



# College of Dental Surgeons, Singapore Academy of Medicine, Singapore



## **POSITION PAPER ON MANAGEMENT OF HEALTH CARE WORKERS WITH BLOOD BORNE DISEASES.**

### **I. Preamble**

In Singapore, healthcare workers (HCW) who are diagnosed with Hepatitis B virus (HBV) carriage are not allowed to perform exposure prone procedures. The Ministry of Health has a directive (MOH Directive 6/2007) forbidding the employment of new healthcare workers who are HBV carriers. In addition, local medical, dental and dental hygiene and therapy, and nursing schools are not allowed to admit applicants who are HBV carriers.

In view of the advances in the management of Hepatitis B and other blood borne diseases such as Hepatitis C and HIV, as well as the experience in other jurisdictions in their management of healthcare workers with such blood borne diseases, the College of Dental Surgeons, Singapore, formed a workgroup comprising representatives from the College of Dental Surgeons, Singapore, the College of Surgeons, Singapore, the Chapter of Infectious Disease Physicians and the Chapter of Gastroenterologists of the College of Physicians, Singapore, to publish a position paper on the management of healthcare workers with blood borne diseases.

The objective of this paper is to aid regulators in their formulation of evidence-based regulations affecting the practice of healthcare workers in Singapore as well as to educate HCWs on management of their serologic status.



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## **II. Literature review**

A review of the literature showed that most research approach the management of HBV, HCV and HIV infections separately. As such, this position paper will also adopt a similar approach of addressing these three main blood borne diseases in dental healthcare workers separately. However, there are overarching principles that relate to management of HCWs with any of these blood borne pathogens.

### **1. Medical Confidentiality and Mandatory testing**

All publications reviewed emphasized the need to respect the medical confidentiality of the HCW just like that of any other patient. There is no jurisdiction that requires mandatory testing of health care workers for their serologic status with regard to these three viral diseases. Only in the United States, in the aftermath of the first and only case of a Florida dentist transmitting HIV to his patients, the CDC required HCWs to disclose their serologic status to patients. That rule had expectedly poor compliance among HCWs and it has been found that it did not improve patient safety but served primarily as a legal shield for hospitals. It was also discriminatory. The CDC has since rescinded that rule. There is also no publication that recommended routine testing of patients for these three pathogens before any operative procedure. Testing is only done as part of post exposure prophylaxis in the event of an exposure and confidentiality of the parties concern is maintained at all times.

### **2. Serologic status, Immunization and Treatment**

All publications reviewed are unanimous in recommending that all HCWs should know their own serologic status. Those who are serologically positive should seek treatment with an expert panel, who shall maintain the HCW's confidentiality. Those who are not serologically positive should be immunized (for HBV). Ensuring the rights of HCWs to medical confidentiality encourages the HCWs to adopt routine voluntary testing and treatment, further enhancing safety for patients.

### **3. Universal Precautions**

All publications recognized the effectiveness of good infection control measures like the adoption of universal precautions in minimizing the risk of cross infection of blood borne pathogens.



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#### 4. Exposure prone procedures (EPP)

Different publications have varied definition of EPPs. Some classify procedures into two categories while others classify them into three. Dental procedures are invasive to varying degrees and the degree of risk of exposure of the same procedure may be different among different dentists, depending on choice of techniques. The general principle of classifying a procedure as “exposure prone” involves digital palpation of needles/sharp objects inside a body cavity or the simultaneous presence of the fingers and a needle/sharp object in a poorly visualized space.

#### 5. Restriction of practice

All publications recommended that no restriction of practice is required for a serologically positive HCW who does not perform EPP. Restriction of practice to varying extent is recommended for a virologically infective HCW only if he performs EPP. Such restrictions are lifted when the viral load of the HCW is managed to recommended levels. This should be subject to review by an Expert Panel, the composition of which typically comprises an occupational physician, an infectious disease physician, a specialist of the same specialty as the infected HCW and a gastroenterologist (for hepatitis), though there are minor variations in different publications. Expert Panel oversight is not needed for HCWs who do not perform EPP.



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### **III. Position of the College of Dental Surgeons, Singapore**

The objective of this paper is to aid regulators to formulate an evidenced-based and fair policy (on HCWs and blood borne diseases) to promote effective action in the prevention, control and protection of blood borne infections for both, our public and HCWs, during healthcare delivery while safeguarding the rights of the public and HCWs.

#### **Position Statements**

1. The interests and concerns of the public and healthcare professions with respect to the transmissibility of blood borne infections during healthcare delivery must be managed based on rigorous scientific, epidemiologic and ethical principles.
2. The fact that these blood borne infections are treatable and the infectivity of carriers can be monitored and managed to prevent disease transmission, a universal restriction of the scope of practice among HCWs, purely on the basis of a single blood test showing seropositivity, is NOT justified.
3. The current scientific evidence does not support the restriction of practice for affected HCWs who have NON- INFECTIOUS virologic status or who are not involved in exposure prone procedures. Conversely, restriction of practice MUST be enforced when their virologic status has changed or is infectious and when they are involved with exposure prone procedures.
4. It is mandatory that affected HCWs are subjected to regular Expert Panel review in accordance to the international guidelines, which all healthcare institutions should adopt.
5. Therefore, HCWs with these blood borne infection should be treated like unaffected HCWs unless their virologic status poses a risk of disease transmission to the patients or / and their co-workers.
6. Mandatory annual screening of the on-board HCW's for blood borne infections is NOT recommended. Testing should be voluntary with appropriate safeguards for confidentiality and counseling services available to HCWs.
7. Serologic status alone MUST NOT be the sole criteria to deny any individual entry into an appropriate healthcare profession (medical, dental, nursing and allied health), faculty or school because such practice does not compromise public safety when a system of proper counseling to these individuals is in place.



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8. A system of counseling for those affected, on the potential impact of their serologic status on their career and their life long monitoring and management of their virologic status that is required over and above that of non-affected HCWs should be available in all healthcare institutions, faculty and schools.

9. The College of Dental Surgeons, Singapore adopts the recommendations of the following publications:

A. For HIV and HCV infections

Henderson DK, Dembry L, Fishman NO, Grady C, Lundstrom T, Palmore TN, Sepkowitz KA, Weber DJ. SHEA Guideline for Management of Healthcare Workers Who Are Infected with Hepatitis B Virus, Hepatitis C Virus, and/or Human Immunodeficiency Virus. *Infection Control and Hospital Epidemiology* Vol 31, No 3 (March 2010), pp.203-232

B. For HBV infections

Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health Care Providers and Students. *Morbidity and Mortality Weekly Report. Recommendations and Reports /Vol 61/No. 3 July 6, 2012.* Centers for Disease Control and Prevention. U.S. Department of Health and Human Services.

10. Regulators should work closely with and engages professional organizations such as the Academy of Medicine, Singapore and its component Colleges and Chapters to formulate policies that are supported by current scientific and epidemiological evidence and consistent with international ethical practice.



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### References

1. Goh KT, Chan YW, Wong LYM, Kong KH, Oon CJ, Guan R. The prevalence of hepatitis B virus markers in dental personnel in Singapore. Transactions of the Royal Society of Tropical Medicine and Hygiene (1988) 82, 908-910
2. American College of Surgeons. Statement on the surgeon and hepatitis. April 2004
3. American College of Surgeons. Statement on the surgeon and HIV infection. May 2004
4. UK Department of Health. HIV infected healthcare workers: guidance on management and patient notification. July 2005
5. Roth V, Worthington J. Implementing a policy for practitioners infected with blood-borne pathogens.. Healthcare Quarterly. Vol 8, Special issue. Oct 2005. 45-48.
6. Tuboku-Metzger J, Sinkowitz-Cochran RL, Casano-Dickerson A, Cardo D. Public attitudes and opinions toward physicians and dentists infected with bloodborne viruses: results of a national survey. Am J Infect Control 2005;33:299-303
7. Perry JL, Pearson RD, Jagger J, Infected health care workers and patient safety: a double standard. Am J Infect Control 2006;34:313-9
8. The Canadian Association of Pediatric Surgeons' position paper on the pediatric surgeon and blood-borne pathogens. J Pediatric Surg 2008;43:936-937
9. UK Department of Health. Hepatitis B infected healthcare workers and antiviral therapy. March 2007
10. Chua A, Leo YS, Kurup A, Chlebicki MP, Lee CC. Healthcare workers and HIV health issues. Ann Acad Med Singapore 2008;37:576-9
11. Henderson DK, Dembry L, Fishman NO, Grady C, Lundstrom T, Palmore TN, Sepkowitz KA, Weber DJ. SHEA guideline for management of healthcare workers who are infected with hepatitis B virus, Hepatitis C virus, and/or human immunodeficiency virus. Infection Control and Hospital Epidemiology 2010;31(3):203-232



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12. Turkel S, Henderson DK. Current strategies for managing providers infected with bloodborne pathogens. *Infection Control and Hospital Epidemiology*. 2011;32(5):428-434.
13. Foltzer M, Hamory B. Protecting patients from harm: design and implementation of an institutional bloodborne pathogen protocol. *Am J Infect Control* 2011;39:880-4
14. Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health Care Providers and Students. *Morbidity and Mortality Weekly Report. Recommendations and Reports /Vol 61/No. 3 July 6, 2012. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services.*
15. Guiding principles for the admission of medical students. The Medical Schools Council, UK. (March 2010)
16. Health clearance for Hepatitis B, Hepatitis C, HIV and Tuberculosis for medical and dental students. The Medical Schools Council, UK. ( April 2008).

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