



Standard Operating Guidelines  
Section 100.0

SECTION:		GUIDELINE:	
100.0		Exposure Control	
EFFECTIVE DATE:	LAST REVISION	AUTHOR:	PAGES:
07/05/2017		Chief Wendt	7

## Exposure Control

This policy applies to all personnel within the Evansville Fire District, who are involved in fire fighting, hazardous material incident control, rescue, or emergency medical services which involve occupational exposure to blood or other potentially infectious materials.

The Evansville Fire District recognizes the potential for transmission of certain blood borne infections to firefighters through contact with blood and body fluids and requires that specific precautions to minimize the risk of exposures. Universal precautions will be used where there is blood or body fluids to protect firefighters, patients, and citizens against the spread of infectious diseases.

This plan will be reviewed annually beginning of May and as needed to reflect changes in procedures, policies or work rules.

The Evansville Fire District recognizes that communicable disease exposure is an occupational health hazard. Communicable disease transmission is possible during any aspect of operations including emergency response, training and while in the station.

It is the Fire District's policy to:

- A. Provide services to all persons requiring them without regard to known or suspected diseases in any patient.
- B. Regard all patient contacts as potentially infectious and to take universal precautions at all times.
- C. Provide Fire District personnel with the necessary training, immunizations and protective equipment to reduce the risk to firefighters and members of the public.
- D. Recognize the need for infection controls in the workplace.
- E. Prohibit discrimination of any Fire District member based on infection with HIV or HBV virus.
- F. Regard all medical information on Fire District personnel as confidential.

### DEFINITIONS:

**Blood:** Human blood, human blood components and products made from human blood.

**Blood Borne Pathogens:** Pathogenic microorganisms that are present in human blood that can cause disease in humans. These pathogens include, but are not limited to Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

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

**Contaminated Laundry:** Laundry which has been soiled with blood or other potentially infectious materials or that may contain sharps.

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

borne pathogens on a surface or item to the point where they are 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, self sheathing needles) that isolate or remove the blood borne pathogens hazard from the work place.

**Exposure Incident** - A specific eye, mouth, other mucus membrane, non-intact skin, or other contact with blood or potentially infectious materials that result from the performance of duties.

**HBV:** Hepatitis B Virus

**HIV:** Human Immunodeficiency Virus

**Occupational Exposure:** Reasonably anticipated skin, eye, mucus membrane or parenteral contact with blood or other potentially infectious materials that may result from performance of an employee's duties.

**Other Potentially Infectious Materials (OPIM):**

A. The following human fluids: 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 where it is difficult or impossible to differentiate between body fluids.

B. Any unfixed tissue or organ (other than intact skin) from human (living and dead).

C. HIV containing cell or tissue cultures, organ cultures, and HIV or HBV containing medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral:** Piercing mucus membranes or the skin barrier through needle sticks, human bites, cuts, abrasions, etc.

**Personal Protective Equipment:** Specialized clothing or equipment worn for protection against a communicable disease.

**Source Individual:** An individual, living or dead, whose blood or other potentially infectious materials may be a source of exposure.

**Sterile:** The use of a physical or chemical procedure to destroy all micro-organisms including highly resistant bacteria.

**Universal precautions:** An approach to infection control which calls for all human blood and certain body fluids to be treated as if they are known to be infectious for HIV, HBV and other pathogens.

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

## OCCUPATIONAL EXPOSURE CONTROL PLAN

### Exposure Determination

All personnel within the Evansville Fire District, who are involved in fire fighting, hazardous material incident control, rescue, or emergency medical services may be exposed to blood and other potentially infectious materials. Positions include:

Probationary Firefighter  
Entry Level Firefighter  
Firefighter I  
Firefighter II  
Lieutenant  
Captain  
Assistant Chief  
Chief  
Safety Officer

### Methods of Compliance

- A. Universal precautions shall be observed to prevent contact with blood and other potentially infectious materials. All body fluids shall be considered potentially infectious materials.
- B. Work Practices
  1. Gloves will be worn for all patient/victim contact. Gloves will be worn for touching blood and body fluids, mucus membranes or non-intact skin of all patients, for

handling items soiled with blood or body fluids, and for performing all cleaning of soiled surfaces. Gloves are to be removed and hands washed after contact with each patient or each use for cleaning or handling potentially infectious materials.

2. All firefighters will wash hands and exposed skin with soap and water when feasible, or flush mucous membranes with water as soon as practical following contact with potentially infectious materials.
  3. Hands must be washed for a minimum of 15 seconds after doffing gloves, before eating or preparing food, and after contact with body fluids, mucous membranes or broken skin.
  4. When hand washing is not possible, firefighters will clean their hands with an antiseptic towel or hand cleanser, and then wash their hands with soap and water at the earliest possible time.
  5. Any other skin, mucous membrane, or body area that has come in contact with potentially infectious material must be washed as soon as possible.
  6. Immediately after use, sharp items such as needles and lancets shall be placed in a leak-proof, puncture-resistant container. Contaminated sharps shall not be recapped or otherwise manipulated by hand. Whenever possible, firefighters will leave handling and disposal of sharps to EMS. When firefighters must dispose of sharps or contaminated broken glassware, all handling will be with tongs or forceps. Also glass can be cleaned up with a brush and dustpan.
  7. All procedures involving blood or OPIM shall be performed to minimize splashing and spattering.
  8. Infectious waste, any disposable item which comes in contact with body fluids, shall be handled with gloves and shall be placed in an impermeable red bag.
  9. No potentially infectious waste will be left at the scene of an incident.
- C. Personal Protective Equipment (PPE)
1. When PPE is removed it shall be, decontaminated or disposed of in an appropriate container.
  2. Personnel in contact with patients/victims will have examination gloves and goggles with them at all times. These are available on each engine and the squad.
  3. Gloves will be worn for all patient/victim contact. Gloves must be worn for touching blood and body fluids, mucous membranes or non-intact skin of all patients/victims, and for cleaning of soiled surfaces.
  4. Gloves are to be removed and hands washed after contact with each patient or each use for cleaning or handling potentially infectious items.
  5. Structural fire fighting protective clothing will be worn for all incidents requiring this protection. Additionally latex gloves will be worn under the firefighters gloves when infectious materials may be encountered such as during vehicle extrication. Because of the potential for burns, latex gloves should not be worn under fire fighting gloves where there is exposure to extreme heat.
  6. Masks shall be worn in combination with goggles or glasses with solid side shields whenever droplets of blood or OPIM may be splashed in the eyes, nose, or mouth. Face shields on structural fire fighting helmets shall not be used for exposure control; however, SCBA masks are acceptable.
  7. Gowns, waterproof aprons or structural fire fighting gear shall be worn during procedures that are likely to generate splashes of blood or other body fluids.
- D. Equipment Cleaning
1. Routine cleaning of equipment will be done on a daily basis.
  2. Vehicles, tools and other equipment that is exposed to body fluids will be cleaned with an antiseptic cleaner followed by soap and water.
- E. Contaminated Sharps
1. A sharps container is carried in the Engine and the Squad.

2. The sharps container must be kept in an upright position when used and shall be replaced immediately after the first use, not used until full.
  3. Sharps will only be picked up with pliers or tongs, never by hand.
  4. Sharps containers should be closed to prevent spillage, placed in a second container if leaking, and handled with care.
  5. Used sharps containers shall be capped, taped, and dated for disposal.
  6. Evansville EMS shall be called to pick up sharps and to provide new sharps containers.
- F. Contaminated materials shall be handled as little as possible. When handling contaminated linen or towels, firefighters will wear latex gloves and other appropriate PPE. All soiled linen shall be placed in red bags that prevent leakage.
- G. Disposal of Waste
1. All waste will be placed in red plastic bags or labeled sharps containers.
  2. Whenever possible, contaminated waste will be given to an on-scene EMS crew for disposal.
  3. Waste not given to an on-scene EMS crew will be transported back to the fire station in a non-passenger area of the vehicle. No more than 50 lbs of waste material may be transported.
  4. The waste will then be double bagged, the bags sealed and placed in the station's outside trash container.
  5. Heavily soiled waste materials, those with unabsorbed body fluids, will be double bagged, placed out of living areas and traffic areas at the fire station, and EMS shall be called to remove the waste.
  6. EMS will respond to remove heavily soiled waste and sharps within 24 hours.
- H. Hepatitis B Vaccination
1. All personnel who are at risk to occupational exposure will have the Hepatitis B vaccination, post exposure evaluation and follow up made available at no cost.
  2. The Hepatitis B vaccination will be available after the firefighter receives training on the Hepatitis B vaccine, its safety, method of administration, the benefits of being vaccinated, and within ten working days of initial shift assignment (career personnel) or station acceptance (volunteer personnel). The vaccination will not be given to anyone who has received the complete Hepatitis B vaccination series, or if antibody testing shows that the firefighter is immune. If the individual is allergic to yeast, an alternate Hepatitis B vaccine will be offered.
  3. Each firefighter must sign a consent/refusal form verifying that this vaccination was offered to him/her
- I. Post-Exposure Evaluation and Follow-up
1. Following a report of an exposure incident, the employer shall make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:
    - a. Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;
    - b. Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law.
      - i. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot

be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

- ii. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.
- iii. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

c. Collection and testing of blood for HBV and HIV serological status;

## 2. Healthcare Professional's Written Opinion

- a. The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.
- b. The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.
- c. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:
  - i. That the employee has been informed of the results of the evaluation
  - ii. That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.
- d. All other findings or diagnoses shall remain confidential and shall not be included in the written report

## J. Communication of Hazards to Personnel

1. Warning labels shall be affixed to containers of regulated waste containing blood or OPIMs.
2. Potentially infectious waste will be placed in red plastic bags.

## K. Information and Training

1. All personnel with the potential for occupational exposure shall participate in an exposure control training program.
2. The training will be provided on initial assignment to a position that has potential for exposure and annually after that.
3. Training will be provided when changes occur, such as modifications of procedures, and with the use of new products that may affect occupational exposure.
4. The training program shall contain at least the following elements.
  - a. Information on the location of the Federal Register, Volume 56, #235, Friday, December 6, 1991, Rules and Regulations. (29 CFR 1910.1030) can be located online at [www.osha.gov](http://www.osha.gov) and in the training division office
  - b. A general explanation of the symptoms of blood borne diseases.
  - c. An explanation of the modes of transmission of blood borne pathogens.
- d. An explanation of this exposure control plan and fact that a copy of the policy will be included in the SOG manual located in the radio room of the fire station.

- e. Training in recognizing activities that may involve exposure to blood or OPIMs.
- f. An explanation of methods and their limitations for reducing exposure including appropriate engineering controls, work practices, and PPE.
- g. Information on the types, proper use, location, removal, handling, decontamination and disposal of PPE.
- h. Instruction on how to select PPE for different situations.
- i. Information on the Hepatitis B vaccine, including its effectiveness, safety, method of administration, the benefits of being vaccinated, and the fact that the vaccination is offered at no charge to firefighters.
- j. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIMs.
- k. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- l. Information on the post-exposure evaluation and follow up provided for the firefighter following an exposure.
- m. An explanation of the labels and color coding required by the exposure control plan.
- n. An opportunity for interactive questions and answers with the person conducting the training session.

#### L. Record keeping

1. The Evansville Fire District shall maintain a record for each employee who has occupational exposure in accordance with 29 CFR 1910.20. The record includes:
  - a. The name and social security number of the firefighter, a copy of the firefighter's Hepatitis B vaccination status including the dates of all hepatitis vaccinations and any medical records relative to the firefighter's ability to receive the vaccination.
  - b. A copy of all results of examinations, medical testing, and follow up procedures as required.
  - c. The employer's copy of the health care professional's written opinion.
  - d. A copy of the information provided to the health care professional.
2. Medical records shall be kept confidential and shall not be disclosed to any person within or outside the Department, except as required by law, without the employee's written consent.
3. The records shall be maintained for the duration of employment plus 30 years in accordance with 29 CFR 1910.20.

#### M. Training Records

1. Training records shall include the following information:
  - a. The dates of the training.
  - b. A summary of the training.
  - c. The names and qualifications of the persons conducting the training.
  - d. The names and job titles of all persons attending the training.
2. Training records shall be maintained for three years from the date on which the training occurred.
3. Firefighter training records will be provided upon request to the individual firefighter, and to anyone having written consent of the individual in accordance with 29 CFR 1910.20.

#### Responsibilities

- A. The Chief of Fire District has overall responsibility for the operation of the Fire District and for the Exposure Control Plan.

B. The ~~Department~~ Fire District-Safety Committee has responsibility for reviewing and updating this plan, for reviewing administration of the infection control program and for making recommendations to the Fire Chief of Department for improvements in procedures, equipment and training that will minimize the risk of occupational exposure.

1. The committee will meet at least annually to review the status of the infection control program and more often as needed.
2. Written notes of all meetings will be maintained.
3. The Safety Committee Chairperson / Fire Chief is the Fire District's Infection Control Officer, and is responsible for administering Fire District's Safety and Training programs and for ensuring that the Exposure Control Plan is current, all personnel with the potential for exposure are trained and understand the plan, and that training records are maintained properly.
4. The Safety Committee Chairperson/Fire Chief is responsible for coordinating the initial phase of training on bloodborne pathogens for personnel, for ensuring that Hepatitis B vaccinations are offered to firefighters who have potential for exposure, for coordinating post exposure protocols for career personnel and for administering exposure records.
5. Officers are responsible within the chain of command for following and enforcing infection control procedures in all phases of their areas of control.
6. All other personnel are responsible for complying with the infection control plan and with the training received.





