

SPRINGFIELD FIRE DEPARTMENT

Series 300

Title:	Exposure Control Plan	304
Category:	Health & Safety	7/2017

PURPOSE

1. This Plan provides written procedures for employees to follow to eliminate or minimize occupational exposure to bloodborne pathogens which include, but are not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).
2. Occupational exposure means reasonably anticipated skin, eye, mucous membrane, or puncture wounds contact with blood or other potentially infectious materials that may result from the performance of duties.

BACKGROUND AND SOURCE

1. The new Occupational Safety and Health Act standard, 29 CFR 1910.1030 requires each employer with employee(s) with occupational exposure to establish a written Exposure Control Plan.
2. This Plan covers all employees who could be reasonably anticipated as the result of performing their job duties to be in contact with blood and other potentially infectious materials.
3. A copy of the plan is to be accessible to employees.
4. The Plan shall be reviewed and updated annually, and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

EXPOSURE DETERMINATION

1. Exposure determination of classifications is made without regard to the use of personal protective equipment.
2. Employees who are directly exposed to blood and body fluids are considered to be at risk of occupational exposure to HBV and/or HIV.

METHODS OF COMPLIANCE

1. Universal precautions shall be used to prevent contact with blood or other potentially infectious materials. Under universal precautions, blood and certain body fluids of all

persons are assumed to be potentially infectious for Hepatitis B, (HBV) Human Immunodeficiency Virus (HIV), and other bloodborne pathogens.

2. Universal precautions require that employees assume that every direct contact with blood and body fluids is infectious and that every employee exposed to direct contact be protected as though such body fluids are HBV and HIV infected.

ENGINEERING AND WORK PRACTICE CONTROLS

1. Engineering and work practice controls shall be used to eliminate or minimize employee exposure.
2. Hand washing is the single most important personal hygiene practice. Careful, thorough, frequent hand washing shall be followed.
3. When hand washing facilities are not available, an antiseptic hand cleaner with clean cloth/paper towels or antiseptic towelettes shall be provide. Employees still must wash their hands with soap and water as soon as possible.
4. Personnel shall wash their hands immediately after removal of gloves or other personal protective equipment.
5. Personnel shall wash hands and any other skin with soap and water, or flush mucous membranes with water immediately after contact of such body areas with blood or other potentially infectious materials.
6. Contaminated needles and other contaminated sharps shall not be bent, recapped, broken, or snapped.
7. Eating, drinking, smoking, taking of medications or applying cosmetics or lip balm and handling of contact lenses shall be avoided in circumstances where infectious materials have or may be encountered.
8. Food and drink shall not be kept in refrigerators, cabinets or on countertops where blood or other potentially infectious materials are present.

PERSONAL PROTECTIVE EQUIPMENT

1. Appropriate personal protective equipment such as gloves, gowns, face masks, eye protection, and mouthpieces, resuscitation bags, pocket masks, or ventilation devices shall be provided at no cost, be accessible and available in appropriate sizes, with alternatives as necessary for all personnel. Such equipment shall be repaired or replaced by the employer as needed. Location and storage of these materials will be discussed during appropriate training courses.

2. Personal protective equipment shall be used so blood and other infectious materials will not reach employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal conditions for the duration of the exposure.
3. Disposable gloves shall be worn by all personnel responding to emergencies involving exposure to blood or body fluids. For situations in which large amounts of blood may be encountered, gloves should fit tightly to the wrist to prevent blood contamination.
4. In an emergency in which broken glass and sharp edges may be encountered, such as removing a person from a wrecked car, leather gloves should be worn.
5. Contaminated gloves should be placed and transported in leak-proof bags and disposed of properly. Reusable gloves shall be cleaned and disinfected. Disposal procedures shall be discussed during appropriate training courses.
6. Disposable airway equipment or resuscitation bags shall be used to minimize emergency mouth-to-mouth resuscitation.
7. Personal protective equipment or clothes which become contaminated with blood or body fluid shall be changed immediately or as quickly as possible. Equipment and clothes shall be placed in an approved bag or container until properly taken care of either by disposal or laundering.
8. Gloves shall be worn when it is anticipated that hand contact with blood, or other potentially infectious materials may occur. Disposable gloves shall be replaced immediately if they become torn, cracked or punctured. Gloves shall be worn in all instances when responding to medical calls.
9. Masks and eye protection shall be worn whenever blood or other potentially infectious materials may be splashed, or spattered, and eye, nose or mouth contamination can be anticipated.
10. Personnel shall remove personal protective clothes and equipment before leaving the worksite.

HOUSEKEEPING

1. The worksite shall be maintained in a clean and sanitary condition in accordance with the written schedule and method of decontamination established by the employer.

2. All equipment and working surfaces shall be immediately cleaned and decontaminated after contact with blood or other potentially infectious materials by using soap and water followed by a 50/50 mixture of bleach and water.
3. Contaminated and obviously soiled surfaces shall be decontaminated with an appropriate disinfectant as designated by the employer. Blood and bloody solutions may be safely disposed of by pouring into the sanitary sewer. The sink and the area around the sinks should be disinfected following such disposal. The disinfectant shall be soap and water followed by a 50/50 mixture of bleach and water.

HEPATITIS B VACCINATION

1. The Hepatitis B vaccine and vaccination series shall be made available to all personnel who have occupational exposure. Personnel on the job will receive the vaccine upon effective date of the Plan and thereafter within ten (10) working days of initial assignment to a job with occupational exposure.
2. Personnel who choose to decline the Hepatitis B vaccination must sign the statement in Attachment B. Failure to have a signed "Hepatitis B Vaccine Declination Form" on file shall result in discipline up to and including discharge.
3. Hepatitis B vaccination shall be available to personnel who initially decline, but at a later date while still covered under this Plan decide to have the vaccination.
4. The healthcare professional responsible for employee(s) Hepatitis B vaccination shall be provided with a copy of this Plan.

POST-EXPOSURE AND FOLLOW-UP

1. Following an exposure incident, personnel shall immediately or as soon as possible clean the skin areas involved, or irrigated eyes and mucous membranes.
2. All personnel shall immediately report to their supervisor all exposures involving direct contact with blood, body fluids, or communicable diseases. Exposure shall be documented on the Exposure Report Form, Attachment A, and provide detailed information of the incident. It will be each individual's responsibility to complete the appropriate documentation. The supervisor shall report the exposure incident to the fire chief.
3. The supervisor shall contact the nearest county health department or hospital to schedule an appointment for the employee exposed to HBV/HIV.
4. These procedures shall be carried out whether or not it is known that the source individual has a communicable disease. The source individual shall be tested as soon as possible.

5. For an exposure to a source individual found to be positive for Hepatitis B, the employee who had not previously been vaccinated should now receive the vaccine series. These should begin within seven (7) days of exposure.
6. Post-exposure follow-up shall include counseling, medical evaluation, and use of safe and effective post-exposure measures according to the recommendations for standard medical practice.
7. If an employee sustains a work-related exposure to blood or body fluid in a manner which could transmit HBV/HIV, in addition to receiving the appropriate vaccines, the employee will be referred for any necessary testing, counseling, and follow-up.
8. The healthcare professional evaluating an employee after an exposure incident shall receive a copy of this Plan, a description of the exposed employee's duties as they relate to the exposure incident; documentation of the route(s) of exposure and circumstances under which exposure occurred; results of the source individual's blood tests, if available; all medical records relevant to appropriate treatment of the employee.
9. The employer shall provide the employee with a copy of the healthcare professional's written opinion within fifteen (15) days of the completion of the evaluation.

COMMUNICATION OF HAZARDS TO EMPLOYEES

1. Warning labels and signs must be tagged or attached to bags or other receptacles containing contaminated blood or potentially infectious materials. The tag shall have the word BIOHAZARD or biological hazard symbol.
2. Equally effective means of identification can be used such as red bagging.

INFORMATION AND TRAINING

1. Personnel with occupational exposure shall participate in a mandatory interactive training program. This training shall include precautionary measures, epidemiology, mode of transmission (routes) and prevention of HBV/HIV. Training shall also include proper use and location of personal protective equipment.
2. Training shall occur upon effective date of the Plan, annually thereafter, and at the time personnel are initially assigned to tasks where occupational exposure exists.

RECORDKEEPING – MEDICAL

1. Medical records shall be kept for the duration of employment plus thirty (30) years for personnel with occupational exposure.

2. Medical records shall include dates of Hepatitis B vaccinations, examinations, medical testing and follow-up procedures, the healthcare professional's written opinion, and information provided to the healthcare professional.
3. Medical records of the employee shall be kept confidential and are not to be disclosed without the employee's written consent except as may be required by law.

RECORDKEEPING – TRAINING

1. Training records shall be kept for three (3) years from the date the training occurred.
2. Training records shall contain the dates the training occurred, the content of the training Sessions, names and qualifications of trainers, and the names and job titles of all personnel attending the training.

ENFORCEMENT

1. Penalties are placed upon employers for not complying with this OSH standard, so the procedures contained herein are to be strictly enforced.

DEFINITIONS

Antibody: Substance that a person's immune system develops to help fight infection.

Antibody Positive: The result of a test of series of tests to detect antibodies in blood. A positive result means that antibodies are present.

Antigen: Substance such as HIV which is foreign to the person's body. An antigen causes the immune system to form antibodies to fight the antigen.

Bloodborne Pathogens: A pathogen is any microorganism or virus that can cause disease. Bloodborne pathogens are microorganisms which are present in human blood. These pathogens include Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

Body Fluids: Fluids that the body makes; e.g. semen, vaginal secretions, and blood.

Contaminated: The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Sharps: Any contaminated object that can penetrate the skin including, but not limited to, needles, syringes, intravenous tubing with needles attached, and broken glass.

Decontamination: The use of physical or chemical means to remove, inactivate, or destroy

bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls: Controls (e.g. sharps disposal containers) that isolate or remove the bloodborne pathogens hazard from the workplace.

Epidemiology: The study of the incidence, distribution, and control of a disease in a population.

Exposure Incident: A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

Exposure Report Form: A report form which must be completed upon notification of knowledge of direct exposure.

HBV: Hepatitis B Virus – a viral infection that affects the liver. The effects of the disease can range from mild to severe and fatal.

HIV: Human Immunodeficiency Virus.

Immune System: A body system that helps resist disease-causing germs, viruses, or other infections.

Mucous Membrane: A moist layer of tissue that lines the mouth, eyes, nostrils, vagina, anus, or urethra.

Nonintact Skin: Skin that is chapped, abraded, weeping, or that has rashes or eruptions.

Parenteral: Piercing mucous membranes or the skin barrier through needle sticks, human bites, cuts, and abrasions.

Pathogens: A disease causing substance.

Percutaneous: Entering the body through the skin by needle picks or broken glass.

Personal Protective Equipment: Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes not intended to function as protection against a hazard are not considered to be such equipment.

Potential Infectious Materials: Infectious materials include semen, vaginal secretions, and any body fluid visibly contaminated with blood. All body fluids in controlled emergency situations where it is difficult or impossible to differentiate between body fluids should be treated as potentially infectious. This would include saliva, feces, nasal secretions, sputum, sweat, tears, urine, and vomit.

Regulated Waste: Liquid or semi-liquid or other potentially infectious materials; contaminated items which would release blood or other potentially infectious materials if squeezed or compressed; items that are caked with dried blood, and contaminated sharps.

Source Individual: Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

Subcutaneous: Beneath or introduced beneath the skin.

Syndrome: A collection of signs and symptoms which occur together.

Transmission Routes: The particular route in which a disease process is transmitted, such as ingestion, injection, absorption, and inhalation.

Universal Precautions: Use of consistent infection control procedures used with specific protective equipment to minimize the risk of exposure and infection. All human blood and certain body fluids are to be treated as if known to be infectious for HBV, HIV, and other bloodborne pathogens.

Vaccine: Substance that produces or increases immunity and protection against a particular disease. The Hepatitis B vaccination is a noninfectious, yeast-based vaccine given in three (3) injections in the arm. It is prepared from recombinant yeast cultures, rather than human blood or plasma. There is no risk of contamination from other bloodborne pathogens nor is there any chance of developing HBV from the vaccine. The second injection is given one month after the first, and the third injection six (6) months after the initial dose. To ensure immunity, it is important that an individual receive all three (3) injections. Booster shots may be required.

Virus: Organism that causes disease.

Window Period: The time it takes the immune system to develop antibodies to the virus after exposure to it.

Work Practice Controls: Controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

CITY OF SPRINGFIELD
ATTACHMENT A

INFECTIOUS DISEASE EXPOSURE FORM

Employee: _____

Soc. Sec. #: _____

Home Address: _____

Phone: _____

Name of Victim: _____

Sex: _____ Age: _____

Victim Address: _____

Phone: _____

Suspected Infection: _____

Date Exposed: _____

Incident Type (PI/Trauma/Medical): _____

Body Fluid Contact: _____

Body Parts Exposed: _____

Did any rashes, cuts, or sores become exposed? _____

How did the exposure occur: _____

Decontamination efforts: _____

Personal Protection Equipment Used: _____

Medical Care:

Who: _____

Where: _____

What: _____

When: _____

Notification:

_____ was notified on _____ by _____
Name Date

Employee Signature: _____

Date: _____

Command Signature: _____

Date: _____

HEPATITIS B VACCINE DECLINATION FORM

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 the Hepatitis B vaccination at this time.

I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupations exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee's Signature

Date

Witness' Signature

Date

(Appendix A to section 1910.1030, Bloodborne Pathogens, 20 Code of Federal Regulations)