

Exposure Control

This policy applies to all personnel within the Fire Department, who are involved in firefighting, hazardous material incident control, rescue, or emergency medical services which involve occupational exposure to blood or other potentially infectious materials (OPIM).

The Department 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 as defined below will be used where there is potential exposure to blood or body fluids to protect firefighters, patients, and citizens against the spread of infectious diseases.

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

The Department 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 Department'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 Department 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 Department member based on infection with HIV or HBV virus.

DEFINITIONS:

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

Bloodborne 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

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 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 bloodborne 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 results 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 mucous 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. . Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, 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.

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.

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

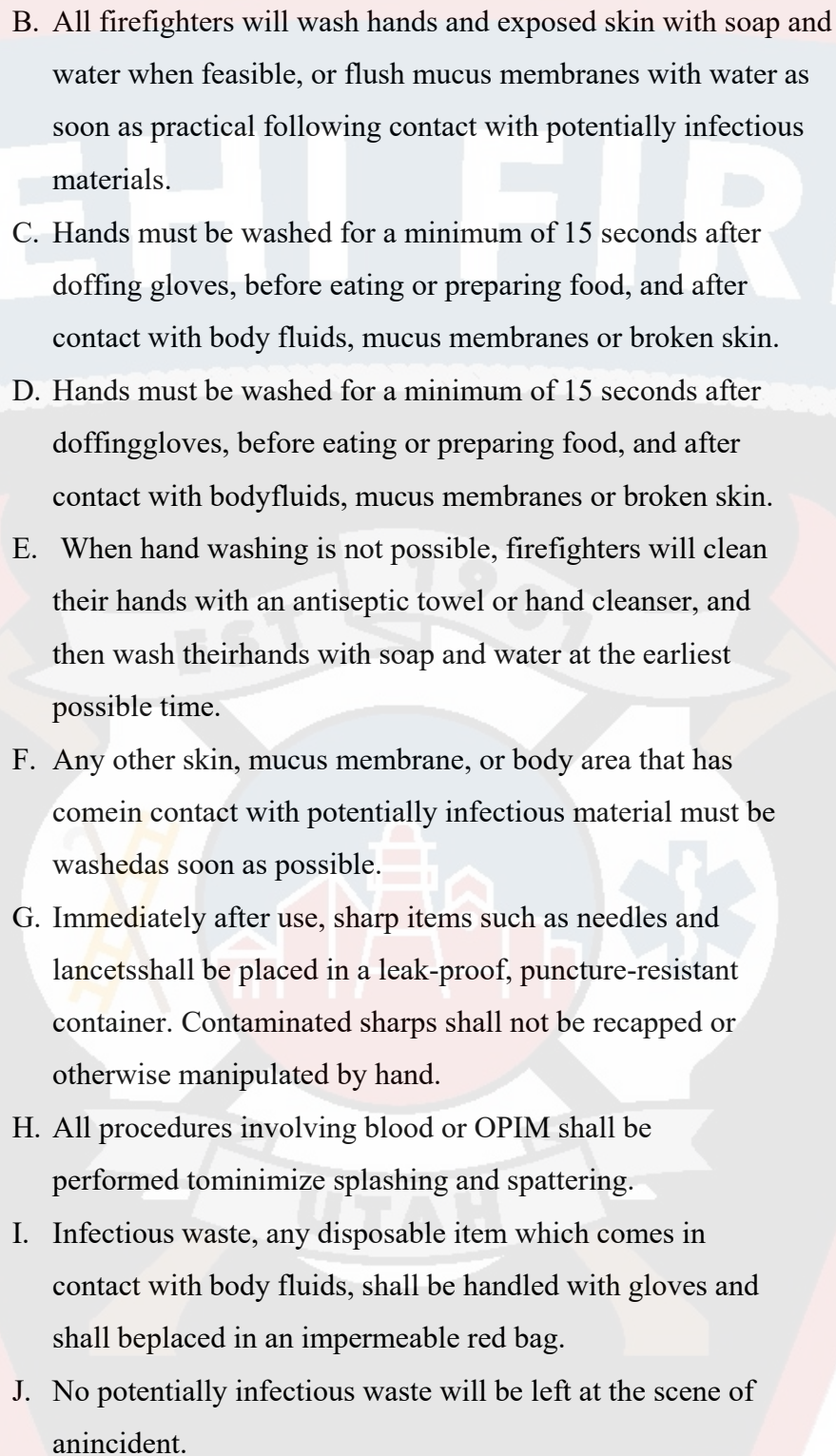
OCCUPATIONAL EXPOSURE CONTROL PLAN

Exposure Determination

All personnel within the Fire Department, who are involved in firefighting, hazardous material incident control, rescue, or emergency medical services may be exposed to blood and other potentially infectious materials.

METHODS OF COMPLIANCE

1. Universal precautions shall be observed to prevent contact with blood and other potentially infectious materials. All body fluids shall be considered potentially infectious materials.
2. Work Practices
 - A. Impervious 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 handwashed after contact with each patient or each use for cleaning or handling potentially infectious materials.

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- B. All firefighters will wash hands and exposed skin with soap and water when feasible, or flush mucus membranes with water as soon as practical following contact with potentially infectious materials.
 - C. Hands must be washed for a minimum of 15 seconds after doffing gloves, before eating or preparing food, and after contact with body fluids, mucus membranes or broken skin.
 - D. Hands must be washed for a minimum of 15 seconds after doffing gloves, before eating or preparing food, and after contact with body fluids, mucus membranes or broken skin.
 - E. 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.
 - F. Any other skin, mucus membrane, or body area that has come in contact with potentially infectious material must be washed as soon as possible.
 - G. 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.
 - H. All procedures involving blood or OPIM shall be performed to minimize splashing and spattering.
 - I. 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.
 - J. No potentially infectious waste will be left at the scene of an incident.

3. Exposure

An exposure shall be documented in CrewSense under Injury/Exposure form. Advise your officer and/or acting officer immediately of the incident. Officer will notify Battalion Chief and the Chief or Deputy Chief. If the Officer or Battalion Chief cannot be notified immediately; then contact the Chief or Deputy Chief.

- A. Officer or Chief Officer will contact the Lehi City Emergency Manager.
- B. A needle stick/sharps injury log shall be maintained and shall include the following information for each incident:
 - Period of time the log covers
 - Date of the incident
 - Date the incident is entered into the log
 - Type and brand of sharp involved
 - Department or area of incident
 - Description of the incident
- C. The log(s) shall be retained for five years after the end of the log year.

4. Personal Protective Equipment (PPE)

- A. When PPE is removed it shall be, decontaminated or disposed of in an appropriate container.
- B. Personnel in contact with patients/victims will have examination gloves and goggles with them at all times. These are available on each engine and ladder truck.
- C. Replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised
- D. Never wash or decontaminate disposable gloves for reuse
- E. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives will be readily accessible to those employees who are allergic to the gloves nominally provided.
- F. Replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised

- G. Never wash or decontaminate disposable gloves for reuse
- H. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives will be readily accessible to those employees who are allergic to the gloves nominally provided.
- I. Impervious gloves will be worn for all patient/victim contact. Gloves must be worn for touching blood and body fluids, mucus membranes or non-intact skin of all patients/victims, and for cleaning of soiled surfaces. Replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised
- J. Never wash or decontaminate disposable gloves for reuse
- K. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives will be readily accessible to those employees who are allergic to the gloves nominally provided.
- L. Gloves are to be removed and hands washed after contact with each patient or each use for cleaning or handling potentially infectious items.
- M. Structural firefighting protective clothing will be worn for all incidents requiring this protection. Additionally, latex or equivalent 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, these gloves should not be worn under fire fighting gloves where there is exposure to extreme heat.
- N. 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.
- O. 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.

5. Equipment Cleaning

- A. Routine cleaning of equipment will be done on a daily basis.
- B. Vehicles, tools and other equipment that is exposed to body fluids will be cleaned with soap and water followed by an antiseptic cleaner .

6. Contaminated Sharps

- A. A sharps container is carried in.
- B. The sharps container must be kept in an upright position when used and shall be replaced when $\frac{3}{4}$ full.
- C. Sharps containers should be closed to prevent spillage, placed in a second container if leaking, and handled with care.
- D. Contaminated materials shall be handled as little as possible. When handling contaminated linen or towels, wear latex gloves and other appropriate PPE. All soiled linen shall be placed in red bags that prevent leakage.

7. Disposal of Waste

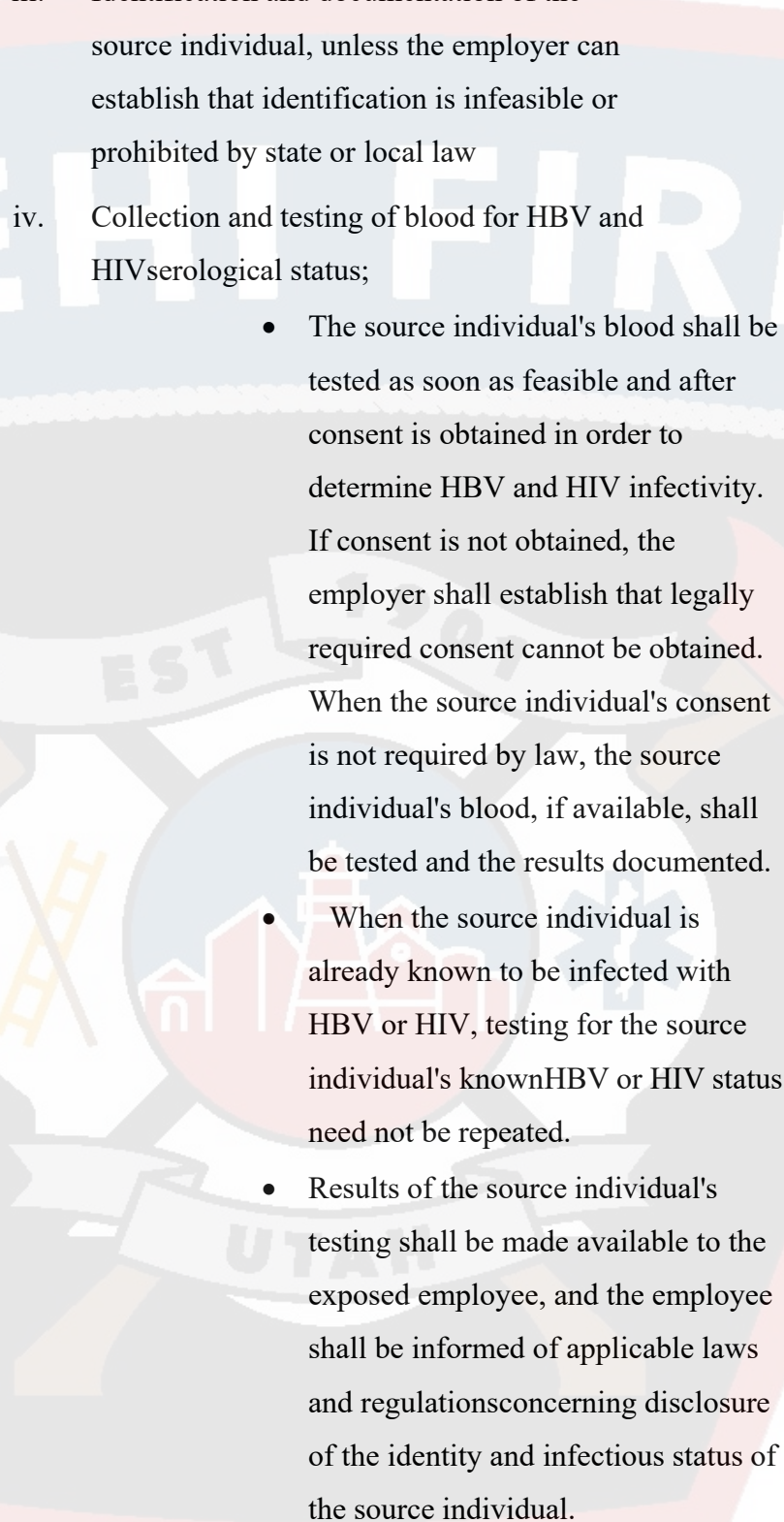
- A. All biohazardous waste will be placed in red plastic bags or labeled sharps containers.
- B. The waste will then be double bagged, the bags sealed and placed in the station's outside trash container.
- C. Heavily soiled waste materials, those with unabsorbed body fluids, will be double bagged, placed out of living areas and traffic areas at the fire station.

8. Hepatitis B Vaccination

- A. 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.
- B. 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.
- C. Each firefighter must sign a consent/refusal form verifying that this vaccination was offered to him/her.
- D. If an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost.

9. Post-Exposure Evaluation and Follow-up

- A. 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:
 - i. Exposure report completed (can be found on CrewSense)
 - ii. Documentation of the route(s) of exposure, and the circumstances

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- iii. Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law
- iv. Collection and testing of blood for HBV and HIV serological status;
- 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.
 - 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.
 - 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.

- After consent is obtained, the exposed employee's blood will be collected as soon as feasible and tested. If the employee consents to baseline blood collection, but does not consent at that time for HIV serological testing, the sample will be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing will be done as soon as feasible.

B. 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.

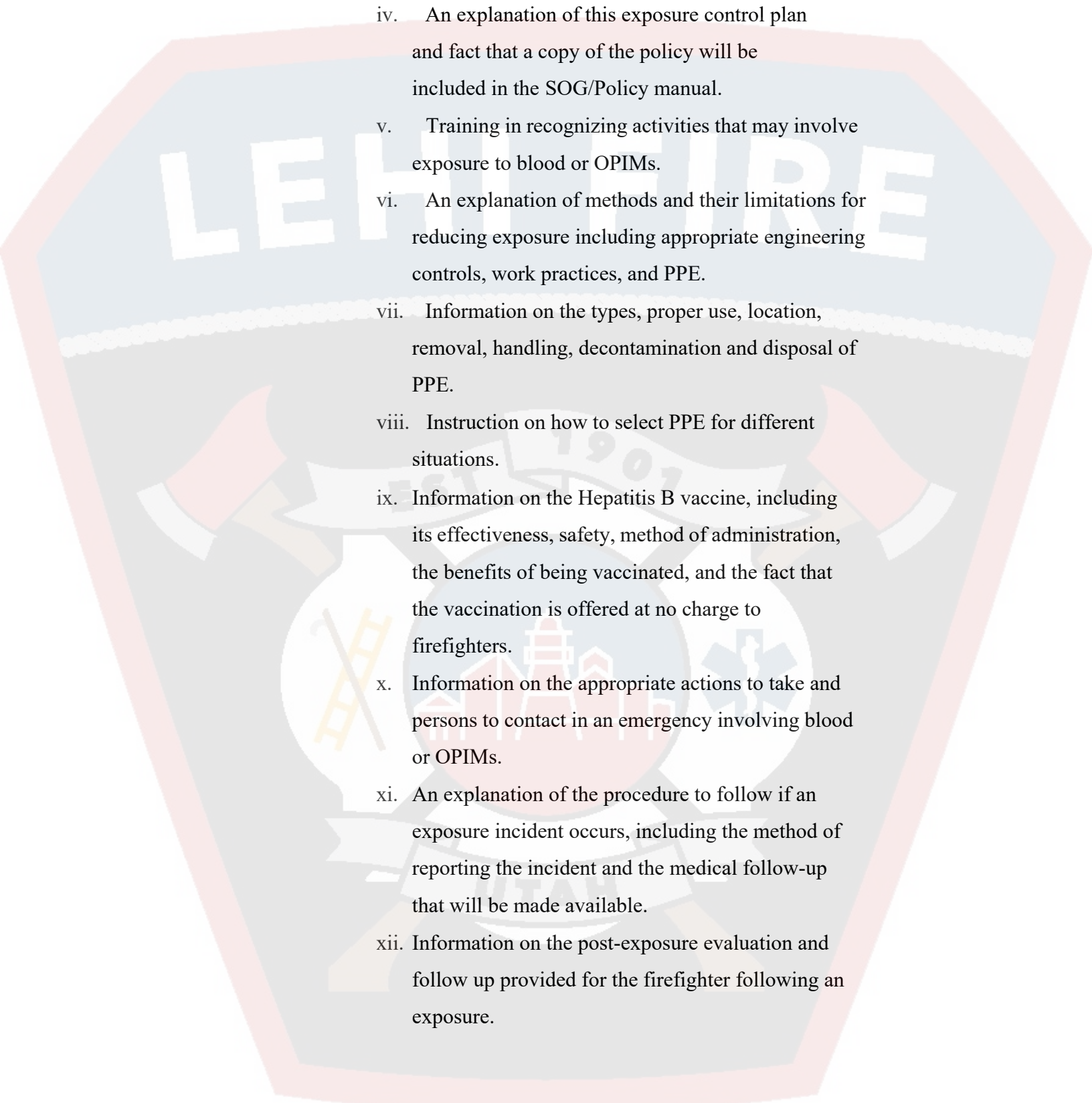
- D. All other findings or diagnoses shall remain confidential and shall not be included in the written report

10. Communication of Hazards to Personnel

- A. Warning labels shall be affixed to containers of regulated waste containing blood or OPIMs.
- B. Potentially infectious waste will be placed in red plastic bags.
- C. Food and drink will not be kept in refrigerators, freezers, cabinets, or on shelves, counter-tops or bench tops where blood or other potentially infectious materials are present.

11. Information and Training

- A. All personnel with the potential for occupational exposure shall participate in an exposure control training program.
- B. The training will be provided on initial assignment to a position that has potential for exposure and annually after that.
- C. Training will be provided when changes occur, such as modifications of procedures, and with the use of new products that may affect occupational exposure.
- D. The training program shall contain at least the following elements.
 - i. Information on the where to obtain a copy of OSHA's Bloodborne Pathogens Standard, 29 CFR 1910.1030,
 - ii. A general explanation of the symptoms of bloodborne diseases.
 - iii. An explanation of the modes of transmission of bloodborne pathogens.

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- iv. An explanation of this exposure control plan and fact that a copy of the policy will be included in the SOG/Policy manual.
 - v. Training in recognizing activities that may involve exposure to blood or OPIMs.
 - vi. An explanation of methods and their limitations for reducing exposure including appropriate engineering controls, work practices, and PPE.
 - vii. Information on the types, proper use, location, removal, handling, decontamination and disposal of PPE.
 - viii. Instruction on how to select PPE for different situations.
 - ix. 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.
 - x. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIMs.
 - xi. 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.
 - xii. Information on the post-exposure evaluation and follow up provided for the firefighter following an exposure.

- xiii. An explanation of the labels and color coding required by the exposure control plan.
- xiv. An opportunity for interactive questions and answers with the person conducting the training session.

12. Record keeping

- A. Fire Department shall maintain a record for each employee who has occupational exposure in accordance with 29 CFR 1910.1020. The record includes:
 - i. 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.
 - ii. A copy of all results of examinations, medical testing, and follow up procedures as required.
 - iii. The employer's copy of the health care professional's written opinion.
 - iv. A copy of the information provided to the health care professional.
- B. 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.
- C. The records shall be maintained for the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.

13. Training Records

A. Training records shall include the following information:

- b. The dates of the training.
- c. A summary of the training.
- d. The names and qualifications of the persons conducting the training.
- e. The names and job titles of all persons attending the training.

B. Training records shall be maintained for three years from the date on which the training occurred.

C. 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.

14. Responsibilities

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