



TO ALL STUDENTS IN THE FACULTY OF HEALTH SCIENCES

NEEDLE-STICK INJURIES AND SPLASH INJURIES

There is a risk of sustaining a needle-stick injury or a splash injury during the course of your practical training, while handling a patient who may be infected with a blood-borne virus.

STARTER PACK

You should buy six ISENTRESS & COMBIVIR tablets from Riviera Pharmacy to keep with you. Prescriptions available from Mrs Ainslie, Dept Family Medicine, HW Snyman North building, R7-15. This precautionary measure is advisable in case you experience problems in obtaining the necessary medication after a needle-stick injury (e.g. after hours or weekends) – the healthcare facilities where you work have no obligation to provide you with this medication. Please keep in mind that the tablets should not be exposed to the sun, and that they have an expiry date.

- In the case of sustaining a needle-stick injury or a splash injury, remember to be factual is always good before emotional and include:
 - Get the patient’s “HIV” status;
 - Get the viral load of the patient;
 - Get the treatment history of the patient e.g. what ARV’s medicine he/she is on;
 - Ask patient questions e.g. when he was last sexual active, how many sexual partners he has & is he an intravenous user?

*Synoptic exposition of the various steps to be followed according to the prescribed procedures set out in the form	
<i>STEP</i>	<i>ACTION</i>
Cleanse and disinfect	Wash with soap and water. Don't irritate the skin by rubbing, sucking blood etc.
Start initial medication STARTER PACK	COMBIVIR: ISENTRESS: one tablet 12-hourly NOTE: The decision of the student to take the medication is regarded as informed consent. Preferably start within two hours.

Blood tests from source patient	<p>Student's responsibility. Draw blood for HIV combo-assay, HBsAg & anti-HBC. Testing may only be done after counselling and with the written consent of the patient. (Should the patient's permission not be obtained, permission may be obtained from the hospital superintendent.)</p> <p>The results of the "Rapid" HIV test should be available within 10 minutes. The results are verified later by routine test methodology.</p>
Baseline blood tests of student	<p>At the same time, the student must have his/her own blood taken for HIV combo-assay and Hepatitis Bs antibody. The student will not receive counselling before the HIV test is done, but will receive counselling before the results are made known. As a safety precaution, students should be advised to proceed with taking their initial starter pack doses immediately even though the results of the patient's HIV test might not be available yet. If it is later proven to be unnecessary after the test results have been obtained, the medication can be stopped.</p>
Blood tests to laboratory	<p>The student must ensure that both his/her own blood and the source patient's blood samples are correctly labelled as "Student injury on duty" and that all the samples are submitted together to their closest laboratory as soon as possible.</p>
Report incident immediately thereafter to Dept of Family Medicine	<p>Mrs Karin Ainslie, Dept Administrator, Dept of Family Medicine, University of Pretoria, R7-15, HW Snyman Building North wing, tel (012) 356-3302, who will arrange an academic supervisor to see you</p>
Further help will be organised by the Department of Family Medicine in the form of a academic/clinical supervisor	<p>An HIV-positive source patient: Prescription for the rest of the month's medication is supplied if the student is HIV negative, and must be filled at Riviera Pharmacy, in order for the University to bear the cost.</p> <p>A Hepatitis B-positive patient: If the student does not have antibodies, Hepatitis B immune-globulin is necessary, as well as a booster dose Hepatitis B vaccine.</p>
Follow-up blood tests And supportive counselling	<p>At TDH Hospital, use the initial hospital file number when opening your file at hospital where accident happened. Open a file at TDH IRO follow up blood tests or do it privately through parents medical (on own cost). Only supportive counselling is done by the Department of Family Medicine, Level 7, HW Snyman Building North Wing.</p>

The pharmacy used by the University is Riviera Pharmacy at 52 Annie Botha Drive (tel 012 329 3414/5).
 The University will bear the cost of the month's medication as well as the costs of the required blood tests.
 As a precaution, students should buy their own "starter pack" of Combivir and Isentress tablets at the same pharmacy at a reduced price (paid for by the students themselves: **±R200**), to have with you in case of an exposure incident.

Attachment A contains the flow chart with all the relevant steps.

The persons you may contact, should you experience problems with any of the steps, are:

- Dr Marietjie van Rooyen, Department of Family Medicine 082 785 4500.
- Dr S.I.M. Mayaphi, Department of Medical Virology, Pathology Building, 082 786 5483.
- Mrs Karin Ainslie, Department of Family Medicine, tel 012 356-3302

NOTE: Blood tests in respect of an injury sustained after-hours or on a weekend day, must be done the same day. These results are only reported during office-hours. The results and interpretation/action to follow from the blood tests will not be influenced by postponing discussion of the results for 24–48 hours. Students must, however, continue taking the initial COMBIVIR and ISENTRESS in the meantime, until the results of their blood test are known.

8. CANDIDATES FOR ADMISSION AS WELL AS REGISTERED STUDENTS WHO HAVE CHRONIC VIRAL CARRIER STATUS

In accordance with the policy statement of the Faculty of Health Sciences, University of Pretoria regarding HIV and Hepatitis B carrier status:

- The rights of HIV-positive students or applicants are recognised and supported,
- the point of view is supported that the HIV status of an individual is confidential medical information and that a student may accordingly not be forced to have his or her HIV zero-status tested, unless a justified emergency situation arises,
- no applicant will be refused admission to the Faculty of Health Sciences on the grounds of a positive HIV zero-status,
- no student who becomes HIV-positive during the course of his or her studies, will be excluded from further study at the University. Counselling will, however, be given in respect of the possibility of an alternative career,
- the view is supported that HIV-positive students pose a minimal risk to patients, provided that the students concerned are properly informed, instructed and trained in all aspects of HIV, are keeping abreast of medical and scientific advances concerning HIV, and adhere to recognised standard and universal precautionary measures,
- HIV-infected students should be allowed to execute *most* of the surgical procedures, provided that universal precautionary measures are strictly applied (justified restrictions may, however, be identified and made applicable to the relevant student),
- any student who is HIV-infected or who has reason to believe that he or she may be infected, should undergo regular counselling at an appropriate institution, firstly to protect patients from risks, and secondly, to ensure that the student has the physical and mental abilities to continue performing his or her professional activities competently and safely,
- the Faculty of Health Sciences as well as the University of Pretoria offer services by providing information regarding HIV, information about the benefit gained when a student knows his or her HIV zero-status, and advice regarding the professional and personal choices facing an individual as student and later on, as a professional,
- an HIV-infected student is legally obligated to disclose his or her HIV zero-status to a patient if there is a substantial risk of the transmission of infection from the student to the patient, or alternatively, to refrain from becoming involved in any therapeutic or diagnostic involvement in such a situation,

Prof D Manning
Deputy Dean: Education FACULTY OF HEALTH SCIENCES

January 2019

TO ALL STUDENTS IN THE FACULTY OF HEALTH SCIENCES

Dear Student

OCCUPATIONAL EXPOSURE RISKS

With reference to the above-mentioned, the following important information is brought to your attention:

1. GENERAL UNIVERSAL SAFETY PRECAUTIONS

General universal measures for the prevention of infection with the HIV and blood-borne virus/es

NOTE: Recapping of needles is the most dangerous procedure in sustaining this injury. The hospital / clinic where you rotate has the responsibility of providing you with the necessary equipment to apply the universal safety precautions.

The second commonest cause of exposure is splash injuries. For this, it is important for you to wear eye protection whenever carrying out, or assisting with a procedure on a patient.

- Before any student attempt a procedure s/he should think about all necessary precautions to prevent exposure injuries
- Protect all injuries of your exposed skin by means of waterproof dressings and/or gloves.
- Prevent prick-wounds, cuts and abrasions.
- Use the Vacutainer system for venepuncture.
- Avoid as far as possible, the use of, or exposure to sharp objects (including needles, glass and metal). If unavoidable, be extremely careful with the handling and disposal thereof.
- Protect the eyes and mouth as well as clothing by wearing eye protection, a mask and waterproof/ water resistant protective clothing.
- Use gumboots or plastic disposable overshoes in the case of possible contamination of the floor or soil.
- Exercise good basic practices, including washing of hands and avoiding hand-to-mouth contact.
- Control surface contamination by blood and blood fluids through appropriate decontamination procedures.
- Dispose of contaminated waste in a responsible and safe manner.

(Information from the *Royal College of Pathologists, 1995* and "*Handbook of HIV Medicine*" *Oxford/Southern Africa – Wilson Douglas et al.*)

If equipment required for the practice of "universal precautions" is not available at the institution where you work, this must be reported, in writing, to the Department of Family Medicine, University of Pretoria, as soon as possible.

2. POLICY REGARDING PROCEDURES ON HIV-POSITIVE PATIENTS

For your own safety, you are advised to consider all patients as HIV positive, which means that the acknowledged and preventative steps must always be followed. You have to insist that the correct equipment be available at the facility where you work, to enable you to practise the "universal precautions". The different schools have their own specific protocols. You will be informed of it in detail during your training.

3. IMMUNISATION AGAINST INFECTIOUS/COMMUNICABLE DISEASES

- During the course of your studies, you will be exposed to patients who are suffering from infectious/ communicable diseases, or who are carriers of the diseases in question. **For the protection of your own health, it is recommended that you are immunised against Diphtheria, Tetanus, Polio, Measles, Tuberculosis, Rubella, Mumps, as well as Hepatitis.**
- Immunisation against **Diphtheria, Tetanus, Polio, Measles and Tuberculosis** are supplied routinely to children by local authorities, but you are nevertheless requested to make sure that you are in fact immune to these diseases before commencing your studies.
- **Rubella** is a highly contagious disease and although it rarely results in a serious illness, it presents a serious risk to the unborn baby if a pregnant patient comes into contact with it. It is therefore imperative that all students are immunised against Rubella.
- **Varilix** is a new vaccine against chicken pox.
- **Hepatitis A, B, C and D** will be discussed under item 6.

4. HUMAN IMMUNO-DEFICIENCY VIRUS (HIV)

- The risk of infection after a needle-prick is 0,3% and even lower (0,09%) after a splash injury to mucous membranes by HIV-infected fluids. No cases of transmission have been reported where HIV-infected blood landed on intact skin.

5. STARTER PACK

You should buy six ISENTRESS (400mg bd) and Combivir (emtricitabine and tenofovir disoproxil fumarate) tablets at a specially reduced price and from Riviera Pharmacy to keep with you. Prescriptions available from Mrs Ainslie, Dept Family Medicine, HW Snyman North building, R7-15. (Other options available. Contact Dr S.I.M. Mayaphi from the Medical Virology department). This precautionary measure is advisable in case you experience problems in obtaining the necessary medication after a needle-stick injury (e.g. after hours or weekends) – the healthcare facilities where you work have no obligation to provide you with this medication. Please keep in mind that the tablets should not be exposed to the sun, and that they have an expiry date.

6. HEPATITIS A, B, C, D

Hepatitis A virus:

- Although incidents of occupational exposure to the Hepatitis A virus have been reported, the route of transmission is mainly by means of close contact, faecal-oral transmission or blood transfusion products.
- Routine testing for Hepatitis A virus infection is not cost-effective as most adults are immune to HAV and do not need immunisation.

Hepatitis B virus:

- The risk of HBV infection after exposure is 5-40%. (This infection is therefore ten times more infectious than HIV).
- Any skin injury or mucous membrane exposure must be regarded as a significant exposure risk that will require attention.
- All healthcare students are required to ensure that they are immune to HBV. All HBV vaccines are highly effective.
- Successful candidates for admission to the Faculty of Health Sciences are expected upon registration as a student, to submit satisfactory proof of immunisation against the Hepatitis B virus to Student Administration.

Hepatitis C virus:

- Various incidents of transmission of HCV to healthcare workers are recorded in literature and the risk is calculated at 3-10% per needle-stick injury.
- At this stage, HCV infection may be suspected if the blood of a patient tests positively for Hepatitis C antibodies. Such individuals must be referred for further examination to ascertain whether or not they are actively infected with the virus, by doing a PCR.
- At this stage, there is no recommended post-exposure prophylaxis or treatment for HCV infection.

Hepatitis D virus:

- Sero-prevalence of Hepatitis D virus is currently very low in South Africa and by controlling HBV, the Hepatitis D virus can be controlled.

9. NEEDLE-STICK INJURIES AND SPLASH INJURIES

- There is a risk of sustaining a needle-stick injury or a splash injury during the course of your practical training, while handling a patient who may be infected with a blood-borne virus.
- In the case of sustaining a needle-stick injury or a splash injury and include:
 - Get the patient's "HIV" status.
 - Get the viral load of the patient.
 - Get the treatment history of the patient.

*Synoptic exposition of the various steps to be followed according to the prescribed procedures set out in the form	
<i>STEP</i>	<i>ACTION</i>
Cleanse and disinfect	Wash with soap and water
Start initial medication	<p>COMBIVIR :</p> <p>ISENTRESS: one tablet 12-hourly</p> <p>NOTE: The decision of the student to take the medication is regarded as informed consent. Preferably start within two hours.</p> <p>Medication <i>may</i> also be available at the healthcare facility where you are:</p> <p>Steve Biko Academic Hospital: Surgical and Trauma ICU, Level 4, Matron Ker (tel 082 417 7879, 012 354 1596) ??? or alternatively</p> <p>Sr Madumo (tel 012 354 1487, 072 314 1298) ???</p> <p>Kalafong Hospital: Casualties and the Hospital Pharmacy.</p> <p>Jubilee Hospital: Casualties.</p> <p>Witbank Hospital: Casualties & Infection Control Sister.</p> <p>Weskoppies Hospital: Admissions Ward and Matron.</p> <p>Oral & Dental Hospital: Sr B Vian at Infection Control Office, Room 6-32 (tel 012 319 2644, 082 337 2059).</p> <p>Clinic: At Doctor or Sister in charge.</p>
Report incident immediately to academic supervisor, and as soon as possible thereafter, to:	Mrs Karin Ainslie Department of Family Medicine, University of Pretoria, R7-15, HW Snyman Building North wing, tel 012 356 3302.
Blood tests from source patient	<p>Student's responsibility.</p> <p>Draw blood for HIV combo-assay, HBSAg & anti-HBC.</p> <p>Testing may only be done after counselling and with the written consent of the patient. (Should the patient's permission not be obtained, permission may be obtained from the hospital superintendent.)</p> <p>The results of the "Rapid" HIV test should be available within 10 minutes. The results are verified later by routine test methodology.</p>

Baseline blood tests of student	At the same time, the student must have his/her own blood taken for HIV combo-assay and Hepatitis Bs antibody. The student will not receive counselling before the HIV test is done, but will receive counselling before the results are made known. As a safety precaution, students should be advised to proceed with taking their initial starter pack doses immediately even though the results of the patient's HIV test might not be available yet. If it is later proven to be unnecessary after the test results have been obtained, the medication can be stopped.
Blood tests to laboratory	The student must ensure that both his/her own blood and the source patient's blood samples are correctly labelled as "Student injury on duty" and that all the samples are submitted together to their closest laboratory as soon as possible.
Further help will be organised by the Department of Family Medicine	An HIV-positive source patient: Prescription for the rest of the month's medication is supplied if the student is HIV negative, and must be filled at Riviera Pharmacy, in order for the University to bear the cost. An Hepatitis B-positive patient: If the student does not have antibodies, Hepatitis B immunoglobulin is necessary, as well as a booster dose Hepatitis B vaccine.
Report to Faculty Management	The incident will be reported by the Department of Family Medicine to Administration (Faculty Manager or his representative) or the Deputy Dean.
Follow-up blood tests And supportive counselling	2 Options: Open a file at TDH IRO follow up blood tests or do it privately through parents medical (on own cost). Only supportive counselling is done by the Department of Family Medicine, Level 7, HW Snyman Building North Wing.

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Deputy Dean: Education