

## POLK COUNTY

### 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) Blood borne Pathogens Standard, 29 CFR 1910.1030, and to eliminate or minimize employee occupational exposure to blood, other specific body fluids, and/or other potentially infectious materials (OPIM) as defined below and to provide the most expeditious assessment and treatment of employees potentially experiencing an exposure:

##### Definitions:

- A. Blood means human blood, human blood components, and products made from human blood.
- B. 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 or the presence of blood.
- C. 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.
- D. Universal Precautions means the protocols and procedures used to maintain an aseptic field and to prevent cross-contamination and cross-infection between health care providers, between health care providers and patients, and between patients. These include, but are not limited to, the sterilization of instruments and goods; the isolation and disinfection of the immediate clinical environment; the use of sterile disposables; scrubbing, masking, gowning, and gloving; and the proper disposal of contaminated waste.

#### II. APPLICABILITY

This policy applies to all Polk County employees who could be exposed 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. Blood borne pathogen exposure risks include needle sticks, sharps container 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 (PCHD), 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 at risk by Polk County Risk Management, after consultation with the Human Resources.

### **III. JUSTIFICATION**

To minimize risk to employees 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 for these employees in the form of engineering controls, personal protective equipment, vaccinations and protocols for potential 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, bodily fluids or OPIM. These controls and equipment shall be provided at no cost to the employees. Department management staff will ensure proper adherence to this plan through periodic training and audits.

#### **B. Program Administrator**

Risk Management in collaboration with Human Resources shall manage the Blood Borne 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 use proper work practices, universal precautions, use of personal protective equipment, and proper clean-up 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, and 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. Students**

Certified Medical Assistants, Phlebotomy, Registered Nurse, Nurse Practitioner , MD, DO and all medical students are responsible for following their own specific educational institutions Blood Borne Pathogen post exposure policies.

## F. 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.

- Agency Contracted employees to follow their agency policy for BBP exposure

## V. EXPOSURE DETERMINATION

All job classifications and locations in which employees may be expected to incur occupational exposure to blood, body fluids or OPIM, 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, bodily fluids or OPIM 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 OPIM, 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 appropriate 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:

### A. Universal precautions

Universal precautions shall be used at Polk County to prevent contact with blood, bodily fluids or OPIM. All blood, bodily fluids or OPIM shall be

considered infectious, regardless of the perceived status of the source individual.

## **B. Engineering Controls**

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

- 1) **Hand washing** - Hand washing facilities shall be made available to employees who incur exposure to blood, bodily fluids 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.
  - a. Hand sanitizer and dispensers will be made available in departments that are at risk for exposure to blood, bodily fluids 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.
  - b. Facility maintenance staff will ensure that hand sanitizer dispensers are working properly and have adequate sanitizer to dispense. In the event that dispensers are not working properly it is the responsibility of department staff to inform maintenance staff.
  - c. Portable hand sanitizer, clean cloths, paper towels or antiseptic towelettes will be placed in county vehicles driven by staff who are at risk for exposure to blood, bodily fluids or OPIM.
  - d. It is the responsibility of the employee to ensure proper use of hand sanitizer if a hand washing facility is not readily available.
  - e. 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
- 2) **Sharps containers** shall be:
  - a. closable, puncture resistant, and leak proof;
  - b. appropriately labeled with a biohazard label and color-coded;

- c. 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
- d. easily accessible to the immediate area where sharps are used;
- e. easily portable if employees travel from one location to another; containers must be covered in transit; and
- f. 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:

- a. reused;
- b. filled over the fill line; and
- c. 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.

3) **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:

- a. after performing venipuncture engage safety shield against hard surface as to not come in contact with body parts.
- b. flip the shield over the needle so that it is capped.
- c. dispose of all used materials in appropriate Sharps container.

4) **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 in the future or that intervals for future reviews can be extended. If needed, the review will include:

- a. 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.
- b. 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 use or evaluate a different device.

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

- a. Place specimens in a container that will prevent leakage during the collection, handling, processing, storage, and transport of the specimen.
- b. Any specimens that could puncture a primary container shall be placed within a secondary puncture-resistant container.
- c. 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.
- d. Specimens should be stored only in approved locations and never near food.

6) **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, including date of incident.

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 blood, bodily fluid 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 as requested.**

#### **7) 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 management 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, powder less 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, bodily fluids 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, bodily fluids or OPIM 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 with this policy 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.**

**The proper technique for removing disposable gloves includes:**

- 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.

**ii. Utility gloves or Protective Search and Duty Gloves** may be decontaminated for re-use if the integrity of the glove is uncompromised. Follow manufacturer's 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.

**iii. 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:

- a. All situations where a risk of splattering is present.
- b. All situations where spraying of potentially infectious materials exists.

**iv. Other PPE**

Additional protective clothing (such as lab coats, gowns, aprons, clinic jackets, scrubs 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, bodily fluids or OPIM shall be removed immediately or as soon as feasible. All PPE shall be removed before leaving the work area.

When other 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.

**8) Polk County Government On-the- Job Injury Report** - After any potential blood, bodily fluid or OPIM exposure, employees must immediately wash site with warm water and soap and notify their Supervisor and complete a POLK COUNTY GOVERNMENT EMPLOYEE ON-THE-



JOB INJURY REPORT form. The completed form must be turned into the employee's supervisor and Risk Management. Risk Management will maintain blood, bodily fluids or OPIM exposure logs for five years after the end of the log year.

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

- a. Eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses.
- b. 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.
- c. 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, bodily fluids or OPIM.

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

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

## **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 ten times 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.

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.

## **B) Preventative 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, after three doses, healthy adults have the following levels of protection: 99.9% v (Hep A) and 98.5% (Hep B).

Employees at risk for blood, bodily fluids or OPIM 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 if uninsured or billed to their insurance if insured 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, to be administered by PCHD staff free of charge in uninsured or billed to insurance if insured.

For any employee continuing the vaccination series, the responsibility for tracking of the employee's vaccination schedule and need for future vaccinations to complete the series lies with the manager of the department the employee is assigned.

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 PCHD. 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 for Declination of Hepatitis B Vaccination Form**

If the employee initially declines vaccination but at a later date decides to accept the vaccination, said vaccination will be made available PCHD and be free of charge.

Employees who have previously received the complete Hepatitis B vaccination series will provide a copy of their immunization record to PCHD 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.

#### **D) 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.

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 one 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 ten 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.

## **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.

## **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:

- i. Larger quantity of blood from the source (visible blood on sharp).
- ii. Procedure involving a needle being placed directly in a vein or artery or a deep injury.

- iii. Source person has terminal illness (higher titer 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. **The medication needs to be initiated ideally within 2 hours of exposure, but no later than 72 hours.** Effectiveness decreases as time from exposure increases. The use of prophylaxis antiretroviral medications is based on the following:

- i. 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 HIV, antiretroviral medications should be initiated immediately.

The employee should take the prescription directly to the pharmacy. 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 post –exposure prophylaxis (PEP).

After initial baseline testing, follow up testing will be done on a case- by - case basis as deemed appropriate by the Mercy Occupational Health. The treating provider at Mercy Occupational Health East will make follow-up recommendations to the employee and employee's immediate supervisor. Employee and supervisor are responsible to make sure follow up care is completed. When employees are exposed to HIV, it is imperative for the manager or supervisor to advise the employee of the importance of completing the prescribed regimen.

**POST-EXPOSURE PROTOCOLS FOR POLK COUNTY EMPLOYEES**  
(See Appendix F for Algorithm):

1. Immediately wash exposure site with warm water and soap.
2. Report incident to supervisor immediately and complete the online **Polk County Government On-The-Job Injury Report in RiskPro.**
3. **During normal working hours, initial exposure treatment will be completed by Mercy Occupational Health 2525 East Euclid Avenue Des Moines, Iowa or during non-normal working hours, Broadlawns Medical Center 1801 Hickman, Rd Des Moines.**
4. Exposed employee's Supervisor shall **call Mercy Occupational Health (515) 358-5951 or Broadlawns Medical Center (515) 282-2200** while employee is in route and inform them that they are sending a Polk County employee (and source blood, if applicable) who has had a blood borne exposure and will need testing and treatment.
5. The Polk County Medical Examiners Office is willing to assist in obtaining specimens for exposures involving Polk County Employees. These draws can take place at the juvenile center (must have parental consent and/or court order), at the jail (court order draws only), and at patrol headquarters (court order and/or consenting individual). The supplies to complete these draws will be provided by Risk Management. The Medical Examiner's Office will only obtain the specimen as requested in the above stated situations- paperwork and specimen delivery to testing location is to be done by the department that requests the Medical Examiner's assistance. Polk County will assume all liability for any incidents or legal recourse involving Medical Examiner staff. Contact Polk County Dispatch at 515-286-3334 and ask to talk to the on duty Medical Examiner.
  - i. The employee shall check in with the charge nurse at **Broadlawns Medical Center** with the following documents found in the BBP Packet given to them by their supervisor. This packet is the **Blood borne Pathogen Packet which will be** prepared by the **Polk County Risk Management** and located within each department deemed at risk for blood, bodily fluid and OPIM exposures. **Please notify Polk County Risk Management 286-3603 if you are in need of additional packets. These packets will be sent inner office to the requested location.** These documents should be presented by the employee to the **Broadlawns Medical Center** check-in clerk and nurse:
    - Blood borne Protocol (for Employee)
    - Expectations After an Exposure (for Employee)
    - Blood Borne Pathogen Risk Form (Mercy fills out with Employee)
    - Polk County Release of Information Form (Mercy fills out with Employee)

- Polk County Blood Borne Pathogen Post-Exposure lab request for source and exposed persons

All forms should be filled out completely and then faxed to Mercy Occupational Health Clinic at 515-261-3301 immediately after the visit to the attention of Mercy Occupational Health.

### **Non-Polk County Employees (source)**

#### **Location: Jail, Detention Center or another location where health care is provided**

- Blood draw should be taken from source on site and sent immediately to **Broadlawns Medical Center** along with completed Polk County BBP Post Exposure Laboratory sheet
- Source blood should consist of one gold top labeled tube full for lab testing
- BBP risk form should be completed on site by health care provider and faxed to Mercy Occupational Health Clinic at 515-261-3301.
- If the source is an inmate that is refusing a blood draw, supervisor should call the appropriate authority to obtain a court order
- **\*Medical examiner's office will draw source at Juvenile detention and all sources with court orders from the jail. (515)-286-3334 is where dispatch will contact Medical Examiner.**

#### **Location NOT where health care is provided**

6. **Sources** (outside of a correctional institute) should be asked by the supervisor to voluntarily provide a blood sample. Supervisor should call Mercy Occupational Health Clinic, during regular working hours (7 a.m. to 4 p.m.). The Medical Examiner if needed would be called to draw one gold cap tube of blood from the source .

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Polk County Board of Supervisor

Contact: Polk County Risk Management  
515-286-3210  
Adopted: 11/1/11

**Appendix A**

**Category I Job Classification/Expected Exposure List**  
**DEPARTMENT NAME**

*Date*

| At <u>Department</u> , the following job classifications are expected to incur occupational exposure to blood or other possibly infectious materials: |                     |
|---|---------------------|
| Job Classification  | Department/Location |
| Nurse   |                     |
| Nursing assistant   |                     |
| Doctor  |                     |
| Janitorial Staff  |                     |
| Nurse Practitioner/Physician Assistant  |                     |
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## Appendix B

### Category II Job Classification/Possible Exposure List

DEPARTMENT NAME

Date

| At <u>Company Name</u> , the following job classifications may incur occupational exposure to blood or other possibly infectious materials during certain tasks or procedures: |  |                     |
|--|--|---------------------|
| Job Classification   | Task/Procedure   | Department/Location |
| Administrative Staff   | Assisting in cleaning up blood spills  |                     |
| Janitorial Staff   | Assisting in cleaning up blood spills  |                     |
| First Responders   | Responding to medical emergency in a non-healthcare environment                  |                     |
| Nurse, nurse practitioner, physician assistant, physician, certified medical assistant   | Injections, genital exams, wound care and assessment, blood/body fluids handling |                     |
| Medical Examiners Office   | Handling blood/bodily fluids   |                     |
|  |  |                     |
|  |  |                     |
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|  |  |                     |
|  |  |                     |





**Appendix E**  
**Polk County**

**HEPATITIS B IMMUNIZATION  
CONSENT OR REFUSAL**

|                              |            |
|------------------------------|------------|
|                              |            |
| Employee Name (please PRINT) | Department |

I have read the information about Hepatitis B and the Hepatitis B vaccine that is outlined on the back of this form. I have had an opportunity to ask question of a qualified nurse or physician and understand the benefits and risks of Hepatitis B vaccination. I understand that I must have 3 doses of the vaccine to obtain immunity. However, as with all medical treatment, there is no guarantee that I will become immune or that I will not experience side effects from the vaccine.

**CONSENT TO HEPATITIS B VACCINATION**

|  |             |
|--|-------------|
|  |             |
| Signature of person to receive vaccine | Date signed |
|  |             |
| Witness                                | Date signed |

|   | Date Vaccinated | Lot No. | Site | Administered By |
|---|-----------------|---------|------|-----------------|
| 1 |                 |         |      |                 |
| 2 |                 |         |      |                 |
| 3 |                 |         |      |                 |

**REFUSAL OF HEPATITIS B VACCINE**

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccination, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination at no charge to me.

|      |                       |
|------|-----------------------|
|      |                       |
| Date | Signature of Employee |
|      |                       |
| Date | Signature of Witness  |

## **INFORMATION ABOUT HEPATITIS B VACCINATION**

### The Disease

Hepatitis B is a viral infection caused by Hepatitis B virus (HBV) which causes death in 1-2% of patients. Most people with Hepatitis B recover completely but approximately 5 - 10% become chronic carriers of the virus. Most of these people have no symptoms but can continue to transmit the disease to others. Some may develop chronic active hepatitis and cirrhosis. HBV may be a causative factor in the development of liver cancer. Immunization against the Hepatitis B virus can prevent acute hepatitis and its complications.

### **The Vaccine**

Hepatitis B vaccine is produced from yeast cells. It has been extensively tested for safety and effectiveness in large scale clinical trials.

Approximately 90 percent of healthy people who receive two doses of vaccine and a third dose as a booster achieve high levels of surface antibody (anti-HB's) and protection against Hepatitis B virus. Hepatitis B vaccine is recommended for workers with potential for contact blood or body fluids. Full immunization requires 3 doses of vaccine over a six month period, although some persons may not develop immunity even after 3 doses.

There is no evidence that the vaccine has ever caused Hepatitis B. However, persons who have been infected with HBV prior to receiving the vaccination may go on to develop clinical hepatitis in spite of immunization.

### **Dosage and Administration**

The Hepatitis B vaccine is given in three intramuscular doses in the deltoid muscle. Two initial doses are given one month apart and the third dose is given six months after the first.

### **Possible Vaccine Side Effects**

The incidence of side effects is very low. No serious side effects have been reported with the vaccine. Ten to 20 percent of persons experience tenderness and redness at the site of the injection and low grade fever. Rarely, rash, nausea, joint pain and mild fatigue have been reported. The possibility exists that other side effects may be identified with more extensive use.

## **Employee Expectations after an Exposure**

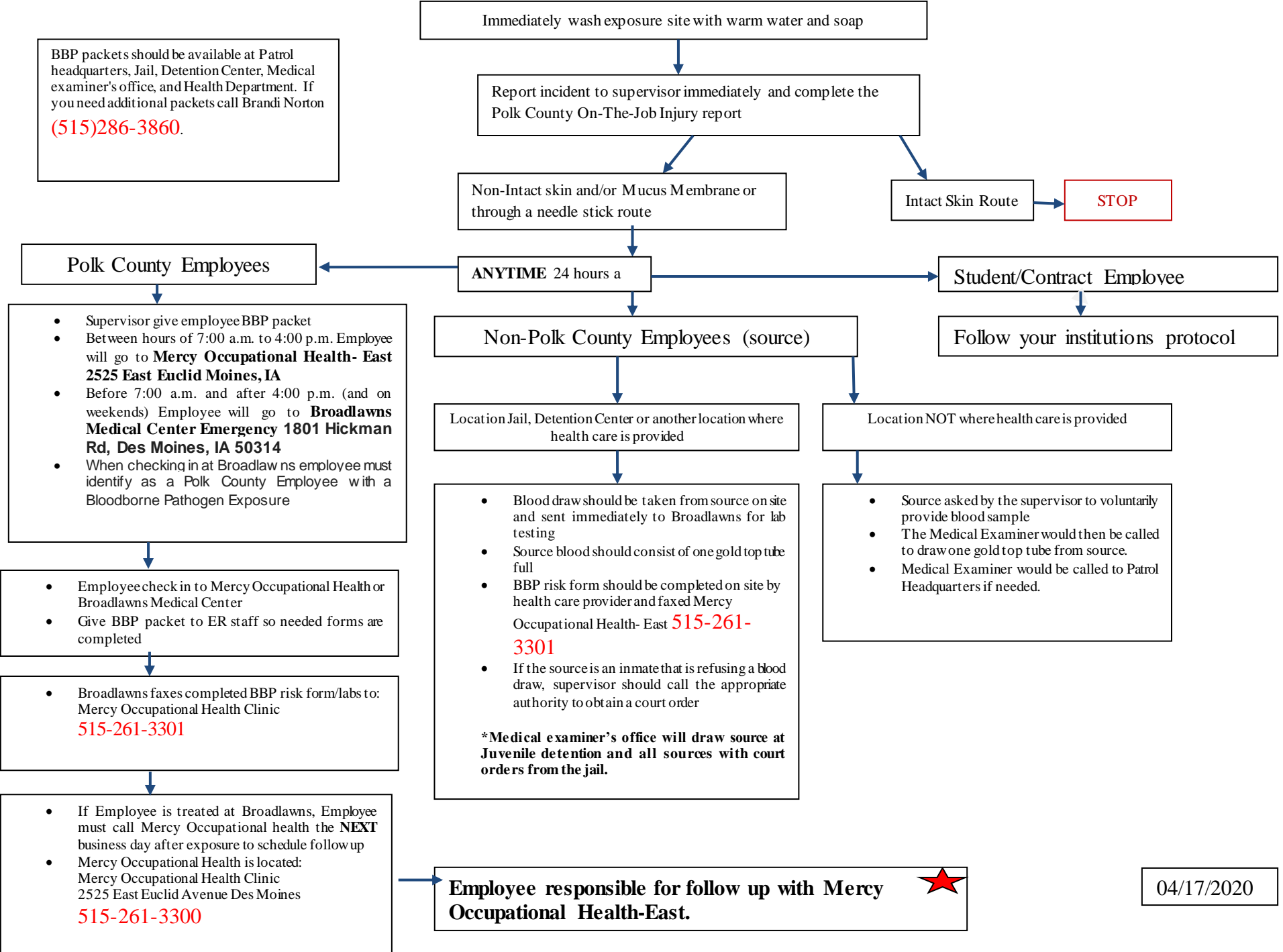
1. Your blood will be tested for HIV, Syphilis, Hepatitis B and C.
2. The source blood will be requested to test for HIV, Syphilis, Hepatitis B and C.
3. Preliminary HIV results may be given to you the same day. If sample needs confirmatory testing, this must be sent to an outside laboratory.
4. Hepatitis results will be available within a few days after being seen at the post-exposure treatment facility.
5. You will follow up with the Medical Providers at Mercy Occupational Health Clinic at specified times depending on need for Hepatitis vaccinations, treatment and further testing.
6. You should be escorted to a patient room rather than waiting in the waiting room in a reasonable amount of time.

## **Polk County Expectations of Employee after an Exposure**

1. You will be courteous to staff at the post-exposure treatment facility.
2. You will calmly explain why you are presenting to the post-exposure treatment facility.
3. You will review information given to you.
4. You will make an appointment with Mercy Occupational Health Clinic East the next business day after being seen at the post-exposure facility.
5. You will make and keep all follow up visit appointments as directed by the medical provider.

## Appendix F

### BLOODBORNE PATHOGEN (BBP) POST EXPOSURE ALGORITHM FOR POLK COUNTY EMPLOYEES



BBP packets should be available at Patrol headquarters, Jail, Detention Center, Medical examiner's office, and Health Department. If you need additional packets call Brandi Norton (515)286-3860.

**STOP**

**Employee responsible for follow up with Mercy Occupational Health-East.**

04/17/2020

**Mercy Occupational Health Clinic  
Blood Borne Pathogen  
PostExposure  
Laboratory Test Request  
for Source and Exposed Persons**

Name: \_\_\_\_\_ Gender: \_\_\_\_\_ SSN: \_\_\_\_\_  
Date of Birth: \_\_\_\_\_  
Date and Time of Specimen: \_\_\_\_\_  
Employer Name: \_\_\_Polk County\_\_\_\_\_ Employer Phone Number: \_\_\_515-286-3860

**Donor/Source Orders**

Admit and Client bill to **7752 Mercy Occupational Health**

**Ordering Provider:** \_Jeff Henson\_\_\_\_\_

Draw One (1) 5 ml Gold Top Tube  
139 HIV 1&2 **STAT** Comment: **Call STAT HIV** to \_\_\_\_\_515-261-3300\_\_\_\_\_

190 Hepatitis B Surface Antigen  
175 Hepatitis C Antibody  
590 Treponemal Antibodies IgG/IgM

**Exposed Person Orders** Lab to order using ER Financial Number

***Affix Patient Label Here***

***Exposed Person's Contact Number:*** \_\_\_\_\_

**an leave a message at this number**

Draw One (1) 5 ml Gold Top Tube  
Collect Urine for Female Exposed Person ONLY  
139 HIV 1&2  
172 Hepatitis B Surface Antibody Qual and Quant  
175 Hepatitis C Antibody





**COUNTY OF POLK**  
**Risk Management**  
[Risk.management@polkcountyowa.gov](mailto:Risk.management@polkcountyowa.gov)

Bob Cataldo, Risk Manager  
 Brandi Norton  
 111 Court Avenue, Suite 372  
 Des Moines, Iowa 50309

Phone- 515.286.3860  
 Fax- 515.323.5318

Bloodborne Pathogen Risk Form

|               |  |
|---------------|--|
| NAME          |  |
| DATE OF BIRTH |  |
| PHONE NUMBER  |  |

1. Have you received the Hepatitis B Vaccine series before? YES NO Where?\_\_\_\_\_

2. Do you have a history of Hepatitis B viral disease? YES NO

3. Do you have a history of Hepatitis C viral disease? YES NO

4. Have you ever been tested for HIV before? YES NO (if NO, skip to #5)

If YES: Where?\_\_\_\_\_ When?\_\_\_\_\_ Results?\_\_\_\_\_

If HIV positive:

Who is your physician?\_\_\_\_\_

What is your viral load? \_\_\_\_\_

What is your CD4 count?\_\_\_\_\_

Antiretroviral medications you take?\_\_\_\_\_

Antiretroviral resistance?\_\_\_\_\_

5. Medical Diagnosis you have:\_\_\_\_\_

6. Symptoms:

- |  |     |    |
|--|-----|----|
| Abdominal cramps, nausea, vomiting               | YES | NO |
| Diarrhea   | YES | NO |
| Enlarged lymph nodes in neck, armpits, and groin | YES | NO |
| Fever  | YES | NO |
| Headache   | YES | NO |
| Muscle and joint pain                            | YES | NO |
| Skin Rash  | YES | NO |
| Sore Throat                                      | YES | NO |
| Weight loss                                      | YES | NO |

7. Risk Factors:

- |   |     |    |
|---|-----|----|
| Have you ever had a blood transfusion?  | YES | NO |
| Have you ever had sex with a person who has had a blood transfusion?                | YES | NO |
| Have you ever used injection drugs?   | YES | NO |
| Have you ever shared drug injection equipment?                                      | YES | NO |
| Have you had vaginal or anal sex with someone HIV positive?                         | YES | NO |
| Have you had vaginal or anal sex with a male having sex with a male?                | YES | NO |
| Have you had vaginal or anal sex while intoxicated or high on drugs?                | YES | NO |
| Have you ever exchanged sex for drugs or money?                                     | YES | NO |
| Have you had vaginal or anal sex with someone who exchanges sex for drugs or money? | YES | NO |
| NO  |     |    |
| Have you received a tattoo?   | YES | NO |