



<b>TITLE:</b>	Employee Blood and Body Fluids Post-Exposure Plan	<b>POLICY NO:</b>	3011
<b>OWNER:</b>	Employee Health	<b>TYPE:</b>	Clinical
<b>ORIGINAL PUB. DATE:</b>	August 1997	<b>KEYWORDS:</b>	Employee, Blood, Fluids, Exposure

### I. PURPOSE

To outline the appropriate post-exposure management for employees in Nix Health Care System (Nix) who have been exposed to a patient's blood and/or body fluids.

### II. SCOPE

This policy is System-Wide.

### III. DEFINITIONS

- a. Counseling - Providing the healthcare worker (HCW) with information that will assist them in their decisions regarding testing of their own blood, complying with other elements of post-exposure management, and using precautions to prevent possible infection in others.
- b. "High Risk" Sources for blood-borne pathogens are persons with the following history:
  - i. Rejection as a blood donor
  - ii. Multiple episodes of sexually transmitted diseases
  - iii. IV drug user
  - iv. Men who have sex with men
  - v. Prostitution or sexual contact with prostitutes
  - vi. Sexual partners of a high-risk person or a person with HIV
  - vii. Children born to high-risk parents
  - viii. Multiple substance users
  - ix. Persons who have multiple sexual partners
- c. Mucous Membrane Exposure - A specific eye, mouth, other mucous membrane, or non-intact skin, contact with blood or other potentially infectious materials that result from the performance of the healthcare worker's duties. (Examples include blood spattering into the eyes or splashing into the mouth.)

- d. PEP – Post-Exposure Plan
- e. Percutaneous Parenteral Exposure - Exposure to blood or other potentially infectious materials, which occurs through a break in the skin barrier. (Examples include an accidental needle stick or a cut with a scalpel).
- f. Potentially Infectious Materials - Blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, tissues and other body fluids containing visible blood.
- g. Sharps - Any object that can penetrate the skin including, but not limited to needles, lancets, scalpels and broken capillary tubes.
- h. Source - person from whom the blood or other potentially infectious materials originated.
- i. Abbreviations used throughout this document:

i. HIV	Human Immunodeficiency Virus
ii. HBV	Hepatitis B virus
iii. HBsAg	Hepatitis B Surface Antigen
iv. HBsAb	Hepatitis B Surface Antibody
v. HBIG	Hepatitis B Immune Globulin
vi. HCV	Hepatitis C Virus
vii. HCAb	Hepatitis C antibody

#### IV. POLICY

All employees will follow the procedures outlined below if they experience an occupational exposure to a patient's blood or body fluids either directly or indirectly from the patient.

#### V. PROCEDURE

- a. Reporting Exposure
  - i. Employees should report the exposure immediately to their supervisor and complete the Employee Injury Report Form. The report should include the source patient's name (if known), medical record number (MRN) and patient room number.
  - ii. During Employee Health hours: The employee should report to Employee Health immediately so that treatment can be initiated.
  - iii. During hours Employee Health is closed: The employee should report to the nursing supervisor/nurse manager immediately.
  - iv. If the source is KNOWN to be HIV positive, the incident should be reported IMMEDIATELY so that PEP can be started and the Infectious Disease Physician can be contacted to counsel the employee.

- v. The exposed employee is responsible for contacting Employee Health no later than the following Employee Health workday to discuss follow-up testing and/or treatment.

b. Exposure Follow-Up

- i. If the HIV, Hepatitis B or Hepatitis C status of the source patient is unknown, the patient and the patient's physician will be notified by the employee health nurse or nursing supervisor that testing needs to be done because there was an exposure to an employee. HBsAg, HbsAb, HCV, HCV RNA, HIV, LFT, and RPR (Exposure Panel) testing will be ordered by the Employee Health Nurse or Nursing Supervisor. Consent is signed by the patient at the time of admission therefore labs should be ordered stat and no need for additional consent.
- ii. Baseline Serologic/HIV Testing of the employee will be done at the time of exposure. Testing will be done under the supervision of the Nix Emergency Department physicians, Employee Health, and/or the Nursing Supervisor. Baseline testing for the exposed employee (HIV, HBsAg, HbsAB, HCV, HbcAb, LFT, & RPR) will only be done with the employee's consent. The employee has three options:
  - 1. Consent to baseline blood collection and testing
  - 2. Decline to have blood drawn. If the employee chooses not to have testing done, their medical care for this exposure will not be covered.
  - 3. Collect and reserve the sample up to 90 days of the time of exposure for future testing.
- iii. If wound care beyond first aid is required, the exposed employee will be sent to the Nix Emergency Department or other approved care provider (See procedure). The incident and treatment will be documented in the employee's health record. Any declination of recommended treatment and follow-up will also be documented in the health record. All testing and evaluations will be conducted in a confidential manner.
- iv. Exposed employees will be counseled by the treating physician regarding the risks of HIV, Hepatitis B and Hepatitis C exposure.
- v. If the source is known to be HIV positive, the Infectious Disease physician, should be contacted immediately (See procedure) to discuss care, treatment and counseling for the employee.
- vi. If you are unable to contact Infectious Disease, you may contact the National Clinicians' Post-Exposure Prophylaxis Hotline (PI:Pline) at (888) 448-4911.

c. Protocol for HIV Post-Exposure Prophylaxis

- i. All required information sheets and laboratory request forms are located in "Post Exposure Plan" packets in the Nursing Service office and the Employee Health Office. In the event these are not available the following lab tests must be ordered on the employee and the source patient: HIV, HbsAb, HbsAg, HCV, HbcAb, LFT, RPR & pregnancy test if needed. Note: also order HCV RNA for source ONLY.

- ii. When it is known that the source patient is HIV positive, the employee, the employee health nurse or nursing supervisor will inform the treating physician. Post-exposure prophylaxis (PEP) will be discussed with the exposed employee immediately by the treating physician and the Infectious Disease physician. If accepted, PEP should be initiated as soon as possible, preferably within 2 hours of exposure. Contact Nix pharmacy for initial 3 days of PEP regimen.
- iii. Administration and counseling regarding PEP is done by the treating physician and the Infectious Disease physician.
- iv. Initially a 5 day PEP supply will be prescribed for the employee by the treating physician. Duration of PEP will be determined during a follow up appointment with a designated Infectious Disease physician under the Employee Injury Benefit Plan. The physician will choose appropriate PEP for each employee based on the current CDC guidelines.
- v. Situations for which expert consultation for HIV post exposure prophylaxis is recommended:
  1. Delayed exposure report (later than 72 hours)
  2. Unknown source
  3. Known or suspected pregnancy in the exposed woman
  4. Breast feeding in exposed woman
  5. Serious medical illness in exposed person
- vi. Pregnant Healthcare worker - Initial treatment should be timely, and the pregnant HCW will be advised by the Infectious Disease Physician regarding the risks/benefits of post-exposure prophylaxis.
- vii. HCWs with occupational exposures to HIV will receive follow-up counseling and medical evaluation (under the Employee Injury Benefit Plan) by a designated physician. Follow-up testing will be done at 6 weeks, 12 weeks, and 6 months. Extended HIV follow up (e.g., for 12 months) is recommended for HCW who becomes infected with HCV following exposure to a source co-infected with HIV and HCV.
- viii. The constraints and requirements for confidentiality and disclosure of HIV test results, as outlined in the "Communicable Disease Prevention and Control Act, Texas Civil Statutes, Article 4419b-1" will be followed. All testing and evaluations shall be conducted on a strictly confidential basis.
  1. Employee Health will maintain documentation including, but not limited to the following:
    - a. The exposure or possible exposure
    - b. Date and type of exposure (i.e., needle stick, mucous membrane splash, etc.)
    - c. Evidence of employee counseling
    - d. Employee refusal to consent to HIV testing (if refused)
    - e. Employee HIV or other laboratory test results
    - f. Follow-up medical treatment or evaluation
    - g. Employees will receive their lab results from the treating physician. LAB RESULTS WILL NOT BE GIVEN OVER THE TELEPHONE.

h. Employees who fail to follow up with the physician and the HIV test results are positive will be sent a certified letter.

2. All evidence of employee HIV counseling, refusal to consent to HIV testing, test results, and any follow-up medical treatment or evaluation will be kept secured in the Employee Health Office.

3. The employer shall maintain the OSHA records for 5 years in accordance with OSHA CFR 1904.35.

d. Protocol for Exposure To Hepatitis B

i. The employee's Hepatitis B vaccination status will be reviewed.

ii. If the source patient has a diagnosis of active Hepatitis B or tests positive for HbsAg, the exposed employee should receive prophylaxis as soon as possible, as outlined on attachment D (See procedure). The employee should be counseled regarding the transmission of Hepatitis B by the treating physician.

iii. If the source tests negative for HbsAg, HBV immunization should be offered to the unvaccinated employee.

iv. If the source patient is unknown, the employee will be tested for HBsAb. If the level is inadequate, treatment should be offered according to attachment A (See procedure). If the level is adequate, no treatment is necessary.

v. The incident and treatment will be documented in the employee health record. Any declination of recommended treatment and follow-up will also be documented in the health record. All testing and evaluations will be conducted in a confidential manner.

e. Protocol for Exposure to Hepatitis C

i. If the source has a diagnosis of Hepatitis C or tests positive for HCV RNA, the exposed employee should be tested for HCV RNA within 48 hours of the exposure (if positive, refer for pre-existing chronic infection) and referred to Infectious Disease physician (See procedure); if negative, test for HCV RNA 3 weeks after the exposure. Testing for anti-HCV and ALT activity should be done at baseline and again at 4-6 months.

ii. No post-exposure prophylaxis is available for Hepatitis C. Immune globulin is not recommended.

**VI. REVIEW FREQUENCY**

This Policy will be reviewed at least annually.

## VII. REFERENCES

"Public Health Service Guidelines for the Management of Health Care Worker Exposure to HIV and Recommendation for PEP". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Provisional Public Health Service Recommendations for Chemoprophylaxis after Occupational Exposure to HIV, by Type of Exposure and Source Material". *Centers for Disease Control and Prevention*.

Mirza A., Wyatt M and Begue R. *Infection control practices and the pregnant health care worker*. The Pediatric Infectious Disease Journal.

"Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, HIV and recommendations for post exposure prophylaxis". *Centers for Disease Control and Prevention*.

"Infection Control and Hospital Epidemiology". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Testing for HCV Infection: An Update of Guidance for Clinicians and Laboratories". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Information for Healthcare Personnel Potentially Exposed to Hepatitis C Virus". *Centers for Disease Control and Prevention*.

"Recommendations for follow up of Health-Care Worker after Occupational Exposure to Hepatitis C Virus". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Hepatitis B Virus: A Comprehensive Strategy for Eliminating Transmission in the United States Through Universal Childhood Vaccination: Recommendation of ACIP, Appendix A: Post exposure Prophylaxis for Hepatitis B." *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Public Health Service Guidelines for the Management of Health Care Worker Exposure to HIV and Recommendations for PEP". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

"Changing Patterns of Groups at High Risk for Hepatitis B in the United States". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.


"Exposure to Blood - What Healthcare Personnel Need to Know". *U.S. Department of Health and Human Services*.

"Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for the Post-exposure Prophylaxis". *Morbidity and Mortality Weekly Review*. Centers for Disease Control and Prevention.

## VIII. ATTACHMENTS

Employee Blood and Body Fluids Post-Exposure Plan – Procedure Checklist

**IX. SIGNATURES**

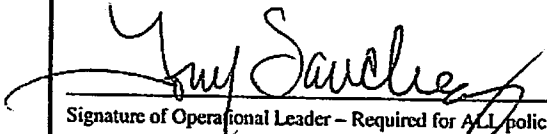


Signature of Policy Owner/Author – Required for ALL policies

Printed Name of Policy Owner/Author: Michelle Flaig, RN

Title: Employee Health Nurse

Date: 5.23.18



Signature of Operational Leader – Required for ALL policies

Printed Name of Operational Leader: Tony Sanchez

Title: VP, Human Resources

Date:

**X. REVIEWS AND REVISIONS**

<b>Revision number</b>	<b>Date</b>	<b>Description of Document or Document Change</b>
1	03/01/2017	Revision
2	05/17/2018	Revision for format; add Checklist
3		
4		
5		



**Employee Blood and Body Fluids Post Exposure Plan – Procedure Checklist**  
**March 2018**

Name of exposed personnel: \_\_\_\_\_ Contact number: \_\_\_\_\_

<b>Exposed individuals responsibilities</b>			
		<b>Date/time</b>	<b>Initials</b>
1.	Express blood from open wound immediately and wash with soap and water.		
2.	Flush affected mucous membranes with water or saline x 15 minutes.		
3.	Contact supervisor, Employee Health or House Supervisor without further delay.		
4.	Follow up with Employee Health Nurse the next week day.		
<b>Nursing Supervisor/ Supervisor/Manager or Designee Responsibilities</b>			
1.	Ascertain whether the steps above have been completed.		
2.	Complete injury report forms with employee and call 24/7 Nurse Triage line at 844-296-5157.		
3.	Order STAT labs for source patient: HIV, HbsAg, HbsAB, HCV, HbcAb, HCV RNA, LFT, & RPR and alert source patient's physician of the incident and that testing will be performed per protocol. Include source patient's name, MR# and birthdate on injury report for Employee Health nurse.		
4.	Complete page 4 with Source Patient information. Send copy to ED and originals to Employee Health.		
5.	Send employee to Nix ED for treatment and counseling and provide copy of injury report to ED (originals to Employee Health nurse).		
<b>Emergency Department Responsibilities</b>			
6.	Order STAT labs for exposed employee: HIV, HBsAg, HbsAB, HCV, HbcAb, LFT & RPR.		
7.	If source patient is known to be HIV positive, have ED physician contact Infectious Disease physician Dr. Charles Lerner, 210-861-0980. The ED doctor will need to be advised of the source patient's most recent viral load values and HIV treatment regimen.		
8.	If unable to contact Dr. Lerner, contact National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline) at 888-448-4911.		
9.	PEP will be discussed with exposed employee by treating ED physician and Infectious Disease physician. If agreed, PEP medications should be initiated as soon as possible, preferably within 2 hours of exposure. Contact Nix pharmacy to provide initial 3 day supply of PEP regimen to employee.		
10.	ED physician to prescribe a 5 day supply of PEP to the employee if applicable. Duration of PEP will be determined during a follow up appointment with a designated Infectious Disease Physician under the Employee Injury Benefit Plan.		

1. Current standard treatment for HIV exposure is:
  - a. Raltegravir 400mg twice a day x4 weeks and Truvada 300mg once daily x 4 weeks, OR
  - b. Truvada 300mg + darunavir (Prezista) 800mg + Ritonavir 100mg once daily
2. For positive RPR, standard treatment is:
  - a. 2.4 million units of Benzathine PCN x 1 for non-penicillin allergic persons.
3. Current standard treatment for Hepatitis B exposure (see next page)

### CDC Recommended Post-Exposure Prophylaxis for Hepatitis B Virus

	Treatment when source is found to be:		
	HBsAg Positive	HbsAb-neg	Source not tested or unknown
<b>Unvaccinated employee needs:</b>	HBIGx1* and Initiate HB vaccine**	Initiate HB vaccine**	Initiate HB vaccine** If known high-risk source
<b>Employee previously vaccinated, known responder needs:</b>	Test exposed for HBsAb 1. If inadequate, HB vaccine booster dose 2. If adequate, no treatment	No treatment	No treatment
<b>Employee known non-responder++ needs:</b>	HBIG x 2 or HBIG x 1 plus 1 dose Hepatitis B vaccine	No treatment	May treat as if source were HBsAg-positive
<b>Employee previously vaccinated response unknown:</b>	Test exposed for HBsAb 1. If inadequate, HBIG x 1 plus HB vaccine booster dose 2. If adequate, no treatment	No treatment	Test exposed for HBsAb 1. If inadequate# HB vaccine booster dose 2. If adequate, no treatment

\* HBIG dose 0.06 ml/kg IM.

\*\*HB vaccine dose

+ Adequate HBsAb is > 10 mIU/ml or positive by EIA

++ Non-responder refers to inadequate response to vaccination demonstrated by HBsAb is < 10mIU/ml or negative by EIA

Source Patient Information

Source Patient hospital sticker (if available):

Source patient name: \_\_\_\_\_ Date of birth: \_\_\_\_\_

MR#: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

		Yes	No	Unknown	Comments
a.	Known HIV positive				
b.	History intravenous drug use				
c.	History of major surgery, transfusions, tattoos				
d.	Homosexual/bisexual				
e.	Tuberculosis				
f.	History of Hepatitis				
g.	Other risk factors				
		Lab Results / Date			Not available
h.	WBC				
i.	HCT				
j.	ALT				
k.	AST				
l.	Hepatitis B markers				
m.	Hepatitis C Markers				
n.	HIV-AB				

Additional pertinent comments regarding patient's medical / social history:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Printed name: \_\_\_\_\_