

BDJ Team CPD



CPD questions September 2020

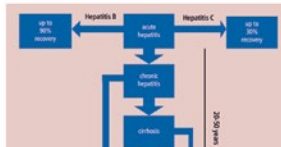
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Article: The infected oral healthcare worker



Table 1 Examples of exposure and non-exposure prone dental procedures as outlined by the United Kingdom Advisory Panel for Healthcare Workers Infected with Bloodborne Viruses

Non-exposure prone procedures	Exposure prone procedures
Removal of orthodontic appliances including impressions	Administration of local anaesthetics
Using ultrasonic scalars	Using hand scalars
Stainless instrumentation	Extraction of teeth
Taking radiographs (both extra and intra oral)	The preparation of both using a high-speed hand piece
	Root canal treatment



'HIV prompted a paradigm shift in dental infection control, but this was driven by public pressure'

USA was forced to close after Hepatitis C was transmitted between patients most probably via contaminated multi-use reusable dental instruments. Cases of transmission from the health-care worker to patient have been associated with low groups, infected caregivers who do exposure prone procedures and those undertaking invasive procedures of the dentists.

use of multiple drugs for an extended period. Treatment does not confer immunity, so the risk of reinfection remains after treatment.

Other infections
Acute childhood measles, respiratory and gastrointestinal infections can easily be spread to the community. When a member of the dental team is unwell, they should remain at home until they have recovered. This will protect both other staff members and patients. Infection prevention is a sociology that describes those that are unwell but come to work anyway. Motivation for absence may be due to the expectations of the management culture of the business. Acutely infectious staff should not be working, and this should be reflected in the way dental practice are run as businesses too.

Sharps injuries
There is an shortage of sharp instruments in a dental surgery that have the potential to cut those handling them. Where the skin is cut by a sharp dental instrument it is called a sharps injury. Of concern are used hollow bore needles, as they have the potential to contain infected blood or body fluids which may result in transmission of the disease to the exposed person. This is also referred to as a...



Fig 1. A scalpel blade with a sharp edge. The sharp edge is the hazard. The sharp edge is the hazard. The sharp edge is the hazard.

Sharps disposal
Sharps should be disposed of in a sharps container. The sharps container should be closed when it is 3/4 full. The sharps container should be placed in a secure location. The sharps container should be disposed of in a sharps disposal bin.

1. The team member receives continued care by a stable HIV health care professional.

The team member remains aware of their health status and acts accordingly. Standard infection control is practiced. HIV transmission scientific evidence is reviewed.

From Chalkley's *Being Declared HIV Positive* (2011, 28-31). The evidence does not support the blanket banning of the HIV positive dental team member. Nor does it support the restriction of duties to the clinical team only. An exposure prone procedure onto the glove hands of a clinician and being HIV positive at all times during surgical procedures, when the use of both sharp instruments and potentially sharp body tissues could be the clinician (Table 1). The result then result in bleeding into the open wound of the patient. Cleaning teeth as a potentially sharp body tissue would make a list of dental care an exposure prone procedure. The evidence does not support the ban on the use of either the glove hand from a patient's tooth that bleeds and then infects the patient is negligible.

Despite the outcome of the Beijing Declaration there remain significant variations throughout Europe in the way HIV positive dental team members are treated. In some countries, all treatment is banned, others risk exposure prone procedures are prohibited, some require the individual to double glove, and others have no restrictions or obligations to report their HIV status at all. It was a welcome relief, albeit too late for some, that the scope of duties the HIV positive dental could undertake in the UK was revised in 2016 with the ability to treat denture patients.

Hepatitis B
Hepatitis B for most infections than HIV, requiring lower viral particles to establish an infection. Less than 1% of adults who contract Hepatitis B will become chronic carriers although children are at a much higher rate (as much as 90%). All the dental team are advised to get Hepatitis B vaccination at the start of their training if they have not already done so and do so. There will be team members who already have chronic Hepatitis B prior to their training and those who become infected once they have started, with a higher risk in resource poor regions of the world and where Hepatitis B endemic. There have been, albeit rare, cases of dental to patient transmission of Hepatitis B virus. Therefore it is important to risk assess and manage members of the dental team who are infected. Where Hepatitis B virus DNA loads are sufficiently low (below 200 IU/ml) and the person is HBeAg negative it would seem the risk from undertaking exposure prone incidents is negligible. Regional rules will of course dictate what duties and tasks infected members of the dental team can undertake, if at all, regardless of the current evidence.

Hepatitis C
Hepatitis C is an insidious infection that may present with similar or similar symptoms to Hepatitis B. Unlike Hepatitis B, the chance of becoming chronically infected is as high as 80% (Fig. 1). Clinician to patient, patient to patient and patient to clinician transmission of Hepatitis C have all been documented in healthcare. In 2013 a dental clinic in the

1. Which of the following is not an exposure prone dental procedure as defined by UKAP?

- A. extraction of teeth
- B. using ultrasonic scalars
- C. administration of local anaesthetic
- D. root canal treatment

2. Select the correct statement:

- A. as much as 80% of adults who contract Hepatitis B will become chronic carriers
- B. HIV requires fewer viral particles than HIV to establish an infection
- C. children who contract Hepatitis B become chronic carriers at a much higher rate than adults

D. when a person is HBeAg negative the risk from undertaking exposure prone incidents is high

3. a) Following a sharps injury, the likelihood of successful infection with Hepatitis C is one in 300. b) Hepatitis C is the most likely virus to result in an infection from a sharps injury if it is in the contaminated sharp

- A. the first statement is correct
- B. the second statement is correct
- C. both statements are correct
- D. both statements are incorrect

4. Which of the following is a recommended way to manage a sharps injury using first aid?

- A. gently squeezing it to encourage bleeding
- B. covering the wound with a bandage
- C. washing it under running water
- D. all of the above

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