

Emergency Department **Blood/Body Fluid Exposure Instructions**

For employees sent to the Emergency Department after hours to be evaluated for needle stick / body fluid exposure

1. Floor or unit Charge RN where employee was exposed will print this entire packet.
2. Complete sections you are responsible for as designated in top right hand corner.
3. Patient then takes entire packet to the ED for review and treatment as appropriate. Call the ED charge RN at 925-6117 to alert them that you are sending a patient.
4. Patient will be discharged from the ED after #3 above to follow up with Employee Health Clinic on the next business day.

Area Charge Nurse

Complete before sending
employee to the ED

Blood/Body Fluid Exposure Checklist

After Hours

Patient = person exposed (usually the employee)

Source / Donor = from whom the fluid came

- Fill out source (donor) information sheet for the ED to use in assessing exposure risk
- Have employee fill out body fluid exposure assessment (2 pages)
- Send employee with above paperwork and rest of the printed packet to the ED
- Draw blood on source (donor) if applicable
- Do not draw any blood on the employee

Area Charge Nurse
Complete before sending
employee to the ED

Body Fluid Source (DONOR)

Assessment Instructions

1. **Obtain Source Name, MR# and Location (This is the person who’s fluid exposed the employee or pt).**
If the Source is under 9 months of age, do the Risk Assessment on the mother and draw Source labs from the mother.
 - **Complete Source Medical History Review**
 - Look up any available lab results for HIV, Hepatitis C, and Hepatitis B.
 - If HIV, Hep C and/or Hep B (HBsAg) were done in the past 2 weeks or if prior HIV, Hepatitis B or Hepatitis C positive then **do not** repeat that test. Obtain results for the provider.
 - If blood was drawn for other reasons/studies, use those samples if they are still in the lab and order the lab panel.
 - Review Medical Record (answer the Source Assessment questions from medical records and from a Source interview if appropriate).
 - Consent is needed to test for HIV, but is not needed for Hepatitis C or HbsAg testing.
2. **Obtain Source HIV testing consent.**
 - If Source is conscious and competent, interview the Source to obtain signed HIV testing consent.
 - If the Source is unable to give consent (including anyone under the legal age for consent), follow New Mexico state law on obtaining HIV consent. Assistance from Epidemiology, Occupational Health, or HSC Legal Counsel may be obtained.
 - If you are able to make contact only by phone, HIV Consent may be obtained but must be repeated by the Source to a 2nd staff witness.
3. **Order source HIV, Hepatitis C, and Hepatitis B (HbsAg)—order as “Needle Don” lab panel.**
4. **Provide the source information to the evaluating provider**
5. **Refer the source to their primary care physician to obtain the results of their Source Labs**
6. **For afterhours exposure assessments**
 - Notify OHS of all after-hour exposures by calling the clinic the next working day.
 - If “**Donor Lab**” results are needed prior to next Clinic business day then the Administrative Supervisor should obtain the results and relay these to the Recipient’s provider (ED) so that treatment of the recipient may be modified as needed.

Source / Donor Assessment (must be completed and sent to ED for evaluation)

<input type="checkbox"/> Unknown Source: No further source assessment required					
Source Name:				MRN #:	
Source with history of	<input type="checkbox"/> Hepatitis B	<input type="checkbox"/> Hepatitis C	<input type="checkbox"/> HIV	<input type="checkbox"/> None	<input type="checkbox"/> Unknown
	<input type="checkbox"/> Liver disease	<input type="checkbox"/> Blood Transfusion prior to 1985		<input type="checkbox"/> Injection drug use	
	<input type="checkbox"/> Multiple or SAME sex partners				
Source blood draw	<input type="checkbox"/> Consent for HIV test obtained		<input type="checkbox"/> “Needle Don” panel ordered		<input type="checkbox"/> Source refused testing

**Source / Donor
Label**

Nurse or Supervisor

Date / Time

Body Fluid Exposure Assessment

Name _____ Home Phone _____ Cell Phone _____
 Work Phone _____ (Preferred number for clinic to contact: Home Work Cell)
 Date of Incident _____ Time of Incident _____
 Work Department _____ Job Category _____
 Location of the exposure (ED, Patient room, OR, Lab, etc.) _____

Employee Medical History

Have you ever had? **HIV** Yes No **Hepatitis C** Yes No **Hepatitis B** Yes No
 Other significant medical history _____
 Last Tetanus Booster (date) _____
 Have you received the Hepatitis B Vaccination? Yes No
 If yes, do you know if you are HBV immune / protected? Yes No Unknown

**** Is the Source patient (the person's whose body fluid it was) identifiable? ****
 Yes No Unknown

**Complete #1-11 if NEEDLESTICK or other SHARP OBJECT injury
 (Skip to # 12 for blood or body fluid splash/other exposures)**

1. Were you the original user of the sharp item? Yes No Unknown
2. Did the sharp item have blood visible on it? Yes No Unknown
3. For what purpose was the sharp item originally used?
 Unknown Injection through the skin Drawing venous/arterial blood
 IV use: injection into/aspiration from an IV injection site/IV port, connecting or starting IV
 Placing a central line Suturing/cutting/electrocautery Other _____
4. How did the injury occur?
 During use After use Recapping needle Restraining a patient Preparation for reuse of reusable equipment
 Device left on floor, bed or other inappropriate place While disposing of item
5. What device was involved in the injury?
 Unknown
 Hollow bore Needle: Identify (gauge of needle, etc) _____
 Other sharp: Identify (lancet, suture needle, scalpel, glass, etc.) _____
- 5a. Brand/Manufacturer of the sharp item: _____ Model: _____
6. Did the item causing the injury have a "safety design" such as retractable or shielded needle?
 Yes No Unknown If yes, describe feature _____
- 6a. Was the device activated? Yes, fully activated Yes, partially activated No Unknown
7. What was the physical location of your injury? (ex. Right index finger) _____
8. Was the injury? Superficial (little/no bleeding) Moderate (skin punctured/some bleeding)
 Severe (deep stick/cut, profuse bleeding)

Continued on next page

Patient Label

- 9. If the injury was to the hand, did the sharp item penetrate?**
 Single pair of gloves Double pair of gloves No gloves
- 10. Are you primarily?** Right handed Left handed
- 11. Do you have any opinion as to how this injury could have been prevented?**
-

**Complete #12-21 for OTHER BLOOD/BODY FLUID Exposure
(Skip to signature if had needlestick or other sharp object injury)**

- 12. Type of Body Fluid: (please check)**
 Unknown Blood Other body fluid: list type (Sputum, vomit, etc.) _____
 If "other," was visible blood present in the fluid? Yes No Unknown
- 13. What body part was exposed? (Skin on the right hand, eye, mouth, etc)**

- 14. Did the blood/body fluid?**
 Touch unprotected skin Soak through protective garment or clothing
- 15. What barrier garments were worn at the time of the exposure?**
 None Gloves Goggles/eyeshield Surgical mask Gown/apron/lab coat
 Other: _____
- 16. How did the exposure occur?** _____
- 17. Did equipment failure occur?** Yes No If yes, please specify equipment type and manufacturer:

- 18. How long was the blood/body fluid in contact with your skin/mucous membrane?**
 Less than 5 minutes 5-14 minutes 15 minutes to 1 hour Over 1 hr
- 19. Did you flush/clean area?** Yes No Comments: _____
- 20. What was the volume of blood/body fluid?** Unknown
 Small (up to 1 teaspoon or 5cc) Moderate (up to quarter cup or 50cc) Large (over 50cc)
- 21. Do you think this injury could have been prevented with controls in place?**
 Yes No If yes, please describe: _____

Employee Signature

Date

ED attending to review and sign below:

Comments: _____

ED Provider

Date

Patient Label

ED Attending
Check boxes as appropriate

Blood/Body Fluid Exposure Checklist

After Hours

Patient = person exposed (usually the employee)
Source / Donor = from whom the fluid came

<p><u>All Patients</u> During ED visit</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Review and sign exposure information pages 3-5 filled out by patient and charge RN. <input type="checkbox"/> Review and sign with the employee the decision trees for HBV, HCV and HIV <ul style="list-style-type: none"> • Check off flowchart boxes as appropriate • Complete gray shaded boxes and sign in the provider line • Circle the HIV risk status and discuss CDC recommendations • Review risks / side effects of PEP if warranted • Offer Hep B vaccination if not already vaccinated or known non-responder <input type="checkbox"/> Draw source / donor labs if that person is also an ED patient (order = "Needle Don") <input type="checkbox"/> Refer to Employee Health Clinic next business day <input type="checkbox"/> Discharge patient from the ED with the last sheet of this packet and ED "Needlestick" computerized discharge instructions from First Net
<p>Patient decides NO to HIV PEP</p>	<ul style="list-style-type: none"> <input type="checkbox"/> NO LABS drawn on patient in the ED <input type="checkbox"/> Refer patient to Employee Health Clinic next business day for CONFIDENTIAL blood draw of HIV and hepatitis panel
<p>Patient decides YES to HIV PEP</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Complete consent sheet <input type="checkbox"/> Review risks / side effects of PEP <input type="checkbox"/> Patient to sign consent for treatment form <input type="checkbox"/> Give patient copy of consent <input type="checkbox"/> Draw CBC, Chem 7, LFT, amylase, pregnancy test (if applicable) (DO NOT draw HIV or hepatitis panel in ED) <input type="checkbox"/> Start first dose (after pregnancy test) of PEP in ED and give Take Home Pack of remaining PEP doses to patient (all meds are in ED Pyxis) <input type="checkbox"/> Patient referred to appropriate clinic (on discharge sheet) next business day for CONFIDENTIAL blood draw of HIV and hepatitis panel <input type="checkbox"/> NON – hospital employees (ex. kid stuck with syringe at park) <u>should</u> have HIV, hepatitis panel, CBC, chem 7, LFT, amylase and PGU (if appropriate) drawn in the ED. These patients should have follow up with PCP 1 week after starting PEP.

Patient Label

Hepatitis B

Decision Tree

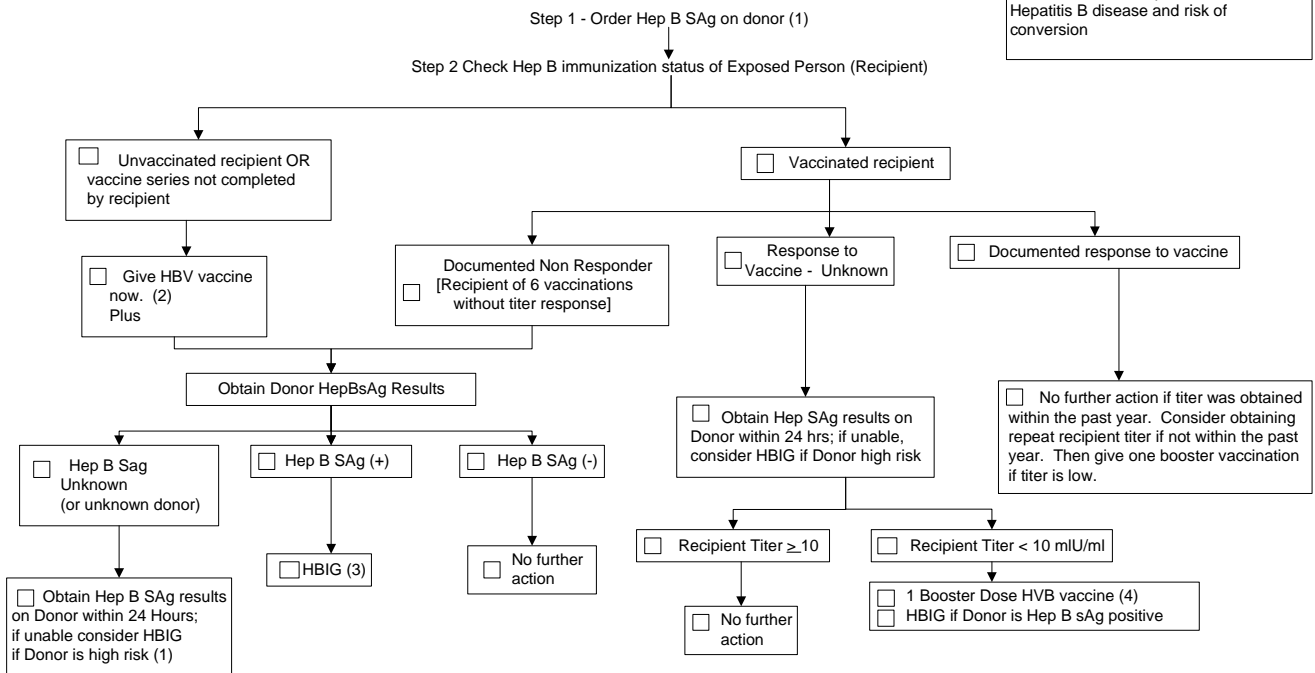
POST EXPOSURE PROPHYLAXIS - Hepatitis B

Addendum J

Ck Boxes upon Completion

ED/UC COMPLETE GRAY BOX OTHER SIDE

Counsel Recipient on Hepatitis B disease and risk of conversion



- (1) Consider using the CDC table: Recommended post exposure prophylaxis for Hep B virus - - Addendum E.
- (2) Ensure complete HBV vaccine series is given.
- (3) HBIG 0.06ml/kg IM; not to exceed 5.0ml for adults (should be given within 24 hrs of exposure if possible). Second dose at 4 weeks.
- (4) Post vaccination testing for titer should be done between 1 & 6 months after completion of vaccine series or boosters to provide info on response to vaccine. Delay testing until 6 months after the booster if HBIG was administered concurrently.

Health Provider Signature

Date

Risk of seroconversion is dependent upon many factors and is **between 2 and 40%** in an **unvaccinated** recipient

NON - health care workers with exposure should receive vaccination

Patient Label

Hepatitis B

Vaccination Guidelines

22

MMWR

June 29, 2001

TABLE 3. Recommended postexposure prophylaxis for exposure to hepatitis B virus

Vaccination and antibody response status of exposed workers*	Treatment		
	Source HBsAg [†] positive	Source HBsAg [†] negative	Source unknown or not available for testing
Unvaccinated	HBIG [‡] x 1 and initiate HB vaccine series [†]	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder**	No treatment	No treatment	No treatment
Known nonresponder ^{††}	HBIG x 1 and initiate revaccination or HBIG x 2 ^{§§}	No treatment	If known high risk source, treat as if source were HBsAg positive
Antibody response unknown	Test exposed person for anti-HBs ^{¶¶} 1. If adequate,** no treatment is necessary 2. If inadequate, ^{††} administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate, [†] no treatment is necessary 2. If inadequate, [†] administer vaccine booster and recheck titer in 1–2 months

* Persons who have previously been infected with HBV are immune to reinfection and do not require postexposure prophylaxis.

[†] Hepatitis B surface antigen.

[‡] Hepatitis B immune globulin; dose is 0.06 mL/kg intramuscularly.

[†] Hepatitis B vaccine.

** A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs ≥10 mIU/mL).

^{††} A nonresponder is a person with inadequate response to vaccination (i.e., serum anti-HBs < 10 mIU/mL).

^{§§} The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.

^{¶¶} Antibody to HBsAg.

Patient Label

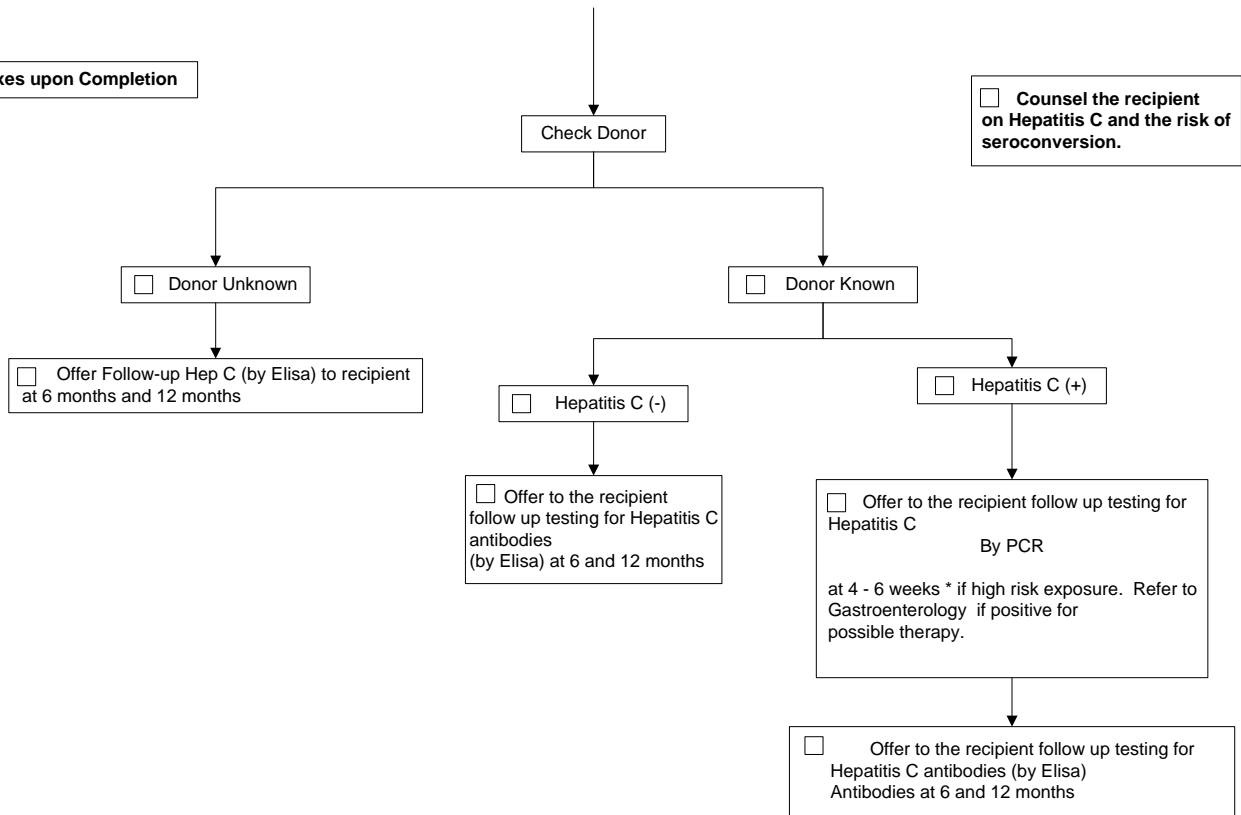
Hepatitis C

Decision Tree

POST EXPOSURE DECISION PROTOCOL - HEPATITIS C

Addendum L

Check Boxes upon Completion



* If the recipient is not tested before 3 months post-exposure, proceed with the Elisa rather than the PCR

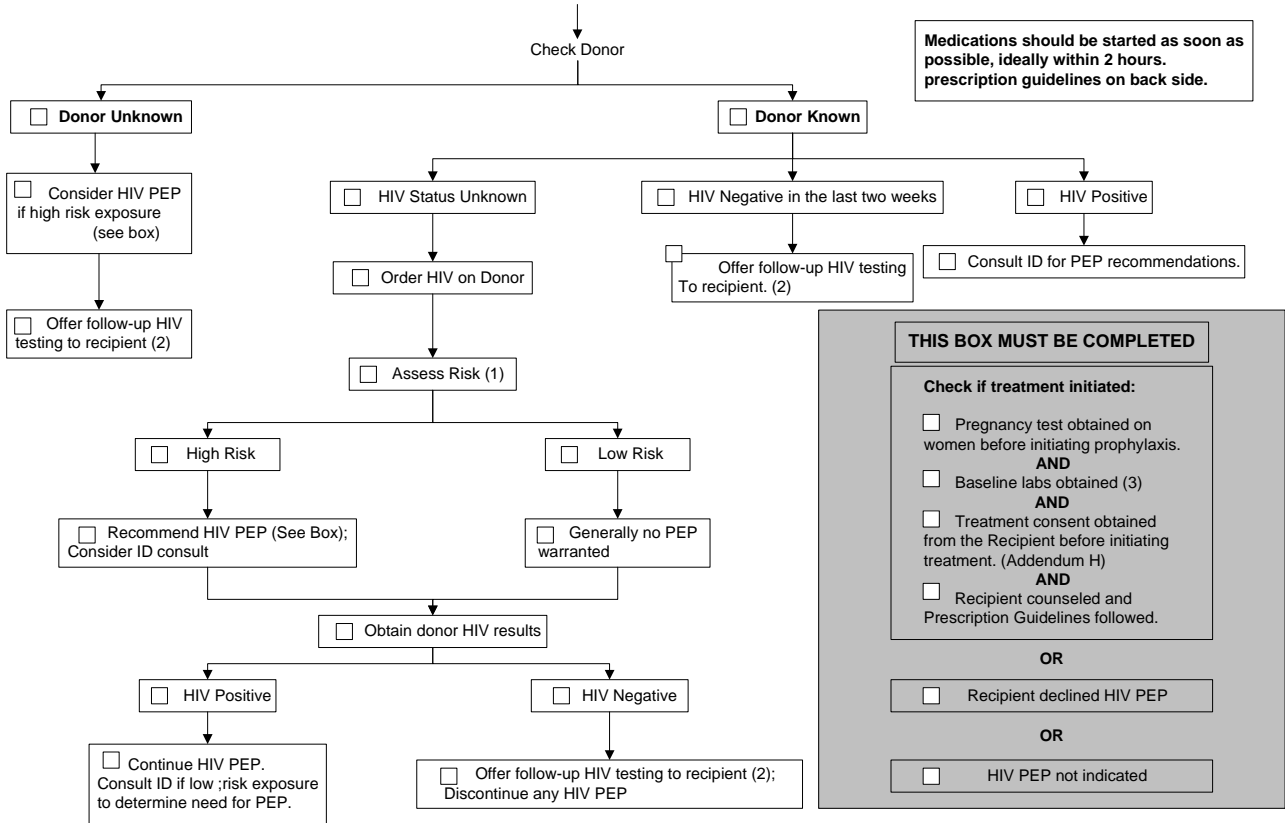
 Health Provider Signature Date

Risk of seroconversion in **percutaneous** exposure to blood is **1.8%**.

Patient Label

HIV
Decision Tree

HIV POST EXPOSURE PROPHYLAXIS (PEP) DECISION PROTOCOL Addendum D



(1) Utilize the CDC PEP recommendation tables if needed.
 (2) HIV testing on recipient is done at 0 weeks, 6 weeks, 12 weeks, 26 weeks, and 52 weeks.
 (3) CBC, Diff, HFP, Amylase, BUN, CR and pregnancy test are the baseline labs.
These labs (excluding pregnancy test) could be held until the Source HIV is known.

Health Provider Signature _____ Date _____

Risk of seroconversion in **percutaneous** exposure to blood is **0.3% (3 per 1000)**
 Risk of seroconversion in a **mucous membrane** exposure to blood is **0.09% (<1 per 1000)**
 Risk of seroconversion in a **non-intact skin** exposure is felt to be **< 0.09%**

These are for HIV infected blood. Risk of seroconversion with exposure to any other fluid or tissue is felt by the CDC to be considerably lower but has not been quantified.

NON - health care worker with exposure: Consider likelihood for HIV prevalence in exposure to determine need for PEP (4 weeks duration). Patient will need PCP follow up.

Patient Label

(Circle the box that applies)

HIV Exposure Risk

PEP Recommendations (from CDC)

Percutaneous Exposures

Exposure Type	HIV Positive	Unknown HIV Status (Known Source)	Unknown HIV Status (Unknown Source)	HIV negative
Less severe (solid needle, superficial injury)	Basic 2-drug PEP; Call Infectious Disease	Generally, no PEP warranted. May consider basic 2-drug PEP for source with HIV risk factors	Generally, no PEP warranted. May consider basic 2-drug PEP if exposure to HIV-infected persons is likely	No PEP warranted
More severe (large-bore hollow needle, deep puncture, visible blood on device, needle used in patient's artery or vein)	Expanded 3-drug PEP; Call Infectious Diseases for regimen	Generally, no PEP warranted. May consider basic 2-drug PEP for source with HIV risk factors	Generally, no PEP warranted. May consider basic 2-drug PEP if exposure to HIV-infected persons is likely	No PEP warranted

Mucous Membrane or Non-intact Skin Exposures

Exposure Type	HIV Positive	Unknown HIV Status (Known Source)	Unknown HIV Status (Unknown source)	HIV negative
Small volume (a few drops)	Basic 2-drug PEP; Call Infectious Disease	Generally, no PEP warranted. May consider basic 2-drug PEP for source with HIV risk factors	Generally, no PEP warranted. May consider basic 2-drug PEP if exposure to HIV-infected persons is likely	No PEP warranted
Large volume (major blood splash)	Expanded 3-drug PEP; Call Infectious Diseases for regimen	Generally, no PEP warranted. May consider basic 2-drug PEP for source with HIV risk factors	Generally, no PEP warranted. May consider basic 2-drug PEP if exposure to HIV-infected persons is likely	No PEP warranted

If donor is HIV + and on multiple medications, ID attending (via PALS) **should be** consulted for best regimen. ID is happy to consult on all cases with ED attending questions.

Patient Label

HIV PEP

Medication Information for Providers

Basic Regimen	Truvada[®] Emtricitabine (FTC) 200 mg / Tenofovir (TDF) 300 mg
Preferred Dosing	One tablet by mouth once daily with or without food
Available Dosages	Tablet, 200 mg FTC + 300 mg TDF (Take Home Packs in ED PYXIS)
Advantages	<ul style="list-style-type: none"> Well tolerated Once daily dosing FTC and TDF are active against HBV Pregnancy category
Disadvantages	<ul style="list-style-type: none"> Headache GI intolerance (diarrhea, nausea, vomiting, and flatulence) Renal insufficiency (Fanconi's syndrome)
Expanded Regimen	Atazanavir[®] (ATZ) + Ritonovir[®] (RTV)
Preferred Dosing	ATZ: One tablet by mouth once daily with food RTV: One tablet by mouth once daily with food (take together with ATZ)
Available Dosages	ATZ: Tablet, 300 mg (Take Home Packs in ED PYXIS) RTV: Tablet, 100 mg
Advantages	<ul style="list-style-type: none"> One of the preferred HIV regimens Generally well-tolerated Pregnancy category B
Disadvantages	<p>ATZ</p> <ul style="list-style-type: none"> Indirect hyperbilirubinemia, with elevated transaminases Cannot be taken with proton pump inhibitor; use caution with antacids and H2RAs Prolonged PR interval Nephrolithiasis Possible increased bleeding episodes in hemophiliacs <p>RTV</p> <ul style="list-style-type: none"> Multiple drug interactions with other medications (consult with pharmacist) GI intolerance Circumoral and extremity paresthesias (rare when used as boosting agent) Asthenia

If other medications are advised by ID, further information is available (online) in:
"Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis" MMWR Recommendations and Reports Vol 54/No. RR-9, September 30, 2005

Patient Label

CONSENT

Post-exposure Prophylaxis for HIV

I may have been exposed to HIV, the virus that causes AIDS, in my work place. The risk of infection from my exposure is not known. However, should HIV infection occur, the outcome is likely to be ultimately fatal. My clinician has offered me treatment with Tenofovir and Emtricitabine (in a combination form known as Truvada®) and, in some cases, Atazanavir/ritonavir, which might reduce my risk of infection. There is no proof that drug treatment after HIV exposure will prevent infection. I will be asked to use contraception during the four weeks of treatment and four subsequent weeks (both men and women). I will be tested for pregnancy and if I am pregnant, any decision to continue prophylaxis will be made in conjunction with an infectious diseases and obstetric clinician. I will be asked to contact my clinician immediately if I learn that I am pregnant while I am on the medications. See table below for risks and side effects associated with antiretroviral drugs. A full listing is in the package insert for each medication. Treatment side effects are expected to disappear after treatment is stopped, but could be life threatening or irreversible. New or rare serious side effects, including cancer, birth defects, or other life-threatening diseases, might develop now or in the future.

MEDICATION	COMMON SIDE EFFECTS		
Emtricitabine / Tenofovir = Truvada®	Abdominal pain Anorexia Anxiety Arthralgia	Diarrhea Vomiting Dizziness Fatigue	Flatulence Headache Nausea
Atazanavir = Reyataz®	Abdominal pain Diarrhea Headache Insomnia	Rash Jaundice Myalgia	Nausea Peripheral neurologias Vomiting
Ritonavir = Norvir®	Abdominal pain Anorexia Asthenia Constipation Insomnia	Malaise Diarrhea Dizziness Flatulence	Headache Parasthesia Rash Vomiting

Caution is to be used with other medication use so I understand I need to disclose all medications that I am currently using.

DOSING:

- **Truvada** (Emtricitabine 200 mg / Tenofovir 300 mg): One tablet by mouth once daily x 28 days
- **Atazanavir 300 mg:** One tablet by mouth once daily x 28 days
- **Ritonavir 100 mg:** One tablet by mouth once daily x 28 days

Please read and check each box as appropriate:

- I understand that I will be taking [] **Truvada (Emtricitabine/Tenofovir)** [] **Atazanavir / Ritonavir**
- I have been advised to use other antiretroviral drugs {as listed here: _____} by an Infectious Disease physician and have been informed of their side effects and drug interactions.
- I have read the “Informed Consent Information: Post-Exposure HIV Prophylaxis”. I have had the opportunity to ask questions. I further understand that should I have any questions about my treatment I may contact the clinic or the infectious disease consultant.
- I have discussed all my current medications with my treating provider.

SIGNATURE: _____

DATE: ___/___/___

WITNESS: _____

DATE: ___/___/___

Patient Label

Body Fluid Exposure Discharge Information

1. There is a possibility that you have become exposed to one or more of the following diseases:

HIV: Risk of infection through a needlestick is 0.3% (3 per 1000)
Risk of infection by blood in the eyes or mouth is 0.09% (Less than 1 per 1000)
Risk of infection by exposure to blood through a break in the skin is felt to be even less.

These are for HIV infected **blood**. Risk of infection with exposure to any other body fluid is considerably lower.

Hepatitis B: Risk of infection is dependent upon many factors and is between 2 and 40% in an unvaccinated person.

Hepatitis C: Risk of infection after a needlestick is 1.8%.
There have been no cases of Hepatitis C infection from blood exposure to the eyes or mouth.

2. Report symptoms of fever, enlarged and tender lymph nodes, skin rash, stomach or nerve problems which start 2-6 weeks after this exposure.
3. It is possible that you could transmit one or more of these diseases to another person, so you should avoid activities that might expose others to your blood or body fluids. These include sharing toothbrushes or razorblades, donating blood or body organs, breastfeeding or becoming pregnant. If you are sexually active, you should consider using condoms with sexual activity. If you are a user of recreational drugs, you should not share needles. These precautions are especially important in the first 6-12 weeks after this exposure.
4. If you have received HIV prophylaxis medication (PEP), make sure that you received a copy of the consent form with information on the drug side effects and drug interactions, and an explanation of the need to continue the PEP regimen.

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- Hospital employees** should follow up at **OHS** (Occupational Health Services – 272-2517 – 5th floor) between 7:30 am and 3:30 pm the next business day.
 - UNM faculty or residents** should follow up at **EOHS** (Employee Occupational Health Services – 272-8043 – 2nd floor of the Family Practice Building) between 8:00 am and 5:00 pm the next business day.
 - Medical or other students** should follow up at **SHAC** (Student Health and counseling – 277-3136 – South Campus across from the SUB building) between 8:00 am and 5:00 pm the next business day.
 - Individuals who were exposed while at work should contact their employer immediately.
 - Other members of the community** should follow up with a Primary Care Provider in 1 week to discuss following the blood drawn in the emergency department.

Patient Label