

Mary Greeley Medical Center

Infection Control

Bloodborne Pathogen Exposure, Employee and Source Patient

POLICY: When notified that an employee or health care provider has been exposed to the blood or body fluid of a patient, MGMC will follow up by testing the blood of the healthcare provider and the source patient for the bloodborne pathogens HIV, hepatitis B, and hepatitis C.

PURPOSE: To provide a procedure for staff to use for follow-up of the exposed healthcare provider and the source patient of a bloodborne pathogen exposure.

PROCEDURE:

Additional References:

Bloodborne Pathogens Exposure Control Plan (MDG003)

****DO NOT DELAY. Follow-up should be done as soon as possible after the exposure to ensure early prophylaxis, if warranted. ****

1. COMPLETE FIRST AID: The exposed person will flush the exposed site with soap and water, as appropriate (e.g., clean wounds with soap and water, flush mucous membranes or eyes with clean tepid water).
2. DETERMINE IF SIGNIFICANT EXPOSURE: The exposed person will contact his/her manager or lead RN as soon as possible after the exposure. The manager will determine if the exposure was a significant bloodborne pathogen exposure (see below; contact Occupational Health at ext. 2639 if you need assistance with this determination). On weekends, evenings, nights, and holidays, the exposed employee will contact the House Supervisor as soon as possible after the exposure.

A significant exposure is defined as:

- a. Transmission of blood, bloody fluids, or other infectious body fluids of the patient onto a mucous membrane (mouth, nose, or eyes) of the care provider.
 - b. Transmission of blood, bloody fluids, or other infectious body fluids onto an open wound or lesion with significant breakdown in the skin barrier, including a needle puncture with a needle contaminated with blood or a human bite.
3. COMPLETE APPROPRIATE FORMS: The exposed person, with the assistance of his/her manager (or House Supervisor if event occurs on off-hours), will complete an Employee Incident Midas Report on the intranet. The HIV Consent form and Confidential Disclosure form are completed via electronic signature in lab/ED prior to collection of blood. The affected staff member shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
 4. REGISTER: The employee will go to Laboratory to register for a bloodborne pathogen exposure. On weekends, evenings, nights, and holidays, the exposed employee will go to the ED Registration desk. If the source patient is known, the employee should bring

the source patient name and date of birth (a patient label/sticker is an option that easily provides this information). BBPE lab panels will be ordered for both the employee and the source patient, per McFarland Clinic Occupational Medicine physician. The lab will enter the BBPE orders in EPIC, Monday through Friday from 7am-5pm. Off hours will be entered by the house supervisor and/or ED physician/staff.

5. **SAMPLE COLLECTION:** A phlebotomist will draw the employee's blood in the lab (or in the ED). Blood bank/lab will determine whether they already have blood collected from the source patient to prevent a redraw. A rapid HIV, Hepatitis B antigen, and Hepatitis C antibody (with reflex to HCV RNA if positive) will be collected for the source patient. The employee will also be tested for Hepatitis B Surface Antibody, Hepatitis B antigen, rapid HIV, and Hepatitis C antibody (with reflex to HCV RNA if positive).

6. **INFORM THE SOURCE PATIENT:** The exposed person, his/her manager, or the House Supervisor must inform the source patient that an exposure has occurred, and that his/her blood will be tested for bloodborne pathogens. The source patient's consent is not necessary; he/she is "deemed" to have consented by being treated at Mary Greeley. If the lab does not have blood already drawn and the patient refuses to be drawn, contact the patient's physician and seek his/her advice. However, we cannot force the patient to be drawn.

If the source patient has left the medical center before the blood is drawn and you have cared for the patient check the medical record for documentation of HIV, HBV, and HCV status. Contact the lab to inquire if they still have blood for the patient. Give the lab the source patient information, so they can enter an order if needed. Blood samples are kept for up to 72 hours. If you have not cared for the patient, contact employee health. If the patient lives nearby, call and explain the situation and ask them to return to the MGMC Lab to have their blood drawn. If the patient lives out-of-town, you may need to coordinate having the patient drawn at an upcoming provider appointment or have them stop by the MGMC lab at their earliest convenience.

What you might say when talking to the Source Patient:

- An employee was poked by a needle that was used to draw your blood. This is considered a blood borne pathogen exposure.
 - When this happens, we test the source person's blood for bloodborne pathogens such as HIV and hepatitis.
 - Your doctor will get the results. You can check with his/her office in about one week if you would like to know the results.
 - Do you have any questions?
 - You may ask them if they would like a copy of the pamphlet on HIV.
7. **FOLLOW-UP/RESULTS:** The Occupational Health Nurse will contact the exposed employee to review results and schedule follow up BBPE lab panel:
 - a. If the source patient is positive the employee will be referred to McFarland Infectious Disease or Occupational Medicine within 72 hours.
 - b. If the source patient is positive, the employee will be redrawn at 1- and 4-months post exposure.

- c. If the source patient is unknown, follow up labs will be drawn at 1- and 4-months and the employee will be seen by McFarland Occupational Medicine. Bloodborne Pathogen Medical Evaluation Form must be completed and returned to MGMC Employee Health if the employee refuses treatment or the blood draw. The forms are located in the Employee Health department.
8. **OFF-SITE LOCATION:** If the incident occurs at an off-site location, coordination of lab draws for employee and source patient will be handled on a case-by-case basis. To ensure timeliness of testing, the employee and source patient's blood may be transported to Mary Greeley Medical Center by a lab courier, by contacting the Ames Taxi Service at 515-232-1343, or by the employee when he/she goes to Employee Health. Human Resources Department will incur the cost of the taxi.
9. **EXPOSURE OF NON-MGMC HEALTHCARE WORKERS:**
 - a. **Emergency Service Providers:** If an emergency medical care provider, peace officer, or firefighter sustains a possible exposure from a person who is brought to MGMC, he/she should complete the State of Iowa form "Report of Exposure to HIV or Other Infectious Disease" (available in the Emergency Department) along with the HIV Consent form and Confidential Disclosure form. These forms can be located on the Infection Prevention SharePoint site under BBPE. The exposed emergency service provider, as well as the source patient, is registered, tests are ordered and performed as above. The completed forms are sent to the Infection Preventionist who contacts the designated representative with test results, mails appropriate paperwork, and assists with coordinating occupational exposure management as needed.
 - b. **Students:** If a student sustains an exposure, he/she should complete the MGMC Midas Incident Report on the intranet and the Confidentiality Form, in addition to any institution-specific paperwork required. With the aid of their instructor, all subsequent follow-up testing, evaluation, and billing will be arranged through, and per policy of, the respective academic facility (e.g., for lab draws, Boone/Ames DMAAC go to McFarland and metro DMACC go to Des Moines). The source patient will be drawn by MGMC Lab and billed to the respective academic facility.
 - c. **Physicians:** He/she should complete the MGMC Incident Report on the intranet and the Confidentiality Form, in addition to any paperwork required by their employer (e.g., McFarland). If the incident occurs during daytime hours, subsequent follow-up testing, and evaluation will be arranged through their respective employer (e.g., McFarland Lab and McFarland Human Resources). If the incident occurs on weekends, evenings, nights, and holidays, the exposed physician will go to the ED Registration desk where lab panels will be ordered and collected. Any bills should be directed to the physicians' employer. In both instances, the source patient will be drawn by MGMC lab and billed to the physicians' employer.
10. **EXPOSURE MANAGEMENT:**
 - a. **HIV Management** for accidental needlestick/sharps injury/perimucosal exposure known to contain or might contain HIV, the employee, manager, Lead RN, or House Supervisor is to contact Occupational Health at 239-2639. Occupational Health will contact the Infectious Disease physician on call (or occupational

medicine if infectious disease is not available) for treatment protocol. During off-hours please contact the Emergency Department physician. The physician will evaluate the exposure, recommend the treatment plan, and counsel employee. If determined need for treatment the Post Exposure Pack will be available from Pharmacy. All charges related to MGMC employees or volunteers will be paid by MGMC.

- b. **HCV Management** for accidental needlestick/sharps/per mucosal exposure to blood that is known to contain or might contain Hepatitis C, the Employee, manager, Lead RN, or House Supervisor is to contact Occupational Health at 239-2639. Occupational Health, or House Supervisor during off-hours, will contact the Infectious Disease physician on call (or Occupational Medicine if Infectious Disease is not available) for treatment protocol. For additional information, <http://www.cdc.gov/hepatitis/HCV/index.htm>
- c. **HBV Management** for accidental needlestick/sharps injury/per mucosal exposure to blood that is known to contain or might contain HBsAG, the employee, manager, Lead RN, or House Supervisor is to contact Occupational Health at 239-2639. Occupational Health, or House Supervisor on off-hours, will contact the Infectious Disease physician on call (or Occupational Medicine if Infectious Disease is not available) for follow up and counseling.

The following protocol will be utilized when assessing the employee:

EMPLOYEE	SOURCE PATIENT		
	HBsAG-Positive	HBsAG-Negative	Unknown
Unvaccinated	HBIG x 1.* Initiate Hepatitis B vaccine series (within 24 hours).	Initiate Hepatitis B vaccine	Initiate Hepatitis B vaccine series (within 24 hours).
Previously Vaccinated Known Responder	If adequate, ** no treatment.	No treatment.	No treatment.
Previously Vaccinated Known Non-Responder	HBIG x 2 or HBIG x 1 plus 1 dose of HB vaccine booster	No treatment.	In known high risk source, may treat as if source were HBsAG positive.
Previously Vaccinated Response Unknown	Test employee for HBsAB. If adequate, ** no treatment. If inadequate, HBIG x 1 plus HB vaccine booster.	No treatment.	Test employee for HBsAB. If adequate, ** no treatment. If inadequate, HB vaccine booster and recheck titer in 1 -2 months.

*Hepatitis B immune globulin (HBIG) dose 0.06 ml/kg intramuscularly. Give within 7 days of exposure.

**Adequate HBsAB \geq 10 mIU/ml

Additional information: <http://www.cdc.gov/hepatitis/HBV/index.htm>

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References:

Association for Professionals in Infection Control and Epidemiology, **APIC Text of Infection Control and Epidemiology**, 4th Ed, Washington, DC, June 2014.

Occupational Safety and Health Administration (OSHA). *Bloodborne pathogens and needlestick prevention*. OSHA website. Available at:
<http://www.osha.gov/SLTC/bloodbornepathogens/index.html>

Centers for Disease Control and Prevention, *Exposure to Blood What Healthcare Personnel Need to Know*, July 2003

Approval:

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