

INFECTION CONTROL

I. NEEDLESTICK PROCEDURE

II. INFECTIOUS CONTROL PROGRAM

KCEAA IDC Policy Statement
Kanawha County Emergency Ambulance Authority

Infection Control Program

Policy Statement

Purpose: *To provide a comprehensive infection control program, which maximizes protection against communicable diseases for all employees, and for the public, they serve.*

Scope: *This policy applies to all Kanawha County Emergency Ambulance Authority employees, part-time and full time; field, office and maintenance staff.*

KCEAA recognizes the communicable disease exposure is an occupational health hazard. Communicable disease transmission is possible during any aspect of emergency response, basic routine transports, as well as in-house operations. While each employee ultimately is responsible for his or her own health, KCEAA recognizes a responsibility to provide as safe a workplace as possible. The goal of this program is to provide all employees with the best available protection, from occupationally acquired communicable disease.

It is the policy of this organization:

- *To provide emergency medical services to the public without regard to known or suspected diagnoses of communicable disease to any patient.*
- *To regard all patient contacts as potentially infectious. Universal Precautions will be observed at all times and will be expanded to include all body fluids and other potentially infectious materials (body substance isolation).*
- *To provide all members with the necessary training, immunizations, and personal protective equipment (PPE) needed for protection from communicable diseases.*
- *To recognize the need for work restriction based on infection control concerns.*
- *To regard all medical information as strictly confidential. No employee health information will be released without the signed written consent of the employee.*

**INFECTIOUS DISEASE CONTROL/Needle Stick Exposure
SUPERSEDES/RESCINDS:
EFFECTIVE DATE: February 1, 2004**

Numerous workers who are occupationally exposed to blood borne pathogens have contracted fatal and other serious viruses and diseases, including HIV, Hepatitis B and C from exposure to blood and other potentially infectious materials in healthcare professions. The following guidelines will outline the KCEAA employee's action in the event of a contaminated needle stick or infectious exposure.

Contaminated needle stick/blood borne pathogen exposure

- *The employee will wash the exposed area immediately with soap and water. If an eye/mucous membrane exposure, flush with copious amounts of water.*
 - *The KCEAA employee will notify the on duty supervisor immediately.*
 - *The KCEAA supervisor will meet with the exposed employee and walk the employee through the KCEAA Exposure Packet.*
 - *KCEAA Employee Accident Form & Worker's Compensation form will be completed.*
 - *Supervisor & Charge Nurse will obtain consent to test blood from a Source Patient.*
 - *Supervisor will obtain consent to test blood from exposed Employee.*
 - *With consent, Supervisor draws Employee blood (red & purple tops)*
 - *KCEAA Supervisor delivers Employee blood & Source blood to CAMC-Memorial Blood Bank for testing.*
 - *If Employee is injured he/she will be treated in the ED.*
 - *The KCEAA Exposure Packet will be given to the KC Infectious Control Officer.*
 - *The KCEAA employee will e-mail notification of exposure to the Infectious Control Officer.*
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- ✓ **If the KCEAA employee is not injured---blood can be drawn and taken to Memorial Blood Bank. All injured KCEAA will be treated in the ED.**

 - ✓ **Source HIV results will be available to the KCEAA Medical Director or designated staff within three hours after being received by the Blood Bank. CAMC will notify the KCEAA Medical Director or designated staff of results. The KCEAA Medical Director will notify the exposed employee immediately of these results.**

- ✓ The KCEAA Medical Director or designated staff will follow up with CAMC on Hepatitis B and C results within three to five days. The KCEAA Medical Director or designated staff will contact the employee after receiving all test results.

- ✓ Prophylactic treatment: If appropriate, prophylactic treatment will be initiated at the direction the emergency room physician, KCEAA Medical Director and/or Infectious Disease Specialist. If needed the KCEAA Medical Director or designated staff will coordinate Counseling and follow-up appointments.

INFECTIOUS DISEASE CONTROL

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

As an employee of the Kanawha County Emergency Ambulance Authority, exposure to blood and other potentially infectious materials is of great concern. It is certainly reasonable to adopt infection control programs to minimize the risk of transmission of disease. These policies are intended to be read and adhered to by all employees, part-time or full time; field, office, and maintenance staff. The Infection Control Program will be reviewed and updated as necessary to reflect significant changes in tasks or procedures.

Each KCEAA employee is responsible for the following policies and procedures outlined in the Infection Control Manual. The Infection Control Manual contains guidelines for the following areas:

- *Health Maintenance*
- *Infection Control Training*
- *Precautions and Prevention*
- *Personal Protective Equipment*
- *Scene Management*
- *Cleaning and Disinfecting*
- *Immunizations*
- *Exposure Determination*
- *Post-Exposure Evaluation and Follow-up*
- *Medical Surveillance*
- *Record Keeping*
- *Training Requirements*

**INFECTIOUS DISEASE CONTROL/Bio-Hazard Waste
SUPERSEDES/RESCINDS:
EFFECTIVE DATE: September 27, 2002**

Bio-Hazardous Waste is any waste that has been contaminated with body fluids. KCEAA is required to dispose of any and all Bio-Hazardous Waste under certain state and federal guidelines. All contaminated waste is to be kept separate of regular trash and/or garbage and incinerated in designated facilities.

Handling

All contaminated waste is to be handled with personal protection equipment (PPE). Each deposit of Biohazard waste is to be sealed in a "RED BAG" and placed in a "RED BAG" lined biohazard cardboard box at each station. All sharp boxes when full will be shut and taped, then deposited in the "RED BAG" lined biohazard cardboard box, located in each station. Hand washing is required after handling of all contaminated containers/bags.

Transportation

When preparing Biohazard for transportation, the cardboard box will be taped with a non-porous packing tape (provided by KCEAA). The bottom, sides and top joints will be taped as to make it leak resistant. The shipping label provided by KCEAA will be placed in area provided on side of the cardboard box. (See documentation) The cardboard box will be placed in the designated area for the runner to pick up. If the crews are transporting the cardboard box----you will secure the box in the locked Biohazard dumpster. The key for the Biohazard dumpster is located by the door in the supply room area. (Do not leave the box in the supply room area).

Hand washing is required after handling of all hazard material waste.

Documentation

Prior to placing the box for the runner to pick up or placing in the biohazard dumpster the following information will be written on the box: date, station, unit number and the crew names that packaged the box. Documentation will be made on the crew daily log noting the preparation and the route of transportation for the Biohazard materials.

Key Points

- ✓ *Never place any hazard materials in regular garbage or trash containers.*
- ✓ *Never place non-contaminated trash in the Sharps Box or “red bag”.*
- ✓ *Never leave/discard biohazard waste in a place that is not designated for handling biohazard materials.*
- ✓ *“Red Bags” and “Cardboard Biohazard boxes” are available from the Materials Control Officer in Supply.*

INFECTIOUS DISEASE CONTROL/Health Maintenance SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

All employees with a risk of occupational exposure will be offered an initial and yearly screening for tuberculosis exposure, immunizations against hepatitis B, influenza, and tetanus. The risks and benefits of immunization will be explained to all employees. The employee may request serologic testing prior to hepatitis B immunization to determine if previous immunity exists. Employees may refuse immunizations, or may submit proof of previous immunizations. Employees who refuse immunizations will be educated on occupational risks of communicable disease, and required to sign a refusal of immunizations form. Employees who initially refuse immunizations may later receive immunizations upon request. All documentation will keep in the confidential medical record file.

The department’s medical director may initiate work restrictions for reasons of infection control, non-occupational/occupational injury or illness per to returning to emergency response duties. These may be temporary or permanent. As an example, members with extensive dermatitis or open skin lesions on exposed areas may be restricted from providing patient care or handling and/or decontamination of patient care equipment.

KCEAA’s Infection Control Officer will maintain accurate up-to-date confidential medical files. Employee participation in the Infection Control Program will be documented, including, but not limited to:

- ✓ *Name and Social Security Number*

- ✓ *Immunization Records*
- ✓ *Circumstances of exposure to communicable diseases*
- ✓ *Post-exposure medical evaluation, treatment, and follow-up*
- ✓ *Infectious Disease Education*

Infection control files/records will become a part of the employee's personal health file and will be maintained for duration of employment plus thirty (30) years.

Medical files/records are strictly confidential. Files/Records will be kept secured under the direction of the Infectious Control Officer and will not be kept with the employee's personnel files. Medical records will not be released without the signed written consent of the employee. There will no exceptions to this policy.

Employees may examine their own medical records, and may request that copies be sent to their personal physician. A release of medical records form must be signed by the employee before copies of the records be sent to the physician.

To preserve employee confidentiality, the EMS Medical Director will not conduct health assessments on KCEAA employees.

INFECTIOUS DISEASE CONTROL/Infectious Disease Control Training

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

All employees of KCEAA providing emergency services and/or be assigned to tasks with occupational exposure will be required to complete:

- *The initial infection control training will occur as part of the employee's employment orientation. Employees presently assigned to such tasks who have not already received such training will complete the initial training as soon as possible.*
- *Refresher infection control training will be scheduled annually.*
- *The infection control training will include, but not be limited to:*
 - ✓ *Diseases*
 - ✓ *Modes of Transmission*

- ✓ *Immunizations*
- ✓ *Proper use of Personal Protection Equipment*
- ✓ *Decontamination and Disposal of Contaminated equipment*
- ✓ *KCEAA Exposure Control Plan*
- ✓ *Medical Files/Reports*

Written records of all training sessions will be maintained in the employee's medical records file for at least three (3) years after the date on which the training occurs. Training records will include, but not be limited to:

- ✓ *Dates of the training sessions*
- ✓ *Contents or a summary of the training sessions*
- ✓ *Names and qualifications of persons conducting the training*
- ✓ *Names of all persons attending the training sessions.*

**INFECTIOUS DISEASE CONTROL/Needle Stick Exposure
SUPERSEDES/RESCINDS:**

EFFECTIVE DATE: February 1, 2004

Numerous workers who are occupationally exposed to blood borne pathogens have contracted fatal and other serious viruses and diseases, including HIV, Hepatitis B and C from exposure to blood and other potentially infectious materials in healthcare professions. The following guidelines will outline the KCEAA employee's action in the event of a contaminated needle stick or infectious exposure.

Contaminated needlestick/bloodborne pathogen exposure

- *The employee will wash the exposed area immediately with soap and water. If an eye/mucous membrane exposure, flush with copious amounts of water.*
- *The KCEAA employee will notify the on duty supervisor immediately.*
- *The KCEAA supervisor will meet with the exposed employee and walk the employee through the KCEAA Exposure Packet.*
- *KCEAA Employee Accident Form & Worker's Compensation form will be completed.*
- *Supervisor & Charge Nurse will obtain consent to test blood from a Source Patient.*
- *Supervisor will obtain consent to test blood from exposed Employee.*
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- If Employee is injured he/she will be treated in the ED.
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INFECTIOUS DISEASE CONTROL/Personal Protective Equipment

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

The emergency response often is unpredictable and uncontrollable. While blood is the single most important source of HIV and HBV infection in the workplace, in the field it is safest to assume that all body fluids are infectious. For this reason, personal protective equipment (PPE) will be chosen to provide barrier protection against all body fluids.

Disposable latex gloves or non-latex, hypo-allergic gloves will be worn during any patient contact when potential exists for contact with blood,

body fluids, or other infectious material. All employees will carry extra pairs of disposable gloves.

Gloves will be replaced as soon as possible when soiled, torn, or punctured. Wash hands after glove removal.

Disposable gloves will not be re-used or washed and disinfected for reuse.

To prevent cross contamination gloves should be changed between patients in multiple patient situations.

Facial protection will be used in any situation where splash contact with the face is possible. Facial protection may be benefited by using both a facemask and eye protection, or by using a full-face shield. When treating a patient with a suspected or known airborne transmissible disease, face masks or HEPA respirator will be used. The first choice will be to mask the patient; if this is not feasible, mask the employees.

Fluid-resistant gowns and shoe covers are provided to protect clothing/shoes from splashes or contaminated areas. Gowns and shoe covers may interfere with or present a hazard to the employee. The employee needs to make a responsible judgment call on the use of these barrier devices. Examples: auto extrication or area of fire hazards.

Key Points

- ✓ *It's wet, it's infectious – use gloves*
- ✓ *If it could splash onto your face – use eye shields and mask or full face shield*
- ✓ *If it's airborne, mask the patient and/or yourself*
- ✓ *If it could splash on your clothes, use a gown.*
- ✓ *If it could splash on your head or your feet – use appropriate barrier protection.*

INFECTIOUS DISEASE CONTROL/Station Environment
SUPERSEDES/RESCINDS:
EFFECTIVE DATE: September 27, 2002

Employees should be aware of how to limit the spread of disease organisms at all stations. Organisms can be transmitted indirectly if infection control procedures are not adhered to at the station or if the station is not properly cleaned on a regular basis.

Storage, decontamination, and disposal areas

All stations will designate separate areas for:

- *Equipment decontamination and disinfection.*
- *Storage of clean patient care equipment and infection control equipment.*
- *Storage of biohazard waste.*

*Under **NO** circumstances will kitchens, bathrooms or areas where food and drinks are present be used for decontamination or storage of patient care equipment or infectious waste.*

Decontamination areas will be marked with biohazard signs and will be equipped with:

- *Appropriate containers for disposal of biohazard waste.*
- *Appropriate PPE for the use of disinfecting solutions.*
- *Contaminated sharps will be stored in closed puncture-resistant containers (sharps boxes) with appropriate biohazard markings.*
- *Other contaminated materials will be stored in leak proof bags with appropriate biohazard markings.*
- *Any reusable bins/containers used to store biohazard waste will be inspected, cleaned, and disinfected weekly.*
- *Immediate disinfecting of containers if outside contamination is present after each use.*
- *All biohazards will be properly labeled and secured (sealed) in the proper marked disposable cardboard container for the runner to pickup for disposable.*

Living and Bedroom Areas

Living and bedroom areas can become places of indirect disease transmission when not properly cleaned. All stations will be cleaned and disinfected on a regular basis.

The following procedures will be followed:

- *Clean/disinfect personal lockers and bedding on a regular basis.*
- *Never lie on a bed or sit on furniture with contaminated clothing or skin areas.*
- *Keep contaminated items out of the living-bedrooms areas.*
- *Each employee with the use of disposable towels for drying will do frequent hand washing.*

INFECTIOUS DISEASE CONTROL/Station Environment

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

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Laundry Area

All employees will maintain a clean laundry area with a washer and a dryer. To eliminate cross contamination the employee will:

- *Hand washing will be done before and after cleaning of all laundry.*
- *Use of PPE when cleaning, handling any contaminated laundry*
- *Handle contaminated laundry as little as possible and by as few people as possible.*
- *Sort contaminated laundry only in the designed areas. Clean designed areas after each use. (Solution 1:4 bleach/water)*
- *The water temperature will be set at 140 degrees F or greater for all contaminated laundry.*
- *The washer will be cleaned after any contaminated load of laundry. (1 cup of bleach—running the washer through the longest hottest water cycle available)*
- *Wipe the exterior of the washer and dryer with a bleach solution after use.*
- *All clean laundry will be stored in a clean area.*
- *Contaminated items should always be laundered separately from other laundry.*

*All employees will wash work uniforms in-station. Under **NO** circumstances will work clothes be washed at home. This procedure will protect the employees' families from both infectious and chemical contamination.*

All employees will have extra clean work uniforms in the station, so that potentially contaminated uniforms can be exchanged upon returning to quarters. The uniforms will be stored in a designated clean area.

Kitchen

*Under **NO** circumstances will any kitchen facility be used for the purpose of cleaning, disinfecting, storing or disposal of any infectious material or waste.*

To avoid the spread of communicable diseases in the kitchen the following will be done:

- *Food will be properly stored, prepared and cooked.*
- *Hands will be washed before and after handling/preparing food.*
- *Do not share utensils when preparing food.*
- *Eliminate porous surfaces from the kitchen (wood cutting boards, wood spoons)*
- *Clean food preparation surfaces with a disinfectant before and after use.*
- *Throw away food left at room temperature for an extended period of time.*
- *Do not use a common spoon for stirring coffee and other beverages.*
- *Food will be returned to the refrigerator before leaving the station if a meal is interrupted.*
- *Common towels will not be used in the station.*

Refrigerators will be maintained at a temperature of 38 degrees F or below; freezers will maintain a temperature of 0 degrees F or below.

INFECTIOUS DISEASE CONTROL/Station Environment

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

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Bathrooms

*Under **NO** circumstances will any bathroom be used for the purpose of cleaning, disinfecting, storing or disposal of any infectious material or waste. Bathrooms can be a breeding ground for organisms that cause disease. If the infection control procedures are not closely followed in the bathroom, organisms can be easily spread from one person to another.*

To reduce the spread of disease the following will be adhered to:

- *Do not use a common towel; disposable towels are supplied to each station.*
- *Use liquid soaps. Bars of soap increase risk of exposure to communicable disease.*
- *Keep personal items in a clean locker.*
- *Hand washing after the use of the toilet.*
- *Do not share personal hygiene items.*
- *Do not store personal hygiene items in contaminated areas.*
- *Flushing of the toilet after each use.*
- *The use of paper towels when touching the handle for flushing toilet.*
- *The use of paper towels after skin washing to turn off water faucets and to open bathroom door.*
- *Bath tubs/showers will be cleaned with disinfect solutions before and after each use.*

Always dispose of any disposable cleaning towels, rags, or commercial absorbents in the proper manner and thoroughly clean all non-disposable cleaning utensils with the appropriate bleach and water solution.

INFECTIOUS DISEASE CONTROL/Vehicles and Equipment

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

Improper decontamination of the vehicle and medical equipment increases the risk that emergency patients will be exposed through cross contamination. The decontaminating of the equipment and the inside of the vehicle should be accomplished as quickly and thorough as possible to prepare the vehicle for another call. Once hand washing has been completed and fresh personal protective equipment has been put on, the employee can begin the following tasks.

Contaminated uniforms and equipment *is defined as any amount of blood and/or body fluids that has been in contact with any part of the equipment or uniforms. It is the policy of KCEAA to adhere to the following for handling, transporting, cleaning and the proper disposing of contaminated waste.*

BSI/PPE

Gloves must be worn anytime you are cleaning or removing contaminated equipment and/or clothing. When the possibility that splashing of any fluids/liquids may occur the use of gloves, gowns, masks, and eye protection must be worn. Shoe coverings must be worn if large amounts of blood and/or body fluids are on the floor.

Vehicle Decontaminating

- *Dispose of medical waste in designated area/container.*
- *Decontaminate the large equipment. (Cot, backboards, passenger seats, patient seats in buses, etc.)*
- *All patient compartments must be disinfected after each use. (Ambulance, mini-vans or buses)*
- *After decontaminating the cot--- replace cot with fresh linen.*
- *Soak up blood and body fluid spills with paper towels or commercial products.*
- *Disinfect all contaminated areas.*
- *Red bag all cleaning materials used in the cleaning process.*
- *Let all surfaces air dry---attempting to dry the surface by wiping may remove disinfectant*
- *Cleaning of the vehicle cab or drivers area will be done. (Steering wheel, floor mats, radio microphone, clipboards, etc.)*

INFECTIOUS DISEASE CONTROL/Vehicles and Equipment

SUPERSEDES/RESCINDS:

EFFECTIVE DATE: September 27, 2002

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Equipment Decontaminating

When the vehicle is ready for service, the employee will wash skin areas and put on fresh PPE before continuing with decontamination of medical equipment.

Any equipment and/or uniforms must be removed immediately to a place of less probability of accidental contact. Then secure in a leak proof, puncture resistant “red bag” that is marked with “Bio-Hazard” before transporting. If there is a possibility of leakage the items must be doubled bagged in a “red bag” marked “Bio-Hazard”.

Any **disposable equipment** such as c-collars, bandages, CID's, gloves, etc. that has been contaminated with body fluids will be placed in a leak proof puncture resistant "red bag" that is marked with "Bio-Hazard" immediately to reduce contamination.

All "red bag" contaminated waste will be placed in "Bio-Hazard" containers. Do not place contaminated waste in regular trash/garbage containers.

The steps in decontaminating **non-disposable equipment** are:

- ✓ Preclean
- ✓ Disinfect
- ✓ Store

Employee will complete hand washing before and after each task of decontaminating equipment.

Pre-clean

Items that will be disinfected at the station should first receive a thorough pre-cleaning to remove all visible organic matter, so that the disinfectants can work properly. To pre-clean equipment, scrub thoroughly with soap and water. Rinse well with hot water.

Disinfect

Disinfect by manufacturer's recommendations. Recommended bleach solution can be used for disinfectant. (One-gallon water with ¼ cup of bleach). Keep in mind using stronger bleach solution may cause damage to the equipment.

Store

When the equipment has finished air-drying, the equipment can be stored. (Let all surfaces air dry---attempting to dry the surface by wiping may remove disinfectant)

PERSONAL PROTECTIVE EQUIPMENT Guidelines

The KCEAA recognizes the importance of its employees and provides equipment to protect them while performing invasive procedures. In this guideline equipment should be used with each of the patients and procedures listed.

**SAFE PRACTICES FOR
INFECTION CONTROL**

RECOMMENDED PERSONAL PROTECTION EQUIPMENT BASED ON TASK OR ACTIVITY				
Task	Gloves	Gown	Mask	Glasses
Bleeding Control: Uncontrolled	YES	YES	YES	YES
Bleeding Control: Minimal	YES	OPTION	OPTION	OPTION
Childbirth	YES	YES	YES	YES
Blood Drawing	YES	OPTION	OPTION	OPTION
Starting IV	YES	OPTION	OPTION	OPTION
Giving Injection	YES	OPTION	OPTION	OPTION
Intubations	YES	OPTION	YES	YES
Suctioning	YES	OPTION	YES	YES
Manual Airway Clearing	YES	OPTION	YES	YES
Handling/Cleaning Soiled Equipment/Vehicle	YES	YES	OPTION	OPTION

CONTAGIOUS DISEASES

Disease	Gloves	Gown	Mask	Glasses
Tuberculosis	OPTION	OPTION	YES	OPTION
Chicken Pox	YES	YES	YES	YES
Meningitis	OPTION	OPTION	YES	OPTION
Whooping Cough	OPTION	OPTION	YES	OPTION