REGIONAL STANDARD OPERATING PROCEDURES

Hazardous Exposures

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SCOPE:

The purpose of the Exposure Control Plan (ECP) is to ensure compliance with standards established by Arizona Department for Occupational Safety and Health ADOSH, Federal OSHA 29CFR 1910.1030 Occupational Exposure to Bloodborne Pathogens, and NFPA 1581 Standard on Fire Department Infection Control Plan.

Public Safety agencies are responsible for the actions or inactions of personnel, whether paid or volunteer. With that in mind, agencies must be committed to providing a safe and healthy work environment for employees; providing the most up to date information and safety technology.

PURPOSE:

The ECP is intended to assist in guiding implementation, ensuring compliance with established standards, and protecting responders. To decrease the likelihood of infection and exposures to members, agencies must provide proper personal protective equipment and provide necessary cleaning and disinfecting supplies to personnel. Individual agencies will also provide initial instruction and continuing education in preventive health care practices so that all members possess a basic awareness of infectious disease, understand the risks and severity of various types of exposures, and exhibit proper skills in infection control. In addition, it is highly encouraged that agencies establish and maintain an employee health maintenance program.

SAFETY:

The Exposure Control Program will identify some of the risks of exposure to responders and suggest means to prevent those exposures. All public safety members have the individual responsibility for their own health, safety, and welfare and each member is responsible for complying with individual agency policies.

Each member must ensure their own safety and health against occupational exposure by:

- Participating in health maintenance programs, including annual physicals and maintaining immunizations
- Practicing good personal hygiene
- Reporting any personal medical conditions that may require work restrictions
- Following infection control procedures at every emergency incident or while conducting patient care at all times
- Properly using all personal protective clothing and equipment

- Promptly reporting and documenting all exposures
- Complying with medical follow-up treatments
- Properly decontaminating clothing and equipment after each patient encounter
- Properly disposing of contaminated waste
- Participation in ongoing Training

An Exposure Control Plan shall be:

- Accessible to employees within 10 working days of their request
- Reviewed and updated at least on an annual basis.
- Reflective of all current Center for Disease Control recommended practices for protection of patients and rescuers
- Reflective of all applicable portions of the Ryan White Act
- Reflective of all applicable portions of NFPA 1581 Infection Control Standard for Fire Departments
- Address all requirements in both State and Federal Regulations of the OSHA Safety and Health Regulations on Bloodborne Pathogens 29 CFR 1910.130
- Provided to healthcare provider agencies responsible for HBV vaccinations and post exposure care

PROCEDURE:

The ECP uses job tasks as a method to determine responders who are deemed to be at risk for exposure to blood and Other Potentially Infectious Material (OPIM). This determination does not take into account the use of PPE and is based on a "reasonable expectation" that a responder could come into contact with infectious material while performing job related duties. In addition to blood and OPIM, rescuers may be exposed to airborne or droplet transmitted diseases.

- Exposure is defined as reasonably anticipated skin, eye, mucous membrane, or "Parenteral" contact with blood or OPIM that may result during the performance of duties.

Tasks associated with high risk of exposure to blood and OPIM including airborne and droplet particulates:

- Intubation, OPA, NPA, and rescue airway insertion
- Airway Suctioning
- Pt extrication / Pt handling
- IV catheter insertion
- Prolonged exposure in enclosed quarters or in close proximity to a Pt with an airborne infection for extended period of time
    - Close proximity - less than or equal to 3ft in a confined space (i.e. patient compartment of the ambulance)
    - Prolonged exposure - exceeding 1 hour in a confined space
- Mist or droplet generating treatments
- Cleaning of equipment and apparatus

Occupational Hazards
Agencies should believe that infectious disease exposure be considered an occupational health hazard, and support the presumption that contracting a contagious disease through patient contact be considered an occupational related condition. Further, agencies should support, that members have the right to be fully informed in the event that a patient is found to carry an infectious disease. If a probable exposure occurs, members will be confident that they will receive care, guidance, and support throughout the process.

Designated Infection Control Officer (DICO) –
In accordance with the Ryan White Act Sec.2695E, agencies are responsible for maintaining a Designated Infection Control Officer (DICO). The DICO will be responsible for managing the agency ECP and the coordination of investigations involving infectious exposures. The DICO will be the primary point of contact with all external agencies when providing follow-up on exposure related matters.

DICO responsibilities

- Annual review of the Department's Exposure Control Plan. Per OSHA 29 CFR 1910.1030(c)(1)(iv)
- Coordinate/investigate all reports of possible exposures
- Maintain employee files that include vaccination records, exposure reports, training and letters or written opinion in secured area. Per OSHA 29 CFR 1910.1030 (h)
- Primary point of contact with external agencies infection control officers. Per the Ryan White CARE Act
- Maintain strict confidentiality of all exposures. Per OSHA 29 CFR 1910.1030(h)(1)(iii)
- Coordinate immunization and vaccination programs for agency personnel. Per CDC MMWR Immunization of Health-Care Personnel
- Development of disease/exposure prevention polices and training programs. Per OSHA 29 CFR 1910.1030(g)(2)
- Develop and maintain documentation of training. Per OSHA 29 CFR 1910.1030(h)(2)
- Coordinate Information flow with their respective Human Resource departments when positive exposure requires reporting to Workman's Compensation. Per State ICA
- Coordinate with Chief, Staffing Officer, and Shift BC as needed.
- Maintain Sharps Injury Log per OSHA 29 CFR 1910.1030(h)(5), 29 CFR 1904.8
- Maintain employee workgroup/committees for evaluation of new technologies including needless systems, safe sharps items, and rescuer PPE per OSHA 29 CFR 1910.1030(c)(1)(v)

Infectious Disease Transmission
Viruses and bacteria are the organisms commonly responsible for the spread of disease. Viruses normally reside in a living host and cannot multiply outside of a living cell. Viruses can spread disease through contact with inanimate surfaces that are contaminated with blood or OPIM containing the virus. Bacteria can multiply outside the body, i.e., on surfaces or objects. Therefore, proper cleaning of equipment is critical.

Infectious Versus Communicable Disease
An infectious disease results from invasion of a host by disease producing organisms, such as bacteria, viruses, fungi, or parasites. A communicable (contagious) disease is one that can be transmitted from one person to another.

CDC Identified list of Diseases
The CDC has published a list of "Potentially Life-Threatening Infectious Diseases" that emergency workers may be exposed to. The list is broken down into bloodborne, airborne droplet and airborne aerosolized diseases.

Bloodborne:	**Airborne-Droplet:**	**Airborne-Aerosolized:**
Anthrax	Diphtheria	Measles
Hepatitis B	(HBV) Novel Influenza A	Tuberculosis (TB)
Hepatitis C	(HCV)	Meningococcal Varicella
HIV	Mumps	
Rabies	Pertussis	
Vaccinia	Plague	
Viral Hemorrhagic Fever	Rubella	
	SARS-COV	

Exposure Determination
Exposure occurs when blood or other potentially infectious material comes in contact with the body in the following manner:

- A contaminated needle stick injury
  - Contaminated means the needle was used inside the vein of a patient or is covered with the blood of a patient
- Blood or OPIM in direct contact with the surface of the eye, nose, or mouth
- Blood or OPIM in direct contact with an area of skin that is open
  - "Open" means any fresh abrasions, dermatitis, eczema and cuts that are not scabbed over, skin affected with poison ivy or any injury that causes the epidermis to be not intact
- Cuts with a sharp object that is covered with Blood or OPIM
- Human bites that draw blood. This will require the person who receives the bite to become the source patient unless the person who is doing the biting has visible blood in their mouth prior to biting, in this case both parties will need to be source tested

Immediately following suspected exposure:

- Notify agency DICO or Commanding Officer to initiate the investigation process
- Seek expert consultation
    - Local or base hospital physician
    - County Health Department
    - CDC
- If the Exposure is a sharps injury (needle stick or puncture with contaminated object) allow the area to bleed freely and wash the area with soap and water or a waterless hand wash
- If the exposure is to the eye, nose or mouth; flush the area with water for at least 10 minutes. Consider assembling a NS 500 cc bag, extension set, and Nasal cannula for exposure to the eyes and NS bag and extension set for controlled flushing of the mouth and nose
- Proper documentation of incident

Airborne-Aerosolized exposure

Airborne-Aerosolized exposures occur when an infected person coughs, sneezes, or speaks. The particles produced are very small and can remain airborne for long periods of time and are able to ride air currents and result in prolonged airspace contamination. The small particles are able to travel into the trachea and lung space to cause an exposure.

Exposure occurs when not utilizing proper PPE.

- Often a care giver will not know the status of a patient in regards to an airborne transmitted disease. Per the Ryan White HIV/AIDs Treatment Extension Act, section G, when a patient is transported to a receiving facility and is found to test positive for an airborne transmitted disease, it is the receiving facility's responsibility to notify all agencies who were involved in pre-hospital care, treatment, and transport of the patient within 48 hours.
- Whenever possible, utilize the ambulance ventilation system and open windows to improve air circulation.
- An exposure report shall be generated if a patient with a known airborne contagious disease is actively coughing, sneezing or having a treatment that produces an aerosolized mist or droplets and **no** respiratory protection was used.

Vaccination / Immunization Program

It is suggested that agencies follow the Center for Disease Control (CDC) and the Advisory Committee on Immunization Practices (ACIP) in maintaining a robust immunization program for those employees who are deemed at risk for exposure.

CDC guidelines provide immunizations and screening for the following diseases at no cost to the employee if after a review of employee records show that they are deficient. Employees can refuse some or all vaccinations offered to them after being educated as to the benefits and risks for each vaccination offered.

****A signed informed consent or declination form is required for all vaccinations that are recommended for the employee.**

Hepatitis B – Transmitted by blood products or OPIM contaminated with visible blood.

- The Three shot series shall be started within (10) days of appointment to a position deemed "at risk". A titer should be obtained within 1-2 months of finishing the series. Revaccination will be offered if the titer is negative for antibodies
- Post Exposure, if an employee has received the HBV series and the source Pt is positive, a titer shall be drawn to check for antibody response. Employees may require additional vaccination depending upon titer response levels.

Tetanus – Bacterial infection caused by bacteria called Clostridium tetani. Bacteria usually found in soil, dust and animal waste.

- Tetanus vaccine is recommended every 10 years and is part of a Vaccine called Tdap or Td.

Diphtheria – Bacterial infection caused by Corynebacterium diphtheria. It is spread through respiratory droplets or direct contact with nasopharyngeal secretions or open skin lesions.

- The Diphtheria vaccine is part of the Tdap or Td vaccination and is recommended every 10 years

Pertussis – Bacterial infection caused by the Bordetella Pertussis bacteria. It is spread via aerosolized particles that others breathe in. Pertussis is a highly infectious disease that can infect those who have been immunized.

- The Pertussis vaccine is part of the Tdap vaccination and is recommended if the employee is unsure if they have received a Tdap dose and then receive a Td vaccination once every 10 years thereafter.

Measles – Measles is a respiratory virus that is spread through the air in small aerosolized particles. It is extremely contagious and anyone who comes into contact with a contagious person will most likely get the disease.

- The measles vaccine is a part of the MMR shot and is recommended for anyone who was born after 1957 unless they can show that they have had the vaccine or the disease. Immunization will require two doses over a 4 week period of time.

Mumps – The mumps virus is spread by contact with airborne droplets of saliva or mucus from the mouth, nose, or throat of an infected person. Items and surfaces of objects may harbor the virus for several hours to days if not decontaminated.

- Mumps vaccine is a part of the MMR shot and is recommended for anyone who was born after 1957 unless they can show that they have had either the vaccine or the disease. Immunization will require two doses over a 4 week period.

Rubella (German measles) – Rubella is a virus that is spread by infected people sneezing or coughing. It is highly contagious and affects adults more than children.

- The rubella vaccine is a part of the MMR shot and is recommended for anyone who was born after 1957 unless they can show that they have had either the vaccine or the disease. Immunization will require two doses over a 4 week period.

Varicella (chicken pox) – Varicella is a highly contagious virus that is transmitted through the air by infected people coughing or sneezing and by contact with the virus particles that come from the chicken pox blisters.

- The Varicella vaccination should be administered if the employee cannot prove that they have received the vaccination or have had the disease. The vaccination is a two shot series with four weeks between doses.

Influenza – The influenza virus is spread from person to person primarily through large particle respiratory droplets through sneezing or coughing.

- The Influenza vaccination is offered each year and is tailored to the anticipated virus strain.

Tuberculosis – Tuberculosis is spread through the air. This occurs when the infected person coughs or sneezes, laughs or sings.

- TB skin testing or screening will be offered on a yearly basis until the TB risk assessment shows a low to no risk to providers.
- Bacilli Calmette-Guerin (BCG) is a vaccine for TB. Many foreign born persons have been vaccinated with the BCG vaccine in countries with a high prevalence of TB. The BCG vaccine shall only be used when a high concentration of TB patients who are resistant to both isoniazid and rifampin medications, there is an ongoing transmission to health care workers and comprehensive TB control precautions have failed.
- BCG has many side effects and will require the employee to receive education on the vaccine prior to receiving.
- **The BCG vaccine will not be offered until the above conditions are met**.

Personal Protective Measures

This procedure outlines protective measures all Public Safety personnel should take during every patient encounter. These measures should be taken even if the patient does not exhibit symptoms of a disease.

It will be the employee's responsibility to initiate personal protective measures.

1. Wear gloves when treating all patients
2. Wear eye protection when appropriate (i.e., during intubation or resuscitation)
3. Wear a surgical mask when appropriate
4. Avoid contact with saliva, sputum, tears, sweat, blood, urine, feces, emesis, vaginal secretions, and placental fluids, unless properly protected
5. Thoroughly wash your hands as soon as possible
6. Do not wipe your nose, mouth, or eyes after patient contact until you have washed your hands
7. Use extreme caution when handling or disposing of needles or other sharp objects. Do not re-sheath sharps. Use an approved sharps container at the site whenever possible. Do not place contaminated needles on the ambulance bench, ambulance floor, or carelessly around the treatment area
8. Ask patients to turn their head away and cover their mouth and nose when coughing or sneezing

9. Utilize ambulance exhaust fan ventilation system and open windows to promote airflow
10. Limit exposure time with a patient
11. Place a surgical mask or non-rebreather mask on the patient as a barrier
12. Minimize number of treatment personnel
13. Properly disinfect equipment after each use
14. If you think you have had an infectious exposure, clean the affected area immediately and report the exposure

Hand Washing

Washing hands after each patient contact is a must. The Center for Disease Control (CDC) states that, *"Hand washing before and after contact with patients is the single most important means of preventing the spread of infection."* Use the patient's own washroom or public facilities when possible. Use the alcohol carried on EMS apparatus when other wash facilities are not available. The CDC recommends that hand washing take a **minimum** of fifteen (15) seconds to properly rid the hands of protein matter, blood, secretions, and other contaminants picked up while caring for patients. Vigorous scrubbing is essential.

The following is one suggested method to wash hands:

1. Wet hands to two or three inches above wrists
2. Apply hand-cleaning agent.
3. Rub hands together to work up a lather
4. Using a rotating motion, apply friction to all surfaces of hands and wrists, including backs of hands, between fingers, and around and under nails. Interlace fingers and rub up and down; continue for 15 seconds
5. Holding hands downward, rinse thoroughly allowing water to drop off fingertips
6. Dry hands thoroughly with a paper towel
7. Turn off faucet using a clean paper towel to avoid contaminating your hands on the dirty faucet handle

Cleaning and Disinfection

This procedure outlines cleaning and disinfecting procedures for emergency medical equipment that may be contaminated with blood and other potentially infectious material.

According to the CDC, 5 to 10 percent of all patients who enter a hospital receive a hospital-acquired infection. This means the patient caught something in the hospital that he or she did not have prior to admittance. It is imperative that personnel properly clean and disinfect reusable equipment to minimize the possibility of infection during emergency treatment.

Personnel will be responsible for cleaning and disinfecting non-disposable equipment and the interior of the ambulance following each patient transport. This will be done immediately after the patient is transferred to the care of the receiving facility. Exceptions to this will be made with resuscitation equipment that is not disposable, such as laryngoscope handles and portable suction equipment. An ambulance should not be put available for service until proper cleaning and disinfection of its interior is completed.

Current recommendations for surface and immersion decontamination of equipment and surfaces are phenolic compounds and glutaraldehyde-phenate solutions which possess a wide range of biocidal activity. These products are excellent bactericides and tuberculocides when used according to manufacturers recommendations, can thoroughly disinfect surfaces in approximately 10 minutes.

Equipment Disinfection
When equipment has come in contact with blood or OPIM, it must be decontaminated. When cleaning and disinfecting, gloves are to be worn, along with any other protection deemed necessary (i.e., goggles, mask, and gown,). Medical equipment such as traction splints, backboards and straps, blood pressure cuffs, and SPO2 finger probes must be thoroughly wiped off using a phenolic agent or hospital supplied disinfectant towels to remove blood and OPIM from equipment.

Apparatus Disinfection
After each patient transport, all surfaces that may have been contaminated with body fluids and OPIM should be cleaned with warm, soapy water, and disinfected with an approved solution, following the manufacturer's recommendations. Special attention should be paid to the gurney, mattress, bench seat, floor, surfaces and compartments in close proximity to where the patient was positioned. Gloves must be worn when cleaning and disinfecting apparatus.

Disposal of Contaminated Linens
Grossly bloody or otherwise contaminated linen shall be placed in a red plastic Biohazard bag and put in the contaminated linen room at the receiving facility.

Uniform Disinfection
Clothing which has been contaminated with a patient's blood or OPIM shall be disinfected as follows: Contaminated clothing, including turnouts, shall be changed as soon as possible, and washed in detergent and hot water as recommended by the manufacturer. Contaminated uniform clothing should be pre-washed at the station prior to taking home for laundering to reduce passing infection to household members. If not pre-washed, contaminated uniforms should be placed in a plastic bag, washed separately, and the washing machine should be rinsed with a cup of bleach after clothing is removed.

Boots and other leather goods may be brush-scrubbed with soap and hot water to remove contamination. If the soles of boots have been contaminated by stepping in body fluids, they should be washed at the scene whenever possible.

Exposure Notification
When responders are exposed to infectious contaminants, diseases, or hazardous materials, the Shift Commander (AC or BC) on duty should be contacted immediately after exposure.

Initial contact between the exposed employee and the Shift Commander consists of determining the details of the incident, severity of exposure, and required medical treatment. Details of the incident should include:

- Incident number and time of exposure
- How exposure occurred
- What body fluids were involved
- Who the body fluids came from
- Was employee's skin intact
- What specific part of employee's body was exposed
- What hospital the patient went to
- Condition of patient and medical history, if possible

Should the exposure be the result of an injury that required immediate treatment and transport to the ED, notification may be done concurrently. Non-emergency treatment will be determined by medical protocol, or consultation with a local or base hospital physician.

Significant Exposure to AIDS/HIV or Hepatitis C

The Industrial Commission of Arizona (ICA) requires the following procedures, in accordance with Arizona Revised Statute A.R.S. 23-1043.02 and OSHA 29 CFR 1910.1030, whenever a significant exposure occurs:

Significant exposure occurs:

1. Employee must report in writing to his employer within 10 calendar days the details of the possible HIV exposure
2. Employee must have blood drawn within 10 calendar days after exposure
3. Employee must have blood tested for HIV by antibody testing within thirty days after exposure and test results must show no presence of HIV
4. After the initial negative test result, employee can present a claim if tested positive up to 18 months after the exposure
5. OSHA regulations mandate that the employer must pay for the required testing
6. Employee must file a Worker's Compensation Claim within one (1) year of diagnosis or positive blood test if the employee wishes to receive benefits under the Worker's Compensation System. The agency DICO will follow-up with the infected employee to ensure that testing and treatment has occurred in accordance with Arizona Revised Statute A.R.S. 23-1043.02.

Significant Exposure to MRSA, Spinal Meningitis, or Tuberculosis (TB)

The Industrial Commission of Arizona (ICA) requires the following procedures, in accordance with Arizona Revised Statute A.R.S. 23-1043.04 and OSHA 29 CFR 1910.1030, whenever a significant exposure occurs:

1. The exposure must be reported to the employer within 10 days, but no blood draw is required
2. Employees must be diagnosed with MRSA within 2-10 days after exposure. The timeframe for spinal meningitis is 2-18 days, and 12 weeks for TB
3. Expenses for post exposure medical evaluations, including prophylactic treatment for spinal meningitis or TB are covered under Worker’s Compensation

Hepatitis-B Virus Exposure Management
Per Arizona Revised Statute A.R.S. 23-1043.04 and OSHA 29 CFR 1910.1030, all responders who are occupationally exposed to any patient's blood or OPIM at least once a month shall be offered Hepatitis-B Virus (HBV) vaccination. The HBV vaccine consists of three intramuscular doses of HBV vaccine with the second and third doses given at 1 and 6 months, respectively, after the first. One month after the third dose, blood should be drawn (titer) at the immunizing facility to determine the level of protection by an adequate antibody response, which is a minimum of 10 MIU/ml.

According to the CDC, vaccine-induced antibody levels decline in time. Up to 50% of adult patients who respond adequately to vaccine may have low or undetectable antibody levels 7 years after vaccination. The CDC maintains that even with declining antibody levels, adults are still protected. When an exposure occurs, an examination of the circumstances will determine whether the exposed employee requires further treatment.

Exposure to Hepatitis-A, and other types of non-B Hepatitis, will be treated according to current recommendations from the CDC and the base hospital physician.

Tuberculosis (TB) Exposure Management
Per CDC recommendations, to minimize the risk of exposure to responders to Mycobacterium Tuberculosis (TB), all responders should be given training and information relative to the hazards of TB transmission, its signs and symptoms, medical surveillance, treatments, and site-specific protocols, including the purpose and proper use of controls. Use of properly sized High Efficiency Particulate Air (HEPA) respirators when in the same room or confined space occupied by a potential or suspected TB-infected patient should be a standard agency requirement. Such respirators should be properly fitted, and provided by each respective agency. HEPA respirators should also be utilized when performing airway patency procedures, airway suctioning, cricothyrotomy procedures, needle thorocostomy procedures, and when administering aerolized medications. Secondary protection is to apply a surgical mask or non-rebreather mask to the transported patient, as patient condition allows.

Respirator protection devices used by all Public Safety agencies shall comply with all OSHA 29CFR 1910.134 provisions including, but not limited to, proper selection and use, relevant medical pre-qualifications to wear respirators, and training on respirator use and limitations. Compliance with OSHA 29CFR 1910.1030 shall fall under the guidance and direction of the Designated Infection Control Officer, Chief, or Shift Commander. Each agency should provide annual administration and interpretation of TB Mantoux skin tests, at no cost, to all at risk employees.

Medical Exposure Severity Rating
This system categorizes and defines four levels to which responders may be exposed during patient care:

- **SIGNIFICANT** exposure occurs whenever a responder suffers a puncture wound by an object which has been contaminated with the patient's blood or OPIM. Or

by direct blood transfer from the patient to an open wound or non intact skin of the responder.

- **MODERATE** exposure occurs whenever a patient's blood or OPIM contacts a rescuer's mucous membranes (eyes, inside the nose, or in the mouth). Performing mouth-to-mouth resuscitation, or a patient sneezing or coughing on a rescuer are two examples.
    - However, a patient with active tuberculosis, not on medication, who is coughing, represents a significant risk of exposure to any care giver in the same room.

- **MINIMAL** exposure occurs whenever a patient's blood or OPIM contacts a rescuer's intact skin or a patient's intact skin contacts a rescuer's mucous membranes.

- **LOW-LEVEL** exposure occurs whenever a patient's intact skin contacts a rescuer's intact skin. Most EMS calls can be considered low-level exposures and need not be documented.

Exceptions to the ratings exist. One example is measles. Simply entering a room which an infectious measles patient has vacated within one hour represents a significant risk of infection. When in doubt, consult with the base hospital physician, or other medical authority, such as the CDC. Guidance for making an informed decision should be sought on the exposure potential and severity of a particular exposure.

Medical Treatment
Emergency treatment should be rendered immediately. The responder should immediately wash the exposed body part(s) to remove infectious material and reduce the risk of infection.

Confidentiality
Per HIPAA regulations, a rescuer's infectious exposure form will remain confidential and not be released to anyone without expressed written consent of the exposed employee. If the exposure places other personnel at risk, appropriate steps should be taken to remove the risk without disclosing the employee's confidential medical record.

Exposure Reporting and Documentation
Responders exposed to patient's blood or OPIM during the performance of work duties must report the incident to protect themselves and the public. Reporting the exposure initiates an investigation into the potential for infection and determines the course of action to follow. Initiation of documentation is the employee's responsibility. Each public safety agency should have a method for employees to document and report known or potential exposures. Each agency should maintain individual employee exposure and immunization records.

Per OSHA regulations, all exposures determined to be **Significant**, **Moderate**, or **Minimal** must be documented by the exposed employee on the infectious disease exposure form. **Low-Level** exposures do not require documentation.

Training
OSHA 29 CFR1910 1030 requires annual training on the Exposure Control Plan as well as individual training prior to an employee being placed into a position that has the potential for occupational exposure. Annual training will update personnel on diseases, equipment, and changes in agency policy or procedure.

Training should include;

- Each member will have access to a copy of the OSHA standard and the Exposure Control Plan.
- A generalized explanation of the epidemiology of Bloodborne disease and their symptoms.
- Education on the epidemiology and symptoms of tuberculosis.
- The Bloodborne pathogens to be reviewed will include; HIV, Hepatitis B (HBV), Hepatitis C (HCV), Syphilis and Tuberculosis.
- Review of tasks that each member performs and how they might be at risk for exposure.
- A review of the use of PPE and the limitations of PPE in certain circumstances.
- The type of PPE that is available.
- Review of information on the hepatitis B vaccine program and TB skin testing program.
- Information on how to report and document an exposure.
- Information on what action will be taken and by whom in an exposure situation and how to seek medical attention and follow up.
- Information on what medical follow up will include following an exposure.
- Explanation of the signs and labels to be used in the handling and storage of medical waste.
- Access to medical records upon request
- Latex Glove Allergy/Sensitivity Issues
- Explanation of Work Restriction Guidelines
- Needle Safe System Use

Training programs will allow for interactive questions and answers with a knowledgeable instructor. The instructor will be knowledgeable in communicable diseases, infection control, and be able to relate this information to each specific work area.

Training Records
Training documentation should be completed for each employee upon completion of each training. These documents will be kept on file for at least three years by the agency training officer.
Training records include:

- Dates of the training sessions
- Contents or a summary of the training sessions
- Names and qualifications of persons conducting the training
- Names and job titles of all persons attending the training sessions

Employee training records are provided upon request by the employee or the employee's authorized representative within 15 working days.

Exposure Records

In accordance with OSHA 29 CFR 1910.1020 Access to Employee Exposure and Medical Records, exposure records should be maintained for each employee with any significant, moderate, or minimal exposures while in the occupational setting.
The Designated Infection Control Officer (DICO) is responsible for maintenance of the required exposure records. These confidential records are kept in the employee's infection control file for at least the **duration of employment plus 30 years**. Employee exposure records are provided upon request by the employee or to anyone having written consent from the employee within 15 working days.
Items required for the exposure record include:

- Name of employee
- Social Security Number
- Copy of Hepatitis B vaccination status, date of vaccination and all relevant medical records
- Copy of Post exposure evaluations and follow up, medical testing results related to exposure
- Health Care Professionals Written Opinion's for HBV vaccinations, and Post Exposure
- Any consent for release forms signed by employee

Sharps Injury Log

All percutaneous injuries from contaminated sharps shall also be recorded in a Sharps Injury Log. All incidences must include at a minimum:

- Employee name
- Date of the injury
- Type and brand of the device involved (syringe, suture needle)
- Work area where the incident occurred
- Explanation of how the incident occurred.

This log should be reviewed as part of the annual QA (Quality Assurance) program evaluation and maintained for at least **five** years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

Enforcing Codes

OSHA CPL 2-02-069 – Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens
OSHA CPL 02-00-106 – Enforcement Procedures and scheduling for Occupational exposure to Tuberculosis
OSHA 29 CFR 1910.1030 Bloodborne Pathogen Standards
OSHA 29 CFR 1910.134 Respiratory Protections
OSHA 29 CFR 1910.1020 Access to Employee Exposure and Medical Records
CDC- Mantoux Tuberculosis Skin Test Facilitator Guide
The Needle Stick and Prevention Act 2000, US Congress
CDC 1994 Guidelines for Prevention and Control of Tuberculosis, 1994
Ryan White CARE Act, Notification of Emergency Response Employees, Part G, 2009
Vaccination of Health Care Personnel, MMWR, 2011, CDC