Bloodborne pathogen exposure control plan

Adapted from the Western Kentucky University Industrial Hygiene Student Association *Sample Bloodborne Pathogens Exposure Control Plan*.

This sample plan is provided only as a guide to assist in complying with the OSHA bloodborne pathogens standard *29 CFR 1910.1030*, as adopted by *803 KAR 2:320*. It is not intended to supersede the requirements detailed in the standard. Employers should review the standard for particular requirements which are applicable to their situation. It should be noted that this model program does not include provisions for HIV/HBV laboratories and research facilities which are addressed in *Section (A)* of the standard. Employers will need to add information relevant to their particular facility in order to develop an effective, comprehensive exposure control plan. Employers should note that the exposure control plan is expected to be reviewed at least on an annual basis and updated when necessary.

Facility name: _____

Facility address: _____

Date of preparation: _____

Signature of provider/designee who prepared the plan: _____

Annual review date(s): _____, _____, _____, _____
or see annual safety training sign-in sheets for review dates

1. Exposure determination

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (for example, employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications, full and part time and per diem, in which all employees may be expected to incur such occupational exposure, regardless of frequency.

At this facility the following employees **will** have occupational exposure determination:

☐ Physicians
☐ Physician assistants
☐ Nurses, including nurse practitioners, nurse midwives, or other mid-level practitioners
☐ Laboratory technicians
☐ Medical assistants
☐ Other: _____

OSHA requires employers who have employees with occupational exposure to bloodborne pathogens to consider and, where appropriate, use effective engineering controls, including safer medical devices, such as sharps with engineered sharps injury protections and needleless systems, in order to reduce the risk of injury from needlesticks and from other sharp medical instruments

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks, or procedures that would cause these employees to have occupational exposure are also required to be listed to clearly understand which employees in these categories are considered to have occupational exposure.

The following employees **may** have occupational exposure determination:

☐ Housekeeping staff
☐ Administrative/clerical staff
☐ Receptionists
☐ Other: _____

The following procedures usually performed in our office involve a potential risk of occupational exposure to blood or other potentially infectious materials:

☐ Patient examinations
☐ Burn treatment and dressing
☐ Wound treatment and dressing
☐ Cerumen removal
☐ Foreign body removal (for example, ear, nose, skin)
☐ I&D abscess
☐ Laceration repair
☐ Hematoma, subungual
☐ Spinal lumbar puncture
☐ Venipuncture
☐ Injection (for example, antibiotic, adrenalin, etc.)
☐ Laboratory procedures (PKU specimen, hematocrit, sed rate, etc.)
☐ Immunizations
☐ Changing diapers where the presence of blood is visible or suspected
☐ Other: _____

2. Implementation schedule and methodology

OSHA requires that this plan includes a schedule and method of implementation for the various requirements of the standard. The following complies with this requirement:

Compliance methods
Universal precautions will be observed at this facility, to prevent contact with blood or other potentially infectious material that will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains a risk after institution of these controls, personal protective equipment shall also be utilized. At this facility the following engineering controls will be utilized:

☐ Sharps disposal containers
☐ Engineered sharps injury protection (ESIP) devices (self-sheathing needles, sharps safety needles/syringes, lancets, etc.)
☐ Other: _____

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows:

☐ The effectiveness of the controls will be examined/monitored daily
☐ The effectiveness of the controls will be examined/monitored weekly
☐ The effectiveness of the controls will be examined/monitored (please specify): _____

The individual who has the responsibility to review the effectiveness of the individual controls is as follows:

☐ Office manager
☐ Medical assistant
☐ Nurse practitioner/physician assistant
☐ Other: _____

Identification of the need for changes in engineering controls and work practices is made by review of OSHA records, employee interviews, and/or staff or committee activities. Both front line workers and management staff are involved in this process. Evaluation of new procedures and/or new products may be completed as necessary or as indicated based on current need.

Sharps with Engineered Sharps Injury Protections (ESIP) include non-needle sharps or needle devices containing built-in safety features that are used for collecting fluids, administering medications or other fluids, or other procedures involving the risk of sharps injury. This description covers a broad array of devices, including:

- syringes with a sliding sheath that shields the attached needle after use;
- needles that retract into a syringe after use;
- shielded or retracting catheters or scalpels;

- intravenous medication (IV) delivery systems that use a catheter port with a needle housed in a protective covering.

Needleless Systems is defined as devices that provide an alternative to needles for various procedures to reduce the risk of injury involving contaminated sharps. Examples include:

- IV medication systems which administer medication or fluids through a catheter port using non-needle connections; and
- jet injection systems that deliver liquid medication beneath the skin or through a muscle.

Use of Non-ESIP Devices: The following procedure(s) is/are performed at this facility that require the use of needle systems without ESIP in accordance with CCR, 8 Section 5193 (enter "N/A" if not applicable):

_____
_____

The rationale as to why ESIP devices cannot be use:

_____
_____

Exposure protection methods and PPE availability when using non-ESIP devices:

_____
_____

The procedure(s) meet one or more exceptions listed below and is reviewed/evaluated annually (skip if only ESIP devices are used on site):

☐ Market Availability: The engineering control is not required if it is not available in the marketplace.

Comment: _____

☐ Patient Safety: The engineering control is not required if a licensed healthcare professional directly involved in a patient's care determines, in the reasonable exercise of clinical judgment, that use of the engineering control will jeopardize the patient's safety or the success a medical, dental or nursing procedure involving the patient.

Comment: _____

☐ Safety Performance: The engineering control is not required if the employer can demonstrate by means of objective product evaluation criteria that the engineering control is not more effective in preventing exposure incidents than the alternative used by the employer.

Comment: _____

☐ Availability of Safety Performance Information: The engineering control is not required if the employer can demonstrate that reasonably specific and reliable information is not available on the safety performance of the engineering control for the employer's procedures, and that the employer is actively determining by means of objective product evaluation criteria whether use of the engineering control will reduce the risk of exposure incidents occurring in the employer's workplace.

Comment: _____

Handwashing facilities are also available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure.
Handwashing facilities are located:

☐ In each exam room
☐ Outside the exam room in hallway/alcove
☐ In nurses station/lab room in close proximity to patient care area
☐ Other: _____

If handwashing facilities are not feasible, the employer is required to provide either an antiseptic cleanser in conjunction with a clean cloth/paper towels or antiseptic towelettes. If these alternatives are used then the hands are to be washed with soap and running water as soon as feasibly possible. Employers who must provide alternatives to readily accessible handwashing facilities should list the locations, tasks, and responsibilities to ensure maintenance and accessibility of these alternatives. Alternative locations/tasks and responsibilities are as follows:

☐ N/A
☐ Other: _____

After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area **immediately** with soap and water.
If employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as appropriate as soon as feasibly possible following contact.

Needles
Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared, or purposely broken. Sharps means anything which can penetrate the skin including needles, scalpels, broken glass, broken capillary tubes, lancets, and exposed ends of dental wires. Shearing or breaking of contaminated sharps is prohibited. Bending, recapping, or removing contaminated sharps (such as contaminated needles) is also prohibited unless there is no feasible alternative or such action is required by the specific medical procedure. If removal or recapping is necessary, removal or recapping must be done either by one-handed scooping (passive recapping) or through a recapping device.

Disposal of sharps and reusable sharps
Since reusable sharps, such as large bore needles, scalpels, and saws pose the same percutaneous exposed hazard as disposable sharps, they must be contained in a manner that eliminates or minimizes the hazard until they are reprocessed. The container for disposing of reusables must meet the same standards as for disposable sharps. Sharps must be disposed as follows:

☐ Immediately or as soon as possible after use, all sharps must be placed in appropriate receptacles for reprocessing or disposal.
☐ Sharps must be located as close as possible to where sharps are used or can be reasonably anticipated to be found.
☐ Sharps containers must be maintained in an upright position throughout use, routinely replaced, and not allowed to overfill.
☐ Medical assistant/provider will check the containers daily to determine if the container needs to be replaced/emptied.
☐ For reusable sharps, a container system has been established which does not expose employees to the risk of percutaneous injury. No system involving the manual opening, emptying, or cleaning of the container is allowed.
☐ If the sharps container contains unwinders that separate needles from syringes, the employees will be trained about proper removal of needles.

The sharps containers are puncture resistant, labeled with a biohazardous label, and are leak proof. Sharps containers are located in the following places:

☐ Each exam room
☐ Nurses station
☐ Lab and/or blood draw station
☐ Triage/treatment room
☐ Other: _____

The following employee(s) have the responsibility for removing sharps from containers/replacing full containers and for checking the containers for need to empty/replace on a daily basis:

☐ Medical assistant
☐ Nurse practitioner/physician assistant
☐ Provider
☐ Lab technician
☐ Other: _____

Work area restrictions
In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Methods which will be employed at this facility to accomplish this goal are as follows:

☐ N/A
☐ Cover on centrifuge
☐ Use of dental dams
☐ Other: _____

Specimens
Specimens of blood or other potentially infectious materials will be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of the specimens.

The container used for this purpose will be labeled or color coded in accordance with the requirements of the OSHA standard.

Employers should note that the standard provides for an exemption for specimens from the labeling/color coding requirement of the standard provided that the facility utilizes universal precautions in the handling of all specimens and the containers are recognizable as containing specimens. This exemption applies only while the specimens remain in the facility. If the employer chooses to use this exemption, then it should be stated below:

☐ N/A
☐ Exemption: _____

Any specimens which could puncture a primary container will be placed within a secondary container which is puncture resistant. List here how this will be carried out, for example; which specimens, if any, could puncture a primary container, which containers can be used as a secondary container, and where the secondary containers are located at the facility.

☐ N/A
☐ Explanation: _____

If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

Contaminated equipment
Equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. List here any equipment which it is felt cannot be decontaminated prior to servicing.

☐ N/A

☐ List equipment:_____

Personal protective equipment
All personal protective equipment used at this facility will be provided without cost to employees. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

1. Disposable gloves: Employees must wear appropriate gloves when it can be reasonably anticipated that the employee may have contact with blood (for example, suturing, immunizations, etc.) and other potentially infectious materials and when handling or touching contaminated items or surfaces. Gloves shall be replaced if torn, punctured, contaminated, or deteriorated. Disposable gloves are located in:

   ☐ Exam rooms/treatment rooms
   ☐ Nurses station/lab area
   ☐ Blood draw station/room
   ☐ Other: _____

   Disposable gloves must be worn when performing the following procedures:

   ☐ Blood draws/venipunctures
   ☐ Performing blood testing (for example, hematocrit/hemoglobin etc.)
   ☐ Cleaning blood/potentially infectious material spills
   ☐ Cleaning dirty/contaminated instruments
   ☐ Pap smears/assist with pap smears
   ☐ Minor surgeries/suturing
   ☐ Any specimen handling
   ☐ Caring for isolation patients
   ☐ Other: _____

2. Utility gloves: Utility gloves (for example, housekeeping) may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration. Check utility gloves for cracks or other flaws as noted above and replace as necessary. Utility gloves are located:

☐ N/A
☐ With housekeeping supplies in housekeeping closet/cabinet
☐ Other: _____

Utility gloves will be worn when performing the following procedures:
☐ Housekeeping duties
☐ Cleaning toilets/sinks/floors, etc.
☐ Other: _____

3. Masks, eye protection, and face shields: Employees must wear masks, eye protection and/or face shields to protect the mucous membranes of the face and upper respiratory tract from droplet splattering. Minimum protection should consist of a mask in conjunction with eyeglasses (goggles) with side shields or a chin length face shield. Masks/eye protection and/or face shield will be worn when performing the following procedures:

☐ Washing contaminated/dirty instruments
☐ Other: _____

4. Protective clothing: Use of protective body clothing such as gowns, aprons, lab coats, clinic jackets, surgical caps, or shoe covers, and the degree to which such protective equipment must resist penetration, are performance based. The tasks and the type of exposure anticipated has been evaluated and based on the determination, the following appropriate personal protective clothing is required:

☐ Barrier proof gown
☐ Apron
☐ Lab coat
☐ Clinic coat
☐ Shoe cover
☐ Surgical cap
☐ Other: _____

The above noted items will be worn when performing the following procedures:
☐ When washing contaminated/dirty instruments
☐ Other: _____

All personal protective equipment will be cleaned, laundered, and/ or disposed of by the employer at no cost to the employees. All repairs and replacements will be made by the employer at no cost to employees.

All garments which are penetrated by blood shall be removed immediately or as soon as feasibly possible. All personal protective equipment will be removed prior to leaving the work area. The following protocol has been developed to facilitate leaving the equipment at the work area (list where employees are expected to place the personal protective equipment upon leaving the work area, and other protocols, etc.):

☐ All personal protective equipment is disposable and will be discarded in biohazardous waste in exam/treatment room.
☐ Other: _____

Housekeeping
Medical facilities must be maintained in a clean and sanitary condition. The facility will be cleaned and decontaminated according to the following schedule and/or as follows:

☐ Please see attached housekeeping schedule.
☐ Work surfaces will be decontaminated with an appropriate disinfectant after completion of procedures, immediately when overtly contaminated, after any spill of any blood or other potentially infectious materials, and at the end of the work shift when surfaces have become contaminated since the last cleaning.
☐ Protective coverings, such as plastic wrap, aluminum foil, or imperviously backed absorbent paper will be used to cover equipment and surfaces when they have become overtly contaminated and at the end of a work shift if they have become contaminated during the shift.
☐ Reusable receptacles, such as bins, pails, and cans that have a likelihood for becoming contaminated, will be inspected and decontaminated on a daily basis. When contamination is visible, receptacles will be cleaned and decontaminated immediately or as soon as is feasible.
☐ Broken glassware which may be contaminated will not be picked up directly with the hands. A dustpan broom will be used to sweep up the broken glass. The tools used in the cleanup of broken glass will be decontaminated or discarded after use and the broken glass will be placed in a sharps container. Vacuum cleaners are not appropriate for cleanup of contaminated broken glass.
☐ Sorting or rinsing of contaminated laundry will not be performed in patient care areas. Contaminated laundry will be placed and transported in bags or containers labeled in accordance with labeling requirements set forth in section *labeling*. In addition, laundry which is saturated will be placed in leak-proof bags.
☐ If the facility to which laundry is shipped does not utilize universal precautions, all bags or containers of contaminated laundry will be labeled or color coded. All employees who have contact with contaminated laundry will wear protective gloves and other appropriate personal protective devices.
☐ Laundry is sent off site for cleaning. The laundry service accepting the laundry is notified in accordance with *Section (D)* of the standard.

The following employee(s) have the responsibility for routine housekeeping duties:

☐ Medical assistant
☐ Housekeeping personnel
☐ Other: _____

Regulated waste disposal
Regulated waste requires special handling and will be placed in appropriate containers. Regulated waste includes the following:

- Liquid or semi-liquid blood or other potentially infectious material.
- Items contaminated with blood or other potentially infectious material that would release these substances in a liquid or semi-liquid state if compressed.
- Items that are caked with blood or other potentially infectious material and can release these materials during handling.
- Contaminated sharps.
- Pathologic and microbiological wastes containing blood or other potentially infectious material.

The containers into which regulated wastes is stored, transported, or shipped will be closable. The container will also be constructed to contain the waste and prevent leakage of its contents. If the waste could puncture the primary container, the primary container must be placed into a puncture resistant secondary container. If outside contamination of the primary container occurs, the primary container will also be placed within a second container which prevents leakage. For containment requirements of sharps see the section *disposal of sharps and contaminated sharps* above. Regulate waste other than sharps will be placed in appropriate containers lined with red bags.

These biohazardous waste containers are located:

☐ In each exam room
☐ Treatment room
☐ Lab draw station
☐ Nurse's station

Hepatitis B vaccine
All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine, at no cost to the employee. The vaccine will be offered within 10 working days of their initial assignment to work involving the potential for occupational exposure to blood or other potentially infectious materials unless the employee has previously had the vaccine or who wishes to submit to antibody testing which shows the employee to have sufficient immunity.

Employees who decline the Hepatitis B vaccine will sign a waiver which uses the wording in *Appendix A* of the OSHA standard.

Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost.

The following individual has responsibility for assuring that the vaccine is offered, the waivers are signed, the vaccine is administered, etc.

☐ Office manager
☐ Provider
☐ Name of person: _____

Post exposure evaluation and follow up
When the employee incurs an exposure incident, it should be reported to:
☐ Office manager
☐ Provider
☐ Administrator
☐ Name of person: _____

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard.

This follow-up will include the following:

- Documentation of the route of exposure and the circumstances related to the incident.
- If possible, the identification of the source individual and if possible, the status of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity.
- Results of testing of the source individual will be made available to the exposed employee with the exposed employee informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual. Employers may need to modify this provision in accordance with applicable local laws on this subject. Modifications should be listed here:

☐ N/A
☐ Explain modifications: _____

_____

- The employee will be offered the option of having their blood collected for testing of the employee HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted, then the appropriate action can be taken and the blood sample discarded. The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service. These recommendations are currently as follows (these recommendations are in the attached *Post exposure prophylaxis* appendix.):

- The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel. The following person(s) has been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy:

☐ Office manager
☐ Provider
☐ Administrator
☐ Name of person: _____

Interaction with health care professionals
A written opinion shall be obtained from the health care professional who evaluates employees of this facility. Written opinions will be obtained in the following instances:

- When the employee is sent to obtain the Hepatitis B vaccine.
- Whenever the employee is sent to a health care professional following an exposure incident.

Health care professionals shall be instructed to limit their opinions to:

- Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident.
- That the employee has been informed of the results of the evaluation, and;
- That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. (Note that the written opinion to the employer is not to reference any personal medical information).

Training
Training for all employees will be conducted prior to initial assignment to tasks where occupational exposure may occur. Training for employees will include the following an explanation of:

- The OSHA standard for bloodborne pathogens
- Epidemiology and symptomatology of bloodborne diseases
- Modes of transmission of bloodborne pathogens
- This Exposure Control Plan (for example, points of the plan, lines of responsibility, how the plan will be implemented, etc.)
- Procedures which might cause exposure to blood or other potentially infectious materials at this facility
- Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials
- Personal protective equipment available at this facility and who should be contacted concerning
- Post exposure evaluation and follow-up
- Signs and labels used at the facility
- Hepatitis B vaccine program at the facility

Recordkeeping
The following person/department is responsible for maintaining records:

☐ Office manager
☐ Physician
☐ Administration department
☐ Other _____

Dates
All provisions required by the standard will be implemented by:

☐ (Date for implementation of the provisions of the standard) _____
Training will be conducted using:
☐ Videotapes
☐ Written materials
☐ Inservice class instruction
☐ Other: _____
The following person will be responsible for ensuring training is completed or for conducting training:
☐ Nurse/nurse practitioner
☐ Physician assistant
☐ Physician
☐ Office manager/administrator
☐ Other: _____

All employees will receive annual refresher training. Note that this training is to be conducted within one year of the employee's previous training.

The outline for the training material is located (list where the training materials are located):

☐ Located in the FSR resource binder
☐ Located in the *Policy and Procedure Manual*
☐ Located in the *Inservice Education Binder/Folder/Manual*
☐ Other: _____

APPENDIX

POST EXPOSURE PROPHYLAXIS (PEP)

These recommendations are taken from:
Exposure to Blood What Healthcare Personnel Need to Know
Updated July 2003
Department of Health and Human Services
Centers for Disease Control and Prevention

Treatment for exposure to HBV:
All health care personnel who have a reasonable chance of exposure to blood or body fluids should receive a hepatitis B vaccine. Vaccination ideally should occur during the healthcare worker's training period. Workers should be tested 1 to 2 months after the vaccine series is complete to make sure the vaccination has provided immunity to HBV infection. Hepatitis B immune globulin (HBIG) alone or in combination with vaccine (if not previously vaccinated) is effective in preventing HBV infection after exposure. The decision to begin treatment is based on several factors such as:

1.) Whether the source individual is positive for hepatitis B surface antigen
2.) Whether exposed individual has been vaccinated
3.) Whether the vaccine provided the exposed individual immunity

Treatment for exposure to HCV:
There is no vaccine against hepatitis C and no treatment after an exposure that will prevent infection. Neither immune globulin nor antiviral therapy is recommended after exposure. For these reasons, following recommended infection control practices to prevent percutaneous injuries is imperative.

Treatment for exposure to HIV:
There is no vaccine against HIV. However, results from a small number of studies suggest that the use of some antiretroviral drugs after certain occupational exposures may reduce the chance of HIV transmission. Post exposure prophylaxis (PEP) is recommended for certain occupational exposures that pose a risk of transmission. However, for those exposures without risk of HIV infection, PEP is not recommended because the drugs used to prevent infection may have serious side effects. Exposed individual should discuss the risks and side effects with his/her healthcare provider before starting PEP for HIV.

Exposures to blood from an individual whose infection status is unknown:

HBV-HCV-HIV
If the source individual cannot be identified or tested, decisions regarding follow up should be based on the exposure risk and whether the source is likely to be infected with a bloodborne pathogen. Follow-up testing should be available to all personnel who are concerned about possible infection through occupational exposure.

Specific drugs recommended for post exposure treatment:

HBV
If the exposed individual has not been vaccinated, then hepatitis B vaccination is recommended for any exposure regardless of the source person's HBV status. HBIG and/or hepatitis B vaccine may be recommended depending on the source person's infection status, the exposed person's vaccination status and, if vaccinated, the exposed person's response to the vaccine.

HCV
There is no post exposure treatment that will prevent HCV infection.

HIV
The Public Health Service recommends a 4-week course of a combination of either two antiretroviral drugs for most HIV exposures, or three antiretroviral drugs for exposures that may pose a greater risk for transmitting HIV (such as those involving a larger volume of blood with a larger amount of HIV or a concern about drug resistant HIV). Differences in side effects associated with the use of these drugs may influence which drugs are selected in a specific situation. These recommendations are intended to provide guidance to clinicians and may be modified on a case-by-case basis. Determining which drugs and how many drugs to use or when to change a treatment regimen is largely a matter of judgement. Whenever possible, consulting an expert with experience in the use of antiretroviral drugs will be done, especially if a recommended drug is not available, if the source person's virus is likely to be resistant to one or more recommended drugs, or if the drugs are poorly tolerated.

When to start PEP:

HBV
Post exposure treatment should begin as soon as possible after exposure, preferably within 24 hours, and no later than 7 days.

HIV
Treatment should be started as soon as possible, preferably within hours as opposed to days, after the exposure. Although animal studies suggest that treatment is less effective when started more than 24 to 36 hours after exposure, the time frame after which no benefit is gained in humans is not known. Starting treatment after a longer period (for example, 1 week) may be considered for exposures that represent in increased risk of transmission.

PEP for pregnant healthcare workers:

HBV
Women who are pregnant or breast-feeding can receive the hepatitis B vaccine and/or HBIG. Pregnant women who are exposed to blood should be vaccinated against HBV infection, because infection during pregnancy can cause severe illness in the mother and a chronic infection in the newborn. The vaccine does not harm the fetus.

HIV
Pregnancy should not rule out the use of post exposure treatment when it is warranted. If the exposed individual is pregnant, he/she should understand what is known and not known regarding the potential benefits and risks associated with the use of anti-viral drugs in order to make an informed decision about treatment.

Follow up after exposure:

HBV
Because post exposure treatment is highly effective in preventing HBV infection, CDC does not recommend routine follow up after treatment. However, any symptoms suggesting hepatitis (for example, yellow eyes or skin, loss of appetite, nausea, vomiting, fever, stomach or joint pain, extreme tiredness) should be reported to the healthcare provider. If hepatitis B vaccine is given, the individual should be tested 1 to 2 months after completing the vaccine series to determine if the individual has responded to the vaccine and is protected against HBV infection.

HCV
The individual should be tested for HCV antibody and liver enzyme levels (alanine aminotransferase or ALT) as soon as possible after the exposure (baseline) and at 4 to 6 months after exposure. To check for infection earlier, the individual can be tested for the virus (HCV RNA) 4 to 6 weeks after exposure. Report any symptoms suggesting hepatitis (mentioned above) to the health care provider.

HIV
The individual should be tested for HIV antibody as soon as possible after exposure (baseline) and periodically for at least 6 months after the exposure (for example, at 6 weeks, 12 weeks, and 6 months). If the individual is taking antiviral drugs for post exposure treatment, he/she should be checked for drug toxicity by having a complete blood count and kidney and liver function tests just before starting treatment and 2 weeks after starting treatment. A sudden or severe flu like illness that occurs during the follow-up period, especially if it involves fever, rash, muscle aches, tiredness, malaise, or swollen glands, should be reported. Any of these may suggest HIV infection, drug reaction, or other medical conditions. The healthcare provider should be contacted for any questions or problems during the follow up period.

Precautions to take during the follow up period:

HBV
No precautions are necessary.

HCV
No precautions are recommended secondary to a low risk of becoming infected and passing the infection on to others.

HIV

During the follow-up period, especially the first 6 to 12 weeks when most infected persons are expected to show signs of infection, the following recommendations for preventing transmission of HIV should be followed. These recommendations include not donating blood, semen or organs and not having sexual intercourse. If the individual chooses to have sexual intercourse, using a condom consistently and correctly may reduce the risk of HIV transmission. In addition, women should consider not breast-feeding infants during the follow up period to prevent the possibility of exposing the infant to HIV that may be in breast milk.