

	POLICY NUMBER →	ASM Policy NFC-006-14 IC Policy # 08
	TITLE: Management of Occupational Exposures to Bloodborne Pathogens at Howard University Health Sciences Center Date of Origin: <u>October, 1997</u> Date Last Revised: <u>Jan. 2014</u> Date Last reviewed : <u>March 2014</u>	
	Department of: Quality Management/Infection Control	

PURPOSE: To decrease the risk of infections due to blood borne pathogens following accidental occupational exposure to infected blood or body fluids.

SCOPE: This policy and procedure will be effective for all Howard University Health Sciences and Hospital Employees, Students, Volunteers, Contractors and Visitors.

BACKGROUND: The risk of HIV transmission from infected blood is 0.3% (1 in 300) for percutaneous exposure and 0.1% (1 in 1000) for mucous membrane or non-intact skin exposure. Post-exposure prophylaxis with antiretroviral medications started within 72 hours (ideally, within several hours) reduces the risk of transmission. The risk of transmission of HCV attributed to needle stick exposure is 1.8% (~1 in 50) when the source patient is infected; non-percutaneous exposures rarely result in HCV transmission. The risk of transmission of HBV to a non-immune person following percutaneous exposure is 23-62%; this risk is reduced by the administration of hepatitis B immune globulin (HBIG) +/- vaccination.

POLICY PROCEDURES:

In the event of an injury by a needle stick, scalpel, dental care tool, or other sharp object which results in breakage of the skin or exposure of blood to a mucous membrane, the individual should report the incident to their supervisor and go immediately to the appropriate venue for evaluation – TIME IS OF THE ESSENCE.

Where to go for evaluation

	M-F, 8am - 3:30pm, report to:	All other times, report to:
HU Students (includes HU Dental School Residents/Fellows)	Student Health Center – Medical Arts Bldg, 2 nd floor 202-806-9732	Emergency Department, with subsequent follow-up in Student Health
Employees, Volunteers, and HUH Residents	Employee Health Department – Medical Arts Bldg, 2 nd floor 202-865-1481	Emergency Department, with subsequent follow-up in Employee Health

Contractors, Visiting Students & Residents	HUH Emergency Department 202-865-1141	Emergency Department. Follow-up in Employee Health the next business day
HUHSC personnel on rotation or other approved business external to HU/HUH	Nearest Emergency Room, Urgent Care Center or Occupational Health Service	Nearest ER, UCC, or OHS. Follow-up in SHC or EHU the next business day

The Healthcare Provider will document in the clinical record the specific type of injury, the location where the injury occurred, how the injury occurred, and any significant medical information on the particular patient involved. The provider should review the exposed individual's records to ascertain his/her hepatitis B, tetanus, and other pertinent vaccination statuses.

For Student Health Providers: The medical record must document that an "Occupational Exposure" with a sharps instrument has occurred. Any prescriptions, referrals, and laboratory work requests that are required for the student's given occupational incident should have the appropriate ICD-9 code (E 920.__ - see below) in order to facilitate prompt coverage/payment. The Summit America Insurance Company has made provisions to cover the immediate treatment for all pathogen exposures to Health Sciences students.

- E 920.3 ~Piercing Injury with knife, sword/dagger
- E 920.4 ~Piercing injury with other hand tools
- E 920.5 ~Piercing injury with hypodermic needle
- E 920.8 ~Piercing injury with cutting and piercing instruments such as broken glass, dart, edge of stiff paper, nail, splinter, plant thorn, tin can lid

The exposed individual will be counseled about HIV and hepatitis B/C infections and offered combination antiretroviral therapy, if appropriate. His/her consent or refusal of treatment should be documented in the medical record. In addition, appropriate laboratory work should be ordered on the exposed individual and source patient as outlined below.

Laboratory Schedule for exposed individual

Baseline Labs

- Pregnancy test (if female)
- HIV Elisa (confirmatory Western Blot will be performed if positive)
- Hep B surface antigen and antibody (HBsAg and HBsAb)
- Hepatitis C antibody
- CBC and Chem 12

Six week Labs

- HIV Elisa (HIV PCR if HIV-positive source)
- Hepatitis C antibody (HCV RNA if HCV-positive source)

CBC and Chem 12

Three Month Labs

HIV Elisa

Hepatitis C Ab

Six Month Labs

HIV Elisa

Hepatitis C Ab

Liver function tests (If HCV positive source)

Twelve Month Labs

HIV Elisa (if HIV/HCV co-infected source)

Baseline laboratory tests to be performed on source patient

- STAT Rapid HIV Elisa (Confirmatory Western Blot will be performed if Elisa is positive)
- HIV Viral Load and genotype (if known HIV positive or recent infection suspected)
- Hepatitis C Antibody
- Hepatitis C viral load (if known Hepatitis C positive or recent infection suspected)
- Hepatitis B s Antigen
- Hepatitis B e Antigen (if known Hepatitis B positive)
- Liver function tests (if hepatitis B or C positive)

Post-exposure prophylaxis

Exposed individuals should be offered antiretroviral therapy as post-exposure prophylaxis (PEP) if they present within the first 72 hours after exposure. PEP should be offered as soon as possible. The emergency department will provide enough PEP medications to last until the individual can be evaluated in student or employee health. Recommended PEP regimen if source patient unknown and exposed patient with no significant co-morbidities:

Truvada (combination of tenofovir 300mg + emtricitibine 200mg) 1 tab PO daily

+

Raltegravir 400mg PO bid

Infectious Diseases (ID) consultations should be sought in the following scenarios:

- Source patient is known to be infected with HIV or viral hepatitis
- >36 hours have elapsed from time of exposure to clinical evaluation
- Exposed individual is pregnant (should also be referred to Ob/Gyn)
- Exposed individual with any significant co-morbidities, such as kidney disease
- Alternative PEP regimen is desired
- By request of exposed individual or healthcare provider

Reporting

All Student Health Center providers are required to notify the Director of The Student Health Center when they are presented with a Student with an Occupational Exposure. The Director of The Student Health Center will notify the Dean of the respective student's school.

All exposed employees are required to report the exposure to the Benefits Office and their supervisors must also submit a completed First Report of Injury to the Benefits Office.

Resources

HUH Consultation: ID fellow on call: pager 7181 OR ID faculty on call: 202 865-6100

PEP Line (National Clinician's Post-exposure Prophylaxis Hotline): 1-888-448-4911

<http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-following-occupational-exposure/>

CITATION(S):	CDC. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post exposure Prophylaxis. <i>MMWR</i> 2005; 54(RR09):1-17 CDC. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post exposure Prophylaxis: <i>MMWR</i> June 29, 2001 / 50(RR11); 1-42
---------------------	---