



## University Health Service

### *Blood Borne Pathogen Exposure – Patient Information Sheet*

#### **Prevention and control of blood borne pathogen transmission:**

##### **A. Risk of blood borne pathogens to HCWs:**

1. Occupational exposure is defined as work-related contact to blood and other potentially infectious material via percutaneous exposure (needle stick, injection, cut), mucous membrane exposure (eye, nose, mouth), or non-intact skin exposure (wound, abrasion, dermatitis).

Potentially infectious material includes blood, semen, vaginal secretions, spinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, fluids contaminated with blood, and any unknown fluid.

2. Risks of specific pathogens

- a. HIV: the risk of acquiring HIV infection, following a needle stick contaminated with HIV-infected blood, is approximately 0.4% (1 in 250). Occupational infections have occurred via mucous membrane or non-intact skin exposures, but the risk from these exposures is much lower. Infection with HIV nearly always progresses to AIDS after an asymptomatic incubation period of several years. HIV infection can be transmitted to others via sexual contact, blood contact, and perinatally (to the newborn).
- b. Hepatitis B virus (HBV): percutaneous exposure to HBV results in a 6-30% risk of HBV infection. After an asymptomatic incubation period of 2-6 months, 50% of infected persons develop clinical hepatitis with jaundice, and the other 50% remain asymptomatic. 5-10% of HBV infected persons become chronic carriers who never clear the infection and can transmit HBV to others indefinitely (via sex, blood contact, or perinatally). 25% of chronic carriers develop chronic hepatitis with associated risk of cirrhosis, liver cancer, and death.
- c. Hepatitis C virus (HCV): exposure to HCV via needle stick results in a 2-10% of HCV infection. Some infections will cause clinical hepatitis after an average 45-day incubation period, while others remain asymptomatic. Chronic liver disease is very common following HCV infection. There is no vaccine against HCV.