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Blood Borne Viruses Policy

RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE



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1. Introduction

The Royal College of Surgeons in Ireland (RCSI) is aware of its over-riding duty of care to the public with whom students are in close contact. In the rare circumstances where a student is shown to have a blood borne virus and is infectious, RCSI will consider all appropriate measures and will do all that is reasonable to accommodate the needs of the student in question, in accordance with statutory requirements. RCSI is obliged to ensure that we take reasonable and appropriate measures not only to safeguard the students and their colleagues, but also patients and members of the public. Safeguarding these groups is of paramount importance.

This document is intended to ensure that all students are informed of the policy and procedures being applied by RCSI regarding blood borne viruses. This policy must be read carefully by students who must ensure that they make themselves fully aware of the contents. Failure to adhere to the provisions of this policy could, ultimately, result in a student being excluded from RCSI.

The transmission of blood borne pathogens within a healthcare setting has become a matter of increasing public concern and interest over a number of years. In 2005 the Government implemented a Code of Practice for the Prevention of Transmission of Blood Borne Diseases in the Healthcare Setting (“the Code of Practice”). The guidelines within this policy are compatible with the Department of Health and Children’s Code of Practice. The provisions of that Code of Practice apply to all workers and students in any healthcare setting. This policy is designed to protect students from acquiring a blood borne virus. In the rare instance where a student has acquired a blood borne virus, this policy will detail how to support and manage that student. This will be undertaken with acknowledgement that the protection of patients and the public is paramount.

2. General Considerations

The prerequisite of good practice in any healthcare setting is the careful observation of basic hygiene and proper infection control procedures by all students. For this reason, particular attention is drawn to the avoidance of sharps/needle stick injuries, including the value of double gloving preoperatively where appropriate and the covering of skin lesions with waterproof dressings. Any student with exudative or weeping skin lesions must avoid direct patient contact and must not handle devices or equipment used during invasive procedures.



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The Code of Practice states that “standard procedures must be taken with all patients in all healthcare facilities at all times by all staff”. RCSI students must adhere to all infection control policies that are in place within the hospitals/institutions where they are based.

3. Risk of Transmission of Blood Borne Viruses to Patients

Hepatitis B

The transmission of hepatitis B Virus (HBV) from infected healthcare workers to patients has been well documented and the factors which predispose to transmission have been identified. They include the performance of invasive procedures (surgical or dental) and a high level of infectivity in the healthcare worker (HBe antigen positive or pre-core mutant positive).

Hepatitis C

The major source of transmission of hepatitis C is by exposure to infected blood and body fluids. Cases involving transmission of hepatitis C from surgeons to patients have been well documented and have arisen in the context of cardiothoracic surgery, open heart surgery, gynaecological surgery and anaesthesiology.

HIV Transmission

Studies have shown that the HIV virus can be transmitted to patients during both dental and surgical procedures.

4. Exposure Prone Procedures

Most contact between healthcare workers, students and patients does not involve the possibility of blood-to-blood contact and therefore carries low risk for transmission of blood borne pathogens. Provided infection control procedures are adhered to, Exposure Prone Procedures (EPP) are the only procedures associated with a risk of transmission of blood borne pathogens to patients.



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EPPs are defined as procedures which involve surgical entry into tissues, cavities or organs or repair of major traumatic injuries, caesarean deliveries or other obstetric procedures during which sharp instruments are used such as perineal repair after a vaginal delivery; the manipulation, cutting or removal of any oral or perioral tissues including tooth structure, during which bleeding may occur.

In addition, EPPs relate to situations where the student or surgeon's hands (whether gloved or not) may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth), inside a patient's open body cavity, wound or confined anatomical space, and where the hands or fingertips may not be completely visible at all times.

EPPs are not part of the usual activities of physiotherapy or pharmacy students during undergraduate training or subsequent clinical practice. Physiotherapy and pharmacy students must, however, recognise the nature of EPPs.

Should the opportunity to electively participate in an EPP arise, students may not be able to participate unless they have recently been tested and shown not to carry a blood-borne virus. Exposure prone procedures that a physiotherapy student may be involved in include:

- Palpation of exposed tendons during orthopaedic procedures
- Temporomandibular joint mobilisations through the mouth

Students infected with a BBV should exclude themselves from EPPs as a standard precaution.

5. Screening of Students

Under the Code of Practice it is the duty of all healthcare workers, including students, to protect themselves and their patients from disease. This includes being tested and immunised against hepatitis B if appropriate, and strictly adhering to standard precautions and to the Code of Practice. There is a moral and legal obligation on both health service providers and healthcare workers to ensure the protection of workers and patients alike.

The Irish Medical Council's Guide to Professional Conduct and Ethics for Professional Medical Practitioners (2009) states that it is unethical for doctors who consider that they might be infected



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with a serious communicable disease not to seek and accept advice from professional colleagues as to how far it is necessary for them to limit their practice in order to protect their patients.

Accordingly, there is an ethical duty for healthcare professionals to protect patients from harm. A healthcare professional or student who knowingly puts patients at risk and who infects patients may be subject to a medical negligence case for breach of standard of care or indeed to prosecution for criminal negligence.

6. RCSI Requirements

Within the first six months of admission to the Royal College of Surgeons in Ireland, all undergraduate students will be screened for hepatitis B and hepatitis C, as well as other communicable diseases. Full details are given in the document "Infectious Disease and General Health". This document should also be read by all students.

As part of RCSI's overall approach to minimising the risks for students associated with blood borne viruses, all students who are not immune to hepatitis B are required to be vaccinated against hepatitis B within six months of admission to RCSI. All students must complete a blood borne virus risk assessment, consent to immunisation where it is deemed necessary and participate in follow-up serology by the Mercer's Medical Centre for evidence of immunity in order to reduce the potential of transmission of these infections.

Failure to adhere to any of these requirements will result in the student being discontinued from RCSI. Results of tests for hepatitis B immunity are only acceptable from the Mercer's Medical Centre. Students presenting such results must have the test repeated. Confirmation of the student's anti-HBs level of 100miu/ml or greater will be necessary prior to the student commencing the intensive clinical attachment in Intermediate Cycle (medical students) or the introductory clinical placement at the end of the First Physiotherapy Year (physiotherapy students) or the end of Junior Cycle for Pharmacy Students. In addition medical students will be screened for hepatitis C for a second time just prior to commencing the intensive clinical attachment in the Intermediate Cycle.



7. Management of Students Infected with Specific Blood Borne Viruses

In order to ensure their well-being, all students who are infected with a blood borne virus must be under the care of an appropriate physician (usually a Hepatologist or an Infectious Disease Physician) in Ireland for the duration of their undergraduate studies.

Students with blood borne viruses who do not perform EPPs but who continue to provide clinical care to patients must remain under regular medical supervision. In order to ensure the student's psychological and emotional well-being, those who contract a blood borne virus will also be required to undergo an assessment by a counsellor and be encouraged to undergo such treatment as recommended. The cost of the counseling service will be borne by RCSI. It is important that the student understands that this counselling service is confidential.

Hepatitis B

People with genetic variants of hepatitis B virus may be unable to produce the e-antigen (or antibody), but may still be highly infectious. To address this issue, any student who is surface antigen positive (HbsAg +) will be assessed by the Mercer's Medical Centre for chronic hepatitis B infection (non-responders to vaccine may be carriers of hepatitis B). In cases where the student is HbsAg positive, arrangements will be made for testing for additional hepatitis B markers (e antigen, core antibody). Those who are e antigen positive will be excluded from performing exposure prone procedures. Students who are e antigen negative must have their viral load determined. This will involve the collection of three sequential samples over a six week period. During this time the student must not perform exposure prone procedures. The threshold for ongoing exclusion from EPPs (restrict practice) is currently a viral load in excess of 104 copies/ml. A single measurement in excess of this threshold is sufficient to impose course programme restrictions. Students whose three samples remain below the threshold may continue on their study programme unrestricted, and will require annual evaluation of their viral load (a single test).

Some treatment exists for infectious carriers of hepatitis B i.e. a student who is e-antigen positive or e-antigen negative but with a high viral load (in excess of 104 copies/ml). Newer treatments now have fewer side effects and can allow persons to fulfill all of their duties including EPPs once their viral load is within the required limits.



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Hepatitis C

The Code of Practice recommends that the following healthcare workers must be tested initially:

- a) Those commencing training for a career that involves performance of exposure prone procedures or
- b) New entrants or re-entrants to the Irish Health System and whose work involves exposure prone procedures.

All students will be tested for antibodies to HCV within the first six months of registration. This test will be carried out a second time just prior to commencement of the intensive clinical attachment in the Intermediate Cycle (medical students only). If positive, the student will then have Polymerase Chain Reaction testing for hepatitis C RNA to further determine their infectivity. The Code of Practice recommends that healthcare workers (including students) who are HCV PCR positive must not assist in exposure prone procedures until the risk has been assessed. The assessment will include measurement of viral load. This includes healthcare workers on antiviral treatment who in general must be PCR negative for six months before assisting in exposure prone procedures. All medical students will then be retested for HCV before beginning the intensive clinical attachment in IC3 in order to ensure patient safety.

Any student who suspects that he or she may have been exposed to HCV from any source must notify the Mercer's Medical Centre and seek professional advice and support, including the need for testing if necessary, and must cooperate with any look back exercise (i.e. a check of patients with whom the person has had contact) deemed necessary in order to ensure patient and public safety.

Any infected student involved in clinical cases must remain under regular medical supervision in order to support them and to ensure their well-being.

A student who is antibody positive but PCR negative for HCV can continue to assist in exposure prone procedures but must have a PCR test for hepatitis C annually while he or she continues to undertake exposure prone procedures.



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Hepatitis B (+ Hepatitis C)

There is also the possibility that blood testing may reveal evidence that an individual has previously been infected with Hepatitis B (or Hepatitis C) but that the disease is no longer active, and the individual does not pose an infection risk. However, this can change if the individual becomes immunocompromised which can lead to a reactivation of the virus. It is important that the individual and their own current and future doctors are made aware of this possibility. Accordingly, the student will be required to attend Mercer's Medical Centre to discuss this scenario and to be given relevant information to pass on to their doctors. Given that RCSI students may well undertake exposure prone procedures in their undergraduate and postgraduate careers, it is essential that individuals in this situation self-report any change in their health that may affect their immune status to their own physician and also to their clinical manager.

HIV

There is still as yet no vaccine available to protect against HIV infection. Therefore the policy for protecting students and patients from HIV continues to rely on good general infection control procedures. Any student who is HIV positive cannot take part in exposure prone procedures. Every effort will be made to facilitate the student in performing all other areas of their study programme.

Any student who suspects that he or she may have been exposed to HIV must notify the Mercer's Medical Centre and cooperate with any look-back exercise deemed necessary as patient and public safety is paramount. Supportive measures will be put in place along with professional advice including testing if appropriate.

8. Procedures that a student who has a BBV may be involved in

With the definition and explanation of exposure prone procedures in mind (as per section 4), medical students who have a BBV may be involved in the following procedures:

- Giving injections



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- Taking blood and setting up IV lines
- Minor surface suturing
- The incision of abscesses
- Routine vaginal or rectal examinations
- Conducting or assisting with normal vaginal deliveries
- Assisting with operative vaginal delivery
- Performing bimanual and speculum aided vaginal examination

Providing that standard precautions are followed, the medical student who has a BBV may scrub up for and participate in the following surgical procedures as first assistant:

- Diagnostic laparoscopy
- Laparoscopic appendectomy
- Laparoscopic cholecystectomy

Undergraduate medical students who have a BBV may scrub in as second assistants in other procedures such as abdominal-pelvic surgeries, cesarean section, abdominal hysterectomy, exploratory laparotomy, or major vaginal surgeries, such as vaginal hysterectomy or vaginal repair. This will facilitate the student to participate in the operation without undue risk to the patient regarding EPPs, thereby ensuring patient safety.

Students who have a BBV **must** avoid any clinical contact whatever (e.g. physical examination) with acute trauma patients in the Accident and Emergency department. The risk here would be the unpredictable risk of injury from fractured bones.

RCSI Professors of Surgery, Obstetrics and Paediatric Surgery will meet with any student who has a BBV prior to the commencement of their clinical rotations. They will endeavour to structure the clinical attachments in such a way that each student with a BBV will not, as far as possible, be asked to perform an exposure prone procedure. However if this does occur it will be made clear how the student must manage such a situation, i.e. it is imperative not to put a patient or a colleague at risk of exposure at any time.

Any Physiotherapy or Pharmacy Student, who has a BBV, must meet with his/her Head of School prior to clinical placement for advice.



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9. Students' Responsibilities

A safe and effective vaccine is available for the protection of students and others from infection with hepatitis B virus. The Code of Practice stipulates that all healthcare personnel (which includes students) who have direct contact with blood or body fluids, or with patient tissue and who are therefore at risk of acquiring hepatitis B occupationally, must have their anti-HBs status established. In circumstances where the contact may also involve undertaking or assisting in exposure prone procedures, testing must also include anti-HBsAg (hepatitis B surface antigen).

All students who assist in exposure prone procedures must be immunised against hepatitis B virus, unless immunity to hepatitis B virus as a result of natural infection or previous immunisation has been established or the vaccine is contraindicated. Students who are unwilling to be vaccinated when appropriate must be aware that they may face discontinuation from RCSI.

At present there are no vaccines that protect health-care workers from hepatitis C virus and human immunodeficiency virus (HIV). All new students to RCSI must be tested for hepatitis C antibodies and if found to be positive PCR testing will be carried out for hepatitis C RNA, to establish if the student is an infectious carrier of hepatitis C. Students found to be infected with HCV who are PCR positive will not be allowed to assist in EPPs until the risk has been assessed. This will be dependent on the viral load. In accordance with the Code of Practice (2005), the need for screening for infection with HIV will be kept under review. Students who are unwilling to be tested for hepatitis C virus must be aware that they may face discontinuation from RCSI.

In order to ensure personal and public safety it is incumbent on all students to take steps to ensure that they do not put themselves at risk from infection by a blood borne virus in their private lives. This includes the avoidance of intravenous drug abuse and appropriate precautions in relation to sexual activity.

Any student who suspects that he or she may have been exposed to hepatitis B, hepatitis C or HIV must notify the Mercer's Medical Centre immediately for advice and support. The student must also cooperate with any look-back exercise deemed necessary and seek professional advice, including testing, if appropriate. Students who fail to notify the appropriate authorities if they suspect that



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they have been exposed to a BBV will be referred to the Professional Conduct Committee and should be aware that they may face discontinuation from RCSI.

In order to ensure that students are properly supported and monitored, and to minimise any detrimental effects on the provision of training to other students and most importantly to ensure protection of all patients, RCSI will only admit and retain the number of students that it can reasonably accommodate who are positive with a blood borne virus at any one time. The quota may be revised from time to time. Offers are made to students in good faith and are subject to BBV screening. If the student is subsequently found to be positive for a BBV on screening, and if RCSI has reached the maximum number of students which it can reasonably accommodate with a BBV, the offer will be rescinded and all fees paid will be refunded.

Any student who is currently being treated, or who has been treated during or within twelve months before commencing their studies at RCSI, with antiviral therapy and/or interferon for a blood borne virus and is not already known to College authorities must notify RCSI immediately.

10. Confidentiality

RCSI will maintain the confidentiality of a student's medical records as far as possible. These will be kept separate from the main student files. Students must be aware however that disclosure of medical records to some staff (for example RCSI Professors of Obstetrics and Gynecology, Surgery, Paediatric Surgery, Clinical Tutors) is necessary to ensure the safety of patients.

A consent form will be completed and signed by the student consenting to the disclosure of details of his/her medical (infectious) condition to those persons who are necessarily required to receive the information. This information will be given in confidence, and its purpose is to protect patients from blood borne viral infection, in accordance with best practice and RCSI policy. In addition, it is required to reassure the student that their case is being dealt with in confidence. It ensures that each staff member who is informed of the case of an infected student and who is responsible for ensuring that the students' duties are restricted to protect patients fully appreciates the confidentiality boundaries required.



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Should you have any queries in relation to this policy, please contact the Vice Dean for Student Affairs.



Summary of Procedures

1. All RCSI students from the undergraduate and graduate entry programmes must read and agree to abide by the terms and conditions of the Policy on blood borne viruses (“BBV”). This policy is compatible with the recent Irish guidelines published by the Department of Health and Children (2005). In line with these guidelines RCSI has an over-riding duty of care to the public with whom medical and physiotherapy students are in close contact. In the rare circumstances where a student is shown to have a BBV and is infectious RCSI will consider all appropriate measures and will do all that is reasonable to accommodate the needs of the student in question in accordance with statutory requirements. We are obliged to ensure that we take reasonable and appropriate measures to safeguard the students and their colleagues but also patients and members of the public. Safeguarding these groups is of paramount importance.
2. Within the first six months of admission to RCSI all undergraduate students will be screened for hepatitis B and hepatitis C and vaccinated for hepatitis B, as required by the Travel Health Centre. This will be monitored by Student Services and the Vice Dean for Student Affairs where necessary.
3. A database will be kept by the Mercer’s Medical Centre, to monitor students in each year and to help ensure compliance with guidelines.
4. For those students requiring vaccination for hepatitis B, it is essential that the treatment course is completed and that the antibody levels post vaccination are assessed prior to clinical practice. An anti-HBs level of 100miu/ml or greater is considered to reflect an adequate response to the vaccine and confer immunity. In order to ensure both student and patient safety, students will not be allowed to be involved in EPPs until RCSI has received satisfactory proof of hepatitis B immunity and that their infection status for hepatitis B and hepatitis C is clear.
5. With regard to the undergraduate five year programme and the graduate entry programme, confirmation of adequate anti-HBs level of 100miu/ml or greater and infection status will be necessary prior to the commencement of the intensive clinical attachment. With regard to



the BSc Physiotherapy programme confirmation of adequate anti-HBs level of 100miu/ml or greater and infection status will be necessary prior to the commencement of the introductory clinical placement at the end of the First Physiotherapy Year. With regard to the pharmacy programme confirmation of adequate anti-HBs level of 100miu/ml or greater and infection status will be necessary prior to the end of the Junior Cycle. This will be obtained from the Mercer's Medical Centre by the Vice Dean for Student Affairs confirming the student's eligibility to progress. In addition, all medical students will be screened for hepatitis C a second time, prior to commencing the intensive clinical attachment of IC3. Only those students that are confirmed to have adequate antibody levels for hepatitis B and confirmation of being negative for hepatitis C will be permitted to commence the clinical attachment.

6. Where a student does not comply with testing assessment for a blood borne virus and vaccination for hepatitis B, a meeting will be convened. The student will be invited to discuss the reasons for non-compliance. Any representations or explanations will be taken into account by the professional conduct committee prior to making a decision on whether or not to discontinue the student's enrolment with RCSI.
7. In order to ensure that students are properly supported and monitored, and to minimise any detrimental effects on the provision of training to other students and most importantly to ensure protection of all patients, RCSI will only admit a number of students that it can reasonably accommodate who are positive with a blood borne virus at any one time. The quota may be revised from time to time. Offers of places in the Medical School are made to students in good faith and are subject to BBV screening. If a student is subsequently found to be positive for a BBV on screening and if RCSI has reached the maximum number of students which it can reasonable accommodate with a BBV, the offer will be considered null and void and all fees paid will be reimbursed.
8. On screening at the Mercer's Medical Centre, any student found to be positive for a BBV, namely hepatitis C and or hepatitis B, will have their identity and the fact of their infection made known to the Vice Dean for Student Affairs.



9. The Director of Public Health (“DPH”- a Health Services Executive appointed physician) will also be informed of the student’s identity and the fact that they have a blood borne virus (hepatitis B and C are “notifiable”) by the Mercer’s Medical Centre. This notification process is standardised and requires the provision of demographic details so that the public health authorities can undertake contact tracing if indicated in order to ensure public safety. Separate from that process, there is a requirement that the DPH be informed anonymously of the case of an “infected health care worker”. This requires that sufficient information be given to enable the DPH to determine if a Local Expert Group (LEG) needs to be convened and if a look-back exercise (i.e. a check of patients with whom the person has had contact) will be necessary. The Code of Practice outlines that this process is done confidentially.
10. Once identified, the student will be asked to meet confidentially with an appropriately qualified physician and the Vice Dean for Student Affairs. This is to assess the level of understanding the student has of the disease and treatment, if any, to date. The student will be reminded of the need to comply with RCSI policy. In order to ensure student well-being, any necessary appointments will be organised for medical and/or psychological help and support.
11. Follow-up appointments will be made in order to ensure that requirements of the policy are met and that the student has a thorough knowledge of the restrictions of the Policy and what procedures are considered safe.
12. The Professors of Surgery, Obstetrics and Paediatric Surgery or the Head of the School of Physiotherapy will be informed of the student’s status and identity in order to ensure the safety and protection of the student, fellow students, staff and patients, and to ensure compliance with the terms of the Policy on BBV.
13. The Professors of Surgery and Obstetrics/Head of School of Physiotherapy/Head of School of Pharmacy will meet with each student who has a BBV prior to the commencement of their particular clinical rotation in order to address the issue of that student’s involvement with Exposure Prone Procedures (EPPs). Students will be given guidance on how to best manage any involvement with EPPs and, in particular, students must bear in mind that it is imperative not to put a patient or a colleague at risk of exposure at any time.



14. Prior to the student commencing their intensive clinical attachments, an assessment will be carried out in order to ensure that the student is proficient and safe carrying out such procedures as phlebotomy or inserting IV cannulas. This will be carried out with as much confidentiality as possible at the Occupational Health Department, Beaumont Hospital.
15. Copies of all correspondence between staff and the students will be kept on the student's file. Minutes of meetings will be produced, filed and a copy provided to the student.
16. This Standard Operating Procedure will be managed by the Vice Dean for Student Affairs. The administrator will liaise with the appropriate personnel as the student progresses through their clinical placements. The administrator works under the same code of confidentiality as other involved College personnel. This will be overseen by the Vice Dean for Student Affairs in consultation with the Professors of Surgery, Paediatrics and Obstetrics/Head of the School of Physiotherapy/Head of the School of Pharmacy.

If a student is found not to be compliant with the Policy in circumstances that might reasonably be assumed to put a patient or colleagues at risk, RCSI is entitled to discontinue that student.

The following data will only be kept on file for so long as is necessary to ensure the safe management and administration of your studies as an undergraduate student in The Royal College of Surgeons in Ireland