UT Southwestern Medical Center Occupational Health

SECTION 3: WORK RELATED INJURIES AND EXPOSURES

OHD 3.02: Blood and Body Fluid Exposures

ADMINISTRATIVE INFORMATION

Responsible Office: Occupational Health
Effective Date: 01/2022
Last Reviewed: 02/06/2026
Next Scheduled Review: 02/2029
Contact: Occupational Health 214-645-5300

POLICY RATIONALE AND TEXT

Exposure to blood and body fluids is a risk to healthcare workers in all healthcare settings. The UT Southwestern Occupational Health Department has established a SOP and protocol that aims to risk stratify and guide prophylaxis administration to all employees exposed to blood or body fluids from another individual (Source). This process is evidence based and follows the current recommendations of the Centers for Disease Control.

SCOPE

This SOP applies to all UT Southwestern employees, students, contractors, and volunteers working on and off the UT Southwestern campus. UT Southwestern employees who are exposed at Parkland Hospital, Children's Hospital, or VA Hospital should contact that hospital's Occupational Health as they follow their own post exposure procedures. UT Southwestern Occupational Health Clinic will provide testing and treatment to those exposed while performing work-related duties. Employees/students/volunteers exposed outside of work should seek testing and treatment through their primary care provider.

PROCEDURES

General Information:

The Blood and Body Fluid (BBF) Exposure Protocol covers multiple infectious disease scenarios (Appendix A BBF Definition) involving UT Southwestern employees who may have been exposed to Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV). This protocol outlines post exposure testing and prophylaxis involving the source of the BBF (Source) and the exposed healthcare provider (HCP).

BBF Exposure Scenarios:

1. Source Known Positive with History with HIV, HBV, or HCV
2. Source Current Status Unknown – Pending Test Results
3. Unknown Source or Source Unavailable for testing

Hepatitis B Immunity Definition

Per Centers for Disease Control and Prevention (CDC) guidelines and for the purposes of this protocol, HCP are considered immune to Hepatitis B Virus infection if they meet ALL of the following:

1. Is immunocompetent (not on immunosuppression and without immune deficiency diseases)
2. Has documentation of fully Hepatitis B vaccination series (any one of these)
   - 3 dose series of Engerix-B
   - 2 dose series of Heplisav-B
3. Has documentation of HBsAb titer ≥12 mIU/mL* after the vaccination series

* = some outside laboratories may consider immunity at HBsAb titer ≥10 mIU/mL

Immediate Post-Exposure Protocol

All BBF Exposures will follow the following steps.

Testing: the following laboratory tests will be collected immediately after the exposure

1. Source (if available)
    1. HIV Testing Panel
        1. HIV-1 + 2 Ag/Ab Screen + Confirmation
        2. If above is positive, then reflex to HIV Virus PCR
    2. HBV Testing Panel
        1. Hepatitis B Surface Antigen (HBsAg)
        2. Hepatitis B core Antibody (HBcAb)
        3. Hepatitis B Surface Antibody (HBsAb)
    3. HCV Testing Panel
        1. Hepatitis C Antibody
        2. Hepatitis C Virus PCR
2. HCP (may decline initial labs while pending Source laboratory results). If this is a double exposure (Source was exposed to HCP's blood or body fluid), then HCP labs need to be drawn STAT.
    1. HIV Testing
        1. HIV-1 + 2 Ag/Ab Screen + Confirmation, reflex HIV viral load if positive
    2. HBV Testing Panel
        1. Testing not required if HCP is HBV immune (see definition above)
        2. If not HBV immune, obtain the following labs:
            1. Hepatitis B Surface Antigen (HBsAg)
            2. Hepatitis B core Antibody (HBcAb)
            3. Hepatitis B Surface Antibody (HBsAb)
    3. HCV Testing Panel
        1. Hepatitis C Antibody
        2. Hepatitis C Virus PCR

Medications: the following Post-Exposure Prophylaxis (PEP) medications will be offered to the HCP.

Human Immunodeficiency Virus (HIV) PEP Standing Orders. For specific dosing recommendations, see Medications Details.

1. HIV PEP should be started within 72 hours of exposure
2. HCP may decline HIV prophylaxis

3. Prescription for three (3) days for each of the following (see dosing table below)
    1. Truvada (Emtricitabine + Tenofovir) 200mg/300mg
    2. Tivicay (Dolutegravir) 50 mg
4. Prescription for antiemetic Zofran
5. If HCP is Pregnant and/or Lactating
    1. Prescribe HIV PEP for three (3) days
    2. Consult Maternal Fetal Medicine (MFM on-call at Parkland) for PEP approval and Breast-Feeding Recommendations
    3. Instruct employee to notify their OBGYN provider about this exposure

Hepatitis B Virus PEP Standing Orders. For specific dosing recommendations, see Medications Details.

1. Not indicated if HCP immune to HBV (see definition above)
2. HCP not immune, HBV PEP should be given with 7 days of exposure:
    1. Hepatitis B immune globulin (HBIG)
    2. Heplisav-B vaccine
        - May be administered simultaneously with HBIG at a separate anatomical injection site
        - Hepatitis B vaccine "non-responders" do not need another dose
            - "Non-responders" are those that received 2 full vaccine series but continue to have HBsAb titer < 12 mIU/mL

Hepatitis C Virus PEP Standing Orders

1. There is no post-exposure prophylaxis for Hepatitis C Virus

Note:

- If Source is HIV Positive, Occupational Health Medical Director/APP will contact Infectious Disease to determine the best regimen for HCP prophylaxis
- If Source is a patient, Unit/Clinic leadership (not Occupational Health staff) is responsible for communicating new diagnosis of HIV, Hepatitis B, or Hepatitis C with the Source

Follow-up Post-Exposure Protocol

If the Source laboratory results are negative for HIV, Hepatitis B, and Hepatitis C, then there is no risk for transmission and no need for Follow Up testing or treatment. The following protocol can be discontinued.

BBF Follow up Schedule

Based on updated 2025 CDC Recommendations

Time Since Exposure	Labs	Medications
Immediate (Clinic or Lab)	Exposure Labs: • HIV-1 + 2 Ag/Ab Screen + Confirmation[1] • HBV Panel[2] • HCV Panel[3] If taking HIV PEP: • BMP • LFT • HCG	HIV[1]: • Truvada x 3 days • Tivicay x 3 days • Zofran x 9 tabs HBV[2]: • HBIG x 1 • Heplisav-B x 1

Time Since Exposure	Labs	Medications
Within 72 hours (Clinic or Telemedicine)		HIV[1]: • Truvada x 25 days • Tivicay x 25 days
4-6 weeks (Clinic)	Exposure Labs: • HIV-1 + 2 Ag/Ab Screen + Confirmation[1] • HCV Panel[3] If taking HIV PEP -AND- Abnormal baseline or symptomatic: • BMP • LFT • HCG	HBV: • Heplisav-B x 1[2] • HBIG x 1[2,4]
12 weeks (Clinic)	Exposure Labs: • HIV-1 + 2 Ag/Ab Screen + Confirmation[1]	
6 months (Clinic)	Exposure Labs: • HBV Panel[2,5] • HCV Panel[3]	

[1] = if Source is HIV POSITIVE -OR- Source is UNKNOWN

[2] = if HCP NOT HBV Immune -AND- (Source is HBV POSITIVE -OR- Source is UNKNOWN)

[3] = if Source HCV POSITIVE -OR- Source UNKNOWN

[4] = if HCP is Hepatitis B Vaccine Non-Responder (completed two series of Hepatitis B vaccine and continues to have negative HBsAb Titer). HBIG Dose #2 must be given 4 weeks after HBIG Dose #1.

[5] = HBsAb must be done > 6 months after HBIG given

Test Abbreviation

- HBV Panel consists of three tests:
  - Hepatitis B Surface Antigen (HBsAg)
  - Hepatitis B core Antibody (HBcAb)
  - Hepatitis B Surface Antibody (HBsAb)
- HCV Panel consists of two tests:
  - Hepatitis C Antibody
  - Hepatitis C Virus PCR
- BMP = Basic Metabolic Panel
- LFT = Liver Function Tests
- HCG = Urine pregnancy test. Performed only in females.

Medications Details

HIV Medication Dosing Table

Creatinine Clearance*	Medication	Dose and Frequency
≥ 50 mL/min	Truvada (Emtricitabine + Tenofovir) 200mg/300mg	1 tab by mouth daily for 28 days

Creatinine Clearance*	Medication	Dose and Frequency
	Tivicay (Dolutegravir) 50 mg	1 tab by mouth daily for 28 days
30 – 49 mL/min	Truvada (Emtricitabine + Tenofovir) 200mg/300mg	1 tab by mouth every 48 hours for 28 days
	Tivicay (Dolutegravir) 50 mg	1 tab by mouth daily for 28 days
< 30 mL/min	Consult ID for HIV PEP recommendations	

* = Creatinine Clearance calculation using Cockcroft-Gault Equation
$(CrClinmL/min) = (140 - ageinyears) \times (weightinkg) \times (0.85 if female) / (72 \times Crinmg/dL)$

Nausea Prophylaxis

Initial: Ondansetron ODT 8 mg: 1 tab by mouth every 8 hours as needed for nausea. Prescribe 9 tablets, 0 refills.
If more doses needed: Ondansetron ODT 8 mg: 1 tab by mouth every 8 hours as needed for nausea. Prescribe 20 tablets, 0 refills.

Hepatitis B Medication Dosing Table

Medication Name	Dose	Route	Frequency
Hepatitis B Immune Globulin (HBIG)	0.06 mL/kg	IM into deltoid or gluteal muscle administered in divided doses of 2 mL each	Dose #1: day 0 Dose #2: day 28[1]
Heplisav-B vaccine	0.5 mL	IM into deltoid muscle	Dose #1: day 0 Dose #2: more than day 28 after Dose #1

IM = Intramuscular Injection
[1] = give Dose#2 only if HCP is Hepatitis B Vaccine Non-Responder (completed two series of Hepatitis B vaccine and continues to have negative HBsAb Titer)

RESPONSIBILITIES

Employees:

Any employee who sustained BBF exposure should:

1. Needle Stick or Sharps Injury – wash the wound and skin with soap and water
2. Mucous Membrane Exposure – flush with water
3. Immediately notify Occupational Health Exposure Pager (214-645-1600)
    1. Also available via Spok Web
4. Follow Instructions provided by the Occupational Health Exposure Nurse or the Hospital Operations Supervisor
5. Complete RL Solutions -> **Employee First Report of Injury**
6. If the patient had exposure to employee's blood, employee must complete RL Solutions -> **Infection Control**
7. Work with the supervisor to communicate with Source about the exposure and arrange blood draws for exposure labs
8. Provide specimens for testing – if testing is necessary, Occupational Health Exposure Nurse will coordinate the test collection for the employee and ensure the specimens are delivered to the lab for analysis

9. Post-Exposure Follow-up – Occupational Health Exposure Nurse will help schedule follow-up appointments if needed

Unit or Departmental Managers or Supervisors:

1. Facilitate communication with HCP and implementation of this plan
2. Complete RL Solutions -> **Employee First Report of Injury**, if not already done by HCP
3. Work with the HCP to communicate with the Source about the exposure and arrange collection of the exposure labs
4. If Source is a patient, inform them of their laboratory results

Occupational Health Exposure Nurse:

1. Determine if a true BBF Exposure Occurred – use Algorithm (Appendix A BBF Definition)
2. Follow BBF Exposure Workflow (Appendix C BBF Exposure Workflow)
3. HCP Counseling – discuss exposure protocol, indications for possible Post Exposure Prophylaxis, and BBF lab results
4. Coordinate any laboratory testing, if indicated
5. Consult Occupational Health medical provider for abnormal results
6. Document in ReadySet / Meddbase and upload laboratory results as indicated

Hospital Operations Supervisor:

1. Answer the exposure pager between 5PM to 8AM and on weekends/holidays
2. Determine if a true BBF Exposure Occurred – use Algorithm (Appendix A BBF Definition)
3. Follow Afterhours Workflow (Appendix C BBF Exposure Workflow)
4. HCP Counseling – discuss exposure protocol and indications for possible Post Exposure Prophylaxis
5. Communicate with the Occupational Health Exposure Nurse on-call regarding all exposures

Laboratory:

1. Processing and analysis of BBF exposure related specimens as indicated on the requisition
2. Report STAT Source HIV test results to the Exposure Pager (214-645-1600) within 3 hours

Pharmacy:

1. Prepare and dispense medications upon order from the Occupational Health Provider or authorization of the standing order from the Occupational Health Exposure Nurse / Hospital Operations Supervisor

Principal Investigator of High-Risk research area

1. Keep track of HIV/HBV/HCV infection status of any human tissues / cell lines that are present in the laboratory
2. Share infectious status of biological material involved in the exposure incident with the Occupational Health team

DEFINITIONS

- **Blood and Body Fluid (BBF) Exposure**: exposure to blood or other potentially infectious materials originating from another human
- **Exposed Healthcare Provider (HCP)**: employee exposed to another person's blood or body fluid
- **Source**: patient whose blood or body fluid is being evaluated to stratify risk of infection to the exposed HCP

RELATED STATUTES, OTHER POLICIES, REQUIREMENTS, OR STANDARDS

- Texas Health and Safety Code §81.095 and §81.107

CONTACTS/FOR FURTHER INFORMATION

Occupational Health: 214-645-5300
Website: Exposures: Occupational Health - UT Southwestern, Dallas, Texas

REFERENCES

1. Kofman AD, Struble KA, Heneine W, et al. 2025 US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Post-exposure Prophylaxis in Healthcare Settings. *Infect Control Hosp Epidemiol*. 2025;46(9):863-873. doi:10.1017/ice.2025.10254
2. Bloodborne Infectious Disease Risk Factors | Healthcare Workers | CDC

FORMS, TOOLS, ONLINE PROCESSES

Needle Stick/Blood and Body Fluid Exposure Pager: 214-645-1600

Appendix A: BBF Definition

Definition of Exposure

Injury	Qualifier	BBF Classification
Cut with Scalpel/Knife	Using Clean[1] Instrument	No Exposure
	Using Dirty[2] Instrument	Exposure
	Used on Fixed Tissue[3]	No Exposure
	Used on Non-fixed Tissue	Exposure
Needle Stick	Using Clean[1] Instrument	No Exposure
	Using Dirty[2] Instrument	Exposure
Splash with OPIM[4]	Onto Intact Skin	No Exposure
	Onto broken skin or mucous membranes	Exposure
Splash with non-OPIM[4]	Onto Intact Skin	No Exposure
	Onto broken skin or mucous membranes	No Exposure

Clean[1] = has no visible contamination (blood, tissue, body fluids, bone, hair, inorganic debris) *and* has undergone appropriate cleaning steps
Dirty[2] = has visible blood, tissue, body fluids, or other contaminants OR one for which contamination is reasonably expected (e.g., after use on a patient).
Fixed Tissue[3] = biological tissue preserved usually in formalin

Table of OPIM[4] = other potentially infectious materials

OPIM (can result in BBF Exposure)	Non-OPIM (not result in BBF Exposure)
Amniotic Fluid	
Blood	
Breast milk visibly contaminated with blood	Breast milk with no visible blood
Cerebrospinal Fluids (CSF)	
Feces visibly contaminated with blood	Feces with no visible blood
HBV-containing tissue or solution	
HCV-containing tissue or solution	
HIV-containing tissue or solution	
Nasal secretions visibly contaminated with blood	Nasal secretions with no visible blood
Pericardial Fluid	
Peritoneal Fluid	
Pleural Fluid	
Saliva associated with human bite	
Saliva in dental procedures	
Saliva visibly contaminated with blood	Saliva with no visible blood
Semen	
Sputum visibly contaminated with blood	Sputum with no visible blood
Sweat visibly contaminated with blood	Sweat with no visible blood
Synovial Fluid	
Tears visibly contaminated with blood	Tears with no visible blood
Unfixed tissue or organ (other than intact skin)	
Unknown Body Fluid	
Urine visibly contaminated with blood	Urine with no visible blood
Vaginal secretions	
Vomitus visibly contaminated with blood	Vomitus with no visible blood

HBV = Hepatitis B Virus
HCV = Hepatitis C Virus
HIV = Human Immunodeficiency Virus

Appendix B: Laboratory Interpretation

HIV Test Interpretation

Source Prior HIV Status	Labs	Interpretation	Follow Up Required
Negative/Unknown	HIV AB/AG - Negative HIV PCR - Negative	Never infected; no need for HIV PEP	No
Negative/Unknown	HIV AB/AG - POSITIVE HIV PCR - POSITIVE	Active infection; give HIV PEP; consult ID	Yes
Negative/Unknown	HIV AB/AG - POSITIVE HIV PCR - Negative	Consult ID	
Positive	HIV AB/AG - POSITIVE HIV PCR - Negative	Infected but well controlled on HAART; give HIV PEP; consult ID	Yes
Positive	HIV AB/AG - POSITIVE HIV PCR - POSITIVE	Active infection; give HIV PEP; consult ID	Yes

HIV AB/AG = HIV 1 & 2 P24 AB/AG screening test
HIV PCR = HIV Viral load confirmatory test
HAART = HIV Highly Active Antiretroviral Therapy
ID = Infectious Disease

Hepatitis B Laboratory Interpretation

Table modified from https://www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6701-H.PDF.

Labs	Interpretation	Follow Up Required*
HBsAg - Negative HBcAb - Negative HBsAb - Negative	Never infected; susceptible if never vaccinated or vaccine failure; not infectious	No
HBsAg - POSITIVE HBcAb - Negative HBsAb - Negative	Early acute infection (confirm with HBV DNA); infectious	Yes
HBsAg - POSITIVE HBcAb - POSITIVE HBsAb - Negative	Current acute or chronic infection; infectious	Yes
HBsAg - Negative HBcAb - POSITIVE HBsAb - POSITIVE	Recovered from past infection and immune; not infectious	No
HBsAg - Negative HBcAb - Negative HBsAb - POSITIVE	Immune from vaccination; not infectious	No
HBsAg - POSITIVE HBcAb - POSITIVE HBsAb - POSITIVE	Possible HBsAg mutant infection; infectious	Yes

* = If not Immune to Hepatitis B per CDC Guidelines
HBsAg = Hepatitis B Surface Antigen
HBcAb = Hepatitis B core Antibody

HBsAb = Hepatitis B Surface Antibody
HBV DNA = Hepatitis B Viral Load test

Hepatitis C Laboratory Interpretation

Labs	Interpretation	Follow Up Required
HCV Ab - Negative HCV RNA - Negative	Never infected; not infectious	No
HCV Ab - POSITIVE HCV RNA - POSITIVE	Active infection; infectious	Yes
HCV Ab - POSITIVE HCV RNA - Negative	Recovered from previous infection; not infectious	No
HCV Ab - Negative HCV RNA - POSITIVE	Either early infection or false positive HCV RNA. Repeat both tests and consult ID	
HCV Ab - Negative HCV RNA - no result	Never infected; not infectious	No

HCV Ab = Hepatitis C Virus Antibody
HCV RNA = Hepatitis C Virus Viral load test
ID = Infectious Disease

Appendix C: BBF Exposure Workflow

Business Hours (Monday - Friday, 8AM-5PM)

1. Occupational Health Exposure Nurse (OH RN) receives the page notification
2. OH RN interviews HCP or their delegate about the incident
3. OH RN coordinates Source and HCP testing using “SS” and “EE” Numbers from the BBF Log
    - Fax Lab Requisitions to the CUH Lab (214-633-8719)
4. Communicates Source lab results with HCP and arrange follow up if needed
5. If indicated, OH RN calls in HIV PEP to the Clements Retail Pharmacy (ext. 34122/option 4) or Aston Pharmacy (ext. 82422)
6. OH RN records the incident in the BBF Log

After Hours, Weekends, and Holidays

The following actions will be performed by the Hospital Operations Supervisor (HOS)

1. HOS receives the page notification
2. HOS interviews HCP or their delegate about the incident
3. HOS coordinates Source and HCP testing using “SS” and “EE” Numbers from CUH Lab (214-633-8719)
    - HCP lab collection may wait until the next business day unless it is a double exposure (Source was exposed to HCP's blood or body fluid)
4. HOS communicates HIV Source lab results with HCP
5. If indicated, calls in HIV PEP to the Clements Retail Pharmacy (ext. 34122/option 4) or Aston Pharmacy (ext. 82422)
6. Advises HCP to call and follow up with Occupational Health in the next business day

7. HOS completes the BBF Exposure worksheet and email it to OccupationalHealth-UTSW@UTSouthwestern.edu and the OH RN on-call

Appendix D: BBF Exposure Logistics

BBF Exposure Decision Tool per Role

Exposed at UTSW Facility

Exposed Person / Role	HCP Initial Lab Collection	Source Lab Collection	Provide Initial PEP	Follow Up Lab Collection	Notify Entity	UTSW ReadySet Account?
PMH Resident / Fellow	UTSW (if desired)	UTSW	Yes	PMH or UTSW	PMH	Yes
UTSW Resident / Fellow	UTSW	UTSW	Yes	UTSW	UTSW	Yes
UTSW MD	UTSW	UTSW	Yes	UTSW	UTSW	Yes
UTSW Student	UTSW	UTSW	Yes	UTSW	UTSW	Yes
UTSW Nurse / Employee	UTSW	UTSW	Yes	UTSW	UTSW	Yes
UTSW Volunteer (Age>18 yrs)	UTSW	UTSW	Yes	UTSW	UTSW	Yes
Student (non-UTSW)	School	UTSW	Yes	School	School	Yes
Contract Employee	Agency	UTSW	Yes	Employer / PCP	Employer / PCP	Yes
Paramedic	Employer	UTSW	Yes	Employer / PCP	Employer / PCP	Yes

Exposed at Non-UTSW Facility

Exposed Person / Role	HCP Initial Lab Collection	Source Lab Collection	Provide Initial HIV PEP	Follow Up Lab Collection	Notify Entity	UTSW ReadySet Account?
PMH Resident / Fellow	Other or PMH	Other	Other or PMH	Other or PMH	PMH	No
UTSW Resident / Fellow	Other or UTSW	Other	Other or UTSW	UTSW	UTSW	Yes
UTSW MD	Other or UTSW	Other	Other or UTSW	UTSW	UTSW	Yes
UTSW Student	Other or UTSW	Other	Other or UTSW	UTSW	UTSW	Yes

Exposed Person / Role	HCP Initial Lab Collection	Source Lab Collection	Provide Initial HIV PEP	Follow Up Lab Collection	Notify Entity	UTSW ReadySet Account?
UTSW Nurse / Employee	Other or UTSW	Other	Other or UTSW	UTSW	UTSW	Yes
Volunteer (Age>18 yrs)	PCP or Other	Other	PCP or Other	PCP or Other	PCP	No
Student (non-UTSW)	School, PCP, or Other	Other	School, PCP, or Other	School, PCP, or Other	School	No
Contract Employee	Other or Employer	Other	Other or Employer	Employer	Employer	No
Paramedic	Other or Employer	Other	Other or Employer	Employer	Employer	No

UTSW = University of Texas Southwestern Occupational Health
PMH = Parkland Occupational Health
PCP = Primary Care Provider
Other = location of the exposure