

River Falls Ambulance Service Exposure Control Plan

POLICY

River Falls Area Ambulance Service is committed to providing a safe and healthful work environment for our entire staff. 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 standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens" and also incorporates tuberculosis cases into the plan.

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

1. Program Administration
2. Determination of employee exposure
3. Implementation of various methods of exposure control including:
 - a. Universal Precautions
 - b. Engineering and work practice controls
 - c. Personal protective equipment
 - d. Housekeeping
 - Ambulance Cleaning Procedure
 - Equipment Cleaning Procedure
4. Hepatitis B vaccination and antibody testing when appropriate.
5. Post-exposure evaluation and follow-up
6. Administration for post-exposure evaluation and follow-up
7. Evaluating the circumstances surrounding and exposure
8. Communication of hazards to employees and training.
9. Recordkeeping
10. Tuberculosis Policy
11. Definitions

The methods of implementation of these elements of the standard are discussed in the subsequent pages of this ECP.

PROGRAM ADMINISTRATION

The Director, Operations Supervisor and Assistant Directors of River Falls Ambulance, hereafter designated as the Officers, are responsible for the implementation of the ECP. The Officers of the service will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.

The Director and the Operations Supervisor are classified as "Infectious Control Officers" for River Falls Area Ambulance Service. These persons will be responsible to oversee all bloodborne pathogens for the service and record them appropriately.

All employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.

River Falls Ambulance Service will maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g. sharps containers), labels, and red bags as required by the standard. The Director or Operations Supervisor will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes.

The Officers of River Falls Ambulance will be responsible for ensuring that all medical actions required are performed and that appropriate employee health and OSHA records are maintained.

The Officers will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives.

If it is determined that revisions need to be made, the Officers will ensure that appropriate changes are made to this ECP. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

EMPLOYEE EXPOSURE DETERMINATION

The following is a list of all job classifications within our organization in which all employees have occupational exposure:

1. First Responders, EMT-Basics & Intermediate Techs
2. EMT-Intermediates, Paramedics and RN's
3. Officers of River Falls Ambulance

The following is a list of job classifications in which outside organizations have potential of occupational exposure with our organization:

1. River Falls First Responder Personnel
2. River Falls Fire Department Personnel
3. River Falls Police Department Personnel
4. University of WI-River Falls Campus Security & Athletic Trainers
5. Any mutual aid pre-hospital or hospital personnel, which may be on scene.

METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees within River Falls Ambulance will utilize universal precautions:

1. Jumpsuits or uniforms *must* be worn on every run. Jackets are additional to these.
2. Gloves will be worn on *every* call prior to attending to a patient.
3. Every attendant will wash their hands after removing gloves, preferably at the location the patient was delivered.
4. Gloves will be disposed of properly, in a waste receptacle if unsoiled, in a biohazard bag if possibly soiled with infectious waste.
5. CPR will be performed with a Microshield, pocket mask, bag valve or positive pressure mask.

Exposure Control Plan

All employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training and orientation session. The plan will also be reviewed in employee's annual refresher training. All employees have access to this plan at any time by looking it up in the organizational book located in each of the ambulances, in the training room and online. A copy of the

ECP will be provided to any employee that requests one. The copy will be submitted to the employee within 15 working days of the request.

The Officers are responsible for reviewing and updating the ECP annually or more frequently, if necessary, to reflect any new or modified tasks and procedures, which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. The annual update documentation will include:

1. An assessment of technology changes that can reduce exposures.
2. An assessment of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.
3. Methods used for soliciting the input from non-managerial employees in the identification, evaluation and selection of effective engineering and work practice controls.

Engineering Controls & Work Practices

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

1. Protect IV plus needles
2. Needle-less IV system
3. Needle safe syringes
4. Needle safe lancets

Sharps containers are inspected, maintained or replaced by the Director or Operations Supervisor whenever necessary to prevent overfilling.

River Falls Ambulance identifies the need for changes in engineering control and work practices through reviewing past OSHA records, employee interviews and committee activities.

Our service evaluates the need for new products/procedures through open discussion at monthly meetings and through committee activities. The Officers and all employees are involved in this process.

The Director will ensure effective implementation of these recommendations.

Personal Protective Equipment

PPE is provided to our employees at no cost to them. Training is provided by the Officers in the use of the appropriate PPE for the tasks or procedures employees will perform.

The types of PPE available to employees are as follows:

1. Non-disposable = Jumpsuits, uniforms and jackets
2. Disposable = gloves, jumpsuits, gowns, booties and eye protection.

The Director issues non-disposable PPE to an employee after the completion of orientation to the service, but prior to performing any ambulance related job. Any non-disposable PPE that no longer performs to its standard is to be brought to the attention to the Officers for immediate replacement/repair. Replacement PPE will be issued by the Director. All non-disposable PPE is to remain in the ambulance bay to decrease potential contamination of personal items.

All disposable PPE is located inside the ambulances and storage room in the building. The officers of the service are responsible for ensuring appropriate disposable PPE is available to employees.

Employees are responsible to notify an officer if they know of a deficiency or problem with any disposable PPE.

All employees using PPE must observe the following precautions:

1. Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
2. Never wash or decontaminate disposable gloves for reuse.
3. Remove PPE after it becomes contaminated and before leaving the work area.
4. Used PPE may be disposed of in the garbage unless contaminated with infectious substances then they must be disposed of in a red biohazard bag.
5. Wear appropriate gloves when it can be reasonably anticipated that there may be hand contact with blood or OPIM and when handling or touching contaminated items or surfaces.
6. Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
7. Utility gloves may be decontaminated for reuse if their integrity is not compromised. Utility gloves must be discarded if there are any signs of cracking, peeling, tearing, puncturing, or deterioration.
8. Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose or mouth.
9. Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface of other garments or your skin.

The procedure for handling used PPE is as follows:

Non-Disposable

1. Upon contamination of an ambulance personnel's clothing/garments, the contaminated item(s) must be removed as soon as possible and placed into a biohazard bag. The Infection Control Officer must be notified *immediately* so the appropriate actions may be taken.
2. Any other non-disposable PPE may be washed at the ambulance station as needed.

Disposable

1. All disposable PPE is discarded. Non-contaminated PPE may be discarded in general garbage. All contaminated PPE should be discarded in red biohazard bags/containers located in each ambulance and at the hospital.

Housekeeping

Regulated waste is placed in red biohazard containers, which are closeable, constructed to contain all contents and prevent leakage. The containers shall be closed prior to removal to prevent spillage or protrusion of contents during handling.

Sharps disposal containers should be placed in the red biohazard containers at River Falls Area Hospital. No full sharps containers shall be discarded at the ambulance station.

Contaminated sharps are discarded immediately or as soon as possible in containers that are designated as sharps containers. The containers should be closable, puncture resistant, leak proof and labeled as biohazard sharps. Sharps containers are located in each ambulance on the counter and in the medical kits. If needle recapping is indicated, it should be done with a one handed technique. The cap should then be taped on to prevent further exposure to the needle.

Emesis basins should be discarded in red biohazard containers at River Falls Area Hospital.

Broken glassware, which may be contaminated, is picked up using mechanical means, such as a brush and dustpan and disposed of in an appropriate sharps container.

Labels

The following labeling methods are used by River Falls Ambulance:

EQUIPMENT TO BE LABELED	LABEL TYPE
1. Contaminated laundry and specimens	Red biohazard bags with biohazard label
2. Contaminated sharps	Red biohazard sharps container w/ bio label
3. All contaminated disposable equipment (suction catheters, containers, etc.)	Red biohazard bags with biohazard label

The Officers will ensure warning labels are affixed or red bags are used as required, if regulated waste or contaminated equipment is brought into the facility. Employees are to notify the infectious control officer if they discover regulated waste containers, contaminated equipment, etc. without proper bags or labels.

Ambulance Cleaning Procedures

1. Adhere to all universal precautions.
2. Wear heavy rubber gloves to clean the ambulance.
3. Check surfaces of the ambulance for blood/body fluids and dispose of properly.
4. Prepare a solution of ¼ cup bleach to 1 gallon water.
5. Wash surfaces inside of the ambulance after each run or as needed. (include gurney)
6. Allow surfaces to air dry.

Potential Exposure Situation Protocol

1. Adhere to all universal precautions.
2. For potentially infectious body fluids:
 - A) soak up fluid with a paper towel and dispose of in a biohazard bag.
 - B) spray all surfaces, except floor, with disinfectant (Cavicide) and wipe clean.
 - C) scrub floor with bleach solution.
3. For airborne infectious diseases:
 - A) spray all surfaces, except floor, with disinfectant (Cavicide) and wipe clean.
 - B) spray the air with a disinfectant spray (e.g. Lysol).
 - C) scrub floor with bleach solution.
 - D) open doors to allow the ambulance to become well ventilated.

Equipment Cleaning Procedures

Single Use Equipment

1. All single use equipment will be treated as if contaminated.
2. Dispose of all single use equipment that has been in contact with a patient in biohazard bags or containers.

Non-Disposable Equipment

1. Wash all non-disposable equipment with either a 4:1 water to bleach solution or a Cavicide solution.

Potential Exposure Situation Protocol

1. Follow all universal precautions.
2. Dispose of all needles or sharps in a red sharps container immediately after use.

3. Dispose of all fluids in the toilet at the hospital.
4. Wash all non-disposable equipment thoroughly with soap and water to remove fluid.
5. Clean all non-disposable equipment thoroughly with Cavicide or any other approved disinfectant.

HEPATITUS B VACCINATION

River Falls Ambulance Service will provide training to employees on hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.

The hepatitis B vaccination series is available at no cost after EMS orientation and within 10 days of initial assignment to employees identified in the exposure determination section of this plan. Vaccination is encouraged unless:

1. Documentation exists that the employee has previously received the series.
2. Antibody testing reveals that the employee is immune.
3. Medical evaluation shows that the vaccination is contraindicated.

However, if an employee chooses to decline vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept in the employee's medical record file at the River Falls Ambulance Station.

Vaccination will be provided by River Falls Area Hospital or Pierce County Department of Health.

Following hepatitis B vaccinations, the health care professional's written opinion will be limited to whether the employee requires the hepatitis vaccine, and whether the vaccine was administered.

One to two months following the HBV vaccination series, EMS personnel will be tested for HBV surface antigens as indicated in MMWR.

Antibody testing for response to hepatitis B surface antigen will be provided by River Falls Area Hospital at 1629 E. Division St.

POST-EXPOSURE EVALUATION & FOLLOW-UP

Should an exposure incident occur, immediately contact an officer of the service. (Preferably the infectious control officer.)

An immediate and confidential medical evaluation and follow-up will be conducted by River Falls Area Hospital. Following the initial first aid of cleaning the wound, flushing the eyes, or mucus membranes, etc., the following activities will be performed:

- ✓ Document the routes of exposure and how the exposure occurred.
- ✓ Identify and document the source individual (unless the identification is infeasible or prohibited by state or local law).
- ✓ Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, HBV infectivity. Document that the source individual's test results were conveyed to the employee's health care provider.
- ✓ If the source individual is already known to be HIV, HCV, and/or HBV positive, new testing need not be performed.

- ✓ Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g. laws protecting confidentiality)
- ✓ After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
- ✓ If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days. If the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

ADMINISTRATION OF POST EXPOSURE- EVALUATION & FOLLOW-UP

The Director of River Falls Ambulance ensures that the health care professional(s), which are responsible for each employee's hepatitis B vaccination and post-exposure evaluation & follow-up, are given a copy of OSHA's bloodborne pathogen standard.

The Officers of River Falls Ambulance ensures that the healthcare professional evaluating an employee after an exposure incident receive the following:

- ✓ The employee's job description.
- ✓ The route(s) of exposure.
- ✓ The circumstances of exposure.
- ✓ Results of the source individual's blood test (if possible)
- ✓ Relevant employee medical records, including vaccinations.

The Director of River Falls Ambulance or River Falls Area Hospital will provide the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

EVALUATING THE CIRCUMSTANCES OF AN EXPOSURE INCIDENT

The Director will review the circumstances of all exposure incidents to determine:

- ✓ Engineering controls in use at the time.
- ✓ Work practices followed.
- ✓ A description of the device being used.
- ✓ Protective equipment or clothing that was used at the time of the exposure incident. (jumpsuit, uniform, gloves, face mask, etc.)
- ✓ Location of the incident. (ambulance, residence, hospital, etc.)
- ✓ Procedure being performed when the incident occurred.
- ✓ Employee's training status.

The Officers shall maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such a manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

1. The type and brand of device involved in the incident.
2. The area where the exposure incident occurred (inside ambulance, residence, hospital, etc.)
3. An explanation of how the incident occurred.

EMPLOYEE TRAINING

All River Falls Ambulance employees who have occupational exposure to bloodborne pathogens receive training conducted by the Director or 1st Assistant of River Falls Area Ambulance Service. River Falls Ambulance may supply training to employees of outside organizations, which have exposure to bloodborne pathogens with our organization, as well.

All River Falls Ambulance employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases including HIV, HBV and HCV. In addition, the training program covers, at a minimum the following elements:

- ✓ A copy and explanation of the standard.
- ✓ An explanation of this ECP and where to obtain a copy.
- ✓ An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- ✓ An explanation of the use and limitations of engineering controls work practices, and PPE including specific training on the sharps used.
- ✓ An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
- ✓ An explanation of the basis for PPE selection.
- ✓ Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge.
- ✓ Information of the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- ✓ An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- ✓ Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- ✓ Information on timely reporting of an exposure incident so that the chemical prophylaxis, if appropriate, can be administered in a timely manner in order to be effective.
- ✓ An explanation of the signs, labels and/or color-coding required by the standard and used within this organization.
- ✓ An opportunity for interactive questions and answers with the person conducting the training.

Training materials for this organization are located in the storage room and training room.

RECORDKEEPING

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at *least three* years in the River Falls Ambulance training records.

The training records include:

1. Date of training session.
2. Instructor and qualifications

3. Summary of training session
4. Signatures of employees, which attended the session.

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the Director of River Falls Area Ambulance Service.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.20, "Access to Employee Exposure and Medical Records."

The Officers are responsible for maintaining the required medical records. These confidential records are kept in each employee's file in the office of the service. They are kept the duration of employment plus 30 additional years.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be addressed to the Director of River Falls Area Ambulance Service at 175 E. Cedar St.

OSHA Recordkeeping

All work related needlestick injuries and cuts from sharp objects that are contaminated with blood or OPIM are recorded as an injury on the OSHA Injury and Illness log (300) by the Director. In addition, they will be logged on the Needlestick and Sharps Injury Log and also "Privacy Case" Log as deemed necessary.

A non-sharps exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). The Director does this determination, as well as the recording activities.

The privacy of employees will be protected by not recording the names of individuals on the OSHA Injury and Illness log. (OSHA 300) These employees will be logged as "privacy case."

All other provisions of the OSHA record keeping rules (29 CFR 1904) will be followed.

TUBERCULOSIS POLICY

Transmission of Disease

M. tuberculosis is carried through the air in an infectious droplet nuclei of 1-5 microns in size. These droplet nuclei may be generated when a person with T.B. coughs, speaks, breathes or spits.

Workplaces with the greatest incident of T.B. cases:

- health care settings / long term facilities for the elderly
- correctional institutions
- homeless shelters
- drug treatment centers

Signs and Symptoms

- productive cough that lasts more than 2 weeks
- coughing up blood
- weight loss
- loss of appetite
- weak/lethargic
- night sweats or fever

Universal Precautions (In addition to previously listed)

1. All ambulance attendants will wear a T.B. mask or hepa respirator mask.
2. Any bodily fluids from the mouth or nose will be disposed of in a biohazard container.
3. Whenever a patient is coughing, spitting, or being suctioned, a T.B. mask will be worn.
4. Notify the hospital of any patient exhibiting any of the above signs or symptoms.

Significant Exposure Protocol

1. Adhere to all universal precautions.
2. In a known case of T.B. apply a mask to the patient as well as to ambulance personnel.
3. As soon as patient has been delivered to their destination, air out the ambulance.
4. As soon as the exposure is realized, it should be reported to the Infection Control Officer *immediately*.
5. The document “*Guidelines for Preventing the Transmission of Tuberculosis in the Health-Care Setting, with Special Focus on HIV-Related Issues*” should be read thoroughly.
6. The OSHA 300 log will be completed for the incident.

Medical Surveillance for T.B.

This will include the following:

- initial baseline screening at the time of employment.
- Bi-annual screening.
- Retesting every six months for workers with a significant exposure.

DEFINITIONS

Significant Exposure

1. Any puncture of the skin by a needle or other sharp object that has had any contact with a patient’s blood or body fluid, or with fluids infused into the patient.
2. Blood spattered onto mucous membranes or eyes.
3. The contamination of open skin (cuts, abrasions, blisters, open dermatitis) with potentially infectious body fluids.
4. The transportation of a patient who subsequently is diagnosed with an airborne infectious disease.

Contaminated

The presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry

Laundry that has been soiled with blood or other potentially infectious materials (wet or dry), or may contain sharps.

Contaminated Sharps

Any contaminated object that can penetrate the skin including, but not limited to needles, scalpels, broken glass, broken capillary tubing and exposed wires.

Exposure incident

A specific eye, mouth other mucous membrane, non-intact skin, or parental contact with blood or other potentially infectious materials.

Regulated waste

Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dry blood or other potentially infectious materials and are capable of releasing these materials during handling; and contaminated sharps.

Cleaning

The physical removal of soil from an object, often using a detergent or mild disinfectant. (Disinfectants are less effective if organic matter, such as blood or feces is present. This needs to be cleaned up thoroughly with soap and water first.)

Potential Exposure

When contact can reasonably be expected to be made with potentially infectious body fluids, any unfixated tissue or organ, or a patient with an airborne infectious disease.

High Level Disinfectant

Has a sporicidal capability that is used for a much shorter time than that required for sterilization. It also kills the same organisms as the intermediate disinfection.

Intermediate Level Disinfectant

Kills vegetative bacteria, lipid viruses, fungi and T.B. A cleaning agent such as a commercial antimicrobial disinfectant is appropriate.

Low Level Disinfection

Kills vegetative bacteria and lipid viruses. A cleaning agent such as 1:10 solution of bleach/water is appropriate.



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