

LEON COUNTY E.M.S.
Standard Operating Guideline

Title: Exposure Control Plan
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I. GUIDELINE:

LCEMS 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 the Needlestick Safety and Prevention Act (PL 106-430)

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

1. Determination of employee exposure
2. Implementation of various methods of exposure control, including:
 - Universal precautions
 - Engineering and work practice controls
 - Personal protective equipment
 - Housekeeping
 - Hepatitis B vaccination
3. Post-exposure evaluation and follow-up
4. Communication of hazards to employees and training
5. Record keeping
6. Procedures for evaluating circumstances surrounding an exposure incident

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

II. PROGRAM ADMINISTRATION:

1. LCEMS is responsible for the implementation of this ECP. In concert with the County Risk Manager, the Deputy Chief of Administration will maintain, review, and update the ECP at least 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. Review of the sharps injury log will be a part of these reviews to identify problem areas and/or ineffective devices which may need replacement. Documentation relating to the consideration and implementation of appropriate commercially available and effective engineering controls designed to eliminate or minimize exposure and the procedure used for evaluation of circumstances surrounding exposure incidents will be included with the annual update.
2. Those employees or auxiliary members 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.
3. LCEMS 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. LCEMS will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes. Contact EMS Administration at (850) 488-0911.
4. The County Risk Manager will be responsible for ensuring that all medical actions required are made available and that appropriate employee health and OSHA records are maintained. Contact the County Risk Manager at (850) 922-4605.
5. The Major in charge of Training and IQM will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives. Contact EMS Major in charge of Training and IQM at (850) 410-1073.

III. EMPLOYEE EXPOSURE DETERMINATION:

The Center for Disease Control and Prevention (CDC) has established the following job task classification system to determine which employees may be exposed to bloodborne disease:

Category I. Tasks That Involve Exposure To Blood, Body Fluids, or Tissues.

All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids or tissues, or a potential for spills or splashes of them, are Category I tasks. Use of appropriate protective measures shall be required for every employee engaged in Category I tasks.

Category II. Tasks That Involve No Exposure to Blood, Body Fluids, Or Tissues, But Employment May Require Performing Unplanned Category I Tasks.

The normal work routine involves no exposure to blood, body fluids, or tissues, but exposure or potential exposure may be required as a condition of employment.

Appropriate protective measures shall be readily available to every employee engaged in Category II tasks.

Category III. Tasks That Involve No Exposure To Blood, Body Fluids, Or Tissues, And Category I Tasks Are Not A Condition of Employment.

The normal work routine involves no exposure to blood, body fluids, or tissues (although situations can be imagined or hypothesized under which anyone, anywhere, might encounter potential exposure to body fluids). Persons who perform these duties are not called upon as part of their employment to perform or assist in emergency medical care or first aid, or to be potentially exposed in some other way. Tasks that involve handling of implements or utensils, use of public or shared bathroom facilities or telephones, and personal contacts such as handshaking are Category III tasks.

Employee Identification

Category I Tasks

Employees in the EMS Operations have been identified as routinely performing Category I tasks. Examples include:

- Bleeding control and bandaging.
- Intravenous access and phlebotomy.
- Other injection procedures.
- Endotracheal intubation and other airway control procedures
- Cleanup of blood and other body fluids

Category II Tasks

No employees of the EMS Division have been identified as routinely performing Category II tasks.

Category III Tasks

Employees in other job safety categories are not exposed to blood or body fluids in their normal work routine. Their work is classified as Category III and is not applicable to this program.

The following is a list of all job classifications at our establishment:

JOB TITLE	DEPARTMENT/LOCATION	CLASSIFICATION
• EMS Staff Assistants	EMS Division	CATEGORY III
• EMS Supply Technician	EMS Division	CATEGORY I
• Emergency Medical Technician	EMS Division	CATEGORY I
• Paramedic	EMS Division	CATEGORY I
• EMS Sergeants	EMS Division	CATEGORY I
• EMS Lieutenants	EMS Division	CATEGORY I
• EMS Captains	EMS Division	CATEGORY I
• EMS Majors	EMS Division	CATEGORY I
• EMS Deputy Chief of Administration	EMS Division	CATEGORY I
• EMS Deputy Chief of Operations	EMS Division	CATEGORY I
• EMS Chief	EMS Division	CATEGORY I

IV. METHODS OF IMPLEMENTATION AND CONTROL:

The following control methods have been adopted by Leon County EMS and employee compliance is required.

1. Universal Precautions – Body Substance Isolation

Leon County EMS, employees shall regard **all** human blood and body fluid as infectious for HIV/HBV and other bloodborne pathogens and take appropriate protective steps to protect themselves from unprotected contact with such fluids. Though HIV/HBV transmission has **not** been documented from urine, feces, vomitus, sputum, saliva, sweat or tears, employees are directed to consider **all** body fluids as potentially hazardous and protect themselves accordingly. This is primarily due to the frequently uncontrolled conditions present in pre-hospital emergency medical services making fluid differentiation difficult if not impossible.

All employees will utilize universal precautions in accordance with the Leon County E.M.S. Policy with all patient contacts. Universal precautions are defined as the use of all appropriate preventative equipment. This equipment includes the proper use of gloves, gowns, face and eye protection and other such equipment as provided or authorized by LCEMS.

Precautions for Patients With Known Infectious Diseases

- In the event that transportation is requested for a patient who is known to be the carrier of an infectious disease, the crew will be provided with all appropriate information. The crew will receive all information that has been provided to the LCEMS dispatcher. Under no circumstances will LCEMS refuse service / treatment / transport to a patient based on their infectious status.
- Upon arrival at the pickup facility, the crew shall confirm the infectious condition of the patient, and any specific precautions to be aware of.
- Upon arrival at the receiving facility, the crew shall notify the person assuming responsibility for the patient's care of the patient's condition and infectious status. This notification shall be made in a discreet fashion both verbally to the receiving personnel and in writing on the patient care report.

2. Exposure Control Plan

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed during their state mandated HIV Refresher. All employees have an opportunity to review this plan at any time during their work shifts by consulting the safety manual which contains this ECP. If a personal copy of this ECP is requested, contact the EMS Major in charge of Training and IQM at (850) 410-1073, and EMS will provide an employee with a copy of the ECP free of charge within 15 days of the request.

In concert with the County Risk Manager, the Deputy Chief of Administration is 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 as determined by the Centers for Disease Control (CDC) or other applicable agency.

3. Engineering Controls and Work Practices

Engineering 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:

A. The following engineering controls have been developed to minimize the risk of exposure.

- Impervious sharps / needle disposal containers in every ambulance
- Impervious sharps / needle disposal / protection devices in carry-in equipment
- Waterless alcohol-glycerin based hand cleaner in every vehicle
- Disposable bag valve mask resuscitators in every ambulance
- Labeled red plastic biohazard bags in every ambulance
- Personal protective equipment (PPE) provided for all Category I and II employees
- Approved disinfectant provided on all ambulances
- Use of needless systems – a device that does not use needles for: 1. the collection of body fluids or withdrawal of body fluids after initial venous or arterial access is established; 2. The administration of medication or fluids; or 3. Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.
- Use of retractable lancets for blood glucose sample retrieval

B. Work Practices are defined as those practices utilized by personnel in the performance of their job to assist in the prevention of exposures. Specific examples of work practice controls are:

- Disposable gloves must be worn when any contact with body fluids is anticipated.
- Employees will cover and protect from body fluid exposure while on duty all open cuts, abrasions and otherwise non-intact skin.

- Employees will flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with body fluids.
- Hands and other skin surfaces shall be washed immediately and thoroughly. Hot water and soap with vigorous lathering of the entire area for at least 15-30 seconds is recommended. If running water and soap is not available, the alcohol-glycerin based hand wash provided shall be utilized. This is the approved cleaning for field settings. The above mentioned soap and water washing should be done as soon as possible after the use of any alcohol-glycerin based hand wash. Thorough washing of hands should occur:
 - Between patient contact
 - Following glove removal
 - After using restroom facilities
 - Prior to eating
 - After covering nose and mouth when coughing or sneezing
 - After trash and/or infectious waste disposal
 - Any time hands are visibly soiled
 - After care of patients with open skin lesions, or when cleaning of rectal or genital areas is required
- **All** used needles and sharps shall **not** be recapped, bent, broken or sheared unless you are administering a controlled drug via injection route. Recapping of a controlled drug shall be done using a single handed scoop technique in which the hand holding the sharp is used to scoop up the cap from a flat surface. This procedure is only permitted after the administration of a controlled drug via injection route due to the need to account for un-used controlled drugs. When controlled drug is administered via IV route the needless system will be used. All used needles and syringes must be placed **directly** into designated containers/holders. Under no circumstances are they to be placed unguarded on any surface or in carry-in equipment.
- Full sharps containers shall be properly sealed, removed from the ambulance and disposed of in a safe manner in accordance with the Leon County EMS Biohazardous Waste Management Program.
- All spills of blood/body fluid shall be cleaned up as soon as possible. While wearing PPE, soak up visible contaminants with paper towels and follow by cleaning with soap and water then a soaking spray of disinfectant, allowing the manufactures recommended soak prior to

wiping off. Place towels and gloves in red biohazard bag and dispose of in designated infectious waste container.

- When starting IV's, an absorbent barrier shall be placed under the limb to absorb blood.
- Contaminated *reusable* equipment shall be washed in hot soapy water, rinsed and disinfected with an approved disinfectant or bleach solution of 1:10 using approved universal precautions during cleaning.
- Drivers are to properly remove and dispose of their PPE after loading the patient in the patient compartment and wash their hands using the alcohol-glycerin based hand wash before entering the cab of the vehicle. Drivers are to wear new PPE prior to unloading the patient from the ambulance.
- Family members, walking wounded, and other non-employees shall not be permitted to ride in the cab of the ambulance if they are visibly contaminated with blood or other body fluids, under any circumstances.
- Employees shall not eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in any patient areas, including any area to the rear of the bulkhead of the ambulance. These items are permitted in the cab of the vehicle provided the pass through door/window is kept closed at all times when a patient(s) is/are in the patient compartment. Anytime food, drinks, cosmetics, lip balm, contact lenses, etc. are transported in the cab, they shall be handled in a reasonable manner to prevent contamination by keeping containers closed and covered. Any contamination of the cab shall require that the cab be immediately decontaminated. Hand cream is not considered a cosmetic and is permitted. It should be noted that some petroleum-based hand creams can adversely affect glove integrity and should be washed off prior to use of gloves.
- Employees shall not store food in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops, or any other location in which blood or other potentially infectious materials are present or are likely to be present.
- Employees shall attempt to minimize the spray, splash, or splatter of blood or other potentially infectious materials while performing procedures that involve these substances.

- Employees shall not mouth pipette/suction blood or other potentially infectious materials. Except when using a DeLee suction when clearing an infant's airway in an emergency; when no other method is available; and a trap which prevents suctioned fluid from reaching the employee's mouth is inserted in-line between the infant and the employee.
- During post-mortem procedures the following shall take place:
 - The blood and all body fluids of all deceased patients should be considered potentially infectious;
 - Employees shall wear PPE when contact with blood and other body fluid is anticipated.
- Employees shall tape and secure all specimens of blood to the outside of the IV bag or to the stretcher sheet and will take every precaution to prevent the accidental breakage of the specimen tubes.
- Employees shall assure that all equipment which may become contaminated with blood or other potentially infectious materials is examined and decontaminated as necessary prior to servicing, shipping, or reusing. Equipment that remains contaminated shall be labeled as specified in this exposure control plan.

LCEMS identifies the need for changes in engineering control and work practices through employee input and involvement. LCEMS will solicit input from non-managerial employees responsible for direct patient care in the identification, selection and evaluation of effective engineering and work practice controls. Methods of soliciting employee input will include employees providing ideas and suggestions through the suggestion box and in the participation of the evaluation of devices through pilot testing. The opportunities for employee input will be effectively communicated to employees during their annual ECP training.

LCEMS evaluates the need for new procedures or new products by attending infection control symposiums and by placing equipment/product on EMS units for evaluation, with employee feedback.

The following staff is involved in the review process for engineering controls and work practices:

- Deputy Chief of Administration will be the lead contact for any solicitation or evaluation of new equipment/products.
- EMS Captains are involved in relaying information on such equipment and employee comments on usage to the Deputy Chief of Administration.
- Employees voice their ideas, suggestions, and concerns in writing directly to the Deputy Chief of Administration.

The Deputy Chief of Administration will formulate a report that includes the recommended change of policy, engineering controls or work practices and provide that report to the County Risk Manager and EMS Chief for consensus. After approval has been granted the Deputy Chief of Administration will ensure implementation of these changes.

4. Personal Protective Equipment (PPE)

LCEMS will provide at no cost to the employee, personal protective equipment which does not allow the penetration of blood and other potentially infectious materials to work clothes, undergarments, skin, eye, mouth, and mucous membranes. The PPE must be worn as specified in this policy and in the Personal Protective Equipment policy. Uniforms that are provided by LCEMS are not intended to be and should not be considered personal protective equipment. LCEMS shall repair or replace any lost, stolen or damaged issued PPE.

Equipment

LCEMS provides training in the use of the appropriate PPE for the tasks or procedures employees will perform. It is the policy of LCEMS that appropriate PPE will be used on all patient contacts. As part of the new employee Orientation/Training Program, all new employees must be required to demonstrate knowledge of the PPE location and procedure for use.

The on-duty crew members are responsible for having their PPE with them in appropriate quantities. PPE shall be carried aboard each emergency vehicle in a quantity sufficient to protect all crew members and anyone else (students, ride along, etc) on board the emergency vehicle. PPE will be accessible to all potentially exposed employees. Employees are responsible for carrying their issued PPE at all times while out of the emergency vehicle. Replacement PPE may be obtained as necessary through EMS Supply. All employees are responsible for ensuring that assigned vehicles are stocked with PPE of all sizes at all times. LCEMS shall maintain the following items in all emergency vehicles:

- Disposable Impervious Gowns
- Face mask/Eye Shield Combination Device
- Disposable Exam Gloves of various sizes
- Waterless hand wash
- Bio-Hazard bags with Warning Labels
- Puncture Resistant Sharps Container
- Portable Puncture Resistant Sharps Container (in carry in equipment)
- Pair Protective Eyewear (Goggles)
- High Level Disinfectant Solution

Employees will wear the following personal protective equipment in the following instances:

Nitrile / Latex Gloves shall be worn in the following situations:

- All patient encounters where blood or body fluids are visible or have the potential to become present;
- Handling soiled linen;
- Touching/cleaning soiled surfaces;
- Performing invasive and vascular access procedures;
- Handling blood or other body fluids in containers;
- Starting IV's, drawing blood, and manipulating stopcock of lines;
- Emptying the drainage from urinary catheters;
- Digital examinations of mucous membranes;
- Endotracheal suctioning;
- Endotracheal intubation;
- All patient encounters where employees have open sores on hands.
- Never wash or decontaminate disposable gloves for reuse.
- Replace gloves between patients and if: torn, punctured, contaminated, or if their ability to function as a barrier is compromised.

Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided. It will be the responsibility of the employee to notify the Deputy Chief of Administration in writing that such an allergy exists so that proper stock levels can be maintained.

Eye Protection will be worn during intubation and in any situation when there is any anticipation of spraying or spattering of any body fluids and in any situation that has the potential for eye injury, i.e. flying debris, chemical splashing, etc. Also must be carried when contacting patients.

Masks, face shields and protective eyewear will be worn to prevent exposure of the mucous membranes of the mouth, nose and eyes and the upper respiratory tract. 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.

- During procedures likely to generate droplets of blood or other body fluids;
- During direct contact with a patient who is coughing excessively or is intubated and/or being suctioned;

Impervious Gowns shall be worn during procedures likely to generate splashes of blood or other body fluids

Guidelines for Specific Medical Procedures

Endotracheal Intubation / Combitube Insertion

- Personnel performing this procedure must wear gloves, mask and protective eyewear.
- Personnel assisting with this procedure must wear gloves, mask and protective eyewear.

Suctioning

- Personnel performing this procedure must wear gloves, mask and protective eyewear.
- Personnel assisting with this procedure must wear gloves, mask and protective eyewear.

Intravenous Access

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

Needle Thoracostomy

- Personnel performing this procedure must wear gloves and protective eyewear
- Personnel assisting with this procedure must wear gloves and protective eyewear.

Mouth-to-Mouth Ventilation

Employees should not perform direct mouth-to-mouth ventilation at any time.

Other adjunctive devices such as pocket masks, bag-valve-mask devices, or

demand valves should be utilized in lieu of making direct skin contact with patients.

Mouth-to-Mask Ventilation

- Personnel performing this procedure must wear gloves and protective eyewear.
- Personnel assisting with this procedure must wear gloves and protective eyewear.

Bag-Valve-Mask Ventilation

- Personnel performing this procedure must wear gloves and protective eyewear.
- Personnel assisting with this procedure must wear gloves and protective eyewear.

Intraosseous Insertion

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

OB Deliveries

- Personnel performing this procedure must wear gloves, mask, gown, and protective eyewear.
- Personnel assisting with this procedure must wear gloves, mask, gown, and protective eyewear.

Bleeding Control with spurting blood

- Personnel performing this procedure must wear gloves, gowns, mask, and protective eyewear. When bleeding is controlled, only disposable gloves are required.
- Personnel assisting with this procedure must wear gloves, gowns, mask, and protective eyewear. When bleeding is controlled, only disposable gloves are required.

Bleeding Control with minimal bleeding

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

Cariopulmonary Resuscitation (CPR)

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

Administering Intramuscular (IM), Subcutaneous (SQ), and Sublingual (SL) Medications

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

Administering Nebulized Medications

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

Administering Intravenous Medications (IVP)

- Personnel performing this procedure must wear gloves.
- Personnel assisting with this procedure must wear gloves.

REQUIRED PERSONAL PROTECTIVE EQUIPMENT

Task / activity	Disposable Gloves	Gowns	Mask	Protective Eyewear
Bleeding control with spurting blood	YES	YES	YES	YES
Bleeding control with minimal bleeding	YES	NO	NO	NO
Emergency childbirth	YES	YES	YES	YES
Drawing blood	YES	NO	NO	NO
Starting an IV line	YES	NO	NO	NO
Endotracheal intubation Combitube use	YES	NO	YES	YES
Oral / nasal suctioning, manually cleaning airway	YES	NO	YES	YES
CPR	YES	NO	NO	NO
Needle Thoracostomy	YES	NO	NO, unless splashing likely	YES
Mouth-to-mask ventilation	YES	NO	NO, unless splashing likely	YES

Bag-valve-mask ventilation	YES	NO	NO, unless splashing likely	YES
Intraosseous	YES	NO	NO	NO
Giving medications IM/SQ/SL	YES	NO	NO	NO
IV medication administration	YES	NO	NO	NO
Nebulized medication administration	YES	NO	NO	NO
Handling and cleaning instruments with contamination	YES	NO, unless splashing likely	NO, unless splashing likely	NO, unless splashing likely

NOTE: The list above is the **required** PPE to use for each procedure listed. In no way, does the above listing restrict personnel from using any and all PPE that the employee deems appropriate.

All employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removal of gloves or other PPE. Use of an alcohol-glycerin based hand sanitizer is permitted, but in no way is use of a sanitizer to replace hand washing at the first available opportunity. Please refer to hand hygiene section.
- Remove PPE and replace between patients, if torn punctured, contaminated or if its ability to function as a barrier is compromised.
- In no instance is a vehicle to be driven while wearing PPE that have been used to examine or touch patients, potentially exposed waste materials, blood products or body fluids. All PPE should be removed before getting into the front of an ambulance.
- Employees shall remove all personal protective equipment and place it in a designated container immediately after use.

- Wear 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.
- Remove immediately or as soon as feasible any garment or uniform contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface as much as possible. Employees will have a back up uniform available and ready for use and will change into back up uniform immediately or as soon as feasible. Employees needing to change their garment or uniform will do so before responding on any other calls. To minimize migration of contamination beyond the work area, employees must remove any contaminated garments or uniforms and wash up before leaving the work area and going into a non field work area.

Compliance

LCEMS shall assure that all employees use the appropriate personal protective equipment when there is potential for occupational exposure to blood or other potentially infectious materials

In cases when an employee temporarily and briefly declined to use personal protective equipment, when under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or co-worker (danger to self/patient, or an impairment in the ability for the employee to provide timely care to the patient), the employee(s) shall document the incident in writing and submit the report to the Deputy Chief of Administration. This report will be required whether or not the employee perceives that an actual exposure occurred or not. The Deputy Chief of Administration shall review all such incidents on a case-by-case basis to determine the appropriateness of the employee's actions and if any change in procedures or policies should be considered.

In the event that any employee is discovered to not have their PPE accounted for as stated previously, or any employee is observed not complying with any provision of this procedural guideline, the employee shall be subject to disciplinary action up to and including termination of employment.

5. Hand Hygiene Guidelines

The following guidelines are taken from the CDC's Recommendations and Reports on Hand Hygiene in Healthcare Workers:

- If hands are visibly dirty or contaminated with material, or are visibly soiled with blood or other body fluids, wash with either an antimicrobial or non-antimicrobial soap and water
- If hands are not visibly soiled, use an alcohol-based hand rub for routine decontamination or wash hands with antimicrobial soap and water.
- Decontaminate hands before having direct contact with patients (no gloves worn)
- Decontaminate hands after contact with a patient's intact skin (i.e. taking B/P) (no gloves worn)
- Decontaminate hands after contact with body fluids or excretions, mucous membranes, non-intact skin, and wound dressings, if hands are not visible soiled.
- Decontaminate hands after removing gloves
- Before eating and after using a restroom, wash hands with a non-antimicrobial soap and water or with an antimicrobial soap and water.
- Antimicrobial wipes may be considered as an alternative to washing hands with non-antimicrobial soap and water. They are not as effective as alcohol-based hand rubs or washing hands with an antimicrobial soap and water, thus they are not a substitute for using alcohol-based hand rubs or antimicrobial soap.
- When decontaminating hands with an alcohol-based hand rub, apply product to palm of one hands and rub hands together, covering all surfaces of the hands and fingers, until dry.
- Do not wear artificial fingernails or extenders when having direct contact with patients at high risk.
- Keep natural nail tips trimmed to less than a ¼ inch long
- Wear gloves when contact with blood or OPIM, mucous membranes, and non-intact skin could occur.
- Remove gloves after caring for a patient. Do not wash gloves between uses with different patients
- Change gloves during patient care when moving from a contaminated site to a clean body site.

6. Housekeeping

All employees will comply with the following housekeeping and decontamination procedures:

Employees shall wear gloves and other personal protective equipment deemed necessary while cleaning and decontaminating all ambulances and equipment. LCEMS shall assure that all supplies and equipment are cleaned and disinfected with an appropriate disinfectant registered with the EPA. Manufactures recommended usage for the disinfectant will be followed. Disinfectant is available from EMS supply and will be carried on all LCEMS vehicles.

Equipment/Materials Processing

All equipment, supplies, or other materials that are non-disposable (cardiac monitor/defibrillators, traction splints, etc.), and used in direct contact with patients that must be turned in for repairs or servicing shall be decontaminated before being sent for repairs. If any of these items can not be decontaminated they shall be marked with a biohazard label indicating what area is contaminated and what needs repaired.

Trash Receptacles

Trash receptacles in the ambulance shall be emptied at the end of every call. These receptacles shall be inspected daily for contamination and be cleaned or replaced as needed.

Hands-Free Cleanup

In the event any glass items shatter/break or sharps are discovered loose, the glass fragments/sharps shall be collected up using mechanical means, such as plastic paddles and dust pan so that the employee is not handling the item(s) directly in his/her hand. The glass fragments/sharps shall then be dropped in an appropriate sharps receptacle without direct contact with the gloved/ungloved hand. This “hands-free” cleanup procedure shall be utilized whenever the potential exists for a cut or abrasion to occur to the employee’s glove/ungloved hand in a potentially contaminated environment. In no case is broken glass or sharp objects to be picked up by hand or vacuum cleaners. The tools which are used in cleanup must be properly decontaminated after use.

Disposal of Contaminated Waste

Contaminated / biohazardous waste shall be disposed of in accordance with the LCEMS biohazardous waste management program. Contaminated waste is to be placed in containers that are closable, constructed to contain all contents and prevent leakage, appropriately labeled (see Labels) prior to disposal, and closed prior to removal to prevent spillage or protrusion of contents during handling. These containers are in no circumstance to be filled to a level that would require force to close. Contaminated / regulated waste will only be disposed of at the receiving hospital in an appropriate biohazard waste container. In cases where contaminated / regulated waste cannot be disposed of at the receiving hospital it can be placed in the biohazardous waste bins at Headquarters. At no time will contaminated / regulated / biohazardous waste be disposed of in the regular garbage.

Cleaning the Ambulance

Routine Cleaning

Employees shall wear disposable gloves when performing routine cleaning of the ambulance. The cab of the ambulance and all horizontal surfaces in

the patient compartment (shelves, bench, seat, ceiling, floor, etc.), shall be wiped with disinfectant solution at the beginning of each shift. This daily cleaning shall be documented on the daily checklist.

Post Call Cleaning

After transporting any patient thorough cleaning shall be carried out. At a minimum this cleaning shall include disposal of paper sheets, removal of all trash, removal of contaminated waste, and a wipe down of the ambulance stretcher mattress and other non-disposable equipment that was in contact with the patient with a disinfectant solution. The paper sheets on the stretcher must be changed at the end of every call. Cleaning and disinfectant solutions, paper towels, and other materials must be disposed of as regular trash unless contaminated.

Decontamination

Bins, equipment, and vehicle interiors (e.g. vehicle bins, Defibrillator, countertop areas inside vehicle) are cleaned and decontaminated as soon as feasible after visible contamination. Employees shall wear disposable gloves and protective eyewear when performing decontamination cleaning. Regardless of the patient's infectious disease status, gross contamination (contaminants that can be seen with the naked eye or can be reasonably anticipated to be present), shall be removed to the fullest extent possible utilizing paper towels and then clean with soap and water then sprayed with the disinfectant solution. After the disinfectant solution has been on the surface for the period of time recommended by the manufacture, the solution shall be wiped off with a paper towel. All disinfecting solutions, paper towels, and other materials utilized in decontaminating the patient compartment and non-disposable equipment shall be disposed of as infectious waste.

Terminal Cleaning

In the event that a patient has been in strict or respiratory isolation and is transported, specific cleaning procedures shall be initiated. The ambulance crew shall notify the on duty supervisor of the need for disinfection. Disposable gloves are to be worn by all personnel engaged in terminal cleaning procedures. When there is potential for splashing of liquids, personnel are required to use protective eyewear.

All contaminated equipment will be scrubbed clean with a detergent, rinsed with water, wiped off then rinsed with a disinfectant solution and wiped dry. All stretcher parts and parts of the mattress that come in contact with the patient will be cleaned with disinfectant. All floors will be sponged or mopped with a detergent solution, then a disinfectant.

Disposition of Soiled Uniforms

All field employees are required to bring a second uniform (pants, shirt), with them to work. Impervious gowns should be worn whenever the employee anticipates encountering an environment where aerosolization of body fluids or splashing of blood is likely to occur. In the event that accidental soiling of the uniform with a patient's body fluid occurs, the uniform shall be removed immediately and double-bagged in biohazard bags (labeled with the crewmember's name), located in each vehicle. The contaminated uniform shall be turned in before the end of the shift for processing at no expense to the employee. The uniform shall be laundered appropriately for decontamination and will be returned to the employee.

All contaminated sharps are to be discarded immediately into containers that are closable, puncture resistant, leak proof on sides and bottoms, and labeled or color-coded appropriately. Sharps disposal containers are to be available in all EMS units and smaller sharp containers located in EMS carry-in kits. If a sharps container is to be moved from its designated location it will be closed immediately prior to removal to prevent spillage or protrusion of contents. It will be placed in a secondary container if leakage is possible. The secondary container shall be closable, constructed to contain contents and prevent leakage and labeled as described in section 8. EMTs or Paramedics may turn filled and properly sealed and labeled Sharps containers into EMS Supply for appropriate disposal via the contracted disposal company. Container should be removed from service when approximately $\frac{3}{4}$ full. A new sharps container will be received from EMS Supply.

7. Laundry

Cloth towels are provided by LCEMS to aid crews. But at no time are the towels to be used to clean up spills of contaminated or biohazardous materials. Paper towels are provided for this purpose and should be used exclusively to minimize the volume of contaminated materials that must be processed and decontaminated.

Linen (cloth) sheets are not provided by LCEMS and shall not be used on the ambulance stretcher at any time. Cloth blankets are provided by LCEMS for the patient's comfort and should be replaced in-between patients and anytime the blanket becomes contaminated or it is reasonable to assume that the blanket is contaminated.

Linen contaminated with blood or body fluids, shall be double-bagged in biohazard bags and placed in the closest LCEMS linen hamper or returned to Headquarters and placed in the soiled laundry bin. All biohazard linen will be labeled according to labeling requirements in section 8. Laundering of towels and blankets for patient use will be done via a contractually retained agency. Contaminated blankets and towels shall not be rinsed or sorted prior to depositing the item(s) in biohazard bags. Nor should they be left at the scene of an incident. Handle contaminated laundry as little as possible, with minimal agitation. Employees will wear appropriate PPE when bagging or handling contaminated laundry

8. Labels

LCEMS shall assure that all containers in which infectious waste has been discarded has a warning label affixed to it and can be read at a distance of at least five (5) feet. The warning label shall be as follows:



All labels will be orange-red with contrasting colors for lettering and symbols. Red bags or containers may be used as a substitute for labels.

LCEMS will ensure warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into vehicles or facilities. Red biohazard bags, sharp containers are available from EMS supply, and ordered on the Daily Check Sheet. Employees are to notify the Shift Supervisor on duty if they discover regulated waste containers, contaminated equipment, etc. without proper labeling.

All red-bagged waste and sharps containers used at LCEMS will be red bagged or disposed of with disposal boxes located in the EMS Supply area by the EMS Supply Technicians.

V. HEPATITIS B VACCINATION:

LCEMS will provide information 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 to the employee after BBP training and within 10 days of initial assignment to employees identified in the exposure determination section of this plan. The hepatitis B vaccination series will be started before the employee is occupationally exposed. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series, 2) antibody testing reveals that the employee is immune, or 3) medical evaluation shows that vaccination is contraindicated.

The County's employee health provider will make a determination during the post-offer physical examination as to if an employee should be vaccinated against Hepatitis B. The County's employee health provider will submit to the County a healthcare professional's written opinion. 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. At the employee's request, Leon County will provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the receipt of the evaluation by the County.

Prevaccination screening for antibody status will not be required of an employee.

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 confidential medical file.

Vaccination provided by all Patients Firsts will be preformed under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional and will be administered in accordance with current U. S. Public Health Service, CDC guidelines including tests after completion of the series for anit-HBs. A copy of OSHA standard Bloodborne pathogens 1910.1030 will be provided by County Risk Management to the County's employee health provider providing the vaccination.

LCEMS will not permit employees to use his/her healthcare insurance to pay for the series nor will LCEMS institute a program in which the employee pays the original cost of the vaccine and is reimbursed by the employer if she/he remains employed for a specified period of time. Nor will LCEMS institute an "amortization contract" which requires employees to reimburse the County for the cost of the vaccination should they leave his/her employment prior to a specified period of time.

If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service, CDC, at a future date such booster doses shall be made available at no cost to the employee.

VI. GENERAL POST-EXPOSURE EVALUATION AND FOLLOW-UP:

LCEMS provides the following procedures for follow-up of our employees who have had an occupational exposure.

1. For definition purposes, exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials (OPIM), including contaminated sharps injuries that results from the performance of an employee's duties regardless of the use of provided personal protective equipment.
2. Immediately (if possible) or as close to the occurrence of an exposure as possible, the employee should clean all body surfaces and flush mucous membranes that have been in **direct contact** with blood or OPIM.
3. All personnel are required to notify their shift supervisors immediately upon occurrence of any and all exposure incidents. The employee is also responsible for completing an incident report that details route of exposure, the circumstances under which the exposure incident occurred including; engineering controls in use at the time, work practices followed, a description of devices in use, protective equipment or clothing that was used at the time of the exposure, the location of the incident, the procedure being performed and post incident actions.
4. It is the responsibility of the exposed employee's shift supervisor to notify immediately the Deputy Chief of Administration or designee of the nature of and if possible the extent of the exposure. Determination shall be made as to the type and severity of the exposure in conjunction with the receiving hospital. It is the responsibility of the Deputy Chief of Administration to insure that all required forms and telephone notifications are completed as soon as possible.
5. Following the initial first aid the following activities will be performed:
 - A. Document the routes of exposure and how the exposure occurred. Confirm that the employee has completed the necessary exposure forms; First Notice of Injury, accident reports, and incident reports, etc.
 - B. Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
 - 1) The Shift Supervisor in cooperation with the receiving hospital will obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity. In order to test a source individual (patient) with whom there has been a significant exposure, the exposed employee must also be tested. If legally-required consent is not obtained, the

employer must establish this fact and document it in writing. If consent is obtained and the test is conducted the test results shall be provided to the exposed employee.

- 2) When the source individual's (patient) consent is not required by law, the source individual's blood, if available (voluntarily drawn for other purposes) shall be tested and the results provided to the exposed employee.
 - 3) If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed. However, in order for no testing to occur, these results must be on file for the patient and absolute confirmation of the positive HIV/HBV status must be thoroughly documented. Notification will be provided to the exposed employee by the receiving facility.
6. The Deputy Chief of Administration will act as the liaison between the employee and the receiving medical facility and the County employee health provider. Their goal is to insure that testing and treatment regimens (as needed) are accomplished after notification of exposure. The Deputy Chief of Administration will provide to the employee health provider a copy of OSHA 1910.1030 Bloodborne Pathogens, a description of the exposed employee's duties as they relate to the exposure incident, documentation of the routes of exposure and circumstances under which exposure occurred, results of the source individual's blood testing, if available; and all medical records relevant to the appropriate treatment of the employee including vaccination status which are the County's responsibility to maintain.
 7. An exposed employee will be offered a confidential medical examination and follow-up care, including counseling as needed. In any exposure event, the medical examination and follow-up treatment will comply with the treatment standards for the exposure type, and in accordance with the Centers for Disease Control and when medically indicated as recommended by the CDC will include post-exposure prophylaxis.
 8. In all cases where the employee will be tested the consent of the employee must be obtained before the collection and testing of their blood. Pre-test counseling will be provided **BEFORE** sample collection and must include:
 - A. Purpose of the test
 - B. Information about HIV and/or HBV will be provided to include risk of infections and the need to evaluate for HIV/HBV early.

- C. If the source has positive HIV, or refuses to be tested, the exposed employee is informed to report and seek additional medical attention for any febrile illnesses that occur within 12 weeks of exposure.
9. If the exposed employee consents to baseline collection, but does not give consent at that time for HIV serologic testing, the employee health provider will be requested to preserve the sample for 90 days. If within 90 days of the exposure incident, the employee elects to have baseline sample tested, such testing will be completed as soon as possible.
 10. The exposed employee will contact the employee health provider to arrange receipt of test results and follow-up on the exposure.
 11. The County Risk Manager shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of receipt the completed evaluation. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:
 - That the employee has been informed of the results of the evaluation; and
 - 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
 - All other findings or diagnoses shall remain confidential and shall not be included in the written report. Any information regarding the results of the employee's evaluation or medical conditions must be conveyed by the healthcare professional to the employee alone and not as part of the written opinion provided to the County.

VII. PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT:

The Deputy Chief of Administration or designee and the County Risk Manager 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 (gloves, eye shields, etc.)
- location of the incident
- procedure being performed when the incident occurred
- employee's training

If it is determined that revisions need to be made in protective equipment, engineering controls, work practices and/or employee training, the Deputy Chief of Administration will ensure that appropriate changes are made to this ECP and are enacted. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

VIII. EMPLOYEE TRAINING:

All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by LCEMS at no cost to the employee during working hours on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. This program will cover a number of bloodborne diseases in addition to HIV and HBV such as Hepatitis C (HCV) and syphilis. In addition, the training program covers, at a minimum, the following elements:

- a copy and explanation of the standard
- an explanation of our ECP and how 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
- 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 on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- 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.
- information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- an explanation of the signs and labels and/or color coding required by the standard and used by LCEMS.
- an opportunity for interactive questions and answers with the person conducting the training session.

Training will also be conducted when there is a change in an employee's responsibilities, procedures or work situation and when changes are made to the ECP.

VIII. RECORDKEEPING:

1. Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at the EMS Division.

The training records include:

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

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 in writing to the County Attorney's Office.

2. 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 County Human Resources Department is responsible for maintenance of the required medical records. These confidential records are kept for the duration of employment plus 30 years as required by law.

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 made in writing to Human Resources.

The records shall include:

- The name and social security number of the employee
- A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.
- The employer's copy of the healthcare professional's written opinion
- A copy of the information provided to the healthcare professional

These records will not be disclosed or reported without the employee's express written consent to any person within or outside of the workplace except as required by OSHA 1910.1030 or as required by law.

3. OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by Leon County Risk Management. All work-related injuries from needlesticks and cuts, lacerations, punctures and scratches from sharp objects contaminated with another person's blood or OPIM shall be recorded on the OSHA 300 or equivalent as an injury. To protect the employee's privacy the employee's name may not be entered on the OSHA 300. Leon County Risk Management will keep a separate confidential list of the case numbers and employee names so they can update the cases or provide them if asked by the government. If the employee develops a bloodborne disease, the entry must be updated and recorded as an illness.

Leon County Risk Management will establish and 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 log shall contain at a minimum:

- The type and brand of device involved in the incident
- The department or work area where the exposure incident occurred
- Explanation of how the incident occurred.

The sharps injury log must be saved for at least five years following the end of the calendar year that they cover.

HEPATITIS B VACCINE DECLINATION

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 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 occupational 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.

Print Name: _____

Signed: _____

Date: _____

Witness Printed Name

Witness Signature