Students who have potential contact with blood and/or body fluids of patients have a risk of acquiring infection with hepatitis B virus (HBV), hepatitis C virus (HCV), and/or human immunodeficiency virus (HIV). Exposure requires both an injury (i.e. percutaneous injury from a needle or other sharp object, a splash of blood or other body fluid onto a mucous membrane or non-intact skin, or a human bite that breaks the skin) and contact with blood or body fluid capable of transmitting HBV, HCV, and/or HIV. In the event of potential exposure, HCWs must report to their supervisor and seek immediate medical attention.

Students who are known to be infected with HBV, HCV, and/or HIV must report their status to the Assistant Dean of their Program for further guidance with respect to the potential for transmission of their infection to patients. Most persons infected with HBV, HCV, or HIV can work safely with patients without risk of transmission of the virus, as long as reasonable precautions are taken.

Screening for infection with HBV, HCV, and HIV prior to entry into McMaster University Health Science Programs is not mandatory; however it is strongly recommended for all students and may be mandatory for some elective or clinical placements.

Postgraduate Medicine students are required to comply with the CPSO Policy on Blood Borne Viruses. All other Health Science students please see OHA Protocol Blood Borne Diseases for further reference.

Click on the links below for further information on HBV, HCV, and HIV.

HBV is a blood borne virus that infects the liver and causes acute and chronic infection. HBV is transmitted through percutaneous or mucosal contact with HBV infected blood and body fluids. About 95 percent of adults will recover within 6 months of becoming infected and as a result will develop lifelong protection against HBV. The remaining 5 percent are unable to clear the virus and will become chronically infected. Chronic hepatitis B infection is treatable in many cases.

HBV vaccination: HBV is a vaccine-preventable disease. Students must be protected with Hepatitis B vaccination unless they are known to have chronic HBV infection (positive HBsAntigen serology). Post-vaccination serology for immunity (anti-HBs) is required. If not immune after a primary vaccination series (anti-HBs < 10 IU/L), booster dose(s) of vaccine are required. If anti-HBs titres remain < 10 IU/L after two vaccination series, the HCW is considered a vaccine non-responder. Students who do not have documented immunity (anti-HBs ≥ 10 IU/L) are considered susceptible to infection with HBV in the event of potential exposure.

HBV vaccine non-responder (not immune after two vaccination series): HBsAntigen serology is required to determine whether the non-responder has acquired HBV infection. Non-responders should report their status to the Assistant Dean of their Program for further guidance. No special precautions are required other than routine infection prevention procedures; however, passive immunization (Hepatitis B Immune Globulin) will be required in the event of potential exposure to HBV. Non-responders should be especially vigilant in preventing and following-up after needle stick injuries or any other potential exposure to HBV.

HCV is a blood borne virus that causes both acute and chronic infection of the liver. Approximately one in five does not know they are infected. In the absence of effective interventions, many infected individuals will go on to develop cirrhosis, liver failure, hepatocellular carcinoma, require liver transplantation, or die as a result of their disease. There is no vaccine for HCV; however there are new and effective drug treatment regimens available.

HIV is a blood borne virus which attacks the immune system, resulting in a chronic, progressive illness that leaves people vulnerable to opportunistic infections and cancers. The prevalence of Canadians living with HIV was estimated to be 0.2%, with 25% unaware of their HIV infection. There is no cure for HIV. Treatment with antiretroviral drugs helps lower the level of HIV in your body, slow the spread of the virus in your body, and help your immune system fight off other infections.