Instructions for Clinical Rotation Abroad

While travelling abroad you may have limited access to medical care. These instructions help prepare you for a blood/ body fluid exposure. Timely assessment and treatment of exposures is extremely important! Keep this information and supplies with you at all times during your clinical rotation.

**Before you travel:**

1. Obtain Medical Evacuation insurance (required).

2. Set up an individual appointment with a General Medicine physician at Student Health (982-3915) for travel related advice.
   a. Complete the Travel Questionnaire prior to appointment scheduling (at Healthy Hoos).
   b. PEP Steps (on SH website) is a good resource to review blood and body fluid exposure protocols. Note that current recommendations for specific HIV medications for PEP are different than those listed in PEP Steps.

3. Before your appointment, if possible, determine if your program abroad will provide:
   a. Post exposure testing [rapid HIV (<12 hours for results), Hep B & C].
   b. Post exposure HIV medicines with 24 hour/day access.

4. If your program has access to # 3, then you do not need to bring lab supplies or prescriptions with you.

5. If post-exposure testing is not available, you will need to bring supplies with you for obtaining source specimen and transporting it back to Charlottesville for testing. These will be provided at your appointment. Pack the supplies with one copy of the official letters (see pages 6 and 7) in your checked baggage, not in your carry-on.

6. If post-exposure HIV meds are not available, you will need to fill prescriptions for these medications before your trip to take with you. Bring your prescriptions to the Student Health Pharmacy on the same day they are received in clinic. The pharmacist will determine if your insurance will cover the meds. The pharmacist will arrange for you to pick up the medications a few days before your trip to maximize the stability of the medications. Carry your medicines in their original packaging with you in your carry-on bags to avoid loss.

7. Carry the second copies of the official letters with you onto the plane in case you are questioned about your checked baggage.

8. At your international site, remember to **always** carry your information packet, supplies, and medicines with you each day. **Take extra precautions in caring for patients by wearing gloves (and gown/eye protection if needed) to prevent exposure to blood or body fluid!**
After an exposure:

1. **Immediately Wash/scrub** the area of skin with soap and water or rinse well the eye or mucous membrane that was exposed.

2. There are 3 key components of managing post-exposure: **Document the Exposure, Evaluate the Exposure Source, and Disease-Specific Management.**
   
a. **Document the Exposure:** Use the enclosed form “Blood and Body Fluid Exposure Report” to help document available information and keep these for your records.

b. **Evaluate the Exposure Source:**
   
i. Carefully draw 1 gold top tube from the Source patient.
   
ii. Arrange for Hepatitis B panel (surface antibody, surface antigen, and core antibody), Hepatitis C antibody, and rapid HIV-1 and HIV-2 antibody tests to be run locally if available. If not available go to the next step.
   
iii. You will separate serum off of blood to avoid hemolysis which would invalidate the test. Don’t refrigerate blood sample until serum is separated; refrigerating whole blood will cause hemolysis. Allow gold top tube to sit upright for 30 minutes to allow clot to settle.
   
iv. Centrifuge gold top tube at 1100-1300g for 10 minutes. Remember to balance the centrifuge before spinning. If Centrifuge is not available, allow tube to sit upright for an additional ~1 ½ hours.
   
v. Once clot settles, pipette off the serum (yellow fluid on top) into the clear plastic vial found in the Styrofoam packing.
   
vi. Affix top tightly to avoid leakage and label tube “source patient serum”.
   
vii. Place tube in bag and refrigerate or keep cool until ready for transport with you back to the United States.
   
viii. Freeze the cold pack overnight the night before your flight home.

c. **Disease Specific Management:**
   
i. **Hep B:** Most students will need no treatment for Hep B due to prior immunization and documented positive titer prior to travel. If you are undergoing a second vaccine series for a negative titer or are a known vaccine non-responder, you should receive HBIG after any potential Hep B exposure.
   
ii. **Hep C:** There is no immediate treatment necessary/ effective after Hep C exposure. However, students exposed to Hep C positive blood will need follow-up blood work and monitoring.
   
iii. **HIV:** Refer to indications for PEP on page 4 to determine if you should take post-exposure HIV prophylaxis. If so, you should start your medication as soon as possible.
**Flying back:**

1. Arrange through your insurance an emergency evacuation flight to arrive back in the US **within 1 week**.

2. On the morning of your flight, place the bagged serum tube on the Styrofoam. Place a couple of paper towels over the bagged specimen to decrease freezing of the specimen (though ok to freeze). Place frozen gel pack over the paper towels. Tape Styrofoam lid over protected sample (Note: Styrofoam box doesn’t close due to gel pack size, but Styrofoam will help maintain coolness).

3. Place the Styrofoam taped box with the specimen into the small cardboard box labeled with the official UVA label and tape up box. You will **not mail** the specimen. The label is just meant to assign an official notation to the package.

4. Pack the specimen into your checked baggage and **not** in your carry-on baggage. Keep one copy of the official UVA letter with the specimen and one copy of the letter with you. If questioned by airport security, explain your situation and show them the letter Student Health has provided you. If they continue to question you, ask them to call Student Health (Mon.- Fri. 8am-5pm, Saturday 8:30am-noon call 434-982-3915 or after hours call 434-972-7004 and asked to be patched through to the General Medicine physician on call). If the specimen is confiscated, you will need to complete 4 weeks of PEP.

5. Fly home to Charlottesville.

**Back in Charlottesville:**

1. Bring specimen to **Employee Health** (call 924-2013 for appointment) during open hours (M-F 8-12 and 1-4:30) or to **UVA ER** after hours to have source serum tested for HIV, Hepatitis B & C. You’ll need the HIV results back before you’ve run out of your Post-exposure prophylactic (PEP) medicine. HIV rapid test results usually return in ~1 hour.

2. UVA will also draw your baseline labs for these same tests to confirm your baseline status.

3. If source patient is HIV negative, stop PEP medicines. 😊
   
   a. If source patient is HIV positive, you’ll get new prescriptions for 3 more weeks (4 week total) of PEP.

4. Schedule a 48 hour follow-up appointment at Student Health 982-3915 to review lab results and discuss follow-up plan.
HIV Travel Prophylaxis/PEP

Indications:

1. Source is known to be HIV positive.

2. Source is of unknown HIV status and source has HIV risk factors. (Consider community infection rate, does the clinic/ hospital care for a large number of HIV infected patients?)

3. Source is unknown (ex. Needle from sharps container) in setting where exposure to HIV-infected persons is likely.

Medication Regimen:

1. Truvada (emtricitabine 200mg + tenofovir 300mg): 1 tablet once daily [dual-NRTI]

2. Raltegravir 400mg tablet: 1 tablet two times per day [Integrase inhibitor]

Notes about PEP:

- Drugs have many potential side effects.
- Routine prescriptions for nausea and diarrhea are not required since this regimen is generally better tolerated than others.
- Consider chronic medical conditions and potential interactions.
- Consider other regular medications and potential drug interactions.
- Refer to Carenotes handouts for more information on PEP meds.
- The Student Health pharmacy is able to fill prescriptions for PEP meds. It is important to bring prescriptions to the pharmacist on the same day they are received in clinic. The pharmacist will determine if your insurance will cover the meds. The pharmacist will arrange for you to pick up the medications a few days before your trip to maximize the stability of the medications.
- Carry your medicines in their original packaging with you in your carry-on bags to avoid loss. The medicine should not be refrigerated, but should stay sealed and at temp < 86° if possible.
- Unused drug cannot be returned to pharmacy for refund per state law.
- For additional questions/ concerns, consult a Student Health provider 434-982-3915 or the UVA Infectious Disease fellow or attending on call: 434-924-0000.
Notes about Risk

Significant Exposures to any of the following may pose a risk and require further evaluation:

- Blood
- Semen
- Vaginal secretions
- Amniotic fluid
- Pleural fluid
- Pericardial fluid
- Peritoneal fluid
- Cerebrospinal fluid
- Synovial fluid

Body Fluids that do NOT pose a risk unless visibly contaminated with blood:

- Urine
- Saliva
- Nonpurulent sputum
- Stool
- Emesis
- Nasal Drainage
- Tears
- Sweat

Risk of infection appears to be higher with:

- Exposure to larger quantity of blood or other infectious fluid.
- Prolonged or extensive exposure of non-intact skin or mucous membrane to blood or other infectious fluid or concentrated virus in a laboratory setting.
- Exposure to the blood of a patient in an advanced disease stage or with a high viral load.
- A deep percutaneous injury.
- An injury with a hollow-bore, blood-filled needle.

**HIV:**
In prospective studies of HCP, the average risk for HIV transmission after a percutaneous exposure to HIV-infected blood has been estimated to be approximately 0.3% and after a mucous membrane exposure, approximately 0.09%. A retrospective case control study of HCP exposed to HIV showed Zidovudine reduced the risk of HIV infection by approximately 81%.

**HCV:**
The average risk of anti-Hepatitis C seroconversion 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. Transmission rarely occurs from mucous membrane exposures to blood, and no transmission in HCP has been documented from intact or nonintact skin exposures to blood.

**HBV:**
Healthcare personnel who have received hepatitis B vaccine and developed immunity to the virus are at virtually no risk for infection. For a susceptible person, the risk from a single needlestick or cut exposure to HBV-infected blood ranges from 6-30% and depends on the hepatitis B e antigen (HBeAg) status of the source individual. Hepatitis B surface antigen (HBsAg)-positive individuals who are HBeAg positive have more virus in their blood and are more likely to transmit HBV than those who are HBeAg negative. While there is a risk for HBV infection from exposures of mucous membranes or nonintact skin, there is no known risk for HBV infection from exposure to intact skin.
Blood and Body Fluid Exposure Report

1) Date of Exposure:_________________________________________

2) Source Patient:___________________________________________

3) Was the source patient identifiable?
   □ Source known and tested
   □ Source known but not tested; reason:____________________
   □ Source not known

4) Which body fluids were involved in the exposure? (check all that apply)
   □ Blood or blood products
   □ Vomit
   □ Sputum
   □ Saliva
   □ CSF
   □ Peritoneal fluid
   □ Pleural fluid
   □ Amniotic fluid
   □ Urine
   □ Other:________________

5) Was the body fluid visibly contaminated with blood? □ Yes □No □Unknown

6) Was the exposed part? (check all that apply)
   □ Intact skin
   □ Non-intact skin
   □ Eyes (conjunctiva)
   □ Nose (mucosa)
   □ Mouth (mucosa)
   □ Other:________________

7) Did the blood or body fluid? (check all that apply)
   □ Touch unprotected skin
   □ Touch skin between gap in protective garments
   □ Soak through barrier garment or protective garment
   □ Soak through clothing

8) Which barrier garments were worn at the time of exposure? (check all that apply)
   □ Single pair latex/vinyl gloves
   □ Double pair latex/vinyl gloves
   □ Goggles
   □ Eyeglasses (not a protective item)
   □ Eyeglasses with side shields
   □ Face shield
   □ Surgical mask
   □ Surgical gown
   □ Plastic apron
   □ Lab coat, cloth(not protective)
   □ Lab coat, other
   □ Other:________________

9) Was the exposure the result of:
   □ Direct patient contact
   □ Body fluid container (specimen/IV tubing or bag/feeding or ventilator tubing)
     leaked/spilled/broke; specify:______________________________
   □ Touched contaminated equipment/surface/bedding/gown:_______
   □ Unknown
   □ Other:________________________________________________________________

10) For how long was the blood or body fluid in contact with your skin or mucous
    membranes? (check one):
    □ Less than 5 minutes  □ 15 minutes to 1 hour
    □ 5-14 minutes  □ More than 1 hour
11) How much blood/body fluid came into contact with your skin or mucous membranes? (check one):
□ Small amount (up to 5 cc or 1 tsp)
□ Moderate amount (up to 50 cc or quarter cup)
□ Large amount (more than 50 cc)

12) Location of exposure on your body: ____________________________

13) Was the source patient positive for the pathogens below? (even if tested before this exposure)

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Test</th>
<th>Result (circle)</th>
<th>Date Drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>HbsAg</td>
<td>positive, negative, not tested</td>
<td>_________</td>
</tr>
<tr>
<td></td>
<td>HbeAg</td>
<td>positive, negative, not tested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anti HBs</td>
<td>positive, negative, not tested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anti HBc</td>
<td>positive, negative, not tested</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>AntiHCV EIA</td>
<td>positive, negative, not tested</td>
<td>_________</td>
</tr>
<tr>
<td></td>
<td>PCR HCV</td>
<td>positive, negative, not tested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RNA</td>
<td>positive, negative, not tested</td>
<td></td>
</tr>
<tr>
<td>HIV</td>
<td>Anti HIV</td>
<td>positive, negative, not tested</td>
<td>_________</td>
</tr>
<tr>
<td></td>
<td>#CD4 Cells</td>
<td>count, not tested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Antigen Load</td>
<td>RNA copies/ml, not tested</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14) If the source patient was believed to be in high risk group for blood borne pathogens, check all that apply:
□ Blood product recipient □ Elevated enzymes □ Sexual
□ Injection drug use □ Hemophilia □ Dialysis
□ Other: __________________

15) If the source patient was HIV positive, had he/she been treated with any of the following before exposure?
□ Unknown □ 3TC □ IDV
□ AZT □ ddC □ Other: ____________________________

16) Additional source patient comments:
Date: __________________

________________________ is traveling to provide medical/nursing care in __________________. The student has been prescribed this emergency kit for their own healthcare needs. The equipment is medically necessary for their travel. Contents listed below.*

Sincerely,

__________________________________________

(Health care provider’s signature)                                            (Print name)

*Medical/Nursing Student Travel Kit:

Bag contents: gloves, tourniquet, Vacutainer blood collection set, Luer-lock Access device, syringe, pipette, gold top tubes, alcohol swabs, gauze pads, band-aids, & TB masks.

University of Virginia specimen box contents: plastic screw top tube, Styrofoam, & gel refrigerant pack.
Date: __________________

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refrigerant pack.
Date: ____________________

________________________ has traveled to provide medical/nursing care in
________________________ (Name)
________________________ as part of their University of Virginia Medical/Nursing School
________________________ (Country)
education. If the student is carrying back serum in the Styrofoam package, then they have
unfortunately been exposed to blood or body fluid from a patient during their trip. They
have been instructed to bring back serum from the source patient for testing for infectious
diseases including HIV, to determine the level of risk to their own health. Without this
serum for testing, this medical/nursing student will need to take a one month course of
HIV medication which may be potentially toxic. This medical/nursing student has been
trained in packaging the serum in order to avoid risk to others who are traveling. The
equipment is medically necessary for his or her travel.
Please call 434-982-3915 8am-5pm Mon.-Fri. or 434-972-7004 after hours for any
questions regarding this emergency need.

Sincerely,

________________________ (Health care provider’s signature)  ____________________ (Print name)
Date: __________________

________________________ has traveled to provide medical/nursing care in

(Name)

____________________ as part of their University of Virginia Medical/Nursing School

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