BLOOD AND HIGH RISK BODY FLUID EXPOSURE FOLLOW-UP

I. PURPOSE

A. To provide appropriate care and follow-up to caregivers and designated non-Aurora caregivers after significant blood or high-risk body fluid exposures.

II. POLICY

A. Caregivers who have an incident which involves significant blood and/or high risk body fluid exposure will be evaluated, tested and, if appropriate, receive treatment/prophylaxis for HIV, Hepatitis B & Hepatitis C, or other infectious diseases consistent with current United States Public Health recommendations.

B. Post-exposure follow-up for designated non-Aurora caregivers shall be managed the same as Aurora caregivers except for the following:
   1. Non-employee shall inform instructor or supervisor of exposure.
   2. Copy of Incident Report shall be provided to the instructor or agency.
   3. Employee Health shall provide the non-employee with results from his/her baseline testing and that of the patient source.
   4. The non-Aurora caregiver shall be referred to their medical provider for all other follow-up care.
   5. All baseline testing costs will be paid by Employee Health. Costs related to PEP and evaluations by the medical provider shall be the responsibility of the non-Aurora caregiver/agency.

III. DEFINITIONS

A. Significant Exposure
   1. Percutaneous (needle stick, cut with sharp object)
   2. Mucosal (ocular or mucous membrane) exposure to a “high risk” body fluid
   3. Non-intact skin (exposed skin that is chapped, abraded or afflicted with dermatitis)
   4. Human bite when the skin is broken

B. High Risk Body Fluids
   1. Blood
   2. Semen
   3. Vaginal secretions
   4. Body fluids that contain visible blood
   5. Amniotic fluid
   6. Deep body fluids (cerebral spinal, synovial, pleural, peritoneal, pericardial)
   7. Body tissue
C. High Risk Behavior
   1. Injectable drug use
   2. Having unprotected sex (oral, anal or vaginal) with an infected person
   3. Multiple unprotected sexual partners

IV. IMMEDIATE TREATMENT (FIRST AID)
   A. For needle puncture, laceration or other broken skin, immediately cleanse area thoroughly with soap and water for 5 minutes.
   B. Exposure to eyes or mucous membranes: irrigate affected area immediately with copious amounts of water or saline for at least 15 minutes.

V. REPORTING INJURY
   A. Notify Employee Health RN or in absence of Employee Health, contact the Hospital Supervisor or designee.
   B. Complete Incident Report
      1. Write a description of the incident that gives detail to determine if exposure is significant or not.
      2. Include name and MRN number of source, if known (place pt. label on incident report)

VI. SOURCE EVALUATION
   A. Contact Infection Preventionist or the RN caring for the source patient to obtain information on the patient’s health history (i.e., medical record).
   B. Assess source patient for high-risk behavior
      1. History of previous viral hepatitis (B & C)
      2. History of IV drug use
      3. Multiple blood transfusions prior to 1985
      4. Sexual contact with HIV/Hepatitis B or Hepatitis C positive person
      5. Abnormal liver function tests
      6. Immigrant or travel to endemic country (Haiti or Central Africa)
      7. Unprotected sex (anal, oral or vaginal) with infected person
   C. Counseling
      1. Reason for testing
      2. HIV test requires informed consent
      3. Confidentiality
      4. Aurora will be responsible for the cost of all required post exposure testing
   D. Employee Health lab requisitions will be provided to the laboratory
E. Source Patient testing will include:

1. Rapid HIV Screening (automatically sent by ACL Labs for Western Blot to confirm positive Rapid HIV results)
2. HbsAG (Hepatitis B Surface Antigen)
3. HCV antibodies (Hepatitis C Virus)

F. Any RN may obtain consent from source/patient for HIV antibody testing.

G. Who may give informed consent for HIV testing:

1. Individuals being tested if 14 years of age or older
2. If any of the following is applicable:
   a) Individual has been adjudicated incompetent, or is under 14 years of age, the care provider obtains consent from the individual’s guardian
   b) Individual is unable to communicate due to medical condition, consent is obtained from the individual’s closest living relative or another with whom the individual has a meaningful social or emotional relationship.

H. The patient, if capable of consenting, has been given an opportunity to be tested, with consent and has declined.

1. A physician determines and certifies in writing on the “Significant Exposure Certification” form (AHCX14701) that the employee or health care provider has been significantly exposed. If the health care provider who is significantly exposed is a physician, PA or NP, he/she may not make this determination or sign the certification form for themselves.
2. The source patient must be informed that the testing is done. The results may be released to the source individual.

VII. CAREGIVER EVALUATION

A. Baseline testing procedure:

1. HIV Eliza– caregiver will need to give informed consent
2. HbsAG (Hepatitis B Surface Antigen) if no previous Hepatitis B vaccine or only 1 dose
3. HBsAB (Hepatitis B Surface Antibodies) if had 2 or more doses of Hepatitis B vaccine
4. HCV antibodies and ALT
5. Caregiver may refuse post exposure testing. If caregiver refuses HIV testing at time of exposure, but consents to other blood testing, blood will be frozen for 90 days (for possible future HIV testing).

B. Counseling of exposed caregiver:

1. Testing process
2. Risk factors of source, if known
3. Means by which test results will be communicated to caregiver. Stress confidentiality of source patient test results.

4. Standard precautions to avoid HIV transmission

C. Review Tetanus/Diphtheria or Tdap immunization status. Employee Health will provide vaccination as needed.

D. Follow-up testing procedures:
   1. If the source patient is unknown or is unable to be tested, repeat HIV testing at 6 weeks, 12 weeks and 6 months and hepatitis C antibody at 12 weeks and 6 months post exposure.
   2. Consider PEP (Post-exposure prophylaxis) therapy for exposed employee (see VIII. HIV Management)

E. If source patient is low risk for HIV and all post exposure testing is negative, no further follow-up testing is required unless requested by the caregiver.

F. If source patient is high risk for HIV but HIV negative, repeat HIV testing on exposed caregiver at 6 weeks, 3 months, 6 months, and, if requested 12 months.

   1. Reinforce use of standard precautions to avoid HIV transmission
   2. Consider PEP therapy (See VIII. HIV Management)

G. If source patient is known HIV positive or tests positive on Rapid HIV testing, Employee Health, or the designee will facilitate an immediate evaluation of the exposed caregiver by ED, infectious disease physician, or Aurora Occupational Health Department for PEP Therapy, (see VIII. HIV Management).

   1. EH will repeat HIV testing on exposed caregiver at 6 weeks, 3 months, 6 months, and, if requested, 12 months.

VIII. HIV EXPOSURE MANAGEMENT

A. Exposed caregiver should be evaluated by a medical provider immediately after exposure (within 2 hours and less than 3 days). Post-exposure prophylaxis (PEP) will be prescribed if there is:

   1. Significant exposure to high-risk or unknown source. Initiating prophylaxis should be decided on a case-by-case basis, dependent on risk and likelihood of HIV infection on the source patient. EXAMPLE: if a needle stick of unknown source occurred in HIV clinic, prophylaxis should be initiated.

   2. A positive Rapid HIV result from source patient. (Note: If the Western Blot HIV test is negative, EH will inform the treating physician so PEP can be discontinued.)

B. Prior to initiation to any prophylactic therapy the evaluating physician must contact PEPLINE (888-448-4911)

C. The physician completing the evaluation will review the following with the exposed caregiver:

   1. Source’s test results and/or risk for HIV
   2. Recommended PEP
3. Explain medication regimen, side effects, subsequent lab tests, follow-up protocol (may use “HIV Post-Exposure Prophylaxis Fact Sheet, AHCX15029.j)

4. Caregiver must sign a consent form to begin PEP. (PEP consent form AHCX14324)

5. If caregiver declines PEP, a refusal form must be signed (PEP Refusal form, AHCX14322)

6. Prior to initiation of therapy, the following lab tests are required:
   a) CBC
   b) Metabolic panel
   c) Pregnancy test for females (stat urine)

7. Administer first doses of medication. Send enough medication with caregiver to take until next physician visit.

8. Schedule appointment within 72 hours with the physician who will be responsible for all further medical care. Aurora caregivers can have follow-up with an infectious disease physician or Employee Health will direct them immediately on the next business day to an Aurora Occupational Health site.
IX. HEPATITIS – B MANAGEMENT

A. Employee Health will provide Hepatitis B prophylaxis based on the following U.S. Public Health Services Guidelines:

**Recommendation for Post-Exposure Prophylaxis for Percutaneous or Permucosal Exposure to Hepatitis B Virus**

<table>
<thead>
<tr>
<th>Vaccination and antibody response status of exposed person</th>
<th>Treatment when source is:</th>
<th>Source not tested or status unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvaccinated</td>
<td>HbsAG* Positive, HBIG † x 1; initiate HB vaccine series §</td>
<td>Initiate HB vaccine series</td>
</tr>
<tr>
<td>Previously vaccinated:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known responder ¶</td>
<td>No treatment</td>
<td>No treatment</td>
</tr>
<tr>
<td>Known non-responder</td>
<td>HBIG x 2 or HBIG x 1 and initiate revaccination</td>
<td>No treatment; If known high-risk source, treat as if source was HBsAg positive</td>
</tr>
<tr>
<td>Antibody response unknown</td>
<td>Test exposed person for anti-HBs **</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. If adequate¶, no treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. If inadequate¶, HBIG x 1 and vaccine booster</td>
<td></td>
</tr>
</tbody>
</table>

* Hepatitis B surface antigen
† Hepatitis B immune globulin; dose 0.06 mL/kg intramuscularly
§ Hepatitis B vaccine.
¶ Responder is defined as a person with adequate levels of serum antibody to hepatitis B surface antigen (i.e., anti-HBs ≥ 0 mIU/mL); inadequate response to vaccination defined as serum anti-HBs < 10 mIU/mL.
** Antibody to hepatitis B surface antigen.
X. HEPATITIS – C MANAGEMENT

A. If the exposed caregiver is HCV positive on baseline testing, he/she will be referred to his/her medical provider.

B. If the source patient is found to be HCV positive on baseline testing, Employee Health will notify the patient’s treating medical provider. A HCV – QTM test will be done on the exposed caregiver at four weeks post exposure. If positive, the caregiver will be referred to his/her medical provider, an infectious disease physician, or a GI specialist. HCV/ALT should be repeated on the exposed caregiver at six months.

C. If the source patient is HCV negative and low risk for HCV, no further testing is required unless requested by the caregiver.

D. If source patient is unknown, caregiver should have baseline testing and repeat testing 12 and 24 weeks post exposure.

XI. EMPLOYEE HEALTH FOLLOW-UP

A. All significantly exposed caregivers will be offered counseling and educational material regarding risks of exposures and methods to reduce risk of future exposures.

B. Caregivers will be notified in writing of all test results and informed that they must maintain confidentiality of the source individual’s identity and test results.

C. Employee Health will monitor all lab tests and any medical provider follow-up care.

XII. INFORMATION SENT TO EMPLOYER/SCHOOL OF NON-EMPLOYEES WILL BE LIMITED TO:

A. EH will send a letter including the following to employer or school:
   1. If Hepatitis B vaccination is indicated
   2. That the exposed individual has been informed of the initial test results
   3. That the exposed individual has been told of any medical conditions, which could result from this exposure and require further evaluation or treatment.

REFERENCES:

Public Health Service Guidelines for the Management of Health Care Workers Exposed to HIV and Recommendation for Post-Exposure Prophylaxis, MMWR, Vol. 50; No. RR-11, June 29, 2001

HIV Prevention Through Early Detection and Treatment of Other Sexually Transmitted Disease – United States, MMWR, Vol. 47; No. RR-12

Guidelines for Infection Control in Healthcare Personnel, 1998 CDC, AJIC, Vol. 26; No. 3

Wisconsin Statute 252.15, 2009

PEPline, National Clinicians’ Post-Exposure Prophylaxis Hotline, 1-888-448-4911