

**Infectious Disease Screening
And Immunisation Policy
(Including Blood Borne Virus Policy)
For
Students of College of Medicine and Health**

Version 3.0 June 2011

University College Cork



UCC

Coláiste na hOllscoile Corcaigh, Éire
University College Cork, Ireland

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PART: 1 INTRODUCTION

1.0 Introduction

- 1.1 The College of Medicine and Health has a duty of care to patients attended by students. This policy aims to reduce the risk of transmission of infectious diseases from students to patients to the minimum possible.
- 1.2 The College of Medicine and Health also has a duty of care to students. This policy also aims to reduce the risk of a student contracting an infectious illness during their course to the minimum possible.
- 1.3 The College of Medicine and Health shall endeavour to support any student who contracts an infectious illness, and will make all reasonable adjustments necessary to allow any infected student complete his/her training.
- 1.4 The College of Medicine and Health and the Student Health Department shall ensure that details of a student's medical and immunisation history will remain confidential and handled accordingly.
- 1.5 The College of Medicine and Health will not refuse registration to a student who is infectious with a blood borne virus (1.6 below excepted), and will make every effort to adjust training to allow the student complete their studies. The College does reserve the right to limit the number of students requiring such adjustments at any one time, and may decide to exclude any number of students exceeding that number.
- 1.6 The College of Medicine and Health will refuse registration to all applicants applying for a place in the School of Dentistry who are infectious with a blood borne virus. (6.4 Below)
- 1.7 All students have a responsibility to protect themselves, their patients and the clinics and hospitals to which they are attached from the transmission of infectious illnesses. They are required to attend scheduled immunisation clinics and co-operate with the screening and immunisation programme organised by the Student Health Department.
- 1.8 The Student Health Department is responsible for implementing the infectious disease screening and immunisation policy, and for providing each student with Certificate of Immune Status , as well as providing an Annual Report on the Programme to the Heads of each School in the College of Medicine and Health.
- 1.9 This policy follows the recommendations for the immunisation of healthcare workers including students, contained in the National Immunisation Guidelines of Ireland (2008)¹ and for the screening and management of healthcare workers including students, for the presence of Blood Borne Viruses published in 2005 in The Code of Practice for the Prevention of Transmission of Blood Borne Diseases in the Healthcare Setting².

PART 2: AIR-BORNE/DROPLET INFECTIOUS DISEASES

2.0 Tuberculosis

- 2.1 Tuberculosis is transmitted principally by the airborne route and remains a significant threat.
- 2.2 All applicant students who are native of countries of high TB endemicity (as defined by WHO criteria of >40 cases per 100, 000 population) to be screened for TB prior to arrival in Ireland. This screening, to be completed no greater than 12 months prior to registration in UCC to comprise of a one-step Mantoux test (reported in mm induration) and a CXR. UCC Student Health Department reserves the right to repeat either the Mantoux test or CXR, if deemed necessary.
- 2.3 Applicant students from countries of low TB endemicity, who do not have evidence of prior BCG vaccination (based on immunisation records or evidence of BCG scars on examination confirmed by clinician) to be screened for TB with a one-step Mantoux test and a CXR if Mantoux test is positive (> 6 mm induration)
- 2.4 Students discovered to have active Tuberculosis to be treated under the supervision of a Consultant Respiratory Physician and excluded from the University and clinical environment until the Student Health Department receives confirmation that the student is no longer infectious.
- 2.5 Students discovered to have Latent Tuberculosis Infection (LTBI) to be offered treatment for Latent TB Infection under the supervision of the Student Health Department. No exclusion from the University or clinical environment is deemed necessary in a case of LTBI.
- 2.6 Students who are Mantoux negative, and who have not previously been immunised are strongly recommended to have a BCG, administered by the Student Health Department, unless contraindicated
- 2.7 Students who decline the offer of a BCG to be advised of symptoms of Tuberculosis by the Student Health Department, and reminded of the need to undergo continued surveillance with Mantoux tests, at least once every two years. The responsibility for arranging follow up Mantoux tests to lie with the student.

3.0 Measles Mumps Rubella

- 3.1 Measles and Rubella are a significant risk to immunocompromised patients and in particular in the case of Rubella, to pregnant women. Mumps is less of a threat to patients, but there have been significant outbreaks of Mumps on campus amongst students, leading to considerable amounts of missed time for students.
- 3.2 All applicant students to provide the Student Health Department with record of previous MMR immunisation history, prior to registration.
- 3.3 Any student who does not have evidence of two previous MMRs, or confirmed natural acquired immunity to each of Measles Mumps and Rubella through previous infection to be immunised with at least a total of 2 lifetime MMRs, unless contraindicated. It is not necessary to undertake post Immunisation serological confirmation of seroconversion. Note: Laboratory serological results for IgG levels to Measles Mumps or Rubella are not regarded as reliable predictors of on-going and future immunity to these illnesses.

4.0 Varicella Zoster

- 4.1 Varicella Zoster (Chicken Pox) is a significant risk to immunocompromised patients and pregnant women. It can also cause a significant illness in students who contract Varicella as an adult.
- 4.2 All applicant students to provide the Student Health Department with record of previous Varicella Zoster immunisation history or confirmed history of clinical Chicken Pox or Shingles.
- 4.3 All applicant students who do not have a history of previous Varicella Zoster immunisation or confirmed history of clinical Chicken Pox or Shingles must provide laboratory serological evidence of immunity status to Varicella Zoster, prior to Registration in UCC.
- 4.4 Any applicant student who does not have evidence of previous clinical Chicken Pox or Shingles, or Varicella Zoster immunisation or is not fully immune based on laboratory results to Varicella Zoster to be immunised with a course of 2 Varivax (VZ) Vaccine, unless contraindicated. It is not necessary to undertake post immunisation serological confirmation of seroconversion.

PART 3: BLOOD-BORNE INFECTIOUS DISEASES

5.0 Transmission of Blood-Borne Viruses (BBV)

5.1 Hepatitis B virus, (Hep B) Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV) are each capable of being transmitted via blood or body fluids.

5.2 Students of the College of Medicine and Health who undertake Exposure Prone Procedures (EPP-See below), can transmit a BBV to patients during an EPP, if the student is infectious with a BBV at the time of the procedure. The College of Medicine and Health and individual students have an ethical responsibility and a duty of care to take all steps to minimise this risk.

5.3 Clinical activities which are associated with an increased risk of transmission of Blood or Body Fluid Borne viruses from operator to patient are called Exposure-Prone Procedures (EPP's). These include major surgical procedures with surgical entry into body cavities or deep tissues, including surgical operations, caesarean deliveries, perineal repair post vaginal delivery, dental procedures and oral-mucosal surgery, and examination and management of major trauma incidents. EPPs also include any procedure involving entry of the student's hand or fingers into a body cavity or closed anatomical space, which may be in contact with a needle tip or other sharp object including spicule of bone or teeth, and during which the hand or finger cannot be clearly seen at all times.

5.4 Exposure-Prone Procedures are undertaken usually only by students of Medicine, Dentistry, Dental Nursing and Dental Hygiene, and Speech and Language Therapy. EPP's do not form part of the training of students of Pharmacy, or Occupational Therapy

5.5 The following are not considered to be EPPs.

- Phlebotomy
- Inserting IV Canulae
- Minor surface suturing
- Incision of abscesses
- PR or PV examinations
- Speculum examinations
- Normal vaginal delivery

6.0 Screening for Hepatitis B and Hepatitis C Infectivity

- 6.1 Applicants for places in Dentistry, Dental Nursing and Dental Hygiene, are required to provide laboratory evidence of their Hepatitis B and Hepatitis C infectivity. All applicants must provide copies of original laboratory reports of Hepatitis B sAg and Hepatitis C antibody to the Student Health Department before Registration at UCC.
- 6.2 Any applicant or student identified as Hepatitis B sAg positive and e-antigen positive is deemed infectious with Hepatitis B.
- 6.3 Any applicant or student identified as Hepatitis B sAg positive and e-antigen negative will have their Hepatitis B Viral load measured on 3 separate occasions over a 6 week period Applicants are deemed infectious with Hepatitis B if a Viral Load of >1718 IU/ml (equivalent to 3.24 log₁₀) is determined on one or more occasions.
- 6.4 Any applicant for a place in Dentistry or Dental Hygiene who is deemed infectious with a Blood-borne Virus on screening according to criteria described in 6.2 or 6.3 (Hepatitis B) or 6.7 (Hepatitis C) will not be offered a place in Dentistry or Dental Hygiene. Registration will be declined at entry and they will be discontinued if they have commenced at University prior to confirmation of infectivity.
- 6.5 It should be noted that applicants who are found to be infectious carriers of Hepatitis B or Hepatitis C but who are successfully treated and appropriately monitored for their BBV infection may then become eligible to perform EPPs and therefore to re-apply for admission to Dental School.
- 6.6 Any student identified as Hepatitis B sAg positive and e-antigen negative and initial Hepatitis B Viral load measured on 3 separate occasions over a 6 week period is 1718 IU/ml (equivalent to 3.24 log₁₀) , is required to attend the Student Health Department for annual measurement of Hepatitis B Viral load.
- 6.7 Any student identified as HCV antibody positive will be required to undergo Polymerase Chain Reaction (PCR) testing for Hepatitis C RNA. A positive result indicates that a student may be infectious for Hepatitis C, and advice re their infectivity will be obtained from their treating Consultant in Infectious Diseases or Hepatologist, based in Ireland. Any student who is PCR Hepatitis C RNA "target not detected" on two assays 6 months apart, is considered non-infectious for HCV, but must attend the Student Health Department for annual Hepatitis C viral load estimation.
- 6.8 Hepatitis B sAg level and Hepatitis C antibody level will be undertaken on the Identified Validated Sample taken from students of Medicine, Dentistry, Dental Nursing, Dental Hygiene, and Speech and Language Therapy when determining the student's anti-Hbs level on completion of their course of Hepatitis B vaccinations. (See 9.3 below)

7.0 Management and Monitoring of Students with BBV infection

- 7.1 Students who are infectious with either Hepatitis B or Hepatitis C must remain under the supervision of a Consultant in Infectious Diseases or Hepatology in Ireland.
- 7.2 Students who are infectious with Hepatitis B or Hepatitis C must not undertake Exposure Prone Procedures during their training as long as they remain infectious. The student must inform any Consultant responsible for his training, in particular the Professors of Surgery, Obstetrics, Accident and Emergency, and Paediatric Surgery should be informed. Students may return to undertaking EPP's only on confirmation of persistent non-infectivity over a period of time as in accordance with current guidance on this issue.
- 7.3 Students are not routinely screened for Human Immunodeficiency Virus (HIV). Any student who believes they have been exposed to or has contracted Hepatitis B, Hepatitis C or HIV positive is ethically obliged to notify the Student Health Department for advice and support and not to partake in EPPs until the risk is assessed.
- 7.4 A student previously infectious with Hepatitis C can return to undertaking EPPs if and when following treatment the student has become PCR "target not detected" for Hepatitis C Viral RNA and has a Hepatitis C Viral load that is acceptable according to the Consultant in Infectious Disease or Consultant Hepatologist, and in accordance with current guidance on this issue. The student must remain under the supervision of a Consultant in Infectious Disease or Hepatology in Ireland, and attend the Student Health Department for Annual Hepatitis C Viral Load measurement.
- 7.5 Students infected with HIV virus should not undertake EPPs. The College of Medicine and Health will make every effort to ensure that the student is able to complete all other areas of training.
- 7.6 A student who discovers that they have been infected with a Blood Borne Virus must agree to co-operate with any look-back exercise deemed necessary on advice from Consultant in Infectious Diseases/Consultant Hepatologist.

8.0 Reducing the Risk of Contracting a Blood-Borne Virus

- 8.1 Most common clinical activities undertaken by students are not associated with an increased risk of contracting or transmitting pathogens present in blood or body fluids.
- 8.2 Compliance with standard infection control measures will prevent transmission of most infectious agents in the clinical setting, and students are required to familiarise themselves and adhere to local infection control policy of any clinic or hospital to which they are attached, including wearing personal protective equipment where appropriate (gloves, gowns, and masks) and obeying the policy with regard to the handling and disposal of sharps.
- 8.3 Students are reminded of their obligation to immediately report all sharps and needlestick accidents or injuries sustained to clinician in charge who will act according to local protocol in handling the incident.
- 8.4 Students of the College of Medicine and Health are at an increased risk of contracting a Blood-Borne infectious disease from an infected patient, and are required to avail of all protective measures to reduce that risk, including being immunised against Hepatitis B, unless already immune by virtue of previous course of vaccination or previously naturally acquired Hepatitis B infection which has resolved.

9.0 Hepatitis B Vaccination

- 9.1 Immunisation against Hepatitis B is provided at the Student Health Department, and commences in first year within the first month of Term 1, following the 0, 1, 6 month schedule. All students are required to be immunised unless there is a medical contraindication to vaccination. Hepatitis B immunisations received elsewhere prior to registration at UCC, must be confirmed by a clinician in writing to the Student Health Department.
- 9.2 The Student Health Department is responsible for confirming a student's Hepatitis B Immune status. Laboratory results from elsewhere will be noted, but may not be accepted as proof an individual's immune status, due to difficulties with verification.
- 9.3 The Student Health Department requires that Photo-id be provided by the student at the time of blood sampling for Hepatitis B immune status. The Student Health Department is responsible for the transportation of the sample to the laboratory and for interpretation of the result. This satisfies the criteria that the result can be reported as being from an Identified Validated Sample (IVS) required by Occupational Health Departments of the HSE. The results are interpreted according to criteria laid down in the Immunisation Guidelines for Ireland (2008 edition) pages 64-65.
- 9.4 Students are not permitted to enter the clinical environment until their immune status to Hepatitis B has been confirmed by the Student Health Department, and this has been confirmed to the Head of School.
- 9.5 Students who have not achieved immunity following completion of a primary course of Hepatitis B immunisations are permitted to enter the clinical environment following advice from the Student Health Department.
- 9.6 Students who are non-immune following completion of a primary course of Hepatitis B immunisations will have their Hepatitis B Core Antibody status checked to screen for evidence of previous Hepatitis B infection, and if this is positive, and they are Hepatitis B Sag negative, no further action is needed. (Naturally acquired immunity, non-infective)
- 9.7 Students who are non-immune following completion of a primary course of Hepatitis B immunisations and are Hepatitis B Core antibody negative are given a further course of Hepatitis B immunisations using a different brand of vaccine than that used in the primary course where available, with a check on their immunity status at the end of this second course.
- 9.8 Students who remain non-immune following completion of 2 courses of Hepatitis B immunisations are true Non-Responders to the Vaccine. They are permitted to enter the clinical environment with no restrictions, but are reminded of the need to seek urgent medical attention in the event of a needlestick or sharps injury. Non-Responder Students who undertake EPPs as part of their training are required to attend the Student Health Department for annual Hepatitis B sAg measurement.

10.0 Outbreak Situations

- 10.1** In the event of an outbreak of any infectious illness on campus, in clinical locations or in the wider local community, students are required to adhere to all infection control measures recommended during that outbreak.
- 10.2** Students who contract an infectious illness should adhere strictly to the minimum period of isolation recommended and **must not** return to the clinical environment until that period has elapsed and they have recovered from their illness.
- 10.3** Students should avail of any other appropriate immunisations as and when recommended during outbreak situations. This includes obtaining boosters to previously completed primary immunisation courses

References:

1. Immunisation Guidelines for Ireland 2008 edition. Available at: www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines2008/
2. The Code of Practice for the Prevention of Transmission of Blood Borne Diseases in the Healthcare Setting. Available at: www.ncnm.ie/files/pubupdate07/Prevent_transmis_blood_borne_disease_2006.pdf

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PART 4: STUDENT DECLARATION

11.0 Agreement

11.1 I confirm that having read and understood the contents the University College Cork Infectious Disease Screening Immunisation and Blood Borne Virus Policy; I agree to abide by the provisions and requirements therein.

SIGNATURE:

DATE:

12.0 Consent

12.1 I consent to the disclosure by the Head of Student Health Service, or his/her nominee to the Head of School, or his/her nominee of my Hepatitis B vaccination status and of my attendance or non-attendance at scheduled Hepatitis B related clinics

SIGNATURE:

DATE:

PLEASE PRINT IN BLOCK CAPITALS:

FORENAME:

SURNAME:

STUDENT NUMBER:

COURSE:

YEAR:

Please forward this signed declaration (PART 4) to

The Student Health
Department, Ardpatrick,
College Road
Cork

Retain the Policy document (Parts 1-3) for your own reference