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Exposure Control Plan for Bloodborne Pathogens

I. Description

Describes the policies for reducing the risk of exposure to a bloodborne pathogen in the workplace.

II. Policy

A. General Information

1. OSHA regulations (Occupational Exposure to Bloodborne Pathogens; Final Rule, is available on OSHA's website (www.osha.gov)) require that the employer provide a written Exposure Control Plan (ECP) that covers the facility's policies and procedures to prevent transmission of a bloodborne pathogen in the workplace. Staff of UNC Hospitals may have duties in more than one facility; therefore, this exposure control plan is designed for all staff of UNC Hospitals (UNC Medical Center, Hillsborough Hospital, Youth Behavioral Hospital (YBH), Ambulatory Surgical Center, UNC Health administrative offices, and community-based outpatient facilities/services), the Adams School of Dentistry, and UNC Health Science students on clinical rotation.

Role	Service Provider	Location of Provider	Notes
UNC Hospitals Staff	UNC Hospitals (Medical Center Campus) Occupational Health Service (OHS)	1st Floor Memorial Hospital, UNC-MC, M-1163	OHS will provide TB testing, immunization screening, vaccine administration, and care of non-emergent conditions/injuries. Staff with emergencies should report to the ED.

Role	Service Provider	Location of Provider	Notes
Hillsborough Hospital Staff	UNC Hospitals Hillsborough Campus Occupational Health Services (OHS)	1st Floor Memorial Hospital, UNC-MC, M-1153	OHS will provide TB testing, immunization screening, vaccine administration, and care of non-emergent conditions/injuries. Staff with emergencies should report to the ED.
University Employees	University Employee Occupational Health Clinic (UEOHC)	AHEAC Building, 145 North Medical Drive	Will provide TB testing, immunization screening, vaccine administration, and care of non-emergent work-related conditions/injuries. Staff with emergencies should report to ED.
UNC dental, medical, and other UNC health students	Campus Health	James A. Taylor Building, 320 Emergency Room Drive	This includes visiting students, such as visiting medical students who have an official rotation through a UNC health science school (i.e., students who have gone through an immunization review through the associated UNC health science school).
Non-UNC students	N/A	N/A	Contact their primary school.

2. Staff who have duties within other healthcare facilities must comply with the provisions of the Exposure Control Plan for that facility. However, staff are to obtain routine occupational health services through their employer's occupational health service (i.e., UNC Hospitals OHS or University Employee Occupational Health Clinic).
3. Contract personnel must comply with this Exposure Control Plan. It is their employer's responsibility to provide basic bloodborne pathogen training and occupational health services consistent with the requirements of this document. Contract staff with blood or body fluid exposures should contact their employer and be evaluated by the ED at UNC Hospitals unless a prior agreement for service with OHS has been established.
4. UNC Hospitals staff may obtain a copy of the Exposure Control Plan via PolicyStat. University employees may obtain a copy via the UNC-CH Environment, Health and Safety website (UNC Department of Environment, Health, & Safety) or by contacting the UNC-CH Department of Environment, Health and Safety at 919-962-5507.

B. Responsibilities

1. **Infection Prevention/University Department of Environment, Health, and Safety (EHS)**
    a. Review Exposure Control Plan and revise as needed.
    b. Identify list of job classifications with potential for occupational exposure.
    c. Provide ongoing consultation regarding implementation of OSHA's final rule on Occupational Exposure to Bloodborne Pathogens.
    d. Develop and coordinate educational programs.
    e. Assist with evaluation when non-compliance is reported. Noncompliance with bloodborne pathogen regulations by UNC Hospitals staff, House Staff, and attending physicians should be documented by completing a Safety Awareness for Everyone (SAFE) report.
    f. Assist with the selection and evaluation of current safety devices.
2. **UNC Hospitals Occupational Health Service/University Employee Occupational Health Clinic**
    a. Review Exposure Control Plan.
    b. Review and maintain Hepatitis Immunization Program records.
    c. Review and continue post-exposure follow-up.
    d. Maintain documentation of exposure and follow-up as required by the OSHA final rule.
    e. The OSHA's Form 300 Log of Work-Related Injuries and Illnesses for UNC Hospitals employees is maintained by Worker's Compensation. For University employees, it is maintained by the University's Department of Environmental, Health, and Safety.
3. **Department Managers and Supervisors**
    a. Annually review list of all job classifications and identify job classifications in which staff in those positions have reasonably anticipated risk of occupational exposure.
    b. Ensure and document employee orientation and annual training.
    c. Ensure compliance.
    d. Ensure that suitable education/training programs are provided to staff by knowledgeable trainer(s). Training will include the appropriate use of new devices on an ongoing basis, review where engineering controls are currently employed, where they can be updated, and participation in the selection and

evaluation of safer medical devices.

e. Ensure personal protective equipment and other necessary supplies are available in accessible locations.

f. Ensure that appropriate safety devices are stocked in their departments and staff have been trained in their use.

g. Evaluate the circumstances surrounding exposure incidents, including an evaluation of "failures of control" at the time of the exposure incident, and submit this information to the UNC Hospitals' Environmental Health and Safety Department/UNC-CH University's Department of Environment, Health, and Safety.

4. **Value Analysis Team**

   - Oversees the selection and evaluation of new products being introduced to UNC Hospitals.

5. **Oversight Committee**

   - Hospital Infection Control Committee (HICC) will serve as the Oversight Committee for the review/revision of the Exposure Control Plan for Bloodborne Pathogens.

6. **Staff**

   a. Know what tasks they perform that may cause occupational exposure.

   b. Participate in the bloodborne pathogens training module annually via the Learning Made Simple (LMS) or the University's Department of Environment, Health, and Safety training.

   c. Plan and conduct all operations in accordance with the UNC Hospitals and University engineering controls, work practice controls, and the use of personal protective equipment (PPE).

   d. Staff who sustain an exposure incident must report the incident to their supervisor and follow up with the appropriate occupational health provider. UNC Hospitals staff must complete a SAFE report.

   e. Participate in the selection and evaluation of safer medical devices where applicable.

C. Methods of Compliance

The use of administrative controls (e.g., Standard Precautions), engineering controls, work practice controls, and personal protective equipment (PPE) will protect staff from an occupational exposure to blood or other potentially infectious materials (OPIM): see OPIM

definition, Attachment 1: Definitions.

1. Standard Precautions

    - Standard Precautions (SP) refers to practicing blood and body fluid precautions for all patients. SP shall be observed to prevent contact with blood or OPIM. When differentiation between body fluid types is difficult or impossible, all body fluids except sweat shall be considered potentially infectious materials. Where occupational exposure remains after institution of engineering and work practice controls, personal protective equipment is also used.

2. Engineering Controls

    a. Engineering Controls are used as a primary means to eliminate or minimize staff exposure to bloodborne pathogens. Examples of engineering controls include sharps disposal containers, needleless IV systems, self-sheathing needles, and biologic safety cabinets as appropriate.

    b. Value Analysis Team, Hospital Infection Control Committee, and Environmental Health and Safety Committee work with department managers and staff to review tasks and procedures performed in our facility, where engineering controls can be implemented or updated.

    c. Departmental managers are responsible for assessing their area's needs on a continuing basis. Once an engineering control has been institutionally introduced and staff training has occurred, the engineering control should be used unless there are medical reasons that would contraindicate its use.

KEY POINT:	**If nursing and/or medical staff believe an engineering control is contraindicated, staff will document the reason in writing and submit this to Infection Prevention for review and possible exclusion.**

    d. Engineering controls are assessed routinely to ensure that each control is maintained, and that the device reflects changes in technology that eliminate or reduce exposure to bloodborne pathogens.

3. Work Practice Controls

    a. Work practice controls are followed to help decrease the potential for staff exposure to bloodborne pathogens. Oversight and implementation of work practice controls are performed by the department manager who works in conjunction with the UNC Hospitals' Infection Prevention staff and safety personnel.

    b. Hand hygiene products (e.g., antimicrobial soap, waterless alcohol-based hand rub (ABHR)) are readily accessible to all staff who have the potential

for occupational exposure.

- Refer to the Infection Prevention policy: Hand Hygiene.

c. Following any contact of body areas with blood or OPIM

i. Staff must wash their hands and any other exposed skin with an antimicrobial soap and water according to the Infection Prevention policy: Hand Hygiene.

ii. If the exposure to blood or body fluids involves the eyes or other mucous membranes, they must flush the exposed mucous membranes with water. Eyewash stations are located in multiple clinical areas of UNC Hospitals and the Adams School of Dentistry. Staff should learn the location of the nearest eyewash station in their assigned work area. Additionally, UNC Hospitals Occupational Health Clinic has an approved eyewash station, located on first floor Memorial Hospital, Room 168. Refer to the Environmental Health and Safety policy: Emergency Eyewash and Shower Equipment.

iii. Shower facilities are available within UNC Hospitals for staff who encounter exposure to blood or OPIM. Showers are located in multiple areas within UNC Medical Center, Hillsborough Hospital (HBH), and in some outpatient areas, such as the Ambulatory Surgical Center and the Family Medicine Center (Manning Drive). All staff should identify the shower location nearest to their assigned work area.

d. Disposal of Sharps

i. Plan safe handling and disposal of sharps before beginning any procedure using sharps (e.g., needles, scalpel blades, phlebotomy needles, etc.).

ii. Sharps disposal should occur as close to the point of use as possible by the person using the sharp.

iii. Do not pass sharp instruments from hand to hand unless the specific procedure requires continuous focus.

iv. Pass sharp instruments using either a neutral zone or in a suitable container to decrease the possibility of injury from sharp, contaminated objects.

v. Do not shear, bend, recap, or remove contaminated needles and other contaminated sharps unless it can be demonstrated that there is no feasible alternative, or the action is required for a

specific medical procedure. Recapping or needle removal is accomplished through a mechanical device or a one-handed technique. This can be accomplished by placing the cover (cap) on a flat surface and sliding the needle into it, using a hemostat to hold the cap, or obtaining a commercial needle recapping device. Two-handed recapping of needles is prohibited. Contaminated phlebotomy needles and tube holders are not to be separated and are discarded as a unit. The tube holders are not to be reused.

vi. The user should discard sharps immediately after use, or as soon as possible, in containers that are closeable, puncture-resistant, and leak-resistant on sides and bottom.

vii. Sharps Containers

- Containers are labeled with a BIOHAZARD label.
- Containers will be easily accessible and located as close as possible to the immediate area where sharps are used or can be reasonably anticipated to be found.
- To prevent needle-stick injuries, wall-mounted sharps containers will be affixed with the opening 52" - 56" from the floor, so the opening may be observed for protruding sharp objects.
- The sharps containers will be secured upright throughout use and be routinely replaced when 2/3 to 3/4 full and not be allowed to overfill.
- The replacement of full sharps containers is a joint responsibility between Nursing and Environmental Services.
- Close and lock the sharps container immediately prior to removal to prevent spillage or protrusion of contents during handling, storage, or transporting.
- Closed sharps containers are to be placed in a regulated medical waste container. Environmental Services staff will remove sealed boxes from the clinic areas.

e. UNC Hospitals staff should not retrieve objects from biohazard waste containers. Supervisors should not instruct staff to retrieve objects from biohazard waste containers.

f. Eating, drinking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of

occupational exposure to bloodborne pathogens (e.g., laboratories, treatment rooms).

g. Food and drink are not kept in refrigerators, freezers, shelves, cabinets, or on counter-tops or work bench tops or in other storage areas where blood or OPIM are present.

h. All procedures involving blood or OPIM shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

i. Mouth pipetting/suctioning of blood or OPIM is prohibited.

j. Specimens of blood or OPIM shall be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. If outside contamination of the primary container occurs, decontaminate the container with an approved EPA-registered disinfectant prior to delivering to the lab. If the specimen could puncture the primary container, the primary container shall be placed within a secondary container that is puncture-resistant in addition to appropriate labeling. Refer to the Plant Engineering policy: Pneumatic Tube System, for sending specimens to the lab in this manner. Specimens that leave the premises must be labeled with a BIOHAZARD label. If the patient is suspected or confirmed of having a High Consequence Pathogen, refer to the Infection Prevention policy: High Consequence Pathogens: Preparedness and Response Plan for handling of specimens before transporting.

k. Equipment known or suspected to be contaminated with blood or OPIM is examined prior to servicing or shipping and decontaminated as necessary, unless it can be demonstrated that decontamination is not feasible. If the equipment cannot be decontaminated, a BIOHAZARD label must be attached to the equipment, stating which portions remain contaminated. Items must be appropriately cleaned after maintenance and prior to patient use.

l. Patient forms that have been stained with blood or body fluids must be placed in a clear fluid impermeable bag, scanned into the electronic medical record, and then discarded. Do not attempt to sterilize paper, and do not place paper contaminated with OPIM in a patient's physical medical record. The clean photocopy of the document can be scanned into the patient's medical record.

m. While transporting deceased patients, Standard Precautions must be maintained. According to the North Carolina State Law (10A NCAC 41A .0212) for the handling and transporting of deceased individuals, "*Persons handling the body of any person who died and is known to be infected with*

HIV or hepatitis B or any person who died and is known or reasonably suspected to be infected with Creutzfeldt-Jakob or rabies shall be provided written, verbal, or electronic notification to observe blood and body fluid precautions."

4. Personal Protective Equipment

    a. Personal protective equipment (PPE) is used by staff to provide protection against a hazard such as blood or other potentially infectious materials (OPIM). It is the employer's responsibility to provide PPE. PPE consists of specialized clothing or equipment worn by staff, such as gloves, fluid-resistant gowns, lab coats, aprons, masks, face shields, and protective eyewear. All staff must routinely use PPE when there is a potential for exposure to blood or OPIM. PPE in the appropriate size is readily available in the work area (e.g., Clean Utility Room, PPE carts, or cabinets). Special arrangements can be made for unique needs (e.g., glove liners, hypoallergenic gloves) of staff members with their supervisors, after evaluation in OHS.

    b. All PPE is removed prior to leaving the patient care or work area. When PPE is removed, it is placed in an appropriately designated area for storage, washing, decontamination, or disposal. Disposable PPE should be discarded in the trash.

    c. All reusable PPE (e.g., utility gloves) must be decontaminated (use an EPA-registered disinfectant) prior to re-use if the integrity of the PPE is not compromised. If the PPE is cracked, peeling, torn, punctured, or exhibits other signs of deterioration, or when its ability to function as a barrier is compromised, the PPE must be discarded.

    d. Types of PPE

        i. Gloves

            - Nitrile or non-latex gloves must be worn when it can be reasonably anticipated that staff may have contact with blood, OPIM, mucous membranes, non-intact skin, and when performing vascular access procedures. Employees with skin or systemic reactions to latex, nitrile, or hand hygiene agents must be evaluated by their Occupational Health Service for alternatives.
            - Disposable single-use gloves must be changed as soon as practical when contaminated, torn, punctured, or when their ability to function as a barrier is compromised.

- Disposable single-use gloves are not to be washed or disinfected for reuse.
- Gloves must be changed after contact with each patient/patient environment. Hand hygiene with soap and water or with ABHR should be used after glove removal.
- Change gloves and perform hand hygiene during patient care when moving from a contaminated site to a clean site.
- When used for irritant contact dermatitis (ICD), cotton glove liners should be replaced at the beginning of each shift with a clean pair. If they become contaminated with blood or OPIM or become generally soiled in appearance, they should be removed promptly and replaced.
- Gloves should be removed, and hand hygiene performed before touching clean, shared environmental surfaces (e.g., computer keyboards and telephones in common areas).
- Double gloving has been shown to reduce blood exposures during operative procedures, and therefore is recommended for all surgeons, scrub nurses, scrub techs, and any other personnel performing high-risk procedures or prolonged surgeries.

ii. Masks, eye protection, or face shields

- Masks and eye protection, or face shields, will be worn whenever splash, spray, splatter, or droplets of blood, or OPIM may be generated, and eye, nose, or mouth contamination can be reasonably anticipated (e.g., emptying suction canisters, open suctioning of coughing patients, trauma procedures).
- Prescription eyeglasses are not to be used as eye protection. Healthcare facility-approved eye protection must be used in addition to prescription eyeglasses when required.
- Protective eyewear must be worn by all persons (including those wearing contact lenses) when there is a reasonably anticipated potential for eye contamination.

iii. Gowns

- Gowns, aprons, and other protective body clothing should be worn in occupational exposure situations. The type and characteristics will depend on the task and the degree of exposure anticipated. Appropriate protective clothing must prevent contamination of staff's skin or clothing by blood or OPIM. For example, fluid-resistant PPE must be worn when it is reasonably anticipated that there would be sufficient blood exposure (e.g., spraying) that it would pass through to or reach the skin, eyes, mouth, or other mucous membranes under normal conditions of use. Waterproof gowns are available for use (e.g., blue plastic gown). A non-fluid resistant gown (i.e., yellow isolation gown) may be worn in all other procedures.
- If personal protective equipment (garment) is penetrated by blood or OPIM, the garment must be removed immediately or as soon as possible and placed in the appropriate container for disposal, storage, washing, or decontamination. Staff must remove contaminated PPE in such a way as to avoid contact with the contaminated portions.
- Scrubs are not personal protective equipment.

iv. Contaminated Personal Clothing/Scrubs

- Personal clothing/scrubs contaminated with blood or OPIM must not be taken home for laundering. The same care shall be exercised in the handling of contaminated personal clothing as the PPE handling described above.
- If personal clothing/scrubs are contaminated, contact Central Distribution (CD) Main at 984-974-4306 and ask for the Supply Chain Supervisor or the Supply Chain Supervisor on-call to obtain a set of loaner scrubs. A designated staff member who is not the staff member who sustained a blood/OPIM/body fluid exposure to personal clothing should go to pick up a new set of scrubs.
- Reimbursement for personal clothing/scrubs contaminated with blood or OPIM may be discussed with the staff member's department. University

employees should remove contaminated personal clothing following the above recommendations for removal of PPE and notify their supervisor.

- Additional PPE (e.g., bonnets, hoods, shoe covers, boots) may be required in instances when gross contamination is reasonably anticipated (e.g., autopsies, trauma surgery, labor and delivery, and orthopedic surgery).

5. Sterilization, Disinfection, and Housekeeping

    a. Standard sterilization and disinfection procedures for patient care equipment are adequate to sterilize or disinfect instruments, devices, or other items contaminated with blood or OPIM. (Refer to Infection Prevention policies: High-Level Disinfection (HLD) - Manual Reprocessing of Reusable Semi-Critical Medical Devices and Sterilization of Reusable Patient-Care Items.

        - An EPA-registered disinfectant or a bleach disinfectant wipe must be used to decontaminate non-critical devices or equipment (that has contact with intact skin) after blood or OPIM contamination per manufacturer's instructions for use. Refer to Infection Prevention policy: Cleaning and Disinfection of Non-Critical Items.

NOTE:	**If Creutzfeldt-Jakob Disease is suspected or confirmed, follow Infection Prevention policy:** Creutzfeldt-Jakob Disease (CJD)

    b. All equipment and environmental work surfaces will be cleaned and decontaminated after contact with blood or OPIM and at the end of the work shift if the surface may have become contaminated during the shift.

    c. Blood and body fluid spills should be cleaned using a bleach disinfectant wipe, or an EPA-registered disinfectant may be used for decontaminating small (<10 mL) spills of blood or OPIM. Strategies for decontaminating spills of blood and other body fluids in a patient-care setting are different than those for spills of cultures or other materials in clinical, public health, or research laboratories. In both settings, gloves will be worn during the cleaning.

        i. In patient-care areas, visible material should be removed with disposable towels or other appropriate means that will ensure against direct contact with blood, and then the area should be decontaminated.

        ii. With large spills of cultured or concentrated infectious agents in

the laboratory, the contaminated area should be flooded with an EPA-registered disinfectant before cleaning, and then decontaminated again with the EPA-registered disinfectant.

d. Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, will be removed and replaced when they become overtly contaminated, between patients, and at the end of the work shift if they may have become contaminated during the shift.

e. All bins, pails, cans, and similar receptacles intended for reuse that have a reasonable likelihood for becoming contaminated with blood or OPIM will be inspected and decontaminated on a regularly scheduled basis, cleaned, and decontaminated immediately, and/or as soon as feasible upon visible contamination.

f. Broken glassware, razors, or other sharp items that may be contaminated will not be picked up directly with the hands. It will be picked up using mechanical means, such as a brush and dustpan, tongs or forceps, and the broken glass will be placed in a rigid container (e.g., sharps container) for disposal.

g. If a wet vacuum is used for removing large spills of liquid, it must be disinfected with an EPA-registered disinfectant after use.

6. Regulated Medical Waste

a. Regulated medical waste is handled in accordance with federal, state, and local laws and Infection Prevention policy: Guidelines for Disposal of Regulated Medical Waste and UNC-CH Medical Waste Disposal Procedures for Campus Health and the Adams School of Dentistry.

b. North Carolina regulates three types of medical waste:

i. Microbiology laboratory waste

ii. Pathology waste

iii. Blood specimens or blood products in quantities greater than 20 mL per unit container.

c. While any item that has had contact with blood, exudates, or secretions may be potentially infective, it is not considered practical or necessary to treat all such waste as infective.

d. In university medical facilities, regulated medical waste is placed in a biohazard/medical waste box that is lined with a red bag. When the box is filled to a reasonable level, the bag is tied, and the box top is closed and secured. Clinic staff members are responsible for the closing and securing

of medical waste boxes. Environmental Services staff will remove sealed boxes from the clinic areas. The boxes will be transported to the loading dock area, where they will be collected by the waste disposal contractor for transport to an incinerator.

7. Laundry

    a. Although soiled linen has been identified as a source of large numbers of certain pathogenic microorganisms, the risk of actual disease transmission is negligible. Hygienic storage and processing of clean and soiled linen are recommended.

    b. Contaminated laundry is handled as little as possible and with minimal agitation to prevent gross microbial contamination of the air and of persons handling the linen. Refer to the Infection Prevention policy: Laundry and Linen Service for details.

D. Occupational Health Service

1. Exposure Reporting

    a. Introduction

        i. Any staff member who has an exposure to blood or body fluids should take immediate action.

            - Exposed skin and any puncture sites should be thoroughly washed with soap and water.
            - Eyes are to be rinsed thoroughly with water at an eyewash station or if a station is not available, using sterile saline, eye irrigation, or clean water. The eyes should be flushed for a minimum of five minutes.
            - If the mouth is exposed, rinse/flush with clean water.
            - The application of caustic agents (e.g., bleach) or the injection of antiseptics or disinfectants into the wound is not recommended.

        ii. Current protocols for HIV post-exposure prophylaxis (HIV PEP) necessitate immediate reporting of occupational exposures so that administration of antiretroviral prophylaxis can be promptly initiated when indicated. Current Centers for Disease Control (CDC) and National Institute of Health (NIH) recommendations advise that antiretroviral prophylaxis be started as soon as possible, ideally within hours of the exposure. At most, post-exposure prophylaxis must be started within 72 hours of

exposure. If more than 72 hours pass, post-exposure prophylaxis will most likely not prevent infection.

iii. Staff should call their occupational health provider to initiate the post-exposure evaluation immediately after injury.

b. Reporting an Exposure

i. All UNC Hospitals staff, including those working off-site, are to report exposures to Occupational Health Service Needlestick Hotline (NHL) at 984-974-4480.

- UNC Hospitals staff must complete a SAFE report and call the Needlestick Hotline at 984-974-4480. This service is provided 24 hours per day, 7 days per week by UNC Hospitals' Occupational Health Service. They will be provided with immediate evaluation and timely treatment of the potential exposure.
- Staff should refer to the Bloodborne Pathogen Exposure (BBPE) protocol found on the Occupational Health Services (OHS) website on the UNC Hospitals' Intranet. This protocol is reviewed annually to comply with the Exposure Control Plan for Bloodborne Pathogens and OSHA Bloodborne Pathogen Standard.

ii. University Employees

- Employees of the University are to call University Employee Occupational Health Clinic (UEOHC) at 919-966-9119 (7 days/week, 24 hours/day). University staff should refer to the HIV Post Exposure Protocol (Bloodborne Pathogen Exposure Protocol) on the UNC Health Intranet for additional information.

iii. UNC Students who are doing a formal rotation through one of the UNC health science schools (including Visiting Medical Students through the medical school)

- Students should call UNC Campus Health at 919-966-6573 to speak with a registered nurse about any exposures. On nights and weekends, this number is forwarded to UNC Nurse Connect, who will be able to contact the House Supervisor and Campus Health Duty Doctor on call.
- Since students are not employees, their private health insurance will be used if they are seen in the emergency

room or other medical clinics.

- Please refer to Attachment 5: Bloodborne Pathogen Exposure - Mode of Operations for Campus Health. Information is also available on the CHS website: https://campushealth.unc.edu/urgent-needs/.

iv. Contract Personnel (e.g., Traveling Nurses)

- Contract personnel must report the exposure to their employer and then contact the Emergency Department (ED) for evaluation and possible treatment for high-risk exposure unless a prior agreement for service with OHS has been established.

v. Trainees Not Affiliated with UNC

- Trainees not affiliated with UNC must report the exposure to their clinical instructor/school. They will be referred to the Emergency Department.

vi. Following an exposure incident

- At the time of evaluation, the employee receives detailed education and documentation about the risks of exposure, if there is a need for Hepatitis B immunization, and if follow-up is required.
- The employer will bear the costs, including costs for staff who must travel away from the work site for medical procedures and evaluations. Medical procedures and evaluations must be convenient to staff and normally be offered during staff's scheduled work hours. Staff who work off-site and who experience an exposure as defined in this document should first call the Needlestick Hotline (984-974-4480) and then refer to the Occupational Health Service: Bloodborne Pathogen Exposure (BBPE) Guidelines on the UNC Hospitals' Intranet.
- A sharps injury log is maintained by UNC Hospitals' Occupational Health Service, and the OSHA 300 Log is maintained by Worker's Compensation. The Sharps Injury Log includes information on the injury, including the type and brand of device involved in the incident, the department or work area where the exposure incident occurred, and an explanation of how the incident

occurred. Medical records are kept confidential for all staff.

- For staff of UNC Hospitals, these records are kept and maintained by the Occupational Health Service. University staff records are kept at University Employee Occupational Health Clinic (UEOHC). Records are not disclosed or reported without the staff's expressed written consent to any person within or outside the workplace except as required by law. Staff medical records are kept for at least the duration of employment plus 30 years.

c. Definition of Exposure

i. Staff will be defined as having been occupationally exposed to:

- HBV under the following conditions: The source is HBsAg and/or HBeAg-positive **AND** one of the following has occurred (see next section "ii").
- HCV under the following conditions: The source is HCV antibody positive and/or HCV PCR positive **AND** one of the following has occurred (see next section "ii").
- HIV under the following conditions: The source is HIV-positive (HIV Ag/Ab combo 4th-generation test positive, **AND** one of the following has occurred (see next section "ii").

ii. If staff meet the virus-specific definition of occupational exposure **AND** one of the following occurred:

- Staff suffered a percutaneous injury with a contaminated sharp.
- Staff had contact on a mucosal surface or abraded skin with contaminated blood or OPIM.
- Staff had skin contact with blood, fluid containing visible blood, or other potentially infectious fluid or tissue, **AND** the skin integrity in the area of contact was visibly compromised.
- Staff had parenteral exposure to, or mucosal membrane contact with, a contaminated body fluid. Such fluids include semen, vaginal secretions, amniotic fluid, cerebrospinal fluid, synovial fluid, pleural fluid,

pericardial fluid, peritoneal fluid, or saliva during a dental procedure. In addition, contact with any unfixed tissue or organ (other than intact skin) from a human (living or dead).

- Staff received a bite that breaks the skin. Please report to Occupational Health Services (OHS) for evaluation.

2. Management of Hepatitis B Virus
(Refer to Occupational Health Services policy: HBV/HIV Infections)

    a. Pre-Exposure Prophylaxis

        i. Hepatitis B vaccine will be offered free of charge to all staff (unless contraindicated) who have potential exposure to blood, blood products, or body fluids that may contain blood. Immunity to hepatitis B virus is strongly encouraged for all at-risk staff. However, staff may decline hepatitis B immunization by signing the Hepatitis B Vaccine Declination form (Attachment 3 - Hepatitis B Declination Form and Informed Refusal). Hepatitis B vaccination must be made available after the employee has received information and training regarding the vaccine.

        ii. The standard immunization schedule and follow-up with anti-HBsAg titers as designated by the CDC's Advisory Committee on Immunization Practices (ACIP) will be followed.

        iii. Newly hired staff without evidence of post-vaccine serologic testing, an anti-HBsAg titer should be offered per CDC/ACIP algorithm.

        iv. HBV vaccine will be provided to staff during working hours (on the clock).

    b. Post-Exposure Prophylaxis

        - Post-exposure prophylaxis will be offered if indicated (unless contraindicated) to all staff with an exposure as recommended by CDC and ACIP. Post-exposure prophylaxis will depend on the infective status of the source (i.e., HBsAg positive), the immune status of the exposed person (i.e., anti-HBs titer), and vaccination status of the exposed person. Post-exposure prophylaxis may include HBIG and/or additional doses of hepatitis B vaccine.

    c. Evaluation of staff with Acute Hepatitis B Infection

        - If the infection resulted from occupational exposure, primary care will be provided by the staff's OHP. If the infection did not result

from occupational exposure, the employee will be referred to their primary care provider for medical care. Referral to a gastroenterologist may also be suggested. Staff with acute hepatitis B infection will be sent home on sick leave during the acute infection (jaundice). Staff will be counseled regarding the need for precautions to prevent home or hospital transmission of infection. Every effort will be made to document whether infection resulted from occupational exposure. All cases will be reported to the NC State Health Department, as per NC State regulations. Prior to returning to work, all staff who have had acute infection must receive medical clearance per OHP protocols.

3. Management of Hepatitis C Virus
    a. Pre-Exposure Prophylaxis
        - None Available
    b. Post-Exposure Prophylaxis
        - None Available
    c. Evaluation of staff to HCV positive persons will be managed per the most recent CDC guidelines.
    d. Evaluation of staff with Acute Hepatitis C Infection
        i. If the infection resulted from occupational exposure, primary care will be provided by the employee's Occupational Health Service. If the infection did not result from occupational exposure, the employee will be referred to their primary care provider for medical care. Referral to a gastroenterologist may also be suggested. Staff with acute hepatitis C infection will be sent home on sick leave during the acute infection (jaundice). All such staff will be counseled regarding the need for precautions to prevent home or hospital transmission of infection. Every effort will be made to document whether infection resulted from occupational exposure. All cases will be reported to the State, as per State regulations.
        ii. Prior to returning to work, all staff who had acute infection must receive medical clearance per OHP protocols. Staff will be followed for at least one year to determine if they have developed chronic hepatitis C infection.

4. Management of Bloodborne Exposures to HIV
(refer to the Occupational Health Services policy: HBV/HIV Infections)
    - Prophylactic Therapy of Exposed Staff

- UNC Hospitals will make anti-retroviral medication available at no cost to staff who meet CDC criteria for an exposure warranting PEP. PEP will be provided per CDC and NIH PEP guidelines. Employees who desire anti-retrovirals for other indications will be referred to their local medical doctor or the Infectious Disease Clinic (treatment being at the employee's expense).

5. Staff will be defined as having **NOT** been occupationally exposed to HIV, HBV, or HCV under the following conditions:
    a. The source is HIV, HBV, and HCV negative, even if the source is a member of a group at high risk of infection.
    b. Inhalation or possible inhalation of microscopic blood or body fluids.
    c. Contact of intact skin with contaminated blood or body fluid.
    d. Percutaneous injury with a non-contaminated sharp.
    e. Parenteral exposure or mucous membrane contact with saliva, sputum, tears, human milk, urine, or feces, in which there is no visible blood.
6. Staff under investigation by the Controlled Substances Assessment Team for drug diversion by injectable mechanism will be asked to submit to voluntary HIV, Hepatitis B, and Hepatitis C testing to ensure they would not be the source of exposure to patients.

E. Determination of Staff with Reasonably Anticipated Occupational Exposure

Each manager will review their list of job classifications to identify which staff in those positions have reasonably anticipated occupational exposure. (See Attachment 2: Job Classification with Reasonably Anticipated Occupational Exposure for job classification listing.)

F. Training and Record Keeping

1. Purpose
    - The purpose of this document is to provide an outline for the training of all occupationally exposed staff to ensure that all elements of training are addressed in educational programs.
2. Policy
    - Staff who have occupational exposure to blood and other potentially infectious materials will receive training at the time of initial assignment to an area where occupational exposure may take place and at least annually, and more often if a need is indicated. If an employee is only proficient in a

foreign language, the trainer or an interpreter must convey the information in that foreign language. Opportunities for interactive questions and answers are available 24 hours a day, 7 days a week, provided by the Infection Preventionist (IP) on call. Contracted services are responsible for providing OSHA education regarding Bloodborne Pathogens to contract staff.

3. General Information

    a. The OSHA-required training is a condition of employment for all staff of the UNC Hospitals and University. Each department manager must ensure that all staff identified as having potential occupational exposure participate in a training program. Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

    b. Training shall be provided at the time of initial employment prior to participating in exposure-prone activities and annually thereafter. The hospital will provide additional training when changes such as modifications of tasks or procedures affect the staff's risk for occupational exposure.

    c. Training can be accomplished via a variety of mechanisms. Most UNC Hospitals' staff utilize a self-instructional module located on the Learning Made Simple (LMS). Staff in designated departments (e.g., Environmental Services) receive training from the Departmental Safety Coordinators (DSC) or Interpreters who use written material with post-test or videotapes. An Infection Preventionist is available 24/7, by paging the Infection Preventionist on-call through the hospital directory to address questions regarding the training. For University employees, the UNC-CH Department of Environment, Health, and Safety conducts training sessions at the request of departments that include all the required educational elements. Staff may also elect to use the self-study training for bloodborne pathogens located on the EHS website.

4. Training Elements

    - The training must contain the following elements:

        i. An accessible copy of the regulatory text of the OSHA bloodborne pathogen standard.

        ii. A general explanation of the epidemiology and symptoms of bloodborne diseases.

        iii. HIV and HBV must be described. Employer must convey that a number of other bloodborne diseases exist (e.g., hepatitis C and syphilis).

        iv. An explanation of the modes of transmission of bloodborne pathogens. An explanation of the Exposure Control Plan.

v. An explanation of the appropriate methods of recognizing procedures and other activities that may involve exposure to blood and other potentially infectious materials.

vi. An explanation of methods that will prevent or reduce exposure, including engineering controls, work practices, and personal protective equipment.

vii. Information on the types, proper uses, location, removal, handling, decontamination, and/or disposal of personal protective equipment.

viii. An explanation of the basis for selection of personal protective equipment.

ix. Information on the hepatitis B vaccine, including information on the vaccine's efficacy, safety, and the benefits of being vaccinated.

x. Information on the appropriate actions to take and persons to contact if an emergency involving blood occurs.

xi. An explanation of the procedures to follow if an exposure incident occurs, including the methods of reporting the incident and the medical follow-up that will be made available.

xii. An explanation of the signs and labels, and color-coding used at UNC Hospitals.

5. Training Record Elements

a. The dates of the training sessions.

b. The contents or a summary of the training sessions.

c. The names and qualifications of the persons conducting the training.

d. The names and job titles of all persons attending the training sessions.

e. Records must be maintained for three years from the date on which the training occurred. For employees of the UNC Hospitals, records are kept by each individual department. For University employees, documentation is kept at the UNC-CH Department of Environment, Health, and Safety.

III. References

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IV. Related Policies

Environmental Health and Safety Policy: Emergency Eyewash and Shower Equipment

Infection Prevention Policy: Cleaning and Disinfection of Non-Critical Items

Infection Prevention Policy: Creutzfeldt-Jakob Disease (CJD)

Infection Prevention Policy: Guidelines for Disposal of Regulated Medical Waste

Infection Prevention Policy: Hand Hygiene

Infection Prevention Policy: High Consequence Pathogens: Preparedness and Response Plan

Infection Prevention Policy: High-Level Disinfection (HLD) - Manual Reprocessing of Reusable Semi-Critical Medical Devices

Infection Prevention Policy: Laundry and Linen Service

Infection Prevention Policy: Patient Exposure to Potentially Infectious Body Fluids and Human Milk

Infection Prevention Policy: Sterilization of Reusable Patient-Care Items

Occupational Health Services Policy: HBV/HIV Infections

Plant Engineering Policy: Pneumatic Tube System

Attachments

01: Definitions

02: Job Classifications with Reasonably Anticipated Occupational Exposure

03: Hepatitis B Vaccine Decliniation for UNC Employees

04: UNC-CH Committee Review of Engineering and Work Practice Controls/Sharps Safety Devices in Use and Under Evaluation for the UNC Adams School of Dentistry and Campus Health Services

05: Bloodborne Pathogen Exposure - Mode of Operation for Campus Health Services

Approval Signatures

Step Description	Approver	Date
Policy Stat Administrator	Judith Strubin: Mgr Program-IP	04/2025
AVP Quality UNCMC	Erin Burgess: AVP Quality UNCMC	04/2025
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Applicability

UNC Medical Center