Australasian College for Emergency Medicine

Position Statement

Exposure Prone Procedures

This document outlines the position of the Australasian College for Emergency Medicine (ACEM) on the role of routine testing of emergency department healthcare workers in the prevention of potential transmission of blood borne viruses in the event that exposure prone procedures are performed.

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

ACEM endorses the need for all emergency department healthcare workers (HCW) to practice safely and ensure that patients are not exposed to blood borne viruses (BBV)s.

While EPPs are noted to increase the risk of BBV transmission between HCWs and patients, EPPs are rarely performed in EDs.

ACEM does not recommend regular routine testing of all ED healthcare workers for BBVs as an efficient strategy in mitigating this risk.

August 2021

Document Review

Timeframe for review:	every three years, or earlier if required.
Document authorisation:	Council of Advocacy, Practice and Partnerships
Document implementation:	General Manager, Research and Policy
Document maintenance:	General Manager, Governance and Standards

Revision History

Version	Date	Pages revised / Brief Explanation of Revision
1	Nov 2020	Approved by Council of Advocacy, Practice and Partnerships
2	Aug 2021	Correction made

Definitions

Non-Exposure Prone Procedures

Non-exposure Prone Procedures (non-EPPs) are procedures where the hands and fingers of the healthcare worker (HCW) are visible and outside of the body at all times and procedures or internal examinations that do not involve possible injury to the HCW's hands by sharp instruments and /or tissues, provided routine infection prevention and control procedures adhered to at all times. [1]

Exposure Prone Procedures

Exposure Prone Procedures (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]

Background

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

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

In response to these concerns the Australian Health Practitioner Regulation Agency (AHPRA) and the Communicable Diseases Network of Australia (CDNA) have recommended that all HCWs who undertake EPPs should be tested for BBVs at least once every three years. [1,2] It should be noted that this recommendation reduces the risk of transmission from HCWs to patients but not from patients to HCWs.

The CDNA suggests the following list of EPPs as pertinent to emergency/trauma care [1]:

- 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

Additionally, it is noted that in emergency/trauma situations there is a possible risk that previously non-EPPs may escalate into an EPP.

Discussion

ACEM notes the recommendations of AHPRA but suggests below a number of factors for consideration in their adoption.

1.1 EPPs are rarely performed in EDs

With regards to the 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.

1.2 HCW to patient transmission is low

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

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

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

A review of the results of published lookback investigations of HCW to patient transmissions indicate that there have been no documented cases of transmission involving ED HCWs. [2]

1.3 With the absence of proven benefit, the impact of additional testing on individual clinicians is unnecessarily burdensome

There is a significant impact to 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; vasovagal reaction syncope, fainting; and allergic reactions. [3]
- 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.

1.4 A three-year routine testing regime has a significant economic impact on the health system for 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. Apart from the individual cost of each mandatory test done on a recurrent basis, there is the cost of the consumables, the referring doctor's time, the phlebotomy time, and the follow-up of the result time. 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 as anyone else.

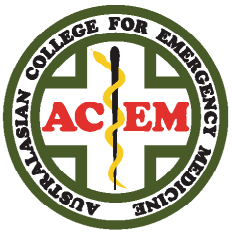
Clearance for an HCW with a BBV to carry out EPPs is the responsibility of the HCW's treating doctor, who must be a person with recognised expertise in the treatment of BBVs.

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 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.

3 World Health Organization. *Guidelines on Drawing Blood: best practices in phlebotomy. WHO, Geneva, 2010.and psychiatric inpatient facilities: what are the service implications?*. Australas Psychiatry. 2019;27(1):14-7.



Australasian College for Emergency Medicine
34 Jeffcott St
West Melbourne VIC 3003
Australia
+61 3 9320 0444
admin@acem.org.au