



THE REPUBLIC OF UGANDA

MINISTRY OF HEALTH

**THE NATIONAL POLICY GUIDELINES ON
POST EXPOSURE PROPHYLAXIS FOR HIV,
HEPATITIS B AND HEPATITIS C**

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
BCC	Behavior Change Communication
CDC	Centers for Disease Control and Prevention
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HCW	Health Care Worker
HIV	Human Immuno-deficiency Virus
IEC	Information Education and Communication
MJAP	Mulago-Mbarara Hospitals' Joint AIDS Programme
MOH	Ministry of Health
NGO	Non Governmental Organization
PEP	Post Exposure Prophylaxis
PMTCT	Prevention of Mother to Child Transmission
RH	Reproductive Health
RTA	Road Traffic Accident
UHSBS	Uganda HIV Sero-Behavioral Survey
UNISTAF	Uganda National Injection Safety Task Force
WHO	World Health Organization
PHA	People Living with HIV/AIDS
STD	Sexually Transmitted Disease
NRTI	Nucleoside Reverse Transcriptase Inhibitor
NNRTI	Non-nucleoside Reverse Transcriptase Inhibitor



FOREWORD

The management of Post Exposure Prophylaxis (PEP) following occupational and non occupational exposure to HIV (Human Immune Deficient Virus), HBV (Hepatitis B Virus) and HCV (Hepatitis C Virus) have raised numerous areas of uncertainty for policy makers and health providers caring for individuals exposed to potentially infectious body fluids. Provision of PEP remains a challenging area in the national programmes for comprehensive HIV, HBV, and HCV prevention, treatment and care services. Key issues among these are the appropriate indications for PEP, antiretroviral therapy choices, and other management strategies to accompany use of PEP.

As the country scales up comprehensive HIV care including ART and moves towards universal access, issues concerning provision of HIV-PEP require policy decisions, and policy guidelines that can be implemented in programmes and services delivery planning. In view of the high prevalence of HBV, efforts should be stepped up to provide vaccination for all healthcare workers (HCWs) as well as PEP services. The overriding objective of these guidelines is to ensure appropriate use of PEP following accidental exposure.

This document offers policy guidance on the use of PEP, the circumstances in which it may be considered, and the appropriate use of subsequent diagnostic tests to measure individual outcome. These guidelines supplement existing policies and guidelines, and present an implementation framework for both occupational and non-occupational post-exposure prophylaxis for HIV, HBV, and HCV infection. They attempt to address the needs of healthcare and non-healthcare workers who experience blood or body fluid exposure in the course of their work and the potential risk faced by sexual assault survivors.

Successful implementation of these provisions requires comprehensive social dialogue between all parties concerned. These guidelines apply to all persons exposed to HIV, HBV, and HCV irrespective of the sector in which they work (e.g. public or private, in or out the health sector). At all times, confidentiality and informed consent must be observed with respect



to both the exposed and the source persons. It is currently recommended that all persons should consent prior to diagnostic testing and prior to receiving PEP. All healthcare workers, employers and other stakeholders are called upon to adhere to these guidelines and facilitate access to PEP services for all those in need and eligible.

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Special credit goes to the World Health Organization (WHO) Country Office for Uganda and Centers for Disease Control (CDC) Uganda for the financial and technical assistance that made the development, review and finalization of these policy guidelines possible and smooth. The names of individuals and key stakeholder institutions that actively participated in the process of developing these policy guidelines are in Appendix II.



GLOSSARY OF TERMS

Exposure: an exposure is defined as percutaneous, mucous membrane, or non-intact skin contact with potentially infectious blood or any other body fluids through occupational injuries, splashes or unprotected sex following an act of sexual offence.

Post Exposure Prophylaxis: Post Exposure Prophylaxis is an emergency medical response consisting of short term disease-specific treatment to reduce the likelihood of a particular infection after an exposure to potentially infectious blood or body fluids either through occupational or non-occupational contact.

Occupational exposure: An occupational exposure is defined as a percutaneous, mucous membrane, or non-intact skin exposure to potentially infectious blood or body fluids that occurs during the course of an individual's employment. This applies to health care workers (HCW) and to non health workers.

Non-occupational exposure: Non-occupational exposure to HIV occurs when one unintentionally gets in contact with potentially infectious body fluids as occurs in rape, defilement, and human bites.

Healthcare providers: These are defined as persons (e.g employees, students, contractors, attending clinicians, public-safety workers, or volunteers) whose activities involve contact with patients or with blood or other body fluids from patients in a health-care, laboratory, or public-safety setting.

Percutaneous: Any thing that crosses the body barrier such as skin, mucosa and eye.

Mucocutaneous: As relating to skin and mucus membrane.

Universal/standard precautions: There are routine recommended procedures that are universally accepted and applied to minimize the risk of transmission of micro organisms from both recognized and unrecognized/unknown sources of infection in the health care setting.

Needle stick injury: Danger from reused needle: the real or potential harm resulting from a prick with a needle previously used to take blood or give injection.

Sexual offence: Unwanted or forceful sexual act that includes vaginal, anal or oral routes



1.0 INTRODUCTION

1.1 Background

Evidence from biomedical studies has revealed that there may be a window of opportunity to abort HIV infection by inhibiting viral replication following an exposure. Research has further indicated that once HIV crosses a mucosal barrier, it takes 48-72 hours before the virus can be detected in the regional lymph nodes; and up to five days before it can be detected in blood. Accidental exposure to HIV is predominantly via percutaneous and mucocutaneous routes. The risk of transmission for deep percutaneous injury has been estimated to be about 0.3% while that due to mucocutaneous route is 0.03 - 0.09%. HIV-PEP has been mainly used for healthcare providers accidentally exposed to HIV, usually after being unintentionally pricked by a sharp or needle that they had used on someone likely to be HIV positive. In recent years, HIV-PEP has been used in many parts of the world as a potential method of preventing HIV infection. Accidental exposure to human immunodeficiency virus occurs in occupational and non-occupational situations. Although unintentional exposure to HIV can occur to any one, it is uniquely more common among healthcare workers, women, adolescents and children.

Similarly, HBV infection is a well recognized occupational risk for healthcare workers and providers in informal sector such as the saloon operators, barbers and traditional birth attendants (TBAs). The risk of HBV infection is primarily related to the degree of contact with blood in the work place and also to the hepatitis B e antigen (HBeAg) status of the source person. Research has demonstrated that among healthcare workers who sustained injuries from needles contaminated with blood containing HBV, the risk of developing clinical hepatitis if the blood was both hepatitis B surface antigen (HBsAg)- and HBeAg-positive was 22% - 31%; while the risk of developing serologic evidence of HBV infection was 37% - 62%. By comparison, the risk of developing clinical hepatitis from a needle contaminated with HBsAg-positive, HBeAg-negative blood was 1% - 6%, and the risk of developing serologic evidence of HBV infection, 23% - 37% (CDC, 2001). HBV PEP is an established practice in many developed countries though not widely used in the developing world, including Uganda.



On the other hand, HCV is not transmitted efficiently through occupational exposures to blood. The average incidence of anti-HCV sero-conversion after accidental percutaneous exposure from an HCV-positive source is 1.8% (range: 0% - 7%), with one study indicating that transmission occurred only from hollow-bore needles compared with other sharps. Available evidence suggests that HBC transmission rarely occurs from mucous membrane exposures to blood, and no transmission has been documented among healthcare workers from intact or non-intact skin exposures to blood. Data are limited on survival of HCV in the environment, with available epidemiologic data suggesting that environmental contamination with blood containing HCV is not a significant risk for transmission in the healthcare setting; with the possible exception of the heamodialysis setting where HCV transmission related to environmental contamination and poor infection control practices have been implicated. The risk for transmission from exposure to fluids or tissues other than HCV-infected blood also has not been quantified but is expected to be very low (CDC, 2001).

Medical procedures are an important, yet largely overlooked route of HIV and HBV transmission, especially in resource poor countries. Inadequate adherence to standard precautions of infection prevention is common in health facilities in many developing countries. This exposes health providers to HIV, HBV and other blood borne infections. Great attention must be paid to standard precautions and infection prevention in order to prevent HIV and HBV transmission in healthcare settings.

1.2 Justification

The development of PEP Policy Guidelines has been long overdue. The guidelines provide information on the PEP practice, management of exposures, training of health providers on the appropriate use of PEP and are a national publicity campaign framework. The policy guidelines also give mandate to any program that embraces PEP. Currently, there is an increasing number of health facilities and stakeholders providing HIV-PEP without any national guidelines. Whereas a policy to vaccinate healthcare workers against HBV is being formulated, there is currently no organizations or institutions in Uganda providing HBV or HBC PEP. However, hepatitis B immunization and post-exposure management are integral components of



a complete program to prevent infection following blood-borne pathogen exposure and are important elements of workplace safety. Studies in several parts of the world found no protective antibody response following HCV infection; and concluded that immunoglobulin use to prevent post-transfusion non-A, non-B hepatitis might not be relevant in making recommendations regarding PEP for hepatitis C.

Although the risk of HIV infection from an infected person through needle stick is estimated to be less than 1%, the number of health workers involved is significant, and this could discourage such workers from providing healthcare to HIV infected patients. A survey by the Uganda National Injection Safety Task Force in 2003 established that nearly half (44%) of health providers in Uganda had had needle stick injuries twelve months prior to the study. A recent survey by Uganda Martyr's University, Nkozi also revealed a high prevalence of needle stick injury among healthcare providers (Uganda Martyrs University, 2006). Many of these providers did not seek help because they did not know about HIV-PEP or where to seek help from. There is, therefore, strong need for policy guidelines on HIV-PEP and a campaign to sensitize people, including health workers, about PEP. It is envisaged that the availability of HIV-PEP services will reduce the occurrence of occupationally acquired HIV infection in health providers, and increase staff motivation to provide care to people infected with HIV.

There is also need to provide adequate information on exposures, how to prevent and manage them to both healthcare providers and employers. The employers need laws and guidelines on how to protect their employees against exposures, while the healthcare providers need information on exposures and how to prevent them, and what services are available in case of an accidental exposure. The policy guidelines will provide the necessary policy framework within which all stakeholders will operate.

Equally, there is need to provide HIV-PEP for non-occupational exposures as occurs in sexual assault by suspected HIV infected persons. Sexual offences expose victims to HIV and other STDs making the existence of PEP policy guidelines very necessary for purposes of training health providers, for provision of antiretroviral medicines, and for creating awareness about



HIV-PEP among the communities so that those who may need the services can access them. These policy guidelines create a framework for providing information that will guide health providers, law enforcement officers and the community as to when and where to refer victims of sex abuse, assaults, home carers and other forms of accidental exposure to HIV infection.

1.3 Goal

The goal of these policy guidelines is to prevention transmission of HIV, HBV and HCV in all persons following accidental exposure to potentially infectious body fluids.

1.4 Objectives

The development of these policy guidelines was underpinned by the following objectives:

- To create awareness about the dangers of accidental exposure to HIV, HBV and HCV infection in both occupational and non-occupational settings;
- To make provisions for management of clients who have had accidental exposure to HIV, HBV and HCV infection; and
- To advocate for HIV, HBV and HCV PEP at all levels

1.5 Target audience

- Healthcare workers including support staff (waste handlers)
- All victims of sexual offence
- Care givers especially in critical clinical areas such as maternity and Accident and Emergence (A and E)
- Police Force



- Saloon and barber shop operators
- Traditional Birth Attendants
- Traditional healers
- Transport agencies

The following are the key stakeholders:

- Healthcare workers
- Managers of healthcare institutions and facilities
- Women, men and children
- Religious, cultural, community and political leaders
- Mass media using the local languages
- All stakeholders involved in HIV, HBV and HCV prevention, care and treatment programmes
- Law enforcement officers and human rights groups

1.6 Policy framework

These policy guidelines will operate within the scope of existing and related provisions nationally and globally.

1.6.1 International guidelines

- Centers for Disease Control and Prevention (CDC) Recommendations on HIV, HBV and HCV PEP, 2001
- WHO/ILO Discussion Papers on PEP

- WHO Guidelines on PEP
- The Department of Health's PEP Guidelines, updated in February 2004, UK
- Updated U.S Public Health Service Guidelines for Management of Occupational Exposures to HIV. Recommendations for Post Exposure Prophylaxis 2005

1.6.2 National guidelines

- The Constitution of the Republic of Uganda, 1995
- The National Health Policy
- The National Policy on Injection Safety and Healthcare Waste Management
- The National Antiretroviral Treatment and Care Guidelines for Adults and Children
- Uganda Clinical Guidelines, 2003
- Revised PMTCT Guidelines, September 2006
- Health Sector Strategic Plan 2006/07-2010/11
- National Infection Prevention and Control Guidelines, 2004

1.7 Policy guidelines development process

The development of these policy guidelines followed a comprehensive consultative process that included key stakeholders. A working group was constituted by the Ministry of Health to draft and finalize these policy guidelines. Individuals were selected to represent key institutions and stakeholders. The working group consisted of senior clinicians, public



health scientists, infection control specialists and persons experienced in healthcare management and administration. The team held several meetings and consulted widely during the drafting, discussion and finalization of these guidelines.

Extensive review of documents, study findings and supportive supervision reports was undertaken by the team during the formulation process. A first draft was produced and subsequently discussed during a two days meeting held at Lira Hotel, Lira District, in the last week of September 2006. This was followed by intensive internal and external consultations that led to the development of the second draft of these guidelines. Subsequently, another workshop was convened in Masaka to come up with a final draft of this document, including additional provisions for HBV and HCV. A wider stakeholders' consultation retreat was held in Jinja and all the inputs are captured in this final version of the document.



2.0 SITUATION ANALYSIS

2.1 *Prevalence of HIV, HBV and HCV in the population*

According to Uganda HIV Sero-behavioral Survey (UHSBS) 2004-2005, the national average adult HIV prevalence was 6.4%, while that for HBV was 10.3%. Given this very high prevalence of HIV and HBV in the general population, and the fact that Uganda is a resource poor country where universal precaution practices of infection prevention and control are still inadequate, accidental exposure to body fluids is potentially dangerous and could result in the acquisition of HIV and HBV infection by the exposed individual.

2.2 *Compliance with standard precautions*

Globally, the World Health Organization has warned that the AIDS epidemic will be difficult to contain if adequate attention is not paid to the universal precautions for disease prevention and control and medical waste management. There is ample evidence to show that failure to observe universal precautions is contributing to the spread of HIV, HBV and other blood borne infections.

In Uganda, findings by Infection Control Unit and Injection Safety Project show that some healthcare providers do not wear protective gear, do not practice routine hand washing, do not cover wounds with waterproof material and do not manage medical waste appropriately. Moreover, protective gear is meant to protect health workers from direct contamination or from splashes such as occurs in operating theatres, labour suites and during handling of emergencies. Failure to observe universal precautions is most times due to lack of equipment and supplies, but in other cases it is due to lack of awareness of the dangers of exposures, or failure of health providers to change behavior. Failure to observe and adhere to universal precautions of infection prevention and control in health care settings puts healthcare providers and the general public at risk of exposure to and acquisition of HIV and HBV infection.



Evidence from support supervision visits by the Ministry of Health further reveals that health workers do not segregate waste at source of generation; some even leave used needles lying about; and that the practice of recapping of needles is still common in many health facilities. Most medical waste is dumped in non-protected areas as several health facilities do not have incinerators. It was further discovered that healthcare providers with hand lesions continued to attend to patients. This practice should be discouraged because much as such health workers apply dressings, the material used most of the time is not leak proof.

2.3 Existing HIV and HBV PEP services

HIV-PEP has received little attention as a major HIV prevention strategy in terms of planning, resource allocation and implementation. The existing services are quite limited and without standard policy guidelines. Most times, antiretroviral medicines are directed to other preventive and curative programs without emphasizing Post Exposure Prophylaxis. Health facilities in Uganda lack occupational health services that would cater for health staff in case of accidental exposure to HIV infection. Therefore, healthcare staff that get accidentally exposed to potentially infectious material turn to friends for counseling or turn to God,¹ while others go to other units where they are treated without following the proper guidelines. Regarding HBV PEP services, there is none so far in Uganda, though legislation providing for vaccination of healthcare workers is being formulated.

2.4 Consequences of HIV and HBV exposure

- Transmission and spread of infection
- Loss of credibility of the Health Care System
- Litigation by healthcare workers, patients and clients
- Increased spending of the Health Care System and the country at large
- Psychological Stress and low morale in places of work
- Liver diseases (in case of HBV)

¹ Research by Uganda Martyr's University, Nkozi: Effect of HIV/AIDS on health workers in four selected rural hospitals.

3.0 OCCUPATIONAL EXPOSURES

3.1 *Prevalence of occupational exposures to HIV, Hepatitis B and C*

Little is known about the prevalence of occupational HIV exposures because of the few studies done and many exposure incidents are not reported or documented. A survey by UNISTAF in 2003 put the prevalence of needle stick-injuries among health workers at 44%, and a recent research by Uganda Martyrs University, Nkozi also revealed a high rate of needle stick injury. According to a study done in Mulago Hospital emergency medical ward (Seremba, 2004) 48% of the patients had HIV, 9% had HBV and 3% HCV. The probability of acquiring blood borne infections following exposure has been estimated to be on average 0.3% for HIV following percutaneous exposure and 0.09% following a mucous membrane exposure; 0.5% for HCV, 30% HBV (CDC guidelines)

3.2 *Types of occupational exposures*

3.2.1 Needle Stick Injury

Needle stick injuries present one of the major ways through which occupational exposure to HIV, HBV and HCV occur. These mainly take place in the healthcare settings during major or minor surgical procedures, venous cannulations, injection administration, lumbar puncture procedures etc. Needle stick injuries also occur through the practice of re-capping needles or in situations where the patient is not at ease or is not fully compliant. The potential for HIV transmission in these types of exposures is presented as either lower risk or higher risk category

Lower risk category

- Superficial scratch
- No visible blood on needle/device
- Dried blood on needle or device
- Solid needle/device
- Needle from muscle or skin



Higher risk category

- Deep puncture with bleeding and/or cuts
- Visible blood on needle or device
- Fresh blood on needle/device
- Wide bore needle
- Needle from artery or vein

Transmission risk of HIV

This is related to:

- The probability that the person who used the needle has HIV infection
- The time interval since the needle was in contact with blood of the source
- The initial concentration of HIV on the needle, presence of blood or tissue that might delay drying, or the presence of fresh blood or material that might contain viable virus
- The severity of the injury in the exposed individual

Transmission risk of HBV

The risk of HBV infection is primarily related to the degree of contact with blood in health care settings and the hepatitis B e antigen (HBeAg) status of the source person. HBV has been found to survive in dried blood at room temperature on environmental surfaces for at least a week (Chaudhuri and Follet, 1982)

HBsAg is also found in other body fluids including breast milk, bile, faeces, cerebrospinal fluid, nasopharyngeal washings, semen and synovial fluids. These fluids however contain a low concentration of infectious HBV particles.

Transmission risk of HCV

HCV is not transmitted efficiently through occupational exposures to blood.



Transmission rarely occurs from mucous membrane exposures to blood and no transmission in health care workers has been documented from intact or non intact skin exposures to blood (Sartori et al 1993, Ippolito et al 1998).

3.2.2 Splashes to skin and mucous membranes

Splashes to the skin and mucous membranes occur mainly in healthcare settings such as in theatres, labuor suites and dental units. Exposures due to splashes are not commonly reported although experience shows that this category does occur. The risk of infection depends on the type of the fluid, the quantities involved, and the status of the skin/mucous membrane, with the risk being low if skin/mucous membrane is intact. Not many studies have been done in this area, but a real risk of HIV transmission exists (Ippolito G., et al.1993).

4.0 NON-OCCUPATIONAL EXPOSURES

4.1 *Prevalence of non-occupational HIV exposures*

Sexual violence occurs across all cultures and in every society. For example, according to a report by the Officer in Charge of Western Region Criminal Investigations Department (OC/CID), 303 girls were defiled between January and June 2006². It should be noted that although the vast majority of victims are women and girls, men and boys also experience sexual violence. Although there is no readily available national population-based prevalence data available in Uganda, one study found that 52% of women interviewed reported incidents of sexual "touching" and 42% reported having been raped as children (The African Child Policy Forum, 2006). Qualitative studies undertaken in Uganda indicate that sexual violence occurs both within the family and the wider community.

Most victims of sex violence and the general community lack awareness about HIV-PEP and its role in preventing development of overt HIV infection. The existing social practices prevent such victims from seeking prompt PEP services. In general, seeking and accessing HIV-PEP services is still very low in Uganda and it is thought that majority of the affected persons or communities lack knowledge of the existence of these services.

4.2 *Types of non-occupational exposures*

4.2.1 *Sexual assault*

Penetrative sexual assault may result in HIV transmission, and whereas this can be against anybody, the majority of survivors are young persons (especially girls) and women in general. It may take the form of anal, vaginal or oral penetration. Sexual assault is likely to result in HIV transmission in children than in adults because of the thin epithelia of the genitalia in children, cervical ectopy in adolescents, trauma involved and because children may be repeatedly abused by the same person over a long period of time. Hepatitis B may be sexually transmitted as well, and where possible it should be investigated and managed accordingly.

² The New Vision of Monday, August 21, 2006



4.2.2 Human bite wounds

Another percutaneous exposure that may occur is human bite wounds. The risk of HIV transmission after exposure to saliva is very low. If there is no blood in saliva or bite wound, HIV-PEP is not indicated. However, if there is blood exchange from a bite, both the person bitten and the person biting are at a high risk of HIV transmission and should be considered for PEP.



5.0 MANAGEMENT OF EXPOSURES

5.1 *General considerations*

Management of exposures to blood and body fluid borne viruses includes universal precautions, vaccination, and PEP. Upon occurrence of any incident, the HIV, HBV and HCV infection status for both the exposed person and exposure source should be established by relevant laboratory diagnostic tests. This should be carried out after informed consent has been obtained as required by existing laws and regulations. However, testing is not required for person(s) known to be infected with any one of the above viruses.

PEP should be initiated within 2-72 hours for HIV and 7 days for HBV. If an exposure is of such risk to warrant PEP, the recommended intervention should be commenced. While awaiting results of the diagnostic test (HIV, HBV and HCV), PEP should be started for the exposed person and stopped if the source is found not to be infected with HIV or HBV; or if the exposed person is found to be positive for any of the above viruses. PEP should not be offered to exposed persons who decline the diagnostic test.

The availability of PEP is not an alternative to universal precautions against transmission of HIV and HBV. If PEP is to be used, clinicians trained in the provision of PEP should be consulted. A careful discussion of the risks and benefits of therapy guides the decision-making regarding PEP and allows for appropriate post exposure care and support.

In evaluating the need for PEP, the following factors should be considered: (see WHO Guidelines for medico-legal care for victims of sexual violence):

- Duration since the potential exposure occurred
- Likelihood of infection in the exposure source (where applicable.)
- Risk of transmission given the source material and type of exposure
- The sero-status of the exposed person
- The circumstances in which sexual assault occurred such as gang-rape, defilement, rape by a known HIV-positive person or by a high risk person.



5.2 Guiding principles

Prevention of exposure through adherence to universal precautions takes priority as a measure to avoid infection. This should be through training and provision of the necessary materials and equipment. The following principles should apply when dealing with PEP:

1. The institution should establish and avail a written PEP protocol(s). This should include a mechanism for its implementation.
2. Training of HCW in universal precautions and management of PEP is mandatory.
3. The actual process of PEP should involve the following:
 - I. Immediate First Aid
 - II. Report of the incident
 - III. Risk assessment
 - IV. Counselling and Testing
 - V. Initiate PEP:
 - o The decision to initiate PEP is based on the premise of risk benefit ratio
 - o Benefit should always outweigh the risk of initiation. This ratio will be based on several factors including risk assessment, consent, counselling and co-existing patient factors.
 - VI. Follow-up, counselling and support
 - VII. Access to PEP provider and PEP therapy at all times

5.3 *PEP in sex exposure*

Unprotected sex exposes the individual to infectious body fluids and is an important mode of transmission of HIV and HBV. Hence sexual assault (through rape or defilement) should be considered high risk since it is likely to involve exchange of semen/vaginal fluids and even blood. When a qualified clinician proves a case of sexual assault and that the perpetrator is a known or suspected to have HIV infection, HIV-PEP should be started within 2–72 hrs. Clinicians considering use of HIV-PEP after a non occupational exposure should ensure that benefits are restricted to situations in which the risk of transmission is high; the intervention can be initiated promptly; and adherence to the regimen is likely. In case of suspected Hepatitis B exposure, the survivor should be investigated where possible and managed accordingly. PEP is not recommended in cases of unprotected casual sex exposures or in consensual sexual relationships.

5.4 *Drugs used in PEP*

In exposures involving HIV infection, a minimum of two highly active anti-retroviral drugs is recommended in order to prevent drug failure as a result of primary resistance. It is recommended that first line drug combination used in the country be considered in case of HIV PEP. However, the decision on which combinations to use should be based on the degree of drug tolerance, contraindications, and availability. In case of female clients, assessment for pregnancy should be done, including a pregnancy test if indicated, before antiretroviral drugs are administered. If a female client is breastfeeding, breastfeeding should be stopped once a decision to give PEP has been made.

In exposures involving HBV use of immunoglobulin and vaccination is recommended depending on HBV immune status of the individual and risk of exposure.

There is currently no therapy for HCV following exposure. Nevertheless other components of PEP need to be carried out in addition to the referral of the patient to relevant specialists.



6.0 IMPLEMENTATION OF PEP

6.1 Implementation strategies

PEP services will be integrated into existing health services. This will target high risk groups such as healthcare workers, the police, and sexual assault victims among others. The strategies will involve all basic functions of good management including planning, implementation, monitoring/ evaluation and feedback.

Specific strategies will include:

1. Wide-spread dissemination of these policy guidelines
2. Development of job aids/user manuals outlining the first aid required, reporting mechanism and procedure to be followed for post exposure prophylaxis and follow up
3. Accurate documentation of PEP using a standard format
4. Training of HCW in PEP
5. Equipping all health facilities with test kits and antiretroviral (Starter Packs) for immediate response
6. Provision of health units with equipment and supplies to implement universal precautions for infection control
7. Strengthening data collection, analysis and utilization at all levels of healthcare
8. Mobilizing local leaders, law enforcement officers, representatives of vulnerable groups and communities for prevention and early referral of persons affected by sexual violence
9. Development of appropriate and comprehensive IEC and BCC materials
10. Support Supervision
11. Establishment and implementation of a quality assurance system
12. Establish and maintain multi-sectoral team response from stakeholders



13. Work with the police and other law enforcement agencies to emphasize early referral of victims of sexual assault to health facilities for timely and appropriate management.

6.2 *Implementation framework*

- PEP comes in the context of the Constitution of the Republic of Uganda, the National Health Policy, National Strategic Framework for HIV/AIDS, Health Sector Strategic Plan, ART Policy, National Policy on HIV and the World of Work, Workers' Compensation Act, Poverty Eradication Action Plan, Occupational Safety and Health Act; and implemented in line with PMTCT, RH and other existing Policy Guidelines.
- PEP will be implemented through existing government, NGO and private sector health care structures in the country.
- It is recommended in these guidelines that a senior clinician with experience in PEP should be consulted as soon as possible or to review the client during the course of treatment. In any case, an eligible client should be put on treatment within designated time interval for initiation of PEP for HIV and HBV.

6.3 *Human resources and capacity building for PEP*

PEP will be managed in the overall framework of universal access to treatment and universal precautions for disease prevention. This entails teamwork of at least the following members:

6.3.1 *Healthcare managers*

Healthcare managers at different levels will be responsible for the organization and running of health facilities in regard to PEP services. The managers will also play a crucial role in facilitating consultations and referrals as well as ensuring a safe working environment.



6.3.2 Trained healthcare workers

Trained healthcare workers will evaluate the client and initiate treatment, liaise with healthcare managers for timely referral/consultations; ensure that counseling and relevant laboratory investigations and subsequent follow-up of the client are done.

6.3.3 Laboratory personnel

Laboratory personnel will conduct the relevant investigations in a timely manner and complement other members of the team for effective and timely management of clients.

6.3.4 Counselors

Counselors will offer counseling to the client regarding the risk and consequences of exposure, the benefits and possible side effects of the medicines used in PEP and maintain follow-up counseling and psychosocial support.

6.4 Ethical issues

PEP is an emergency medical intervention that requires strict adherence to existing ethical provisions. Informed consent and confidentiality must be observed at all times.

6.5 Monitoring and Evaluation

Incidences of various exposures should be documented in the HMIS. Returns will be sent to the Ministry of Health Headquarters. Data will be collected by the facility PEP focal persons using the specially designated PEP documenting form. Continuous monitoring will be conducted to ensure adherence to the PEP policy guidelines.



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8.0 APPENDICES

APPENDIX 1: POST EXPOSURE DOCUMENTATION FORM

Name of Health Facility.....Level of facility.....

Ownership (NGO/Private for Profit/Public)

Name of client.....Age..... Sex.....

Occupation/professional cadre of exposed person.....

Place of work (name of village in case of sexual violence)

Place where injury took place

Date of exposure (dd/mm/yyyy)Time of exposure

Date reported Time reported

Date PEP started Time PEP started

Drug combination given (indicate doses)

.....

Name of the attending healthcare professional.....

Risk assessment in the source person (circle as appropriate)

a) Terminally ill

b) HIV positive but asymptomatic

c) HIV positive and symptomatic (specify WHO stage)

d) Unknown HIV but symptomatic (state WHO stage)

e) Unknown HIV status and asymptomatic

f) On ART 1st line or 2nd line (specify).....

g) Known HBV patient

h) Any other person (specify)

Tick (✓) as appropriate in the table below

Particulars about exposure	Yes	No
Type of exposure		
Needle stick injury		
Contaminated broken ampoule		
Sharp equipment		
Splash with blood/liquor		
Exposure to semen, CSF, pericardial effusion etc		



Others (specify)		
Area of contact		
Penetrating injury		
Contact with intact skin		
Contact with broken skin		
Contact with mucous membranes (eyes/mouth/nose)		
Rape/defilement		
Human bite		
Circumstances surrounding exposure		
Was recapping		
Patient suddenly moved		
Found needle/sharp on trolley/bed		
Stepped on the needle/device		
Was conducting delivery/operation		
Was retrieving something from waste bin		
Type of needle/device		
Solid		
Narrow bore		
Wide bore needle		
Type of body fluid involved		
Blood		
Liquor		
Semen		
Synovial		
Pericardial		
Pleural fluid		
CSF		
Others (specify)		
Amount of fluid involved		
Fluid visible on needle/device		
Fresh blood/fluid on needle/device		
Dried blood/fluid on needle/device		
Seminal fluid		



Site of device/needle		
Blood vessel		
Muscle		
Skin		
Skin/mucous membranes exposures		
Skin intact		
Skin broken		
Presence of vaginal tears		
Type of percutaneous injury		
Deep puncture with bleeding		
Superficial scratch		
HIV Sero status (lab results)		
Client HIV positive		
Client HIV negative		
Source HIV positive		
Source HIV negative		
For females: pregnancy test results		
Baseline laboratory investigations		
Liver function tests		
Renal function tests		
Complete blood count		
PEP Administration		
Exposed person/next of kin counseled		
Exposed person/next of kin accept PEP		
Drugs administered for PEP		
Review of client		
HIV Status at 4 weeks		
HIV Status at 3 months		
HIV Status at 6 months		
Number of days on PEP treatment		
Any adverse reaction to PEP		
Any other treatments given		
Psycho-social support and counseling		

APPENDIX II: INDIVIDUALS AND KEY STAKEHOLDER INSTITUTIONS THAT CONTRIBUTED TO THE DEVELOPMENT OF THESE POLICY GUIDELINES

Dr. Madraa Elizabeth	Ministry of Health
Dr. Kasanka Betty	Ministry of Health
Dr. Balidawa Hudson	Ministry of Health
Dr. Ekoku Yuventine	Mulago National Referral and Teaching Hospital
Dr. Kalyesubula Israel	Mulago National Referral and Teaching Hospital
Mr. Okao B. A.	Lira District Health Department
Dr. Ekwaro Lawrence	Jinja Regional Referral Hospital
Ms. Chota Margaret	Ministry of Health
Dr. Okello Patrick	Lira Regional Referral Hospital
Ms. Rukundo Teddy	Ministry of Health
Dr. Luswata Hafsa	Ministry of Health
Dr. Mijumbi Cephas	Mulago National Referral and Teaching Hospital
Mr. Okwii Richard	JSI/MMIS
Ms. Regina	MSF-Holland
Dr. Alisalad Abdikamal	World Health Organization
Dr. Nuwagira Innocent	World Health Organization
Ms. Nalwadda Rita	World Health Organization
Dr. Lule Frank	World Health Organization
Dr. Nattabi Barbara	World Health Organization
Dr. Wanyenze Rhoda	Mulago-Mbarara Hospitals Joint AIDS Programme
Dr. Mwesigire Doris	Mulago-Mbarara Hospitals Joint AIDS Programme
Dr. Sentumbwe Olive	World Health Organization
Dr. Okello Margaret	Mulago National Referral and Teaching Hospital
Dr. Opio Kenneth	Mulago National Referral and Teaching Hospital
Dr. Namuyuga Margaret	Jinja Regional Referral Hospital
Ms. Maikut Irene	Ministry of Health
Dr. Banage Flora	Centres for Disease Control and Prevention

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