

## **BLOOD BORNE PATHOGEN EXPOSURE CHECKLIST**

### **MUSC Off-Campus Clinical Site - Occupational Exposure**

- Immediate First Aid of Injury
- Report Exposure to Supervisor
- Report Exposure to Student Health Services (792 – 3664)
- Ensure that **Source Patient's** blood is received by lab < 1 hour from exposure. Transport source patient's blood to MUSC Lab #319 or transport source patient to Rutledge Tower to have blood drawn.
- Documentation of Exposure
  - Complete the MUSC Blood Borne Pathogen Assessment Form
  - Complete the online MUSC ACORD Form
- Follow Up of Exposure
  - Student Health will contact you with the source patient's HIV results within 1-2 hours of the blood specimen being received at the lab.
  - Student Health will contact you with the remainder of the source patient's baseline labs (Hepatitis B surface Ag and Hepatitis C Antibody) within 24 hours of the specimen being received at the lab.
  - For exposures to patients with (+) serology for blood borne pathogens, Student Health can initiate any necessary post-exposure antiviral prophylaxis and/or perform any necessary follow up lab testing per MUSC protocol.

**See following pages for details on the steps to follow**

# Off-Campus MUSC Clinical Sites

## STUDENT BLOOD/BODY FLUID EXPOSURE PROTOCOL

Exposures to blood, visibly bloody body fluids, tissue, or \*potentially infectious fluids (CSF, Synovial, Pericardial, Peritoneal, Pleural, Amniotic, Semen, Vaginal Secretions):

### 1. TREATMENT OF EXPOSURE – Immediate:

- **Percutaneous Injuries** (punctures, lacerations) – Wash with Soap and Water for 5 minutes.
- **Non-intact Skin** (open abrasions, cuts). Intact skin is an effective barrier and contact with blood does not need to be reported. Wash with Soap and Water for 5 minutes.
- **Mucous membranes** (splashes to eyes, mouth, etc.): Flush extensively with water or saline for 15 minutes.

*AVOID chemical cleansers that irritate the skin (Alcohol, hydrogen peroxide, Betadine or other chemical cleansers). Avoid "milking" or squeezing out needlestick injuries or wounds. Squeezing the wound merely increases blood flow to the exposure site and potentially increasing the risk of systemic exposure if viral pathogens are present in the source fluid.*

### 2. Notify Your Supervisor of Exposure immediately after completing emergency First Aid to the exposure site.

- **Week Day Exposures:** Monday – Friday, 8:00 AM – 4:30 PM – Call Student Health (792-3664), Option # 1. A Student Health provider will review the nature of the exposure and will assist in the appropriate management of the exposure.
- **Exposures when Source is Known HIV (+)** – have hosp operator (792-2123) page Dr. Blumenthal to your extension ASAP.
- **Afterhours exposures** and holidays: follow the protocol outlined below and call the MUSC operator (792-2123) and have the Hospital Supervisor paged to your extension. If a Hospital Supervisor is not available, have the operator page Dr. Blumenthal to your extension.

### 3. LAB TESTING ON SOURCE: Blood on the source patient needs to be received by the lab within 1 hr of the exposure.

- Complete **Source Patient Lab Request** Form for protocol labs – lab request form can be downloaded and printed from this site: <https://education.musc.edu/students/student-health/blood-borne-pathogen-exposures>- select **MUSC Off-Campus Clinical Sites**. If no printer is available at your site, notify Student Health of your FAX number and we will FAX the forms to your location. Complete the lab request form including: **SOURCE PATIENT'S Name, DOB, Medical Record Number (MRN)**- if MRN not available use SSN.
- If there is no ability to draw blood on the source patient at your clinical site, then immediately take patient (along with the completed lab request) to Rutledge Tower Lab (1st floor, Register at Room 122) open Monday - Friday, 6:00 AM – 6:00 PM. Alert lab that you are bringing a patient (Lab: 792- 7016, FAX: 876 – 0123) for blood borne pathogen protocol labs OR
- If there is the capability of drawing the Source Patient's blood at your site, then draw: (1) Gold Top SST Tube (5 mL min volume) on the patient, label the blood specimen tubes with: Source Patient Name, DOB, and MRN; Place labeled specimen and lab request in a Biohazard Bag and immediately transport to MUSC Lab located on the 3rd floor of the MUSC Extension Building (former MUSC Children's Hospital), SPECIMEN RECEIVING (792-0707) Room # 319 or TUBE to #99.

### 4. DOCUMENTATION OF EXPOSURE after steps 1-3 completed

- Complete the MUSC Blood Borne Pathogen Assessment Form
- Complete the online MUSC ACORD form: <https://www.carc.musc.edu/acord/>
- Click on the link: "Online ACORD Form"
- Use your MUSC ID and password.
- For "Employer" there is a drop down menu - > Click "MUSC Student"
- Complete the ACORD Form

### 5. FOLLOW UP

- Student Health will notify the student with the results on the Source Patient. Serologic results (HIV, HCV, HBsAg) on the Source Patient are generally available within 1 - 2 hours of the specimen being received by the lab. Student Health will provide any necessary treatment or lab follow up per MUSC protocol for exposures to source patients with + serology.

## Follow up on source lab results:

- **Source Patient With Negative Serology:** When source patient's tests are negative for blood borne pathogens (HIV, Hepatitis B, Hepatitis C), then immediate baseline lab testing on the student is not necessary in most cases. If the student wishes to document their baseline serologic status (HIV, HCV) after an exposure, these labs can be drawn at Student Health Services within 2 days of the exposure. A negative test (HIV or HCV) at the time of the exposure will only demonstrate that the exposed student was not previously infected. It will not determine whether or not viral transmission occurred from the exposure. It is mandatory for all MUSC students to have received the hepatitis B vaccine series prior to clinical coursework and have a post-vaccine Hepatitis B Surface Antibody titer (HBsAb) to determine if they developed the desired immunity from the vaccine series. If this HBsAb is positive/immune, then this test does not need to be repeated in the event of a subsequent exposure (and doing so may incur unnecessary expense to the student and/or institution). MUSC students can view their immunizations and antibody titers @ <https://lifenet.musc.edu> using their MUSC Net ID and password.

**Exposure to HIV (+) Source Patient:** The risk of HIV transmission from a percutaneous exposure (needle stick, puncture wound, etc.) is estimated to be 3 in 1,000; transmission risk of a blood splash to the mucus membranes (eye, nose, mouth) is lower (~ 1 in 1,000). Early studies in the 1990's showed reduced maternal-infant transmission of HIV from 25% to 8% with a single antiviral agent (ZDV). Combinations of multiple newer antiviral agents have reduced perinatal HIV transmission to < 2%, and it is inferred that similar efficacy can be achieved with immediate initiation of post-exposure prophylaxis. When indicated, anti-viral medication should ideally be started on the exposed student within 2 hours of the exposure, and continued for 28 days.

**Exposure to Source with active Hepatitis C Infection –** When the source patient is infected with hepatitis C, then the risk of Hepatitis C transmission from a percutaneous injury is estimated to be close to 0.2%, though may be higher from a hollow-bore needle. There is 0 % chance of hepatitis C transmission from a mucocutaneous splash. Post-exposure prophylaxis is not currently recommended for persons sustaining a BBP exposure from a source infected with hepatitis C. The exposed student should have a baseline hepatitis C antibody and ALT drawn within a few days of the exposure (which can be drawn at Student Health for students in Charleston). Protocol labs will be monitored at regular intervals over the following 4-6 months to detect whether or not hepatitis C transmission occurred. If viral transmission does occur during follow up monitoring, there are anti-viral medications that can be initiated that are highly effective at eradicating the infection.

- **Exposure to Source with active Hepatitis B Infection (HBsAg +) –** for students who have completed the hepatitis B vaccine series and have an immune hepatitis B surface antibody on file, then no further testing or treatment is necessary. Students who are potentially susceptible to hepatitis B infection should have their blood tested for hepatitis B surface antibody. This includes those who: (1) completed the primary Hepatitis B vaccine series but did not check a post-vaccine titer for immunity. (2) Never received the primary hepatitis B vaccine series or have not completed the series. (3) Students who received two hepatitis B vaccine series and did not develop an immune serologic response should have their hepatitis B surface antigen (HBsAg) tested. Students who are non-immune to hepatitis B should be offered Hepatitis B immune globulin.



# BLOODBORNE PATHOGEN EXPOSURE ASSESSMENT

**MUSC STUDENT HEALTH SERVICES**  
Medical University of South Carolina  
30 Bee Street – Suite 102, MSC 980  
Charleston, South Carolina 29425  
Office: (843) 792– 3664 Fax: (843) 792 – 2318

Today's Date: \_\_\_\_\_

Date/Time of Exposure: \_\_\_\_\_:\_\_\_\_AM/PM Date/Time Reported: \_\_\_\_\_:\_\_\_\_AM/PM

Student's Name: \_\_\_\_\_

College: Med Dental Nursing CHP \_\_\_\_\_ Other \_\_\_\_\_ Clinical Year: \_\_\_\_\_

Student Contact #:(\_\_\_\_\_) \_\_\_\_\_

Clinical Location: \_\_\_\_\_ Rotation: \_\_\_\_\_

Supervising Faculty Member: \_\_\_\_\_

## Type of Exposure (Specify Below):

### Percutaneous:

Hollow Needle (Gauge) \_\_\_\_\_  Solid Sharp Instrument \_\_\_\_\_ Other \_\_\_\_\_

Safety Device on Instrument: Yes No Safety Device Utilized: Yes No

Instrument Used For: \_\_\_\_\_

Injury Location: \_\_\_\_\_ Injury Depth: \_\_\_\_\_ mm

Body Fluid Involved: Blood Other \_\_\_\_\_ Amount of Fluid: \_\_\_\_\_ (ml)

Visible Blood Present on Instrument: Yes No Potentially

Primary User of Instrument: Self Resident Attending  Other \_\_\_\_\_

Protective Equipment: None Gloves (1 pr) Gloves (2 pr)

### Mucous Membrane Exposure:

Body Site Exposed: \_\_\_\_\_

Body Fluid Involved:

Blood Other Fluid (specify) \_\_\_\_\_ Visible Blood Present in Fluid? Yes No Potentially

Amount of Fluid:  < drop  drop  0.5 ml  1 ml  > 1 ml

Primary User of Instrument: Self Intern/Resident Attending  Other \_\_\_\_\_

Protective Equipment Used: None  Protective Eyewear: Goggles/Shield  Face Mask  Gown

Other: \_\_\_\_\_

## Mechanism of Injury (Describe how exposure occurred):

Source Patient Name: \_\_\_\_\_ DOB: \_\_\_\_\_ MRN/SSN: \_\_\_\_\_

Source Pt Status: Unknown with no Risk Factors Unknown w/ (+) Risk Factors: \_\_\_\_\_  HIV+ Hepatitis C+ Hepatitis B surface Ag+

For Known HIV (+) Source:

Antiviral Medications: \_\_\_\_\_

Last HIV Viral Load Test (Result/Date): \_\_\_\_\_ Healthcare Provider Managing Condition: \_\_\_\_\_

## Student Information:

Student Hepatitis B Vaccine Series Completion/Year: No Yes (Date) \_\_\_\_\_

Student Hepatitis B surface Antibody Status: Unknown  Non-Immune  Immune (Date): \_\_\_\_\_

(MUSC students can view their immunizations and antibody titers @ <https://lifenet.musc.edu> using their MUSC Net ID and password)



**STUDENT HEALTH SERVICES**  
 Medical University of South Carolina  
 30 Bee Street – Suite 102, MSC 980  
 Charleston, SC 29425  
 Office: (843) 792-3664 Fax: (843) 792-2318

**CERNER Registration**  
**HNAM Client/Facility**  
**SHIV/SHIV**  
**CERNER CODE SHIV**

Laboratory Services  
 165 Ashley Ave, Room 318  
 Charleston, SC 29425  
 Phone: (843) 792-0707, FAX: (843) 792-4896

**MUSC OFF-CAMPUS CLINICAL SITE**  
**STUDENT BLOOD EXPOSURE**  
**PROTOCOL LABS FOR SOURCE PATIENT**

**BLOOD/BODY FLUID EXPOSURE PROTOCOL**

- **Exposure Site:** Percutaneous Wounds – wash with soap/water x 5 minutes. MUCOUS Membranes: Flush with water x 15 minutes
- **Report Exposure** ASAP to Supervisor. During week (M-F) 8:00 – 4:30 PM call Student Health (792-3664), Option # 1. Afterhours, Weekends, or Holidays page Hospital Supervisor (HS) on call (792-2123).
- If **SOURCE PATIENT** known **HIV (+)**, have hospital operator (792-2123) page Dr. Blumenthal immediately.
- **LABS On Source:** Draw (1) Gold Top SST (5 mL min volume) on **SOURCE PATIENT**.
- **Label** blood specimen with **SOURCE PATIENT'S**: Name, DOB, MRN (or Social Security # if no MRN).
- **Transport:** IMMEDIATELY transport **SOURCE PATIENT** blood samples with this completed **STAT** lab request to MUSC Lab located on the 3rd floor of the MUSC Extension Building (former MUSC Children's Hospital), SPECIMEN RECEIVING (792-0707) Room #319 or TUBE to #99
- **Exposures occurring Mon – Friday (7:00 AM – 5:00 PM)** - If there is no phlebotomist to draw Source Patient's labs at your clinical site, then immediately escort the **Source Patient** to the 1<sup>st</sup> floor Rutledge Tower Lab (Room 122) for STAT labs within one hour of the exposure. **Lab Hours:** Monday - Friday, 6:00 AM – 6:00 PM. Alert lab that you are bringing a patient (792-7016, FAX: 876-0123).

**Lab Result Reporting:** Monday – Friday 8:00 AM – 4:30 PM call Student Health Services (792-3664) or Page Dr. Larry Blumenthal @ Pager # 14032. Afterhours, Weekends, or Holidays page House Supervisor (HS) on call (792-2123)

SHIV - Source Patient Sample

**DATE:** \_\_\_\_\_ **TIME:** \_\_\_\_\_ **PHLEBOTOMIST NAME:** \_\_\_\_\_

**SOURCE PATIENT NAME:** \_\_\_\_\_

**MRN # :** \_\_\_\_\_

**DOB:** \_\_\_\_\_

**Ordering Provider:** L. Blumenthal, MD MUSC Student Health Services

**ATTN:** FFL Accessioning: Use Social Security Number if MRN is not available.

Enter using Patient Name

Use MRN (or SS# when MRN Not Available). Use format of ordering staff initials with date/time of service for Fin #.

**BLOODBORNE EXPOSURE LABS**

**CODES**

**TESTS**

**SPECIMEN TUBES**

<input type="checkbox"/> <b>BC</b>	BC (BLOOD CONTAMINATION ON THE <b>SOURCE PATIENT</b> )	ONE (1) Gold Top <b>SST TUBE</b>
<b>Attn LSS</b>	TESTS INCLUDE: HIV, HCV AB, Hep B Surface Antigen	(5 mL minimum volume)
<b>Order As STAT</b>	All suspect/reactive HIV ½ Ab will be reflexed to the HIV Multispot Differentiation for confirmation. All Equivocal or Reactive HCV results will be reflexed to the Hepatitis C Viral Load by Quant PCR	

**OTHER** \_\_\_\_\_