

**BLACKWOOD FIRE COMPANY  
OPERATING GUIDELINE**

**7.7 FIREFIGHTER SAFETY - BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

**7.7.1 POLICY**

7.7.1.1 The Board of Fire Commissioners Fire District #4 and the Blackwood Fire Company are committed to provide a safe and healthful work environment for our employees and members (personnel). In pursuit of this endeavor, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA Bloodborne Pathogens Standard, Title 29 Code of Federal Regulations 1910.1030.

7.7.1.2 The ECP is a key document to assist our organization in implementing and ensuring compliance with the standard, thereby protecting our personnel. This ECP includes:

- I. Personnel exposure determination
- II. The procedures for evaluating the circumstances surrounding an exposure incident, and
- III. The schedule and method for implementing the specific sections of the standard, including:
  - Methods of compliance.
  - Hepatitis B vaccination and post-exposure follow up.
  - Training and communication of hazards to personnel.
  - Record keeping.

## **7.7.2 PROGRAM ADMINISTRATION**

7.7.2.1 The Chief is responsible for implementation of the ECP. The Safety Officer will maintain and update the written ECP at least annually and whenever necessary to include new or modified tasks and procedures.

7.7.2.2 Personnel who are reasonably anticipated to have contact with or exposure to blood or other potentially infected materials are required to comply with the procedures and work practices outlined in this ECP.

7.7.2.3 The Safety Officer will have the responsibility for written housekeeping protocols and will ensure that effective disinfectants are purchased.

7.7.2.4 The Safety Officer will be responsible for ensuring that all medical actions required are performed and that the appropriate medical records are maintained.

7.7.2.5 The Safety Officer will be responsible for training, documentation of training, and making the written ECP available to all personnel, OSHA and NIOSH representatives.

7.7.2.6 The EMS Officer will maintain and provide all necessary personal protective equipment (PPE), engineering controls, (i.e., sharps containers, etc...), labels and red bags as required by the standard.

7.7.2.7 The EMS Officer will ensure that adequate supplies of the aforementioned equipment are available.

## **7.7.3 EMPLOYEE EXPOSURE DETERMINATION**

7.7.3.1 As part of the exposure determination section of our ECP, the following is a list of all job classifications in which all personnel have occupational exposure. For the purposes of this procedure all personnel covered by this standard shall be known as "employees".

Contributing Firefighter  
Active Firefighter  
Lieutenant  
Captain  
Assistant Chief  
Chief

Firefighter/Maintenance Mechanic  
Fire Official

7.7.3.2 All exposure determinations were made without regard to the use of Personal Protective Equipment (PPE).

#### **7.7.4 EXPOSURE CONTROL PLAN (ECP)**

7.7.4.1 All employees will utilize Universal Precautions. Universal Precautions is an infection control method which requires personnel to assume that all human blood and specified human body fluids are infectious for HIV, HBV and other bloodborne pathogens and must be treated accordingly.

7.7.4.2 Employees covered by the Bloodborne Pathogens Standard will receive an explanation of this ECP during their initial training sessions. It will also be reviewed annually. All employees will have an opportunity to review the ECP at any time by reviewing the watch desk copy in each station or the copy posted on the company website. Each employee or member will be issued a copy of the plan with their initial training. Employees seeking a copy of the plan should contact the Safety Officer. A copy of the plan will be made available free of charge and within 15 days of the request.

7.7.4.3 The Safety Officer will also be responsible for reviewing and updating the ECP annually or sooner if necessary to reflect any new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employees with occupational exposure.

7.7.4.4 Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering and work practice controls we will use and where they will be used are listed below:

7.7.4.5 Employees shall wash hands as soon as possible after removal of gloves or other PPE. Hand washing facilities with germicidal soap are provided at each station. Germicidal wipes are maintained on each apparatus for clean up in field. Employees shall wash their hands as soon as possible or on return to station.

7.7.4.6 Employees shall wash any body part as soon as possible after skin contact with blood or other potentially infectious material occurs.

7.7.4.7 Employees should replace contaminated PPE as soon as possible to prevent cross contamination.

7.7.4.8 Employees shall not bend, recap, shear or break needles.

7.7.4.9 All potentially contaminated waste shall be labeled properly.

7.7.4.10 All potentially contaminated non-disposable equipment shall be decontaminated properly.

7.7.4.11 Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses in work areas where there is a likelihood of occupational exposure is prohibited. This section includes incident scenes and apparatus prior to washing hands and exposed skin.

7.7.4.12 Where there is potential for occupational exposure, appropriate personal protective equipment such as, but not limited to, gloves, gowns, replaceable coveralls, face shields or masks, eye protection, pocket resuscitation masks or other ventilation devices shall be used. Training will be provided by the Safety Officer in the use of appropriate personal protective equipment. Additional training will be provided, whenever necessary, when personnel take a new position or if new duties are added to their current position.

**NOTE 7.7.4.12**

**Employees may choose to temporarily and briefly, under rare and extraordinary circumstances, to forego the equipment. It must be the employees professional judgement that using the protective equipment would prevent the delivery of health care or public safety services or would pose an increased hazard to the safety of the worker or co-worker.**

7.7.4.13 When a situation as above occurs, the Safety Officer shall fully investigate the incident and document circumstances to determine if there are ways to avoid it in the future. Exceptions must be limited - this is not a blanket exemption.

7.7.4.14 Appropriate PPE will be stored on all apparatus. Additional PPE such as CPR masks may be issued to employees. PPE or use in station decontaminating equipment will be stored near the engine room sinks in each station.

#### General Precautions for Use of PPE

7.7.4.15 Wash hands immediately or as soon as feasible after removal of gloves or other PPE. (Germicide wipes should be used at emergency scenes as an interim measure before returning to station)

7.7.4.16 Remove PPE before leaving the emergency scene or work area and after a garment becomes contaminated.

7.7.4.17 Place used protective equipment in appropriately designated bags stored on each apparatus for disposal. **ALL** EMS PPE currently in use is disposable. PPE visibly contaminated with blood or other potentially infectious material should be red bagged and sent to the receiving hospital in the ambulance with the patient treated. Used PPE and disposable equipment not visibly contaminated should be disposed of in normal trash containers. If contaminated PPE and disposable equipment cannot be sent to the hospital, it shall be red bagged, sealed and labeled as to contents and segregated for disposal after return to station.

7.7.4.18 Wear appropriate gloves when it can be reasonably anticipated that you may have contact with blood or other potentially infectious materials and when handling or touching contaminated items or surfaces. Replace gloves if torn, punctured, contaminated or if their ability to function as a barrier is compromised.

7.7.4.19 Following any contact of body areas with blood or any other infectious materials, you must wash your hands and any other exposed skin with soap and water as soon as possible. Personnel must also flush exposed mucous membranes (eyes, mouth, etc) with water.

7.7.4.20 Never wash or decontaminate disposable PPE for reuse or before disposal.

- 7.7.4.21 Wear appropriate face and eye protection such as a mask with glasses with solid side shields or a chin-length face shield when splashes, sprays, spatters or droplets of blood or other potentially infectious materials pose a hazard to the eye, nose or mouth.
- 7.7.4.22 Gowns, aprons or other protective body clothing should be worn when gross contamination may be encountered.
- 7.7.4.23 If a garment is penetrated by blood and other potentially infectious materials, the garment must be removed immediately or as soon as feasible.

## **7.7.5 TRAINING**

7.7.5.1 All employees who have or are reasonably anticipated to have occupational exposure to bloodborne pathogens will receive training conducted by the Safety Officer. The Safety Officer shall provide training on the epidemiology of bloodborne pathogen diseases. OSHA pamphlet "Occupational Exposure to Bloodborne Pathogens" and Fact Sheets will be used to inform personnel of the epidemiology, symptoms, and transmission of bloodborne diseases. In addition, the training program will cover, at a minimum, the following elements:

- A copy and explanation of the standard
- Epidemiology and symptoms of bloodborne pathogens
- Modes of transmission
- Our exposure control plan and how to obtain a copy
- Methods to recognize exposure tasks and other activities that may involve exposure to blood
- Use and limitations of engineering controls, work practices and PPE
- PPE - types, uses, location, removal, handling, decontamination and disposal
- PPE - basis for selection
- Hepatitis B Vaccine - offered free of charge.
- Training will be given prior to vaccination on its safety, effectiveness, benefits and method of administration
- Emergency Procedures - for blood and other potentially infectious materials
- Exposure Incident Procedures
- Post-exposure evaluation and follow up
- Signs and labels - and/or color coding

- Question and answer session.

## **7.7.6 HEPATITIS B VACCINATION**

7.7.6.1 The Safety Officer will provide information on Hepatitis B vaccinations addressing its safety, benefits, efficacy, methods of administration and availability. The Hepatitis B vaccination series will be made available at no cost within 10 days of initial assignment to employees who have occupational exposure to blood or other potentially infectious materials unless:

- The employee has previously received the series
- Antibody testing reveals the employee is immune
- Medical reasons prevent taking the vaccination
- The employee chooses not to participate

7.7.6.2 All employees are strongly encouraged to receive the Hepatitis B vaccination series. However, if an employee chooses to decline HB vaccination, then the employee must sign a statement to this effect.

7.7.6.3 Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of the refusal of the HB vaccination will be kept in the personnel file with the employee's other records.

## **7.7.7 POST EXPOSURE EVALUATION AND FOLLOW-UP. PROCEDURES FOR REPORTING, DOCUMENTING AND EVALUATING THE EXPOSURE**

7.7.7.1 Should an exposure incident occur contact the officer in charge of the incident immediately. If no officer is present alternate attempts to contact ranking officers and commissioners should be made by phone or page. Each exposure must be documented by the employee on an "Exposure Report Form". The Safety Officer will review each report and add any additional information as needed.

7.7.7.2 An immediately available confidential medical evaluation and follow up will be conducted by " A MEDICAL FACILITY SELECTED BY THE BOARD". The following elements will be performed:

- Document the routes of exposure and how the exposure occurred.

- Identify and document the source individual (See Appendix E) unless the employer can establish that identification is infeasible or prohibited by State or local law. (See Note #2)
- Obtain consent (See Note #2) and test source individual's blood as soon as possible to determine HIV and HBV infectivity and document the source individual's blood test results.
- If the source individual is known to be infected with either HIV or HBV, testing need not be repeated to determine the known infectivity.
- Provide the exposed personnel with the source individual's test results and information about applicable disclosure laws and regulations concerning the source identity and infectious status.
- After obtaining consent, collect exposed personnel's blood as soon as feasible after the exposure incident and test blood for HBV and HIV serological status.
- If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days. (See Note #3).

7.7.7.3 Appendix D "Exposure Incident Report" and Appendix E "Request for Source Individual Evaluation" and Appendix F "Employee Exposure Follow-up Record" (See Note #4) will be copied and provided to the employee so they may bring them along with any additional relevant medical information to the medical evaluation. Original copies of these appendices will be maintained with the employee's medical records.

7.7.7.4 The Safety Officer will review the circumstances of the exposure incident to determine if procedures, protocols and/or training need to be revised.

## **7.7.8 HEALTH CARE PROFESSIONALS**

7.7.8.1 The Safety Officer will ensure that health care professionals responsible for employee's HB vaccination and post-exposure evaluation and follow-up be given a copy of the OSHA Bloodborne Standard. The Safety Officer shall also ensure that the health care professional evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident.
- Route(s) of exposure.
- Circumstances of exposure.
- If possible, results of source individual's blood test; and relevant employee medical record, including vaccination status.

7.7.8.2 The Safety Officer will provide the employee with a copy of the evaluating healthcare professionals written opinion within 15 days of the completion of the evaluation.

7.7.8.3 For HB vaccinations, the healthcare professional's written opinion will be limited to whether or not the employee has been informed of the results of the medical evaluation and any medical conditions which may require further evaluation and treatment.

7.7.8.4 All other diagnoses must remain confidential and must not be included in any written report to the fire district.

## **7.7.9 HOUSEKEEPING**

7.7.9.1 As housekeeping functions required by the OSHA Bloodborne Standard are not a regularly occurring task and only occur when necessary after an incident, no regular housekeeping schedule has been established.

7.7.9.2 Work surfaces shall be decontaminated with appropriate disinfectant immediately after the termination of an emergency incident or after equipment decontamination has taken place in the stations. This section shall apply when surfaces are overtly or possibly contaminated with blood or other infectious material.

7.7.9.3 Work surfaces for equipment decontamination should be limited to the counter and rear sink in the Station 1 engine room and the Station 2 engine room utility/bath room. Work surfaces may also apply to apparatus and equipment in that personnel with contaminated gloves may handle and use compartment door handles, steering wheels etc... These activities should be avoided as much as possible. Prior to returning to station, this possibility should be considered and if necessary use disinfectant wipes on surfaces likely contacted and/or have driver/operator use gloves on return to station and then perform full decontamination.

7.7.9.4 Visibly contaminated disposable materials or cleaning supplies shall be placed in a sealed, labeled, red bag for disposal.

7.7.9.5 Surfaces should be decontaminated with a chloride based tuberculocidal disinfectant. All label instructions should be followed. Generally these disinfectants should be applied and left on a surface for at least 10 minutes prior to removal.

7.7.9.6 Equipment may be decontaminated in a solution of household bleach and water mixed in a ratio of 10 parts water to 1 part bleach.

7.7.9.7 The following contaminated articles will be laundered:

- Firefighting PPE (coats, pants, hoods, gloves).
- Fire Department Uniforms.
- Selected personal clothing.

7.7.9.8 Laundering of approved articles shall be performed by the employee immediately following the contamination. Laundering shall take place using the fire station washing machine using the posted directions.

7.7.9.9 The following are general requirements in handling contaminated laundry:

- Handle contaminated laundry as little as possible and with a minimum of agitation.
- Use appropriate personal protective equipment when handling contaminated laundry.
- Place wet contaminated laundry in leak proof, labeled or red bags before transporting.
- Bag contaminated laundry at it's location of use.
- Never sort or rinse contaminated laundry in area of it's use.

#### **7.7.10 LABELING**

7.7.10.1 All contaminated material intended for disposal shall be placed in red "biohazard" trash bags.

7.7.10.2 Any materials being transported or stored prior to decon or laundering shall be placed in red "biohazard" trash bags and labeled as to contents.

7.7.10.3 The Officer in Charge of the incident shall ensure red bags are

used and labeled as required.

7.7.10.4 Employees are to notify the Safety Officer if they discover unlabeled regulated waste containers.

### **7.7.11 RECORD KEEPING**

7.7.11.1 Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.120.

7.7.11.2 The Safety Officer is responsible for maintenance of the required medical records and they are kept in the Commissioners Office personnel file.

7.7.11.3 In additions to the requirements of 29 CFR 1910.120, the medical record will include:

- The name and social security number of the employee.
- A copy of the employee's Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccinations.
- A copy of all results of examinations, medical testing, and follow-up procedures as required by the standard.
- A copy of all healthcare professional's written opinions as required by the standard.

7.7.11.4 All employee medical records will be kept confidential and will not be disclosed or reported without the employee's express written consent to any person within or outside the work place except as required by the standard or as may be required by law.

7.7.11.5 Employee medical records shall be maintained for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.120.

7.7.11.6 Employee medical records shall be provided upon request of the employee or to anyone having written consent of the employee within 15 working days.

7.7.11.7 Bloodborne pathogens training records will be maintained by the Safety Officer in the Fire Company office training file.

7.7.11.8 The training record shall include:

- The dates of the training sessions.
- The contents or a summary of the training sessions.
- The names and qualifications of the persons conducting the training.
- The names and job titles of all persons attending the training sessions.

7.7.11.9 Training records will be maintained for a minimum of 3 years from the date on which the training occurred.

7.7.11.10 Employee training records will be provided upon request to the employee or the employee's authorized representative within 15 working days.