



UNIVERSITY OF NATAL

**OCCUPATIONAL EXPOSURE TO THE
HEPATITIS B VIRUS (HBV)
AND THE
HUMAN IMMUNODEFICIENCY VIRUS (HIV)
POLICY, PROCEDURES & PROTOCOLS**

Submitted by:

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OCCUPATIONAL EXPOSURE TO THE HEPATITIS B VIRUS (HBV) AND THE HUMAN IMMUNODEFICIENCY VIRUS (HIV) POLICY

The University of Natal is committed to providing, to the best of its capability, an effective and efficient preventative and Post-exposure Prophylaxis (PEP) Programme based on sound scientific principles, in the event of an employee or student being exposed to infectious material suspected of having HBV and/or HIV, while performing duties or activities in the course of any activities related to the University.

1. DEFINITIONS

In this Policy any expression to which a meaning has been assigned, shall have that meaning unless the context otherwise indicates:

- 1.1 The Policy means the University of Natal Occupational Exposure to HBV and HIV Policy.
- 1.2 The University means the University of Natal.
- 1.3 Staff member or student means a staff member employed by the University of Natal on the date of injury and student means a person registered at the University for the purposes of studying. The possession of a valid University identity card is essential.
- 1.4 Occupational exposure refers to any student or staff member who is accidentally exposed to bodily fluids, which may contain the Hepatitis B Virus and / or the Human Immunodeficiency Virus, while performing duties or activities in the course of any activities related to the University.
- 1.5 HIV means the Human Immunodeficiency Virus.
- 1.6 AIDS means the Acquired Immunodeficiency Syndrome that is the latter phase of HIV infection.
- 1.7 HBV means the Hepatitis B Virus.
- 1.8 PEP means Post-exposure Prophylaxis. The theory underpinning the use of PEP is that antiviral treatment commenced immediately after exposure to infectious material suspected of having HBV and / or HIV, may prevent the transmission of HBV and / or HIV. The provision of Post-exposure Prophylaxis is without prejudice to the University, and is simply a service to assist a staff member or student.
- 1.9 Antiretrovirals (also known as antivirals) are drugs that fight against retroviruses, such as HIV.
- 1.10 Stat dose / dosage means the medication dispensed and taken immediately.
- 1.11 Post-exposure prophylaxis starter pack means emergency quantities of antiretroviral medication, which is prescribed and dispensed by an identified preferred provider.

- 1.12 Identified preferred provider means a hospital or medical practitioner identified by the University as meeting predetermined minimum standards of care, to provide specialized emergency after-hours assessment and treatment of a staff member or student who sustains an occupational exposure (as defined in 1.2 above).
- 1.13 Professional nurse means a registered nurse employed by the University of Natal to perform in such capacity.
- 1.14 The Source Patient (SP) refers to the person whose bodily fluids the staff member or student has been accidentally exposed to.
- 1.15 Office-hours means between 08h00 and 15h30 Monday to Friday.
- 1.16 After-hours means after 15h30 and before 08h00 Monday to Friday and any time on Saturday, Sunday and / or national public holidays.

UNIVERSITY OF NATAL OCCUPATIONAL EXPOSURE TO HBV AND HIV PROCEDURES

To facilitate the Policy, the procedures below will be followed:

1. Post-exposure Prophylaxis starter pack.
2. Assessment of the source patient.
3. Assessment of the staff member or student.
4. Administration of PEP.
5. Comprehensive documentation of the exposure.
6. Counselling of the staff member or student.
7. Follow up of the staff member or student.
8. Administration of the University of Natal Occupation Exposure to HBV and HIV Policy, Procedures and Protocols.

UNIVERSITY OF NATAL OCCUPATIONAL EXPOSURE TO HBV AND HIV PROTOCOLS

1. POST-EXPOSURE PROHYLAXIS STARTER PACK

- 1.1 If the staff member or student is situated at a hospital / clinic site, s/he must report to their immediate superior and follow the hospital / clinic's occupational injury procedure.
- 1.2 If the staff member or student is situated at /or close to the University, s/he must report to the nearest Campus Health Clinic during office-hours. The professional nurse at the Campus Health Clinic will:
 - 1.2.1 Administer the stat dosage.
 - 1.2.2 Assess the risk of exposure to the staff member or student following the injury and decide on the appropriateness of PEP. An assessment must be made to clarify whether the exposure is a high or low risk exposure.
 - 1.2.3 If appropriate, prescribe and dispense the applicable starter pack.

- 1.3 If the staff member or student is not at a hospital or clinic, and is situated at / or close to the University and the injury occurred after-hours, s/he must report to Risk Management Services. Risk Management Services will contact the identified preferred emergency medical transport provider (such as Medical Rescue International) who will transport the staff member or student to the identified preferred service provider (such as McCord Hospital). The Medical Officer at the identified preferred service provider will:
 - 1.3.1 Administer the stat dosage.
 - 1.3.2 Assess the risk of exposure to the staff member or student following the injury and decide on the appropriateness of PEP. An assessment must be made to clarify whether the exposure is a high or low risk exposure.
 - 1.3.3 If appropriate, prescribe and dispense the applicable starter pack.

The University will cover the costs of this assessment, prescription and dispensing of the starter pack, provided the staff member or student has reported the incident to Risk Management Services. The staff member or student will be liable for any costs of any additional treatment.

- 1.4 Any staff member or student commencing the PEP treatment after-hours must be advised to report to his/her nearest Campus Health Clinic the next working day. Failure to do this will result in the staff member or student not having access to the full 28 day PEP regimen.
- 1.5 If staff members and / or students are working away from the University campuses and not at a state hospital / clinic, it is the responsibility of the Head of the particular School or Department or delegated personnel to ensure that such staff member or student has access to HIV prophylactics.
- 1.6 The Campus Health Clinics will consult with the identified doctors at the Virology Department, Nelson R Mandela School of Medicine, should they require further medical advice. Importantly, the staff member or student must be advised to take the stat dosage while medical decisions are being made.
- 1.7 All PEP medication must be continued until the source patient is confirmed to be uninfected with the HIV antibody (HIV antibody negative and p24 antigen negative).

2. ASSESSMENT OF THE SOURCE PATIENT (SP)

- 2.1 Blood in a gel tube should, where possible, be taken from the SP after adequate counselling and obtaining his/her consent at the time of exposure.
- 2.2 The blood must be marked with:
 - 2.2.1 The SP details, including the results for HBV and HIV.
 - 2.2.2 Urgent.
 - 2.2.3 Clear details that it is from a SP connected with an occupational injury.
 - 2.2.4 Clear contact details of the attending doctor or professional nurse to facilitate the issuing of results.

2.3 The blood must be sent to the laboratory on site for HBV and HIV testing if the exposure occurred at a remote facility or to the Department of Virology, Nelson R Mandela School of Medicine, if nearby.

2.4 If, for whatever reason, blood cannot be obtained or the source of the blood is unknown, then the source must be regarded as being HBV and HIV positive.

3. ASSESSMENT OF THE STAFF MEMBER OR STUDENT

3.1 The exposed staff member or student or must report to a Campus Health Clinic as soon as possible, or on the next working day following the injury.

3.2 An assessment, including counselling, must be made to clarify the staff member or student's HBV and HIV status.

3.3 With the staff member or student's consent, blood in a gel tube must be taken.

3.4 The blood must be marked with:

3.4.1 An appropriate confidential number. No details of the staff member or student are to appear on the tube and request form.

3.4.2 Clear details that it is from a staff member or student with an occupational exposure.

3.4.3 Clear contact details of the attending doctor or professional nurse to facilitate the issuing of results.

3.5 The blood must be sent to the Department of Virology, Nelson R Mandela School of Medicine, for HBV and HIV testing as well as other baseline studies, to ensure the safety of the medication.

3.6 The assessment of the staff member or student does not need to be made after-hours, as it does not influence the administration of PEP after-hours.

4. ADMINISTRATION OF PEP

Appropriate PEP must be administered depending on the assessment of the risk, status of the source patient and status of the staff member or student.

4.1 HIV

4.1.1 If the SP is confirmed to be HIV infected (HIV antibody positive and/or p24 antigen positive) and the staff member or student is HIV antibody negative, PEP will be administered for 28 days.

4.1.2 No further PEP will be administered if the SP is HIV negative and / or the staff member or student is HIV positive. Appropriate counselling and referral of the staff member or student must be instituted.

4.2 **HBV**

- 4.2.1 If the SP is tested to be surface antigen positive on the rapid HBV surface antigen test then action depends on one of the following, after consultation with Campus Health Clinic or the identified preferred service providers:
 - 4.2.1.1 If a delay of more than 24 hours is expected in ascertaining the staff member or student HBV antibody titre, then HBV immunoglobulins must be administered within 24 hour.
 - 4.2.1.2 If the staff member or student HBV antibody titre is tested on the next working day to be > 100 IU/ml, then no further action is necessary.
 - 4.2.1.3 If the staff member or student HBV antibody titre is tested on the next working day (within 24 hours) to be < 100 IU/ml, then HBV immunoglobulins must be administered within 24 hours to the staff member or student, together with the HBV vaccination.
 - 4.2.1.4 If the SP is tested to be surface antigen negative on the rapid HBV surface antigen test, then no further action necessary.
- 4.2.2 As a general precaution all staff members and students identified as occupationally being at high risk should be vaccinated against HBV.

5. **COMPREHENSIVE DOCUMENTATION OF THE EXPOSURE**

- 5.1 Comprehensive documentation of the exposure must be maintained by the Campus Health Clinic, the Occupational Officer and Safety Manager, and where applicable, Risk Management Services and identified preferred service providers.
- 5.2 The Campus Health Clinic's documentation will include:
 - 5.2.1 PEP Report Form.
 - 5.2.2 PEP Management Checklist.
 - 5.2.3 Statement of Exposure to Infectious Material i.e. consent to HIV testing and administration of PEP drugs.
 - 5.2.4 Follow up notes including all consultations and communications.
 - 5.2.5 Blood results of SP and staff member or student.
- 5.3 Confidentiality must be maintained at all times using the PEP UN Number.
- 5.4 In the event of the staff member or student seroconverting, initial and all follow up COIDA Forms/Reports will be facilitated by Human Resources, Campus Health Clinics, and where applicable Risk Management Services and identified preferred service providers.

6. **COUNSELLING OF THE STAFF MEMBER OR STUDENT**

- 6.1 Adequate counselling of the staff member or student must be initiated and maintained.
- 6.2 The counselling will include:
 - 6.2.1 Pre- and post- test counselling for HIV testing.
 - 6.2.2 Information on risk of transmission of HBV and HIV from the SP.
 - 6.2.3 Information on the risk reduction due to PEP drugs.
 - 6.2.4 Adverse effects of the PEP drugs and how to alleviate these effects.

- 6.2.5 Precautions in pregnant and breastfeeding mothers.
- 6.2.6 Use of barrier contraception for 12 weeks from the time of injury.
- 6.2.7 Avoidance of blood donation until staff member or student is shown on follow up to be seronegative for HIV.
- 6.2.8 Adherence to the PEP programme.

7. FOLLOW UP OF THE STAFF MEMBER OR STUDENT

- 7.1 Appropriate follow up of the staff member or student must be maintained.
- 7.2 Appointments for 2 weeks, one, three, six, nine, twelve and eighteen months follow up must be scheduled.
- 7.3 It is the responsibility of the staff member or student to adhere to the PEP follow up programme.

8. ADMINISTRATION OF THE UNIVERSITY OF NATAL OCCUPATIONAL EXPOSURE TO HBV AND HIV POLICY, PROCEDURES AND PROTOCOLS

To facilitate effective and efficient execution of this document, each of the following role players will have the assigned responsibilities as indicated.

- 8.1 **University Executive** will be responsible for:
 - 8.1.1 Arranging administratively and / or financially with the KwaZulu Natal Department of Health (KZN DOH) to cover all staff or students of the University by the KZN DOH PEP Programme at all off-campus sites that are administered by the KZN DOH until the staff member or student is able to present at Campus Health Clinic for further management.
 - 8.1.2 Arranging administratively and/or financially with the appropriate laboratory services to perform all blood testing of the staff member or student and source patient.
 - 8.1.3 Arranging administratively and / or financially with the identified preferred service provider to access and treat staff members and students who have sustained an occupational exposure after-hours.
- 8.2 **The AIDS Programme** will be responsible for:
 - 8.2.1 Monitoring and evaluating the operationalisation of the Occupational Exposure to HBV and HIV Policy, Procedures and Protocols.
 - 8.2.2 Annually reviewing this document to accommodate developments within the medical, scientific and related fields.
 - 8.2.3 Reporting to the University of Natal AIDS Task Force on the application and implementation of the Policy, Procedures and Protocols.
 - 8.2.4 Monitoring of the fulfillment of the staff members and students' responsibilities in terms of the Policy as detailed in point 8.10 below.
- 8.3 **Campus Health Clinic** will be responsible for:
 - 8.3.1 Ordering and dispensing of the antiretroviral medication.
 - 8.3.2 Maintaining confidential documentation.

- 8.3.3 Counselling of exposed staff members or students with assistance from the University Student Counselling Centres where appropriate.
 - 8.3.4 Follow up of staff members or students who have sustained occupational exposures.
 - 8.3.5 Facilitating the provision of starter packs to staff members or students who are at remote institutions following written requests from the relevant Head of School or Department.
 - 8.3.6 Liaising with Risk Management Services to institute a preventative programme with the goal of minimizing occupational exposures.
- 8.4 **After-hours, the Identified Preferred Service Provider** will be responsible for:
- 8.4.1 Assessing the staff member or student's risk of exposure to HIV/AIDS.
 - 8.4.2 Prescribing and dispensing PEP starter pack if appropriate.
 - 8.4.3 Maintaining confidential documentation.
 - 8.4.4 Collaborating with the Campus Health Clinics.
- 8.5 **Department of Virology, Nelson R Mandela School of Medicine** will be responsible for:
- 8.5.1 Providing a consultation service to the Campus Health Clinic at all hours.
 - 8.5.2 Facilitating and reviewing any medical and scientific changes.
- 8.6 **Human Resources Division** with assistance from Campus Health Clinics, Risk Management Services and, where appropriate, identified preferred service providers, will be responsible for the completion of all documentation pertaining to the Compensation for Occupational Injuries and Diseases Act (COIDA) in the event of a staff member seroconverting.
- 8.7 **Finance Division** will facilitate the availability of appropriate funds in specific University codes to facilitate the purchasing of:
- 8.7.1 Antiretroviral medication and symptomatic treatment of side effects.
 - 8.7.2 HBV immunoglobulins and vaccines.
 - 8.7.3 Antitetanus toxoid.
 - 8.7.4 Consumables, both stationery and medical.
 - 8.7.5 Payment for emergency, after-hours services of preferred service providers as specified in this document.
 - 8.7.6 Payment of all blood testing of staff member or student and source patient.
- 8.8 **Heads of Schools or Departments** will be responsible for facilitating:
- 8.8.1 The administration of HBV vaccines to all staff members and students at identified high-risk departments.
 - 8.8.2 The implementation and practice of the requirements of the Compensation for Occupational Injury and Diseases Act, including Universal Precautions, in consultation with Risk Management Services.
 - 8.8.3 Arrangements with the Campus Health Clinic to dispense starter packs to staff members or students working at off-campus sites or arrangements with the managements (in conjunction with the University Executive) of the off-campus sites to cover the staff member or student by the off-campus site PEP Programme until the staff member or student is able to present at the Campus Health Clinic.

- 8.9 **University Staff and Students** will be responsible for:
 - 8.9.1 The attendance and follow up at the Campus Health Clinic.
 - 8.9.2 Complying with the administration of HBV vaccines.
 - 8.9.3 The practice of the requirements of the Compensation for Occupational Injury and Disease Act including Universal Precautions.
 - 8.9.4 Familiarity with this document to facilitate the PEP Programme.

- 8.10 **Risk Management Services (RMS)** will be responsible for:
 - 8.10.1 Ensuring the staff at Risk Management Services are trained with the knowledge and skills required for the implementation of the applicable procedures and protocols outlined in this Policy.
 - 8.10.2 Ensuring that staff at Risk Management Services have the referral information relating to the Campus Health Clinics (who can assist during office-hours), emergency medical transport providers, (such as Medical Rescue International), and identified preferred service providers, (such as McCord Hospital), who can assist after-hours.
 - 8.10.3 Facilitating, together with the Campus Health Clinics, preventative programmes to minimize the risk of occupational exposures.
 - 8.10.4 Facilitating with Human Resources, the Campus Health Clinics and, where applicable, the identified preferred service provider, in the completion of all documentation pertaining to the Compensation for Occupational Injury and Disease Act in the event of the staff member seroconverting.
 - 8.10.5 Facilitating, with the Heads of Schools or Departments, the requirements of the Compensation for Occupational Injuries and Diseases Act (COIDA), which provides for a safe working environment for staff members.
 - 8.10.6 Contacting the appropriate emergency medical service/transport provider in the event that a staff member or student reports an occupational exposure after-hours.

**DOCUMENT COMPILED BY DR PRAVI MOODLEY & DR RAVEEN PARBOOSING
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DRAFT ONE: 04 March 2002
DRAFT TWO: 06 March 2002
DRAFT THREE: 18 March 2002 (input from Risk Management Services and Campus Health Clinic)
DRAFT FOUR: 21 March 2002 (input from Risk Management Services, Add Ref 4/5/6)
DRAFT FIVE: 22 March 2002 (input from Prof Smith)
DRAFT SIX: 11 June 2002 (input from Campus Health Clinic, Risk Management Services, OH & SM, AIDS Programme)
DRAFT SEVEN: 11 June 2002 (input from Campus Health Clinic, Risk Management Services, OH&SM, AIDS Programme)
DRAFT EIGHT: 17th March 2003 (input from Campus Health Clinic, AIDS Programme, Prof Smith, Shepstone & Wylie Attorneys)