| Title: Employee Health Infection Policy/Procedures for Blood | Policy Number 208 | Approved By: | Effective Date: | Page 1 of 9 |
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| Borne Exposures | | EHS Medical Director | 08/01 | |
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Policy:

Guidelines and treatment for health care workers with exposures resulting during performance of employee's duties. Occupational exposures to parenteral skin, eye and mucous membranes through contact of human blood or other potentially infectious body fluids. The Employee Health program includes but is not limited to, the provisions and conditions set forth in this policy.

Purpose:

To reduce the risk of occupational acquired infections and transmission of infections to patients, physicians, employees.

Blood Exposures: CDC Post Exposure Hotline (888-448-4911)

Blood Borne Pathogens post exposure follow-up and prophylaxis is done after an exposure incident (refer to Policy 401). An exposure incident occurs when mucous membranes, non-intact skin or parental contact with blood or other potentially infectious body fluids is made. The employee with an exposure incident should report to his/her supervisor, charge nurse or lead tech., etc. immediately. Post exposure follow-up is coordinated through Employee Health Services.

- If there is blood or body fluid exposure to the eyes, nose, or mouth, irrigate with running water immediately and
 thoroughly. There are Eye Wash Stations provided in strategic locations throughout each department of the hospital.
 Intact skin exposed to blood or body fluids should be washed immediately with soap and water, even though a true
 exposure has not occurred. Wash exposed non-intact skin with soap and water immediately. Report to the supervisor or
 charge nurse of the unit where the exposure occurred.
- 2. The supervisor or employee completes the "Employee Incident Report" (Form 652, Appendix A. The employee immediately reports to Employee Health Services. If exposures occurs after hours employee will report to EHS on the next business day.
- 3. If the exposed employee is not an employee of the unit on which the exposure occurs, the exposed employee notifies the Unit Supervisor, Charge Nurse or primary nurse on the unit in which the patient is assigned. In addition the exposed employee will notify his/her supervisor or charge person. (I.e. Respiratory Therapy, Lab, etc).
- 4. The source patient's history will be reviewed by the patient's primary nurse or Charge Nurse on duty to determine if testing for blood borne pathogens has been completed and to determine the risk. If testing is already complete see follow-up results.

If testing has not been done, the following blood exposure testing will be done on the source patient pursuant to North Carolina Administrative Rule 10A NCAC41A.0202 This will be ordered utilizing the downtime process on form "Blood-Body Fluid Exposure Lab Slip" (See attached example)

http://infoweb4.capefearvalley.com/policies_cat/employee_health/employee%20exposure%20info%20sheet%20and%20bl ood%20body%20fluid%20lab%20slip.doc (Do not order these tests in the computer). Charge nurse notifies CareLink that lab tests have been completed.

- a. Rapid HIV test
- b. Hepatitis B Antigen HBsAG
- **c.** Hepatitis C (HCV)
- 5. The source patient's; attending physician will be notified of incident and to receive orders for testing. Testing is done at no cost to the patient. No consent for testing is required. Employee Health Service or Infection Prevention Control will notify the Cumberland County Health Department Infectious Disease Investigator at 910-433-3781 if the source patient or legal representative refuses testing.
- 6. Testing for exposures from newborns: Mother's blood is tested for child less than or equal to six months of age. After six months specimens obtained from child with parental notification.
- 7. If unable to contact primary physician after hours the EHS Nurse, or Care Link Nurse may place order for testing, using the Medical Directive HIV Exposure form.

| Reviewed/Revised: | Reviewed / No Change | Departments: | Did this policy | If yes, old policy |
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| 08/10 | | All | replace another policy? | title: |

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- 8. Maintaining strict confidentiality, the results of the source testing will be returned to the patient's unit to be placed on the chart. After hours results will be called to Carelink.
- 9. If the exposed is Outpatient, the employee notifies the supervisor of the Outpatient department and the same procedures listed above will apply.

Exposed Employee's Reporting Obligations:

- **a.** Any employee who is infected with HIV and/or Hepatitis B especially those that perform or assist in surgery; dental procedures or vaginal deliveries are to report themselves to the County Health Department. This is required by law and is solely the employee's responsibility.
- **b.** If the employee or non-employee (including medical staff) does not consent to having his or her blood drawn when a patient has been exposed, the EHS physician will refer to the Medical Director of the Cumberland County Health Department (who is authorized by the NCAC).
- **c.** The exposed employee is informed in writing of the source patient's testing, if known. (The source's patient's name will not be provided on the written results. The employee is advised of recommended medical treatment and follow-up testing and given pre and post- test counseling.
- **d.** Upon written consent, the exposed employee is offered the opportunity to enter the in-house follow-up testing program. The full test schedule includes a baseline testing (immediately), with follow-up testing at six weeks, three months and six months. The employee may choose one of the following options:
- **e.** Baseline testing only
- **f.** Both baseline and follow-up testing
- **g.** Having blood drawn but no tests at the time of exposure, but with the opportunity to request testing on that sample within 90 days from the time it is drawn.
- **h.** Employee's refusing to complete any or part of the in-house follow up testing program will be required to sign a declination refusing these services at Employee Health Services.
 - 1. When the employee consents to testing, blood will be drawn by the Employee Health Nurse and coded for the purpose of confidentiality before being sent to laboratory.
 - 2. If the employee testing is negative after six months, no further follow-up is necessary. If the final test is not drawn within 6 months of the due date, the person is removed from the current in- house follow-up testing program.
 - 3. If the employee leaves employment during the time they are enrolled in the follow-up testing program, they are to contact Employee Health Services. Copies of their records will be provided (with their signed consent for release per hospital policy). They may continue follow-up at their local county health department or at their private physician's office if they prefer, although this would be at their expense.

Negative Lab Results:

- i. If the source is HIV negative, CareLink notifies the employee and explains post exposure follow up and the necessity for the employee to report to Employee Health on their first day of operation after the exposure. Employee Health is responsible for testing the employee and completing the follow up.
- **j.** During hours of operation the employee is informed of the results of the source testing per Employee Health Nurse. The exposed employee is informed of all applicable laws and regulations concerning disclosure of confidential information relating to the identity and infectious status of the source individual.

Source Unknown Blood Exposure:

- 1. If an employee has a blood exposure from an unknown source, the employee is offered Hepatitis B vaccine series (if not previously started) and the employee has the option of inclusion into the in-house HIV follow-up testing program. The same protocol outlined above will be followed. In addition, for all unknown source exposures, Hepatitis C will be retested in 6 weeks with PCR in addition to testing for baseline and repeated in 6 months after exposure.
- 2. If source of exposure is known to be Hepatitis B surface antigen positive and the exposed employee does not have an adequate antibody level to Hepatitis B, Employee Health staff administers the appropriate prophylaxis when the employee reports to EHS on the first operational day. (See Hepatitis B section below).

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HIV/Unknown Exposure: If the source patient is unknown, or HIV positive the following procedures will be implemented.

- 1. Employee Health Nurse will notify employee of source patient's lab results during hours of operation.
- 2. The Employee Health nurse will consult Employee Health Medical Director or the Infectious Disease physician for post exposure prophylaxis.
- 3. If the exposure occurs at a time that Employee Health is closed Care Link notifies the exposed employee that the source lab results have been obtained and notifies the employee of the prophylaxis treatment available in the Pharmacy.
- 4. Care Link calls the Pharmacist in Charge and notifies him/her of the exposure and the name of the exposed employee who has been instructed to report to the Pharmacy. Carelink will fax a copy of the prophylaxis Medical Directive to 483-4022
- 5. The pharmacist issues to the exposed employee an exposure kit consisting of 48-hour anti-HIV medication regimen as recommended by Center For Disease Control and Prevention to decrease risk of acquiring HIV and the "Consent To Take Approved Drugs For Non-Approved Indication" (Form 358). The pharmacist counsels the employee on risks and benefits. At that time, the exposed employee signs the consent accepting or declining post exposure prophylaxis. The Pharmacist sends the signed consent to Employee Health Services via fax and interdepartmental mail.
- 6. If the source has been diagnosed as having HIV or AIDS, Care Link notifies the EHS Medical Provider. If the EHS Medical Provider cannot be contacted, the Medical Director for Infection Prevention and Control Committee (IPC) may be contacted. Employee Health will contact the IPC to review medication resistance and if a viral load has been obtained on the source. The EHS Provider may consult Infectious disease or the CDC Post Exposure Hotline at 1-888-448-4911 to determine possible HIV antivirals.
- 7. The provider would then make the necessary adjustments in post exposure prophylaxis and call the prescription into the Pharmacist-In-Charge. Care Link notifies the employee to pick up prescriptions if indicated.
- 8. Post exposure prophylaxis is done immediately as soon as results of a positive test are obtained. CDC guidelines based on the types of exposure are as followed. Current guidelines include employees with the following types of exposure:
 - a. Percutaneous exposure to blood, body fluid (semen, vaginal secretions, peritoneal, pericardial, synovial fluid, CSF,etc.) or unfixed tissue
 - b. Percutaneous exposure to visibly bloody urine, saliva, or respiratory secretions.
 - c. Mucous membrane exposure to a. or b.
 - Skin contact if extensive, prolonged contact, high HIV titer (acute retro viral illness or end stage AIDS) or non-intact skin.

Note: Highest is percutaneous, exposure with large volume of blood i.e., visible contamination, deep wound, hollow needle, vascular source) and high titer HIV.

- 9. The employee is required to follow up with Employee Health on their first day of operation after the exposure. Employee Health is responsible for testing the employee and completing the follow up.
- 10. If the source's status is unknown, or in settings where a nurse or physician is not available, CareLink will fax the Blood-Body Fluid Exposure Lab Slip available on the info-web) for necessary tests (HIV Rapid Test, Hepatitis B Surface Antigen, and Hepatitis C). Follow the department's STAT phlebotomy procedures.

 http://infoweb4.capefearvalley.com/policies_cat/employee_health/employee%20exposure%20info%20sheet%20and%20blood%20body%20fluid%20lab%20slip.doc
- 11. Employee Health covers the cost incurred in providing prophylaxis, evaluation and follow up for Post Exposure Prophylaxis provided as described under this policy for exposures directly related to a valid and reported work-related incident.
- 12. Treatment will not be provided for sexual contacts, pre-existing HIV infections or other conditions. Treatment beyond that indicated by the work-related exposure is not provided or covered by this policy. Cost incurred for procedures obtained that do not follow the approved policy and procedures will not be covered.

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Hepatitis B: The need for prophylaxis is determined by the HBsAg status of the source patient and the vaccination status/response of the exposed employee.

Source patient is Hepatitis B surface antigen positive:

- A. When the exposed employee has not been vaccinated:
 - 1. Hepatitis B vaccination should be initiated within seven days of the exposure and subsequent doses of vaccine should be given one and six months after the first dose.
 - 2. A single dose of Hepatitis B immune globulin (HBIG) 0.06 ml/kg of body weight should be given within seven days of exposure. If the employee declines Hepatitis B vaccine, the dose of HBIG will be repeated in one month.
 - a. When the exposed employee has begun but not completed the vaccination:
 - 1. One dose of HBIG should be given within seven days of exposure.
 - 2. Vaccination series should be completed as scheduled.
 - b. When the exposed employee has already been vaccinated and the anti-HBs response status is known:
 - 1. If the anti- HBs level is adequate no treatment is necessary.
 - 2. If the anti-HBs level is inadequate, Hepatitis B Vaccine will be administered as indicated
 - c. When the exposed employee is known non-responder to the vaccine series:
 - 1. Two doses of HBIG: one given as soon as possible after the exposure and the Second dose given one month later (preferred for those who have no response after vaccination).
 - d. When the exposed employee has been vaccinated and the anti-HBs response is unknown, the employee is tested for anti-HBs:
 - 1. The employee should be tested.
 - 2. If the exposed employee has adequate antibody, no additional treatment is necessary.
 - 3. If the exposed employee has inadequate antibody, one dose of HBIG and a standard booster of vaccine (at a different site) should be given.

Source patient is Hepatitis B surface antigen negative:

a. When the exposed employee has already been vaccinated and has positive titer, no treatment is necessary.

The source patient is unknown or not available for testing:

- a. When the exposed employee has not been vaccinated, a dose of the Hepatitis B vaccine should be given within seven days of the exposure and the vaccination completed as recommended.
- b. When the exposed employee has not completed the vaccination series, the vaccination should be completed as scheduled.
- c. When the exposed employee has been vaccinated and the anti-HBs response is known:
 - 1. If the exposed employee's response is adequate, no treatment is necessary.
 - 2. If the exposed employee has inadequate anti-HBs, with titer < 0.99, then repeat the series of three and repeat titer in thirty days. If employee has had six doses of hepatitis B Vaccine and did not convert treat as non-converter.

HBV/HIV Employee Status:

- a. If the employee is HIV positive with Western Blot confirmation on initial baseline testing or converts to positive during six months of testing, the employee is informed and counseled by the EHS Medical Director. This information is kept in the employee's confidential employee health record, which may only be accessed by EHS Staff. Any information, which is required to be released by N.C. State Law or Regulation, is disclosed to the Health Department. If an employee is an HBV carrier, the local Health Department and Risk Management is notified per EHS.
- b. A healthcare worker who tests positive for HBV or HIV infection and performs or assists in performing surgical, obstetrical or other invasive procedures is informed by EH Services of the reporting measures adopted by the Commission for Health Services.

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c. The health care worker who has tested positive for HVB or HIV infection is requested to have a medical evaluation performed by a physician who has an understanding of infectious diseases. Copies of lab results are given to the employee or the employee's physician upon written request and consent. The medical evaluation must include a statement from the physician regarding the employee's ability to perform the functions of his/her job in a manner that does not pose a risk to him/herself, the patient and others. An Infectious Disease physician who serves on the Infection Prevention and Control Committee makes the final evaluation for returning the healthcare worker to work.

Hepatitis C: If the source is positive for Hepatitis C, the employee is tested for HCV and retested at three months and at six months. The employee is tested at six weeks post exposure for HCV- PCR testing. Employee Health and an Infectious Disease serving on the Infection Prevention and Control Committee evaluate the positive results.

Post- Exposure Evaluation and Follow-up:

- a. The Employee Health Services makes available to all employees who have had an exposure incident, the Hepatitis B vaccine/series. A tetanus and diphtheria (Toxoid) booster is offered if the exposure is a needlestick, puncture wound or cut and if the last booster has been longer than five years. The booster is not given if the employee reports a history of neurologic or hypersensitive reaction following a previous dose. A post exposure and follow up evaluation is provided for all employees.
- b. The components of the confidential medical evaluation and follow-up include:
 - 1. An evaluation of the exposure incident.
 - 2. Informing employee of results of his/her lab results and source individual testing (if not already known).
 - 3. Counseling.
 - 4. Post exposure prophylaxis when medically indicated and recommended by the US Public Health Services (USPHS) at the time of exposure.
 - 5. Evaluation of any reported illness related to the exposure incident.
- c. Employee Health Services provides notification to the exposed employee. A written copy of the Post-Exposure Summary is available for review within 15 days of completion of the evaluation. The written summary contains the following information:
 - 1. Results of HIV, HbsAg, HCV, and other lab ordered on source patient.
 - **2.** Results of the evaluation.
 - 3. Indication for Hepatitis B vaccine.
 - 4. Results of HIV, HbsAg, HCV, and other lab ordered on source patient.
 - 5. Results of the evaluation.
 - 6. Medical conditions requiring further follow –up resulting from the exposure.

Human Bites:

When an employee sustains a human bite involving a break in the skin, the source patient will be tested for Hepatitis B and Hepatitis C (even in the absence of visible blood in the source patient's mouth). If the employee does not have antibodies and the source is Hepatitis B antigen positive, HBIG prophylaxis will be given. If the source is positive for Hepatitis C, the employee will be followed appropriately. If visible blood was present in the source patient's mouth, the protocol for blood exposures will be followed.

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Hours of Operation for Post Exposures

- 1. Hours of operation for Employee Health Services are (Monday through Friday 7 a.m. until 5 p.m. except recognized holidays). During hours of operation all Blood borne pathogen exposures that occur should report to Employee Health immediately.
- 2. If Employee Health Services is closed, CareLink consults with the exposed employee over the phone to initiate post exposure follow-up at 485-5851.
- 3. When calling CareLink after hours please provide exposed employee's name, source patient's data and a contact number for Carelink to allow for follow-up after results are received.
- 4. For non-employees (independent contractors, students), the supervisor follows the same steps on the source patient, but refers the person to his/her employer for post-exposure prophylaxis follow-up.

CONSENT TO TAKE APPROVED DRUGS FOR NON-APPROVED INDICATION

I have been or might have been exposed on-the-job to HIV (Human Immunodeficiency Virus), the virus that causes AIDS. Based upon the circumstances of my exposure, my clinician has offered me antiretroviral (drugs which damage or interfere with HIV) drugs including AZT, 3TC, and/or other antivirals, which might reduce my risk of infection. Although these drugs are indicated for treatment of established HIV infection, they are not approved by the Food and Drug Administration (FDA) for preventing infection after exposure.

If I Decide to take a post-exposure prophylaxis regimen, I understand that the following may occur:

- 1. My blood will be drawn at the request of Employee Health Services and tested for routine chemistries, as well as HIV, HbsAb, and if the exposure occurs at night or on weekends, I will go to Employee Health Services at the start of the next business day.
- 2. A urine test may be performed to determine if I am pregnant, and my weight will be obtained.
- 3. I will be given a prescription for the antiretroviral drugs. The instructions will be as follows:
 ➤ Combivir times #6, one by mouth twice daily or Truvada times #7, one by mouth once daily until seen in Employee Health Services (if weight > 50 kg).
- 4. I will be required to report for follow-up to Employee Health Services the next business day, 2 weeks, 4 weeks, 6 weeks, 3 months, and 6 months. Urine and/or blood tests may be performed at these visits.
 - 5. If I experience adverse reactions or develop abnormal laboratory tests, the regimen may be discontinued or the dosage adjusted.

Treatment Benefits: The risk of infection from exposure is not known with certainty. It varies according to the circumstances of my exposure. Should HIV infection occur, the outcome might be fatal. Antiretroviral drugs may prevent infection after exposure to HIV; especially if I take the first doses within just a few hours and continue to take doses regularly.

Although the CDC has published evidence that antiretroviral drugs decreases the risk of HIV infection after on-the-job exposure such as mine, the actual benefit to me of antiretroviral drugs in preventing infection after exposure is not proven. The benefit is less if treatment is delayed for more than 24 hours.

The duration of antiretroviral regimen likely to prevent infection is not known, but could be prolonged. For this reason, many clinicians recommend taking the drug at least four (4) weeks.

RISK:

If I take antiretroviral drugs, I might develop symptoms including headache, flank pain, muscle pain, tiredness, loss of appetite, trouble sleeping, fever, nausea, vomiting, dizziness, and diarrhea. Although unlikely, I might also develop anemia, low white blood count, hepatitis (liver inflammation), meningitis or encephalitis (nervous system inflammation), or other serious adverse effects. These adverse effects are expected to disappear after the antiretroviral drugs are stopped, but the chance exists that the adverse effects could be life threatening.

Although considered unlikely, delayed effects of antiretroviral drugs could include carcinogensis (cancer) or mutagenesis (mutations in genetic material). Having my blood drawn may be painful and may cause a bruise or rarely an infection.

CONSENT TO TAKE APPROVED DRUGS FOR NON-APPROVED INDICATION, page 2 of 2

Exclusion Criteria:

If any of the following apply, I should not take antiretroviral drugs:

- 1. My on-the-job exposure to HIV was exposure of my intact skin (that is, skin with no cuts or breaks) vs. a parenteral (e.g. needle stick) exposure or exposure to unprotected mucous membrane or non-intact skin.
- 2. I am either a male or female of a childbearing age and I decline to perform acceptable contraception, including abstinence, during the period I would take the antiretroviral drug and for four weeks thereafter.
- 3. I am breast-feeding and elect to continue breast-feeding.
- 4. I have one or more of the following:
 - a. Prior diagnosis of HIV infection
 - b. Underlying renal (Kidney) disease
 - c. Underlying hepatic (liver) insufficiency
 - d. Existing immune system disease, whatever the cause
 - e. Bone marrow disease
 - f. Treatment with drugs which damage my bone marrow, kidneys or liver within 2 weeks prior to or at the same time as my antiretroviral drugs

I certify that I have read the above, or it has been read to me, and that I understand its contents, including the risks and benefits to me of taking or refusing to take the antiretroviral drugs. I have had the opportunity to ask questions and receive answers, which are satisfactory to me.

| I elect to take inhibitor prescri | the antiretroviral drugs Combivir and/orbed later. I certify that none of the Exclusion Criter | I m I m | nay have a protease |
|-----------------------------------|---|---------|---------------------|
| | Employee Signature | Date | |
| | Clinician Signature | Date | |
| I elect not to tal | ke antiretroviral drugs. | | |
| | Employee Signature | Date | |
| | Clinician Signature | Date | |

Employee Health Services Exposure Medical Directive: HIV Exposure

CDC Post-Exposure Hotline (1-888-448-4911)

Policy: Employees exposed to blood/body fluid of positive HIV source or source employee whose HIV status is unknown will be offered prophylaxis treatment recommended by CDC Guidelines. Employee Health Services verifies most recent CDC Guidelines for medical treatment for positive HIV exposures at least annually. Pharmacists or EHS Medical Providers may verify the most recent medical treatment by calling the above CDC Hotline number at any time. Based upon the most recent CDC Guidelines of February 21,2007, the following prophylaxis medical treatment will be offered.

| Employee Information | □ Basic Regimen |
|--|--|
| Name: Date of Birth: Address: Home Phone: | 1 po twice a day Dispense #14 3 refills Truvada 1 daily #7 3 refills |
| Allergies: | Terms |
| Medications as listed above are indicated for be | oth treatment and post-exposure prophylaxis. |
| EHS Medical Provider Printed Name | - |
| EHS Medical Provider Signature | Date |
| Dispensing Pharmacist | Date Initially Dispensed |

Pharmacist: Upon dispensing the initial supply of medication, please fax this form to Employee Health

Services 483-4022.