

Policy on Blood Borne Diseases and Healthcare Workers

The purpose of this policy is:

- To educate, advise and counsel undergraduate and postgraduate students in the Faculty of Health Sciences on the need for immunization against Blood Borne Disease and the risks if infected with Blood Borne Disease.
- To achieve a balance between the need to protect the public/patients from an infected student while respecting the student's right to confidentiality.
- To establish protocols for Immunization with Hepatitis B vaccine, adherence to routine infection control precautions and post-exposure prophylaxis which are required by most health care faculties and clinical training sites to protect students.

Each school in the Faculty of Health Sciences will develop its own admission requirements and screening principles and duly notify the appropriate students.

DEFINITIONS

Health Care Worker: is defined as any student including undergraduate medical, nursing and rehabilitation therapy students and postgraduate medical trainees, providing direct physical patient care. It includes students on elective and foreign medical graduates.

Blood Borne Disease: is defined as any microbiologic agent capable of being transmitted via contact with the blood of an infected individual. Most notably, this includes the human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV).

GENERAL INFORMATION

- Transmission of Blood Borne Disease may occur if blood or certain body fluids contact tissue under skin (percutaneous injury), non-intact skin or mucous membranes.
- There is extensive documentation of transmissions of HBV from patients to Health Care Workers; transmission of HCV has been documented as has transmission of HIV.
- Relative risk after percutaneous exposure has been reported as 2 – 40% for HBV, 3 –10% for HCV and 0.2 – 0.5% for HIV.
- Infection with HBV is preventable with pre-exposure use of Hepatitis B vaccine and post-exposure use of Hepatitis B immune Globulin (HBIG) combined with vaccine.
- Post-exposure use of anti-retroviral agents has recently been recommended after exposure to HIV.
- There is no pre- or post-exposure prophylaxis available to prevent transmission after exposure to HCV.
- Outbreaks of HBV infection acquired by patients from their Health Care Worker have been documented. Most of these outbreaks have been associated with Health Care Workers who were Hepatitis B "e" antigen (HBeAg) positive. A few have been

associated with HBeAg negative Health Care Professionals who were infected with a strain of HBV with a precore mutation that prevents expression of HBeAg.

- HCV transmission has been documented from a cardiac surgeon to his patients.
- HIV transmission has recently been documented from an orthopaedic surgeon to at least one patient.
- The clinical stage of the infection and the titre of circulating virus in the Health Care Worker appear to be important in assessing risk of transmission.
- Transmission is associated with "exposure prone" procedures, and persists even with consistent use of the appropriate precautions. Exposure prone procedures are characterised by digital palpation of a needle tip in a body cavity or by the simultaneous presence of the Health Care Worker's fingers and a needle or other sharp instrument or object in a poorly visualised or highly confined anatomic site. In these procedures, the sharp object causing injury to the Health Care Worker will recontact the patient's open wound.

Faculty of Health Science Policy:

Immunization Screening Process

Students entering any training program of the Faculty of Health Sciences, Queen's University are required to provide documentation of their 2-step tuberculin skin test status, varicella serological status and immunization history for measles, mumps, rubella, diphtheria, tetanus and Hepatitis B.

(Form 1) Students must be advised to attend at their Family Physician, Student Health Services, Public Health or in the case of postgraduate trainees to the KGH Occupational Health Office to be screened or to enter an immunization schedule. Vaccination occurs at the student's cost unless covered by the PAIRO/OCOTH agreement. For Hepatitis B vaccine, documentation of receipt of all three doses by the physician or Health Unit as well as laboratory evidence of immunity (i.e. positive serology for antibody to Hepatitis B surface antigen 2 to 3 months post vaccination (HBsAg) is required to be submitted to the School.

For students entering their first year of medical, nursing and rehabilitation therapy undergraduate training, this documentation is required by the end of their first year.

For postgraduate students, documentation is required on registration at the University.

For students who are anti-HBs positive, no further action is required.

For students who are anti-HBs negative, screening for HBsAg is done; if they are HBsAg positive they are also screened for HBeAg.

For all students the absence of documentation may result in the student unsuccessfully completing their degree or training program.

Reporting

In Accordance with the Lexington Report there is no requirement for notification unless a change in curriculum/residency program/rotation is required.

Students identified as infected with HBV are referred by the School Director, the appropriate Associate Dean or their delegate for counselling, medical assessment and to the Advisory Committee for consideration of modification in clinical training rotations. The preferred route for reporting will be self-reporting, however, mandatory reporting mechanisms as dictated by Provincial legislation will be followed if self-reporting does not occur.

No screening is done for infection with HCV or HIV. At this time, expert opinion and current evidence does not support the necessity of such screening. Students who selfreport infections with these viruses will be considered by the Advisory Committee.

Advisory Committee

An Advisory Committee shall be advisory to the student and to the appropriate Associate Dean of Undergraduate Education, Postgraduate Education or the Director of the School of Nursing, or School of Rehabilitation Therapy for the process to assist with career counselling and decision making.

The Committee shall be convened at the request of the student and/or the respective Associate Dean/ School Director or the Dean and shall include representation for

- Associate Dean, Student Affairs (Chair)
- Ethicist, Queen's University
- Lawyer, Queen's University
- Medical Officer of Health
- Medical Director, KGH in the case of clinical clerks or postgraduate trainees
- Medical Director of Infection Control
- Student representation as needed
- Faculty representation as needed
- Infectious Disease Specialist as needed