Needlestick Protocol: WHAT TO DO

If you are exposed to a needle stick, splash in the eye, or other high-risk exposure:

1. Immediately **dispose of sharps** safely, if necessary.

2. **Explain to the patient that you will now transfer their care** to another clinic worker, while you care for your injury, and ask them to wait for this transfer.

3. Notify your replacement clinic worker that you are activating the Needlestick Protocol:
   - **Both you and the patient will be tested** for communicable diseases (i.e., receive free HIV and hepatitis testing through the HIV Alliance/Needle Exchange). This is NOT optional.
   - The clinic worker must **obtain and document the patient's risk status** (remote and recent injection or needle use of any kind; blood transfusions, with year; known disease history).
   - Before the patient leaves the clinic, **their correct contact information** must be documented, for follow-up of this testing.
   - Before the patient leaves the clinic, they must be given written contact information for the HIV Alliance/ Needle Exchange, and instructed to visit them for free testing:
     HIV Alliance/Needle Exchange phone, 541-342-5088. Location, 1966 Garden Avenue, Eugene. (Needle Exchange has mobile sites throughout the week - call for details.)
     Alternatively, the patient may visit their personal physician; document this physician's contact information before the patient leaves the clinic, for followup.
   - Notify the patient that IF **official documentation of recent negative HIV and hepatitis B/C testing** is provided by medical authorities, no new testing or treatment are necessary.

4. **Clean the wound** thoroughly with alcohol-based hand sanitizer (containing at least 60% alcohol, which kills HIV, HBV, and HCV), or rinse eye/s very thoroughly with fresh water or sterile saline solution.
   - Do not squeeze a puncture wound - it causes microtrauma and swelling, and doesn't help.

5. **Document** the date, time, route of exposure, and patient and staff risk factors for blood-borne diseases. Deliver this information to the clinic manager.
   - The clinic manager is to open a file to document:
     1. The staff member's exposure report
     2. Patient's and staffer's test results (rapid HIV, HBsAg, anti-HBs antibodies, anti-HCV)
     3. Patient's and staffer's treatment plans (post-exposure prophylaxis/PEP and followup care, including emotional support and education)
   - **Do NOT leave the clinic yourself, without a prescription for post-exposure prophylaxis** (PEP, preventive medication) that you can fill and take within 2 hours of exposure, OR SOONER. See below for possible regimens.
   - Do NOT leave the clinic yourself, without documenting the injury/exposure, notifying the clinic manager, and planning your testing and treatment regimen.

6. **Immediate testing**:
The patient:
   - **The patient should be rapid-tested for HIV** (results within an hour), with a positive result followed by a Western blot for confirmation. Negative rapid tests do NOT require further testing.
   - **The patient should be tested for hepatitis** (HBV surface antigen, HBsAg, and anti-HCV antibodies) immediately.

The staffer:
   - If the patient's rapid HIV is negative, the staffer does NOT need HIV testing, other than routinely, or treatment (PEP).
   - If the patient is HIV positive, the exposed staffer should be tested for HIV immediately and at 6 and 12 weeks, and 6 months after exposure. Most people seroconvert in the first 3 months, if at all.
   - The staffer should be tested for hepatitis on the basis of the patient's results. See below for details.

7. HIV post-exposure prophylactic (PEP) treatment:

- **If the patient's HIV status is unknown, take immediate post-exposure prophylaxis medication** (PEP) while waiting for the patient's rapid HIV test results.
- **If the patient is thought to be very low risk, you can wait 1-2 hours** before starting PEP medication while awaiting rapid HIV testing. If no results within 2 hours, start PEP immediately. (You can stop the PEP if the patient later turns out to be HIV negative.)
- If the patient is known to be HIV positive, start PEP immediately, and plan to continue it for 4 weeks. HIV-PEP is most effective if started within 1-2 hours of exposure, or sooner.

8. What drugs for HIV-PEP?

Call the **National Clinicians' Postexposure Prophylaxis Hotline (PEPline, 888-448-4911)**.

Possible regimens:

- Preferred: *Truvada (tenofovir/emtricitabine, 300/200 mg daily) plus Isentress (raltegravir, 400 mg twice daily)*.
- Alternative: Truvada (tenofovir/emtricitabine, 300/200 mg daily) plus Reyataz (atazanavir, 300 mg daily) and Norvir (ritonanvir, 100 mg daily),
  OR Truvada (tenofovir/emtricitabine, 300/200 mg daily) plus Prezista (darunavir, 800 mg daily) and Norvir (ritonanvir, 100 mg daily) with food.
- Additional possible regimens: *Atripla (efavirenz/tenofovir/emtricitabine, 600/300/200 mg daily),*
  OR *Truvada (tenofovir/emtricitabine, 300/200 mg daily) plus Kaletra (lopinavir/ritonavir, 400/100 mg twice daily),*
  OR Zerit (stavudine, 30 mg twice daily) and Epivir (lamivudine, 150 mg twice daily) in place of tenfovir/emtricitabine in the above regimens if the latter is contraindicated.
- For pregnant workers: Combivir (zidovudine-lamivudine, 150/300 twice daily) and Kaletra (lopinavir/ritonavir, 400/100 mg twice daily). Efavirenz should not be used in women who are or might be pregnant.
- Drugs that should NOT be used are abacavir (Ziagen) and nevirapine (Viramune), which may cause severe and sometimes life-threatening side effects, especially during the first few weeks of exposure.

(http://www.aidsinfo.nih.gov/guidelines/html/1/adult-and-adolescent-treatment-guidelines/0/ Updated 3/28/2012.)

Drug prices at Costco (online, 12/2012):

Truvada 200/300mg	#30, $1278;	#60, $2520;	#90, $3761	(rev. transcriptase inhib.)
Isentress 400mg	#60, $1133;	#120, $2228;	#180, $3325.	(integrase inhibitor)
Kaletra 200/50mg	#30, $211;	#50, $343;	#100, $671.	(protease inhibitor)
Atripla	#30, $1889;	#60, $3752;	#90, $5615.	(rev. transcriptase inhib.)

Others on the above list are not found from this pharmacy.

Plan to take HIV-PEP medication for 4 weeks or longer. If the patient is found to be HIV-negative, you can stop the PEP medication.

9. **Hepatitis B** testing and treatment:

- If the patient is HBV negative, you might not need further testing.
- If you have been vaccinated against hepatitis B, get tested to verify that you are immune.
  If immune, you will have positive anti-HBs (antibodies to hepatits B surface antigen, which is used to make the vaccine). You might not need further testing.
  If you are not immune, and the patient is positive, (had a poor response, or the vaccine wore off), you will need to be treated as though unvaccinated.
- HBV-PEP consists of HBIG ("Hepagam," hepatitis B immunoglobulin, 0.06mg/kg, repeated in one month if not HBV immune) and/or hepatitis B vaccination (a 3-shot series).

10. **Hepatitis C** testing and treatment:

- If the patient is HCV negative, you don't need further testing for HCV, although CDC recommends that adults born in 1945-1965, those who got blood before 1992, and many others with "mild" risk factors, get screened routinely for anti-HCV antibodies.
- If the patient is HCV positive, get follow-up testing for HCV RNA by PCR 4-6 weeks after exposure. Continue follow-up testing for anti-HCV antibodies by ELISA, HCV RNA, and liver enzymes (ALT and AST) 4-6 months after exposure.
- There is currently no PEP or vaccine for hepatitis C. Immunoglobulin (HCIG) and antiviral agents are NOT recommended. Consult your personal physician or a liver specialist for advice.

Needlestick Protocol Checklist

Completed by _____ Date ____/____/_____

Exposed staffer name/DOB _____

Contact info_____

Patient contact info _____

_____

Patient risk status (hx blood borne illness, IVDU, transfusion, MSM, etc.) _____

_____

Time, date, and route of exposure _____

_____

_____

HIV testing:

☐ Patient had rapid HIV test*

☐ Result negative > no further HIV testing needed

☐ Result positive > sent for Western blot confirmation

☐ Result positive > staffer tested for HIV > staffer to doctor for management

Hepatitis testing:

☐ Patient documented recent negative for HBV (date ____/____/_____), copy in chart

☐ Patient documented recent negative for HCV (date ____/____/_____), copy in chart

☐ Patient tested for HBV/HCV*

☐ HBV-vaccinated staffer tested for immunity, found immune (positive anti-HBs Abs)

☐ HBV-vaccinated staffer tested for immunity, found not immune (negative anti-HBs Abs)

☐ Patient HBV-positive (HBsAg positive) > staffer to doctor for testing and HBV-PEP

☐ Patient HCV-positive (anti-HCV Abs positive) > staffer to doctor for testing and management

PEP: Staffer given rx for

☐ Truvada + Isentress ☐ Truvada + Kaletra ☐ Atripla

☐ Financial assistance provided for rx

☐ Staffer started PEP within 2 hrs of exposure

☐ PEP discontinued when patient documented HIV-negative

**HIV Alliance, 541-342-5088, 1966 Garden Avenue, Eugene. Mon-Tues 5-7 pm; Wed 6-8 pm; Fri 3-5 pm.*