Infectious Diseases Policy

for

Medical Students in Ireland
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Infectious Diseases Policy for Medical Students in Ireland

University College Cork (UCC)
University College Dublin (UCD)
National University of Ireland, Galway (NUIG)
Royal College Surgeons Ireland (RCSI)
University Of Limerick (UL)
Trinity College Dublin (TCD)

Introduction

The Universities and Colleges with Medical Schools (UCC, UCD, NUIG, RCSI, UL and TCD) are extremely aware of their overriding duty of care to the public with whom medical students are in close contact. In the rare circumstances where a student is shown to have an infection (e.g. a blood borne virus) and is infectious to others the Universities 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. The Colleges are obliged to ensure that reasonable and appropriate measures are taken not only to safeguard 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 medical students are informed of the policy and procedures being applied by the Universities regarding infectious diseases. This policy must be read carefully and all medical students 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 the degree programme.

In order to confirm that you have read and agree to abide by the conditions of the policy, the last page of the document must be signed, dated and submitted to TCD School of Medicine Office.

This document represents the consensus view of the Council of Deans of Faculties of Medical Schools in Ireland. Individual schools may have supplemental policies.

The transmission of pathogens within a healthcare setting has become a matter of increasing public concern and interest over a number of years. The Department of Health and Children recommend that medical schools should take account of national guidelines in developing policies for students. 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 the healthcare setting. Doctors-in-training will be involved in procedures which could result in the
transmission of blood borne diseases. This policy is designed to protect such students from acquiring a blood borne virus. In the rare instance where a student has acquired a blood borne virus, this policy will support and manage that student. This will be undertaken with acknowledgement that the protection of patients and the public is paramount.

1. General considerations

The prerequisite of good practice 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, 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.

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

2. Screening of Students

It is the duty of all healthcare workers, including medical students, to protect themselves and their patients from disease. This includes being tested for and immunised against infectious agents if appropriate, and strictly adhering to standard precautions. 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 Medical Council’s Ethical Guidelines for Medical Practitioners (2009) state that it is unethical for doctors who consider that they might be infected with a serious contagious 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 on doctors to protect patients from harm.

A doctor, surgeon or medical 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.

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 anaesthesia.

HIV Transmission

Studies have shown that the HIV virus can be transmitted to patients during both dental and surgical procedures. Such occurrences are extremely rare.

Medical School Policies

All students will be screened for hepatitis B. Students who are not immune to hepatitis B are required to be vaccinated against hepatitis B within six months of admission to the Medical School. Each individual School has developed detailed procedures on the implementation of this policy and students should consult with their own school as to local procedures.

4. Policies with Regard To BCG and Tuberculosis in Medical Students

Ireland has a tuberculosis rate of 11 cases per 100,000 (Eurosurveillance Vol 13 Jan Mar 2008). The rate of infection has increased in the years 2000-2005 after a decline during the previous 5 years. In Ireland it is recommended that all newborns receive BCG vaccine because although efficacy of the BCG vaccine has varied in studies it is generally agreed that vaccine protects small children against the most severe forms of the disease especially in areas with a high risk of infection. However, even studies that show BCG’s maximum efficacy show only 80% protection with maximum duration of efficacy ranging from 15 -20 years.

The majority of Irish born medical students will have received BCG vaccination against tuberculosis but the level of protection that this affords them may be low or absent and there is no proof that repeating BCG vaccination enhances protection. There is also a substantial cohort of non-Irish students in Irish medical schools and therefore any policy that is implemented should take into account the varied measures taken to control tuberculosis that may be used outside Ireland.

The following screening procedure should take place before students have contact with patients or clinical materials. If a medical student is to have clinical placement outside the Republic of Ireland and there is no clinical contact in Ireland then the regulations for that area should be implemented by the medical school or clinical facility that they will be attending in that area.

- Students should have documented proof of prior BCG vaccination or an examination show a BCG vaccination scar.
• If neither of the above is present then baseline Mantoux testing should be performed in line with the procedure outlined in the National Immunisation Guidelines for Ireland 2008.

• If the Mantoux test is interpreted as negative (see immunisation guidelines) the students should be offered BCG vaccination.

• BCG vaccine, which is part of the control strategy for tuberculosis in Ireland, may not be routinely used in some of the countries from which our students originate (e.g., US, Canada) and being vaccinated may have implications for those students if they return to work in their country of origin. Therefore, it is important to explain to students that BCG vaccination may affect interpretation of any subsequent screening tests for tuberculosis and students be given the option of declining vaccination.

• If the Mantoux is interpreted as other than negative (>6mm) the student should be referred for advice and/or clinical assessment and clinical contact should not occur until this assessment has taken place.

5. Policy with Regard to MMR

All persons who work in healthcare facilities, including medical students, should be immune to measles and rubella. Those who are not immune can contract and transmit measles, mumps or rubella to patients or other health-care workers. In addition, immunity to rubella is important for female health-care workers who could become pregnant.

Over 90% of individuals develop immunity to measles and rubella after one dose of MMR; after two doses, 98% will be immune. Protection against mumps is conferred on 61-91% after one dose of vaccine, with 98% protected after two doses. Therefore, two doses of MMR are required to produce satisfactory protection against measles, mumps and rubella. Serological and epidemiological evidence suggest that vaccine-induced immunity is possibly life-long.

Medical students should be assessed for immunity to measles, mumps and rubella prior to clinical placement, in order to minimise the risk of non-immune students transmitting these infections to vulnerable patients.

Any medical student who cannot provide evidence of having received two doses of MMR should be tested for serological evidence of immunity to measles, mumps and rubella. A medical student found to be non-immune to any of the three components of the vaccine should receive two doses of MMR, given at least one month apart. Post-vaccination testing is not indicated.
6. Policy for Immunity to Influenza

Influenza occurs seasonally and students may be offered vaccination through the individual teaching hospitals at these times.

7. Policy for Immunity to VZV

Varicella zoster virus (VZV) is the cause of chickenpox, a common disease in childhood. While the illness is usually mild, it can be associated with more severe complications. Local reactivation of the virus leads to shingles which can result in pain, paraesthesia and neurological sequelae.

Most individuals are exposed to VZV in childhood. Irish estimates suggest that the prevalence of immunity in adolescents is approximately 80%. Acquisition of VZV in adults is associated with a higher rate of systemic complications including disseminated infection and pneumonitis. High rate of complications are also seen in primary VZV infection in immunocompromised patients and in pregnant women.

Nosocomial transmission of VZV is well-recognised and sources of nosocomial exposure have included hospital staff infected with varicella or HZ. Unvaccinated HCW (including medical students) with no other evidence of immunity who are exposed to VZV are potentially infective from days 10-21 after exposure and should not have any patient contact during this period.

It is recommended that all healthcare workers be immune to varicella, because of the risk to themselves and of the risk to patients. Evidence of immunity includes

- documentation of 2 doses of varicella vaccine given at least 28 days apart,
- history of varicella or herpes zoster based on physician diagnosis,
- laboratory evidence of immunity,
- laboratory confirmation of disease.

Medical School Policy

1. Students must provide evidence of immunity to Varicella Zoster virus.

2. Non-immune students will require vaccination against VZV. Two doses of vaccine are required, a minimum of 4 weeks apart.

8. Policy for MRSA

The screening of healthcare workers for carriage of MRSA is controversial, as the role of such detection in the colonisation and infection of patients is unclear. Screening of staff is time-consuming and costly. The Medical Schools do not believe that screening for MRSA for medical students is warranted in view of the lack of clear evidence that occupational screening is beneficial. However, in those institutions where routine screening for staff involved in patient care is performed, students may be screened prior to clinical placement. If MRSA carriage is confirmed, the student may require referral.
for decolonization or an alternative clinical placement may be arranged. The results of all screening will be kept confidential.

9. 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 are the only procedures associated with a risk of transmission of blood borne pathogens to patients.

Exposure prone procedures (EPP) 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.

10. 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 in Ireland for the duration of their undergraduate studies. Students with blood borne viruses who do not perform exposure prone procedures but who continue to provide clinical care to patients must remain under regular medical supervision. In order to ensure the student’s well-being, those who have contracted a blood borne virus will be required to be under the care of an appropriate physician in Ireland and will be expected to participate in a long-term healthcare plan.

The following are procedures that a student who has a BBV may be involved in

With the definition and explanation of exposure prone procedures in mind medical students who have a BBV may be involved in the following procedures:

- Giving injections
- 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 appendicectomy
- 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 A&E department. The risk here would be the unpredictable risk of injury from fractured bones.

Although every effort will be made to keep the student’s information confidential, key academic leaders (e.g. Heads of Surgery and Obstetrics) will need to be informed of 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.

**11. Students’ Responsibilities with Respect To BBV**

A safe and effective vaccine is available for the protection of students and others from infection with hepatitis B virus.

All students 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.

At present there are no vaccines that protect health-care workers from hepatitis C virus and human immunodeficiency virus (HIV). 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 relevant office immediately (local arrangements apply) 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 they have been exposed to a BBV must be aware that they may face discontinuation from the College.

Students have an obligation to report any incident of a needlestick or sharps injury to the relevant senior physician in their rotation, who will advise them of the appropriate procedures.

12. Confidentiality

The Colleges will strive to maintain the confidentiality of a student’s medical records as far as possible. These will be kept separate to the main student files. Students must be aware however that disclosure of medical records to some staff (for example Professors of Obstetrics and Gynaecology, Surgery,) is necessary in an undergraduate medical programme 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 Medical School 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.

Professor Dermot Kelleher
Head School of Medicine and Vice Provost for Medical Affairs
Trinity College Dublin (TCD)
References

**BCG and Tuberculosis**

Eurosurveillance Vol 13 Jan Mar 2008. European Centre for Disease Prevention and Control
Immunisation guidelines for Ireland 2008; National immunisation advisory committee Royal College of Physicians of Ireland
Tuberculosis. Clinical diagnosis and management of tuberculosis and measures for its prevention and control. The National Collaborating Centre for Chronic Conditions Royal College of Physicians.
The Role of BCG Vaccine in the Prevention and Control of Tuberculosis in the United States. A Joint Statement by the Advisory Council for the Elimination of Tuberculosis and the Advisory Committee on Immunization Practices. MMWR April 26, 1996 / Vol. 45 / No. RR-4

**MMR References**


Student Acknowledgement

I, (Insert full name)

Address

and number (as used on application form)________________________, have read in detail the attached Infectious Diseases policy of the Universities and Colleges with Medical Schools.

I understand the policy and my responsibilities with regard to compliance and adherence to the policy. I will comply with the College’s requirements with regard to the policy in order to ensure the well-being and protection of myself and the patients, health care staff, fellow students, staff members and the College.

I consent to the University of Dublin, Trinity College Dublin, holding and processing personal data including sensitive personal data, such as medical records, relating to me and to transfer such information inside and outside the European Economic Area provided that such transfer is for the purposes of the University’s administration and management of its students and business or is done pursuant to any legal obligation of the College.

In addition I understand that the College may contact my next of kin if they have serious concerns for my well-being in regard to the subject of the BBV Policy.

Signed _________________________

Date __ / __ / _____

Date of Birth_____________________

This 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 University of Dublin, Trinity College Dublin.