Update Prevention and Management of Occupational Exposures

Exposure to blood and other potentially infectious body fluids (OPIM) represent a risk for the transmission of bloodborne pathogens (e.g. HIV, HBV, HCV) in the health care setting. Health care workers (HCWs) at risk of occupational infection are defined as those whose duties might be reasonably anticipated to result

PREVENTION: There is reasonable risk to dental HCW's of skin, eye, mucous membrane, or parenteral contact with blood or *OPIM* when protective attire is not used. Dental personnel **must** assume that all body fluids, contaminated instruments and materials are infectious and routinely use universal precautions to protect themselves and their patients. Assessment of risk and prevention of transmission of BBP, such as Hepatitis B (HBV), Hepatitis C (*HCV*), and Human Immunodeficiency Virus (HIV), in health care settings are based on information from a variety of sources including investigation of suspected case transmission, seroprevalence surveys and seroconversion after exposure to blood and body fluids from infected persons.

The use of standard precautions (which include universal precautions) will reduce contact with blood and body fluids and reduce the frequency of percutaneous injuries. *HCWs should routinely use the following to reduce risk of exposure:*

- Appropriate handwashing
- Barrier precautions
- Engineering controls (e.g., safety devices)
- Changes in work practices (e.g., techniques to reduce handling of sharp instruments)

Despite adherence to these precautions *accidents do happen and exposure to blood and OPIM may occur.*

Upon referral for medical evaluation, information detailing the circumstances surrounding the exposure incident should be provided to the health care professional evaluating the incident. This will assist the health care professional in assessing the degree of risk associated with the exposure and the need for postexposure prophylaxis.

The flow chart on the back of this document outlines the sequence of events that should occur during the postexposure evaluation and follow-up process, including testing of the source individual if the source's infectious status is unknown. in skin, eye, other mucous membrane, or parenteral contact with blood or OPIM. Saliva in dentistry is treated as OPIM, however, as far as HIV is concerned, it is not considered potentially infectious unless it is visibly tainted with blood.

EXPOSURE INCIDENTS: OSHA defines an exposure incident as a specific eye, mouth, mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials. All exposure incidents should be reported immediately to facilitate prompt referral for medical evaluation. Postexposure prophylaxis, if deemed necessary upon medical evaluation, is most effective if initiated as soon as possible after the exposure occurs. For example, postexposure prophylaxis against HIV should preferably be initiated 1-2 hours, but no longer than 24-36 hours, after the exposure incident. Dental offices should develop written protocols and forms for reporting and recording details of exposure incidents. To allow prompt medical evaluation and follow-up, medical or occupational health facilities with the ability to provide postexposure evaluation and follow-up in accordance with the latest CDC guidelines should be identified and kept on record at each dental office.

If an occupational exposure incident occurs, the exposure site should be immediately washed with soap and water; mucous membranes should be flushed with water. The circumstances and postexposure management should be recorded in the HCW's confidential medical record (usually on a form the facility designates for this purpose).

- Date and time of exposure
- Details of procedures being performed, how injury occurred and type of injury
- Details of exposure, including type and amount of fluid or material, depth of injury
- Details about the exposure source including any historical facts
- Details about counseling, postexposure management and follow-up

COMMENT: (excerpted from the ADA's Policy Statement on Bloodborne Pathogens, Infection Control and the Practice of Dentistry, adopted October 1999) The dental office is a safe place to provide and receive dental care. Current and generally accepted epidemiological information supports the conclusion that there is no significant risk of contracting bloodborne diseases through the provision of dentla treatment when appropriate infection control procedures are followed. Most studies suggest that the prevalence of HCV infection among dentists is similar to that among the general population. Furthermore, data historically indicate a higher HBV seroprevalence rate among dentists than the general population, however, declining overall seroprevalence rates and significantly lower rates among dentists under age 40 reaffirm the safety and efficacy of currently recommended infection control measures with respect to bloodborne pathogens. The dental profession, therefore, is strongly urged to continue to adhere to current infection control recommendations as set forth by the ADA and the CDC.

Since the implementation of universal precautions in the United States as a main element of infection control, and with the exception of the Florida casecluster where HIV may have been transmitted from a dentist to six patients, there have been no documented cases of HIV transmission from dentist to patient, patient to dentist, or patient to patient as a result of dental treatment. Similarly, since 1987 and the implementation of universal precautions, there have been no documented outbreaks of HBV or HCV associated with the practice

