

Polk County Bloodborne Pathogen Policy

BLOODBORNE PATHOGEN AND OTHER POTENTIALLY INFECTIOUS MATERIAL CONTROL AND EXPOSURE POLICY

I. PURPOSE

To meet the standards of the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens Standard, 29 CFR 1910.1030, and to eliminate or minimize employee occupational exposure to blood, certain other body fluids, or other potentially infectious materials (OPIM) as defined below and to provide the most expeditious assessment and treatment of employees potentially experiencing an exposure:

Blood means human blood, human blood components, and products made from human blood.

Bodily fluids means semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Other potentially infectious materials (OPIM) means any unfixed tissue or organ (other than intact skin) from a human (living or dead), and human immunodeficiency virus (HIV)-containing cell or tissue cultures, organ cultures, and HIV- or hepatitis B virus (HBV)-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

II. APPLICABILITY

This policy applies to all Polk County employees who have the potential for exposure to blood, bodily fluids and other potentially infectious diseases in the course of conducting their job duties. This includes health care workers, emergency response, public safety personnel, and other workers who are deemed at risk. Bloodborne pathogen exposure risks include needle sticks, sharps injuries, mucus membrane, and open skin that have been exposed to blood or contaminated body fluids.

Departments with the potential for exposure to blood, bodily fluids and other potentially infectious diseases include the Health Department, Sheriff's Department, Medical Examiner, Community and Family Youth Services' Juvenile Detention and Youth Shelter Services,

General Services and any other Polk County employees who have been deemed by Polk County Risk Management, after consultation with the Human Resources.

III. BACKGROUND

To provide best practices in worker safety by identifying situations and job classifications in which employees may be exposed to blood or other potentially infectious materials, and to provide protection and risk reduction to these employees in the form of engineering controls, personal protective equipment, vaccinations and protocols for exposures.

IV. ASSIGNMENT OF RESPONSIBILITY

A. Management

Polk County will provide adequate controls and equipment that, when used properly, will minimize or eliminate risk of occupational exposure to blood or OPIM. These shall be provided at no cost to the employees. Department management staff will ensure proper adherence to this plan through periodic audits.

B. Program Administrator

Risk Management in collaboration with Human Resources shall manage the Bloodborne Pathogen and

OPIM Exposure Control Plan. The Polk County Health Department will work with Risk Management and Human Resources to provide an annual review of the policy and provide recommended best practice updates or suggested changes. Risk Management will ensure proper adherence to this plan through periodic audits and training opportunities.

C. Supervisors

Each department shall designate a supervisor and/or administrative staff to ensure employees are trained in and uses proper work practices, universal precautions, the use of personal protective equipment, and proper cleanup and disposal techniques and other risk reductions such as vaccinations and blood borne exposure protocols.

D. Employees

Employees are responsible for employing proper work practices, universal precautions, personal protective equipment and cleanup/disposal techniques as described in this plan. Employees are also responsible for reporting all exposure incidents to their Supervisor immediately.

E. Contractors

Contract employees shall be responsible for complying with this plan, and shall be provided the training described herein by the responsible person within the department.

V. EXPOSURE DETERMINATION

All job classifications and locations in which employees may be expected to incur occupational exposure to blood or OPMI, based on the nature of the job or collateral duties, regardless of frequency, shall be identified and evaluated by each affected department in conjunction with Risk Management and Human Resources. This list shall be updated as job classifications or work situations change. Exposure determination shall be made without regard to the use of personal protective equipment (**employees are considered to be exposed even if they wear personal protective equipment**).

A. Category I

Job classifications in which employees are exposed to blood or OPMI on a regular basis, and in which such exposures are considered normal course of work, fall into Category I.

The Department's assigned responsible staff shall maintain a list of these types of jobs and the locations in which the work will be performed. **See Category I - Job Classification/Expected Exposure List, Appendix A.**

B. Category II

Job classifications in which employees may have an occasional exposure to blood or OPMI, and in which such exposures occur only during certain tasks or procedures that are collateral to the normal job duties, fall into Category II. The Department's assigned responsible staff shall maintain a list of these types of jobs and the locations in which the work may be performed. **See Category II - Job Classification/Expected Exposure List, Appendix B.**

Copies of Category I and II lists should be maintained by the affected Department and shared with the appropriate management/supervisory or other staff assigned to ensuring employee safety. Departments should provide copies of current Category I and II lists to Risk Management and Human Resources.

VI. IMPLEMENTATION SCHEDULE AND METHODOLOGY

Compliance Methods include:

Universal precautions

Universal precautions shall be used at Polk County to prevent contact with blood or OPIM. All blood or OPIM shall be considered infectious, regardless of the perceived status of the source individual.

Engineering Controls

The engineering and work practice controls listed below shall be used to minimize or eliminate exposure to employees at Polk County.

- a) **Hand washing** - Hand washing facilities shall be made available to employees who incur exposure to blood or OPIM. If hand washing facilities are not feasible, antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes will be made available to employees. If these alternatives are used, the hands are to be washed with soap and running water as soon as feasible.
- i. Hand sanitizer and dispensers will be made available in departments that are at risk for exposure to blood or OPIM. It is the department's responsibility to place the sanitizer and dispensers strategically within the department where hand washing facilities are not easily available.
 - ii. Facility maintenance staff will ensure that hand sanitizer dispensers are working properly and have adequate sanitizer to dispense. In the case of the dispensers not working properly it is staffs responsibility to inform the maintenance staff.
 - iii. Portable hand sanitizer, clean cloth, paper towels or antiseptic towelettes will be placed in county vehicles driven by staff that are at risk for exposure to blood or OPIM.
 - iv. It is the responsibility of the employee to ensure proper use of hand sanitizer if a hand washing facility is not readily available.
 - v. Employees will follow established timeframes for hand washing as outlined:
 1. Before, during, and after preparing food, and before eating
 2. After using the toilet
 3. After changing diapers or cleaning a person who has used the toilet
 4. Before *and* after patient care or caring for someone who is sick
 5. After removing personal protective equipment (PPE)
 6. After blowing nose, coughing, or sneezing
 7. After touching hazardous waste
 8. Before and after treating a cut or wound
 9. After contact with another person's bodily fluids or feces

If an employee incurs exposure to their skin or mucous membranes, those areas shall be flushed with water as soon as possible.

b) **Sharps containers** shall be:

- i. closable, puncture resistant, and leak proof;
- ii. appropriately labeled with a biohazard label and color-coded;
- iii. designed with an opening that is large enough to accommodate disposal of an entire blood collection assembly (i.e., blood tube holder and needle); and
- iv. easily accessible to the immediate area where sharps are used;
- v. easily portable if employees travel from one location to another; and
- vi. located anywhere that sharp objects will be used including but not limited to outreach activities in the community, clinic rooms, vehicles when it is possible that sharp objects will need to be disposed.

Sharps containers shall not be:

- i. reused;
- ii. filled over the fill line; and
- iii. opened manually or in any other manner.

Disposal of sharps containers will be arranged by each department with a biohazard hauler. Polk County General Services is not responsible for pick up of sharps containers.

c) **Contaminated needles and other sharps** shall not be bent, manually recapped, removed, sheared, or purposely broken. Contaminated sharps shall be placed immediately, or as soon as possible, after use into appropriate sharps containers.

At Polk County, the following procedure(s) requires a contaminated needle to be recapped or removed only when using the mechanical safety shield needle device. This method requires a one-handed scoop technique, and no alternative is feasible. The Mechanical Safety Shield Device Method is as follows:

- i. After performing venipuncture engage pink safety shield with thumb on the thumb pad.
- ii. Flip the shield over the needle so that it is capped.
- iii. Dispose of all used materials in appropriate biohazard container.

d) **Annual review of sharps device data** – Each August, all applicable departments shall review sharps device data during safety or infection control-related meetings with documentation in minutes. If no injuries have occurred with a particular device or injury rates are reduced, it may be determined that a review is not needed. If needed, the review will include:

- i. Assessment of the nature and circumstances of sharps-related injuries to determine if the injury is from the device or perhaps some other issue like overfilled disposal containers that needs to be addressed.
- ii. If there is an increase in injuries from a specific device and all the injuries occur during activation of the safety mechanism, it might indicate the need to evaluate a different device.

e) **Specimens** - Blood or other potentially infectious material specimen guidelines:

- i. Place specimens in a container that will prevent leakage during the collection, handling, processing, storage, and transport of the specimen.
- ii. Any specimens that could puncture a primary container shall be placed within a secondary puncture-resistant container.
- iii. If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container that will prevent leakage during handling, processing, storage, transport, or shipping of the specimen.

f) **Contaminated Equipment and Facility** - Departments will designate responsible staff to ensure that equipment that has become contaminated with blood or other potentially infectious materials is examined prior to servicing or shipping. Contaminated equipment shall be decontaminated, unless decontamination is not feasible. Contaminated equipment shall be tagged and labeled as such.

Facilities shall be cleaned and decontaminated regularly and as needed to prevent exposure of blood or OPIM or in the event of a gross contamination. All contaminated work surfaces; bins, pails, cans, and similar receptacles shall be inspected and decontaminated regularly.

Each Department with potential for bloodborne or OPIM contamination will maintain a schedule describing the work areas that should be decontaminated, decontamination frequency and method, and required types of cleaning. **See Cleaning and Decontamination Schedule, Appendix C.**

Departments will provide a copy of the Cleaning and Decontamination Schedule to General Services.

g) **Personal Protective Equipment (PPE)**

Each department shall ensure that the provisions regarding personal protective equipment described in this plan and the Polk County Fit Testing Policy are met to ensure employees use appropriate and fitted PPE.

Each department will designate a responsible administrative staff or supervisor to ensure that appropriate PPE in the necessary sizes is readily accessible at the work site or is issued to staff at risk as well as the repair, replacement, cleaning, laundering and disposal of PPE. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

Personal protective equipment shall be chosen based on the anticipated exposure to blood or OPIM. Each department will identify the appropriate PPE based on their employee risk factors. PPE shall be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach an employees' clothing, skin, eyes, mouth, or other mucous membranes under normal and proper conditions of use and for the duration of time that the equipment will be used.

Each Department will keep a current PPE task list of job classifications and their task or procedure that requires PPE as well as the specific PPE to be used and the staff person issuing said PPE. See Personal Protective Equipment/Task List, Appendix D.

Copies of Category I and II lists should be maintained by the affected Department and shared with the appropriate management/supervisory or other staff assigned to ensuring employee safety. Departments should provide copies of current Category I and II lists to Risk Management and Human Resources.

Types of PPE utilized by Polk County include:

i. Gloves

1. **Disposable gloves** are not to be washed or decontaminated for re-use, and are to be replaced as soon as possible when they become contaminated. Gloves that become torn or punctured (or their ability to function as a barrier is otherwise compromised) shall be replaced immediately or as soon as feasible.

It is critical that disposable gloves are removed without having the contaminated glove touch bare skin. Proper disposable glove removal is one component of universal health precautions that will help avoid infection in personal or professional settings. **Assume that all blood, mucus, urine and feces contain an infectious agent---this will ensure that every necessary precaution is taken.**

- Pinch the lower palm of one contaminated glove with the gloved fingers of your other hand, and pull it toward your fingertips so that it rolls off your hand with the inside facing outward. Do not remove it completely, though.
 - Pinch the lower palm of the other glove with the fingers of the partially-gloved hand, and pull it off completely by pulling it upward and inside-out. Do not dispose of this glove yet---hold it with the fingertips of your partially gloved hand.
 - Insert the thumb and forefinger of your bare hand between your wrist and the inside-out cuff of the partially-removed glove. Use caution to avoid touching the outside of the contaminated glove with your bare fingers.
 - Pull the glove toward your fingertips and then over the other contaminated glove.
 - Dispose of the gloves in a marked infectious waste container. Wash your hands immediately with soap and hot water.
2. **Utility gloves or Protective Search and Duty Gloves** may be decontaminated for re-use if the integrity of the glove is uncompromised and according to manufacture instructions. Utility or Protective Search and Duty gloves shall be disposed of properly if they are cracked; peeling, torn, punctured, or they exhibit other signs of deterioration or inability to function as a barrier without compromise.

ii. Eye and Face Protection

Masks worn in combination with eye protection devices (such as goggles or glasses with solid side shield, or chin-length face shields) are required when the occurrence of splashes, splatters, or droplets of blood or other potentially infectious materials can reasonably be anticipated to contaminate an employee's eye, nose, or mouth. Situations at Polk County where eye and face protection is required include:

1. All situations where a risk of splattering is present.
2. All situations where spraying of potentially infectious materials exists.

iii. Other PPE

Additional protective clothing (such as lab coats, gowns, aprons, clinic jackets, or similar outer garments) shall be worn in instances when gross contamination can reasonably be expected. The following situations require additional protective clothing:

1. While working in situations that produce a high risk for large amounts of potentially infectious material spill.
2. While handling laundry from an exposure;

All garments penetrated by blood or OPIM shall be removed immediately or as soon as feasible. All PPE shall be removed before leaving the work area.

When PPE is removed, it shall be placed in a red biohazard bag and notification to a laundry service of OPIM. Arrangements shall be made for laundering of contaminated garments and proper labeling for the laundry service.

h) **Polk County First Report of Injury Form** - After **any** potential blood or OPIM exposure, employees must immediately notify their Supervisor and complete a Polk County Incident Complaint form. The completed form must be turned into the employee supervisor and Risk Management. Risk Management will maintain blood or OPIM exposure logs for five years after the end of the log year.

i) **Work Area Restrictions** - In work areas where there is a reasonable risk of exposure to blood or OPIM, employees shall not:

- i. Eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses.
- ii. Food and beverages shall not be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials may be present.
- iii. Mouth pipetting or suctioning of blood or other potentially infectious materials is prohibited.

All processes and procedures shall be conducted in a manner that will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials.

j) **Engineering Controls Review** – Each August, the following schedule shall be followed to review the effectiveness of the engineering controls:

- i. Each control is to be reviewed annually by department designated supervisors or administrators;
- ii. Annual review of new equipment and/or technologies present at the workplace; and
- iii. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

3. Hepatitis B Virus

a) Background Information

Hepatitis B virus (HBV) is transferred through contact of contaminated blood, mucous membranes, or contaminated body fluids. Percutaneous injuries are among the most efficient modes of transmission. However, HBV can survive in dried blood at room temperature on environmental surfaces for at least 1 week. Therefore, healthcare providers (HCP) are at about a 10 X higher risk to acquire hepatitis B virus than the general public.

Blood is the most important vehicle of transmission in health-care settings of HBV, but Hepatitis B surface Antigen (HBsAg) is also found in several other body fluids including; breast milk, bile, cerebrospinal fluid, feces, nasopharyngeal washings, saliva, semen, sweat, and synovial fluid. The concentration of HBsAg in these body fluids is so low that these are not efficient vehicles of transmission but do pose a small risk for transmission.

Other body fluids are not infectious unless they contain blood. These fluids include the following; feces, nasal secretions, saliva, sputum, sweat, tears, urine, and vomitus. The risk of transmission from these fluids is extremely low.

In a laboratory setting, any direct contact to a concentrated virus is considered an exposure that requires medical evaluation. Human bites must also be considered as a transmission risk for both the person bitten and the person who inflicted the bite. Transmission of HBV has been rare by this route.

HBV infection is an occupational risk for health care workers, emergency personnel, public safety, and others occupational professions. The degree of risk depends on the degree of contact with blood and the Hepatitis B e Antigen (HBeAg) status of the source person. In studies, it has shown that the risk of acquiring HBV from a needle stick injury with a source who is HBsAg and HBeAg positive was **22%-31%** for clinical symptoms and **37%-62%** for serologic evidence of HBV infection.

b) Hepatitis B Prevention Vaccinations

"Engerix- B" (Hepatitis B Vaccine [Recombinant]) is a noninfectious Recombinant DNA Hepatitis B Vaccine. Clinical studies have shown that after three doses 96% of healthy adults have been seroprotected.

Persons with immune system abnormalities, such as dialysis patients, have less response to the vaccine, but over 67% of those receiving it do develop antibodies. If you have immune deficiency problems, you should obtain a written release from your physician.

TWINRIX® [Hepatitis A Inactivated & Hepatitis B (Recombinant) Vaccine] is a sterile bivalent vaccine containing the antigenic components used in producing HAVRIX® (Hepatitis A Vaccine, Inactivated) and ENGERIX-B® [Hepatitis B Vaccine (Recombinant)]. Clinical studies have shown that healthy adults, after three doses, found the following levels of protection against 99.9% v (Hep A) and 98.5% (Hep B) have been seroprotected.

Employees at risk for blood or OPMI exposure as part of their occupational duties will be offered Hepatitis vaccine (either Enegerix B or Twinrix {Hepatitis A Inactivated & Hepatitis (Recombinant) free of charge and administered by the Polk County Health Department.

Employees who have been identified by Risk Management with input from Human Resources as being at risk for exposure through their occupational duties, will start their hepatitis vaccination series during their employment physical unless they are detention officers or internal transfers who will schedule an appointment with the health department to start their vaccination series on their first day of employment.

Current employees who are at risk for exposure and have not received their Hepatitis vaccination will be given the opportunity to receive a vaccination at any time and administered by the Polk County Health Department free of charge.

If an employee declines vaccination or has a medical contraindication to hepatitis vaccine, said declination will be documented in the employee's medical record maintained at the Polk County Health

Department.

Employees who have previously received the complete hepatitis B vaccination series will provide a copy of their immunization record to the Polk County Health Department for filing in the employee medical file. If proof of immunization cannot be produced, the employee will be offered antibody testing for confirmation of immunity.

Employees declining the Hepatitis B vaccination, or who fail to complete the vaccination series, shall be required to sign and submit a declination statement for filing in their medical file. **See Appendix E.**

If the employee initially declines vaccination but at a later date decides to accept the vaccination, said vaccination will be made available at that time by the Polk County Health Department and free of charge.

c) Post-Exposure Prophylaxis (PEP) for HBV

Risk for Occupational Transmission of HBV

HBV infection is a well recognized occupational risk for HCP. The risk of HBV infection is primarily related to the degree of contact with blood in the work place and also to the hepatitis HB e antigen (HBeAg) status of the source person. In studies of HCP who sustained injuries from needles contaminated with blood containing HBV, the risk of developing clinical hepatitis if the blood was both hepatitis B surface antigen (HBsAg)-and HBeAg-positive was 22%--31%; the risk of developing serologic evidence of HBV infection was 37%--62%. By comparison, the risk of developing clinical hepatitis from a needle contaminated with HBsAg-positive, HBeAg-negative blood was 1%--6%, and the risk of developing serologic evidence of HBV infection, 23%--37% (26).

Although percutaneous injuries are among the most efficient modes of HBV transmission, these exposures probably account for only a minority of HBV infections among HCP. In several investigations of nosocomial hepatitis B outbreaks, most infected HCP could not recall an overt percutaneous injury, although in some studies, up to one third of infected HCP recalled caring for a patient who was HBsAg-positive. In addition, HBV has been demonstrated to survive in dried blood at room temperature on environmental surfaces for at least 1 week. Thus, HBV infections that occur in HCP with no history of non-occupational exposure or occupational percutaneous injury might have resulted from direct or indirect blood or body fluid exposures that inoculated HBV into cutaneous scratches, abrasions, burns, other lesions, or on mucosal surfaces. The potential for HBV transmission through contact with environmental surfaces has been demonstrated in investigations of HBV outbreaks among patients and staff of hemodialysis units.

In serologic studies conducted in the United States during the 1970s, HCP had a prevalence of HBV infection approximately 10 times higher than the general population. Because of the high risk of HBV infection among HCP, routine pre-exposure vaccination of HCP against hepatitis B and the use of standard precautions to prevent exposure to blood and other potentially infectious body fluids have been recommended since the early 1980s.

Recommendations for HBV post-exposure management include initiation of the hepatitis B vaccine series to any susceptible, unvaccinated person who sustains an occupational blood or body fluid exposure. Post-exposure prophylaxis (PEP) with hepatitis B immune globulin (HBIG) and/or hepatitis B vaccine series should be considered for occupational exposures after evaluation of the hepatitis B surface antigen status of the source and the vaccination and vaccine-response status of the exposed person. In the occupational setting multiple doses of Hepatitis B Immune Globulin (HBIG) should be initiated within 1 week following percutaneous exposure with known or suspected hepatitis B positive blood. This provides an estimated 75% protection from HBV infection. Although post exposure efficiency of the combination of HBIG and Hepatitis B vaccine series has not been evaluated in the occupational setting, the combination is used based on studies of increased combination efficacy in perinatal settings. There is no apparent risk for adverse effects to developing fetuses when hepatitis B vaccine is administered to pregnant women. Therefore, neither pregnancy nor lactation should be considered a contraindication to vaccination of women. HBIG is not contraindicated for pregnant or lactating women.

Hepatitis B immune globulin is not a vaccine. Therefore it will not provide long-term protection from hepatitis B.

The Polk County Health Department will maintain a stock of Hepatitis B Immune Globulin. Employees with a percutaneous exposure to HBsAG with known or suspected hepatitis positive blood should make an appointment with the health department within seven days of exposure to receive education, treatment and any applicable labs. When contacting the Health Department they should instruct medical receptionist that they have had an occupational exposure and need an appointment immediately.

4. Hepatitis C Virus

Risk for Occupational Transmission of HCV

Hepatitis C Virus (HCV) is not transmitted efficiently through occupational exposures to blood. The average incidence of anti-HCV seroconversion after accidental percutaneous exposure from an HCV-positive source is **1.8%**. Environmental exposure to dried blood with HCV is not a significant risk for transmission in the health-care setting.

Post-Exposure Prophylaxis for HCV

It has been concluded through multiple studies that using Immune Globulin (IG) as PEP for HCV was not supported due to the following facts:

- i. No protective antibody response has been identified following HCV infection.
- ii. Previous studies of IG used to prevent post transfusion non-A, non-B hepatitis may not be relevant in making recommendations regarding PEP for hepatitis C.
- iii. Experimental studies in chimpanzees failed to show that IG would prevent HCV transmission after an exposure.

Therefore, recommendations of post exposure management are intended to achieve early identification of chronic disease and, if present, referral for evaluation of treatment options.

Employees with a percutaneous exposure to HBsAG with known or suspected hepatitis positive blood should make an appointment with the Polk County health department within seven days of exposure to receive education and follow-up labs. When contacting the Health Department they should instruct medical receptionist that they have had an occupational exposure and need an appointment immediately

5. Human Immunodeficiency Virus

Risk for Occupational Transmission of HIV

Risk for occupational transmission of Human Immunodeficiency Virus (HIV) after a percutaneous exposure in HIV infected blood has been estimated at 0.3% and after a mucous membrane exposure 0.09%. Epidemiologic and laboratory studies have indicated that the following increase the transmission of HIV:

Larger quantity of blood from the source (visible blood on sharp).

Procedure involving a needle being placed directly in a vein or artery or a deep injury. Source person has terminal illness (higher titer of HIV in blood late in course of AIDS).

Post-Exposure Prophylaxis for HIV

The use of PEP should be decided on a case-by-case basis, considering the severity of the exposure and the epidemiologic likelihood of HIV exposure, Follow-up of exposed healthcare personnel—including post-exposure testing and monitoring of PEP toxicity—are also important. Post-exposure prophylaxis is antiretroviral drug treatment that is started immediately after someone is exposed to HIV. The aim is to allow a person's immune system a chance to provide protection against the virus and to prevent HIV from becoming established in someone's body. In order for post-exposure prophylaxis to have a chance of working the medication needs to be taken as soon as possible and definitely within 72 hours of exposure to HIV. Left any longer and it is thought that the effectiveness of the treatment is severely diminished. The use of prophylaxis antiretroviral medications is based on the following:

- Pathogenesis of HIV infection- information about primary HIV infection indicates that systemic infection does not occur immediately. This means there is a brief window of opportunity in which antiretroviral medications may modify or prevent viral replication and infection.
- ii. Biological plausibility that infection can be prevented or ameliorated by using antiretroviral drugs.
 - iii. Direct or indirect evidence of the efficacy of specific agents for prophylaxis-use of ZDV was associated with a reduction in the risk of HIV infection by approximately 81% in a retrospective case-control study. Therefore, if the incident poses high risk for transmission of human immunodeficiency virus, antiretroviral medications should be initiated immediately.

These medications should be taken twice a day for 4 weeks but may be discontinued if results of the source patient's testing come back negative for HIV.

The Polk County Health Department will keep on hand at least 2 doses of Hepatitis B Immune Globulin and enough for at least 3 days of Combivir treatment. Employees who are started on HIV PEP will be given a prescription for the medication, along with Corvel Rx card to be used at the pharmacy of their choosing. The employee should take the prescription directly to the pharmacy to ensure they have medication on hand after the initial pills have been taken. The ID card will allow the employee to receive the medications from the pharmacy without any out of pocket charges. All charges will be sent to Polk County Risk Management.

Those with occupational exposures to HIV should receive follow-up counseling, post exposure testing, and medical evaluations **regardless** of whether they receive PEP.

After initial baseline testing, when the exposure is suspected, follow-up tests should be performed at 6 weeks, 3 months, and 6 months after exposure. When workers are exposed to HIV, it's imperative to advise them of the importance of completing the prescribed regimen.

POST-EXPOSURE PROTOCOLS FOR POLK COUNTY EMPLOYEES:

1. Immediately wash exposure site with warm water and soap.
2. Report incident to manager right away.
 - i. Manager will send employee to the Polk County Health Department for history, physical exam, lab testing and if appropriate initiation of medication.
 - ii. Manager will report incident to risk management immediately upon receipt of information

Note: In order for post-exposure prophylaxis to have a chance of working the medication needs to be taken as soon as possible and definitely within 72 hours of exposure to HIV. Left any longer and it is thought that the effectiveness of the treatment is severely diminished. It is recommended that Polk County employees seek a medical assessment and prophylaxis antiretroviral medications, if appropriate, within 2 hours of exposure.

3. If the exposure occurs between the hours of **8am and 5pm Monday** through Friday or until 7:00pm Tuesday the Manager should **call the Polk County Health Department (286-3798 + 0)** and tell the person answering that a bloodborne incident occurred and they will be sending source/blood (if appropriate) and employee for appropriate care management.
(If no provider is on site, office staff will inform manager and ask that the employee be sent immediately to Mercy Emergency Department).
4. If exposure occurs **outside** of the Polk County Health Department's regular hours, employee and source blood (if an inmate) should be sent directly to Mercy Emergency Department. Employee should **call Mercy ER at 247-3211** while in route, ask to speak with the charge nurse, and tell the charge nurse that they are on their way and will need testing and treatment after a blood and/or body fluid exposure.
 - i. Employee should present at Mercy Medical Center with a copy of the following documents which are provided in the **Bloodborne Pathogen Packet** prepared by the

Polk County Health Department and located within each department deemed at risk for bloodborne and OPMI exposures. These documents should be presented by the employee to the Emergency Room check-in clerk and nurse:

- Bloodborne Protocol;
- Completed non-employee blood borne pathogen post exposure laboratory requisition form;
- Polk County Health Department records release form; and
- Report of exposure to infectious disease form.

- ii. If the employee needs a **Polk County Health Department advocate** to help instruct Mercy staff, the employee can contact PCHD during regular business hours at 286-3798 or they can call the PCHD on-call nurse anytime after regular business hours at 234-9477.

5. Sources (outside of a correctional institute) should be asked to voluntarily provide a blood sample. They can be directed to the Polk County Health Department the same day of the exposure or on the next regular work day for a blood draw and testing. Preferably, the source blood is obtained immediately following the incident for comparison with the exposed employee. Medications will be prescribed to the employee based on the results of the source blood.

If incident occurs at jail, detention center, or another location where health care is provided for the source, the blood should be drawn from the source on site and sent immediately to the Health Department for Mercy for lab testing. In this case the risk assessment and history of source should also be performed by on-site health care provider. **See Appendix F1.** If the source is an inmate that is refusing a blood draw, call your supervisor to obtain a court order.

6. An employee who presents to Mercy Medical Center should make a follow up appointment with the Nurse Practitioner at the Polk County Health Department on the next business day following the exposure. Call 286-3798 and inform the staff person that you need to make an appointment with the Nurse Practitioner for a blood and/or body fluid exposure for that day. The follow-up appointment will include pre and post test exposure education, medical evaluation including history, further lab testing as deemed appropriate, and physical examination (see attached forms). Employee will be scheduled for further follow up testing and care as needed based on the type of exposure, vaccination, immunity status, and treatment recommendations.

7. An employee experiencing a bloodborne exposure should complete the county Report of Exposure to Infectious Disease and turn it in to the appropriate supervisor to be forwarded to Risk Management.

See F, Bloodborne Pathogen Algorithm.

Polk County Board of Supervisor

Contact: Polk County Health Department
515-286-3759
Adopted: 11/1/11