs are noted to increase the risk of BBV transmission between HCWs and patients, EPPs are rarely performed in EDs. There have been no documented cases of ED HCW-to-patient transmission.
- Mandatory self-declarations by individual HCWs on whether they perform EPPs (for example in support of registration requirements) should be informed by national guidance and the further context provided in this statement.
- ACEM does not recommend regular routine testing of all ED HCWs for BBVs as an efficient strategy for mitigating the risk of transmission to patients. In the present state of medical knowledge this is not justified by the very low risk of transmission from HCWs to patients.

5. Discussion

ACEM notes national recommendations and suggests a number of further considerations in their adoption.

5.1 EPPs are rarely performed in EDs

With regards to the CDNA list of emergency/trauma EPPs, it is considered that these procedures do not occur commonly in clinical practice and that not all HCWs in EDs will perform these procedures. As most HCWs in EDs will not be performing these EPPs, the overall risk of exposure to BBV from these EPPs will be low.

5.2 HCW to patient transmission is low

The risk of BBV transmission from HCW-to-patient is stated as [1]:

Blood borne virus	Risk of infected HCW to patient transmission	Risk of infected patient transmission to HCW
Hepatitis B	0.2–13.19%	1–62%*
Hepatitis C	0.04–4.35%	0–7%
HIV	0.0000024–0.000024%	0.3%

* Variability in the transmission risk of hepatitis B is related to Hepatitis B e-antigen status.

A review of the results of published international lookback investigations of HCW-to-patient transmissions between 1991 and 2015 indicate no documented cases of transmission involving ED HCWs. [1]

5.3 The impact of testing on individual clinicians is unnecessarily burdensome with no proven benefit

Testing has a significant impact on each individual clinician given the benefit to risk ratio is very low. This impact includes:

- Risks faced due to having blood taken for testing include exposure to bloodborne viruses through contaminated work surfaces or equipment; infection at blood sampling site; pain at blood sampling site; haematoma or thrombus; extensive bleeding; nerve damage; fainting; and allergic reactions. [5]
- Risks of repetitive testing due to a false positive or equivocal result.
- The psychological burden of routine and repetitive testing on some individuals, especially when false positive or equivocal results are involved, should not be underestimated.

5.4 A routine recurring testing regime has a significant economic and environmental impact with no proven benefit

A search of the literature suggests that there is no evidence that mandatory regular testing for BBV affects outcomes to the HCW or to the patient. In addition to the individual cost of each mandatory test undertaken (on a recurring basis), there is the cost and environmental impact of the consumables [6]; as well as the time-costs relating to the referring doctor, the phlebotomist, and the follow-up of results. Mandatory testing is likely to have a significant economic impact with an extremely low risk to benefit ratio from an individual and health system perspective.

Any HCW who has been exposed to a BBV, either occupationally or socially, should seek out testing. All HCWs have the right to access confidential testing, counselling, support and treatment and with the same right to privacy and confidentiality as anyone else. Clearance for a HCW with a BBV to carry out EPPs is the responsibility of the HCW's treating doctor, who must be a person with recognised expertise in the treatment of BBVs. Registered health practitioners living with a BBV who perform EPPs can continue to practise their profession, without the need to notify registering authorities, if they comply with the relevant regulations/ guidelines and the advice of their treating doctor.

6. References

1. Communicable Diseases Network Australia. Australian National Guidelines for the Management of Healthcare Workers Living with Blood Borne Viruses and Healthcare Workers who Perform Exposure Prone Procedures at Risk of Exposure to Blood Borne Viruses. CDNA, Canberra, 2019.
2. Health Regulatory Authorities of New Zealand and Medical Council of New Zealand. Joint Guidelines for Registered Health Care Workers on Transmissible Major Viral Infections. HRANZ/MCNZ, Wellington, 2005.
3. National Health and Medical Research Council, 2019. Australian Guidelines for the Prevention and Control of Infection in Healthcare. Australian Government, Canberra, 2019.
4. Medical Board of Australia and Australian Health Practitioner Regulation Agency. Guideline on Registered Health Practitioners and Students in Relation to Blood Borne Viruses. Medical Board of Australia/AHPRA, Melbourne, 2020.
5. World Health Organization. Guidelines on Drawing Blood: best practices in phlebotomy. WHO, Geneva, 2010.
6. Devis L, Closset M, Degosserie J, et al. Revisiting the Environmental Impact of Inappropriate Clinical Laboratory Testing: A Comprehensive Overview of Sustainability, Economic, and Quality of Care Outcomes. J Appl Lab Med. 2025 Jan 3;10(1):113-129.
7. Australasian College for Emergency Medicine. Reducing the Spread of Communicable Infectious Disease in the Emergency Department. ACEM, Melbourne, 2023.