

## Background

Health care professionals are at risk that they might be injured at work by being stuck, cut or splashed with fluids containing infectious agents. Even though the risk is small, you still need to know what to do.

The Bloodborne pathogens that worry us are hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). The chance of developing infection depends on the type of injury, the type and amount of fluid involved and the type of virus. Potentially infectious body fluids are blood or blood products, cerebrospinal fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, vaginal secretions and semen. One approach to remembering the approximate risk of being infected by a needle-stick is that there is an approximately 10-fold difference in the level of risk between each of the three worrisome viruses when listed in the alphabetic order:

Virus	Risk
HBV	6-30%
HCV	2%
HIV	0.3%

*(Online resources are listed on the last page on this monograph BUT please follow the protocol below first)*

## WHAT IF YOU ARE EXPOSED?

One of the vaccines you received provides antibodies to prevent infection for highest acquisition risk virus, HBV. For the HCV and HIV, we do not yet have effective immunizations. Do your best to not have to trigger the following protocols by remembering that you can prevent exposure by **being alert, aware, and careful** while using and disposing of a sharp and being around infectious bodily fluids.

Should an exposure occur, *please don't panic*. The vast majority of body substance exposures do not result in harm. **Time matters though, so please proceed as follows (see next two pages):**

## **Immediate Actions**

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### Wash:

- For punctures or lacerations, bleed the site well under running water and wash with soap and water.
- For mucous membrane splashes (eyes, nose or mouth), immediately flush with copious amounts of water.
- Carefully remove all soiled clothing and wash again if it was necessary to remove soiled clothing.

Gather and write down information about what happened because this is needed to do testing on the patient and to decide whether you might need post-exposure prophylaxis:

- The source patient's name, hospital number, date of birth, and location in the hospital or clinic.
- Name and contact information of your clinical supervisor at the time of the incident.
- The date and time the incident occurred.
- The type of potentially infectious materials that was involved in the incident - blood, amniotic fluid, etc.
- The details of the incident - for example, the type of needle or splash, what that needle had been in, the depth of the injury, whether you were wearing protective equipment such as gloves or face mask, etc.

Notify the nurse or health care provider in charge of the area where the incident occurred. The hospital's or clinic's personnel will initiate the process of consenting the patient to have blood tests to determine if he or she might be harboring an infectious agent. You are NOT the person to consent the patient or to draw the blood from the source patient. Complete the clinical agency's Incident Report form.

Tests that designated personnel will do on the source patient if the exposure warrants it and the patient's infectivity is not known are:

- Hepatitis B surface antigen (HBsAg).
- Hepatitis C antibody (anti-HCV).
- HIV antibody (with consent).
- In high risk source patients believed or known to be HIV positive, and/or known to be anti-HCV positive, viral "load" studies (i.e., quantitative viral RNA) should also be sent for each respective virus.
- If the patient refuses to have blood drawn, the Spokane Health Department will be contacted.

## **Actions within Two Hours**

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Physician evaluation to determine if the Affected Person might need post-exposure prophylaxis.

*During regular work hours:* Affected persons who are residents or students should report to Rockwood Clinic Urgent Care, 400 E. 5<sup>th</sup> Ave, Spokane, WA, Phone: (509) 838-2531. Call Urgent Care immediately and an urgent visit will be arranged. It is important to tell the receptionist that an exposure has occurred so that the individual will be seen quickly.

*After hours or on weekends or holidays:* Affected Persons should report to Deaconess Emergency Department.

While the Affected Person is in clinic or in the ER being evaluated, he/she must contact one of the course/clerkship/rotation preceptors or supervisors (course director, clerkship coordinator, or an attending physicians or small group leader) depending on which program is involved. Don't waste time calling the supervisor or preceptor prior to being evaluated.

Tests that will need to be ordered if the exposure warrants it are:

1. Hepatitis B surface antibody (HBsAb) if the Affected Person has not completed Hepatitis B immunization series or if the level of protective antibody from such a series is unknown. [WWAMI student immunization records should be in electronic health record.]
2. Hepatitis C antibody (anti-HCV).
3. HIV antibody (with consent).
4. If indicated and the affected person elects to take prophylactic treatment, additional Baseline blood tests will include CBC, renal function, hepatic function, and pregnancy test.

## **Actions within 24 Hours**

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WSU students must complete a WSU incident form that is available on-line within 24 hours of the incident (<http://hrs.wsu.edu/managers/incident-report/>). The attending provider will be asked to send the "health care professional's written opinion" to the respective program supervisor stating that the student was seen and advised as to follow-up care. Files will be kept confidentially in each program office.

WSU Guidelines for Bloodborne Pathogen Occupational Exposure Management / Medical Services

<p><b>UW Medical &amp; WSU College of Medical Sciences students</b> Complete WSU Incident Report (see below for link) and use the Spokane campus 4-digit mail code: 1495.</p>	<p><b>Students in Spokane</b> should report to:  <b>8-5PM:</b> Rockwood Clinic Urgent Care, 400 E. 5<sup>th</sup> Ave., Spokane, WA (509) 838-2531  <b>After Rockwood Clinic Urgent Care hours:</b> Deaconess Emergency Department</p>	<p><b>Students outside of Spokane</b> should report to their community's clinic or ER</p>	<p><b>If UW med students have unanswered questions, contact:</b> <b>1. Office of Student Affairs:</b> 206-543-5560 (8am-5pm PST), ask for 'Compliance Staff' <b>2. If after hours, call:</b> <b>AMY BAERNSTEIN, MD</b> at 206-547-5227 (cell) or <b>DOUG PAAUW, MD</b> at 206-598-6190 (pager)</p>
<p><b>For All UW Medical Students:</b> If testing, prophylaxis, or counseling is deemed necessary and the training site outside the Seattle area cannot absorb these costs, call or email UW Health Sciences Immunizations Program (HSIP) at 206-616- 9074 or myshots@uw.edu (9am-4pm PST) to inform them of the event. They will be responsible for your subsequent follow-up testing and treatment.</p>			
<p><b>WSU Nursing students</b> Complete WSU Incident Report (see below for link) and use the Spokane campus 4-digit mail code: 1495. The clinical instructor or preceptor should contact the College of Nursing Associate Dean for Academic Programs (509) 324-7335 or Assistant Dean (509) 324-7241.</p>	<p><b>Spokane-based students</b> Students who do not carry personal medical insurance but have paid for the WSU mandatory Health and Wellness Plan (\$87.00) are entitled to services at:  <b>8-5PM:</b> Rockwood Clinic Urgent Care, 400 E. 5<sup>th</sup> Ave., Spokane, WA (509) 838-2531  <b>After Rockwood Clinic Urgent Care hours:</b> Deaconess Emergency Department  <i>Identify yourself as a WSU student when you report</i></p>	<p><b>Yakima-based students</b> Central Washington Family Medicine: 1806 West Lincoln, Yakima, WA 98902 (509) 452-4520 <b>For Yakima-based faculty</b> Occupational Health Clinic-Yakima  Should WSU students in Yakima incur an exposure, the student must notify their clinical faculty. The clinical faculty will notify the Program Director.</p>	<p><b>Vancouver and Tri-Cities students</b> WSU does not have official agreements established with any medical facilities in the Vancouver and Tri-Cities areas. If medical treatment is necessary, students will need to be seen at their assigned clinical location or nearest medical facility. Students in Vancouver and Tri-Cities are not required to pay the mandatory health fee, but are responsible for any medical costs associated with medical treatment for exposure to infectious agents.</p>
<p><b>WSU Pharmacy students</b> Complete WSU Incident Report (see below for link) and use the Spokane campus 4-digit mail code: 1495. The student should notify their Preceptor, who will notify the Assistant Director of Experiential Programs (509) 358-7659.</p>	<p><b>Spokane-based students</b> Students who do not carry personal medical insurance but have paid for the WSU mandatory Health and Wellness Plan (\$87.00) are entitled to services at:  <b>8-5PM:</b> Rockwood Clinic Urgent Care, 400 E. 5<sup>th</sup> Ave., Spokane, WA (509) 838-2531  <b>After Rockwood Clinic Urgent Care hours:</b> Deaconess Emergency Department  <i>Identify yourself as a WSU student when you report</i></p>	<p><b>Yakima-based students</b> Central Washington Family Medicine: 1806 West Lincoln, Yakima, WA 98902 (509) 452-4520</p>	<p><b>Students in other geographic locations</b> WSU does not have official agreements established with any medical facilities in the other geographic locations. If medical treatment is necessary, students will need to be seen at their assigned clinical location or nearest medical facility. Students in other geographic areas are not required to pay the mandatory health fee, but are responsible for any medical costs associated with medical treatment for exposure to infectious agents.</p>

**\*\*WSU Students must understand that the health and wellness fee only covers the first three days (72 hours) of evaluation, counseling, and post-exposure treatment for Bloodborne incidents, until laboratory results are back. Students are responsible for all clinic visits, medication, laboratory, and any other related costs that occur 72 hours or more after the incident. Based on practitioner recommendations, coverage for continuation of post exposure medications will be handled on a case-by-case basis. Students should consider purchase of health care insurance that may assist with these additional costs. Students should notify their clinical site faculty and college program directors of financial issues pertaining to Bloodborne pathogen exposure. The mandatory health and wellness fee is applicable to students enrolled in 7 or more credits (optional coverage is available for those enrolled in fewer).**

**Online Resources:**

1. CDC Emergency Needle stick Information:

<http://www.cdc.gov/niosh/topics/bbp/emergnedl.html>

2. Needle stick Risk Assessment Calculator:

<http://www.medicinecalculator.com/hiv-needle-stick-risk-assessment-stratification-protocol-rasp/index.html>