

Tab 300

Infection Control Policies



Lucas County Emergency Medical Services
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**TAB 300
INFECTION CONTROL POLICIES
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A Infection Control Policy (Scope and Purpose)



1. Scope and Purpose

- a. This policy will reflect recommendations and provide information regarding infection control precautions and procedures commonly referred to as ***standard precautions***.
- b. Appropriate and safe transport of the sick and injured is of great importance to all EMS providers. Personal protection for yourself, your crew and your patient should be high on the list of your priorities. EMS providers are in a high-risk group for infectious disease exposure. Infection control is a shared responsibility between the employer and employee.

2. Goals

- a. To regard all patient contacts as potentially infectious and institute standard precautions on all patients.
- b. To provide or assist system paramedics with personal protection equipment (PPE) and the necessary training to utilize this equipment.
- c. Recommend the need for proper immunizations.
- d. To recognize the need for work restrictions based upon infection control concerns.
- e. To inform personnel of proper procedures for the exchange or cleaning of equipment and supplies.
- f. To inform personnel of the proper disposal procedure for infectious waste.
- g. To inform personnel of the proper procedures after an exposure.



A Infection Control Policy (Scope and Purpose)



Infection Control Policy, continued

3. Transmission

The transmission of infectious diseases requires five (5) factors. The infection can be interrupted by stopping the process at any of these points.

- a. **Dose:** refers to the number of live organisms present.
- b. **Virulence:** refers to the strength of the infectious organism.
- c. **Host Resistance:** ability of the potential host to resist the effects of the infectious organisms.
- d. **Route of Exposure:** airborne or blood borne.
- e. **Means of Transmission:** the way an organism enters its host.



B Equipment Disinfection (LCEMS Annex Level)



Lucas County EMS recommends that all non-disposable EMS equipment have a comprehensive cleaning/disinfection at a minimum of four times per year in addition to routine cleaning outlined in Tab 300, Section G. Any comprehensive cleaning/disinfection of EMS equipment can be scheduled through the Lucas County EMS Annex.

A. Patient Cot

1. Wash entire cot with soap and water.
2. Spray entire cot with disinfectant and then hose off.
3. Combined towel and air drying.
4. Cot net removed (if applicable), washed in washer with soap and disinfectant.
5. Cot mattress washed with soap and water; sprayed with disinfectant and hosed off.
6. Combined towel and air drying.
7. IV poles inspected for wear. Sprayed with disinfectant and wiped off with a towel.

B. Cardiac Monitor

1. Clean with surface cleaner and disinfectant.
2. Check time and date.
3. Wipe all cables with disinfectant; inspect for wear.
4. Inspect cases for wear or cracks.
5. All batteries cleaned and a shelf-life test performed.
6. Protect-A-Paks washed in washer with soap and disinfectant; dried in dryer.
7. Re-stencil if necessary

C. Suction Machine

1. All disposable parts replaced.
2. Re-stock to match inventory.
3. Soft pack washed in washer with soap and disinfectant; dried in dryer.
4. Re-stencil if necessary.
5. Suction pressure tested.



B Equipment Disinfection (LCEMS Annex Level)



Equipment Disinfection (Annex Level), continued

D. Traction Splints

1. Wash with soap and water
2. Spray with disinfectant and hose off.
3. Straps removed and washed in washer with soap and disinfectant; dried in dryer.
4. Case washed in washer with soap and disinfectant; dried in dryer.
5. Re-stencil if needed.

E. CID

1. Soak in bucket of disinfectant for 30 minutes.
2. Wash in washer with soap and disinfectant; air dried
3. Velcro inspected.
4. Re-stencil if necessary.

F. KED Board

1. Wash with soap and water.
2. Spray entire unit with disinfectant spray and hose off.
3. If heavily stained, soak unit in soap and disinfectant over night and then wash with soap and water; air and towel dry.
4. Wash case in washer with soap and disinfectant; towel dry
5. Re-stencil if needed.
6. Inspect for wear.

G. BP Cuffs

1. Remove bladder and wash in washer with soap and disinfectant; dry in dryer.
2. Calibrate gauge.
3. Wipe bladder with disinfectant.
4. Return bladder to unit.
5. Re-stencil if needed.

H. Stethoscopes

1. Completely disassemble unit.
2. Soak pieces in disinfectant for 10 minutes.
3. Wash pieces in soap and water; air dry
4. Reassemble unit.



B Equipment Disinfection (LCEMS Annex Level)



Equipment Disinfection (Annex Level), continued

I. Stair Chair

1. Wash with soap and water.
2. Spray unit with disinfectant and hose off; air/towel dry.
3. Remove straps and wash in washer with soap and disinfectant; dry in dryer.

J. Backboards

1. Remove straps and wash in washer with soap, bleach and disinfectant.
2. Dry in dryer. If still stained, discard.
3. Wash board with soap and water.
4. Spray with disinfectant and hose off; towel dry.
5. Replace straps as necessary.

K. Add-A-Splint

1. Wash in washer with soap and disinfectant; dry in dryer.
2. Re-stencil if needed.
3. Wash case in washer with soap and disinfectant; dry in dryer.

L. Vacuum Splints

1. Wash in washer with soap and disinfectant; towel dry.
2. Check operation of splints.
3. Wash case with soap and disinfectant; dry in dryer.
4. Re-stencil if needed.

M. Oxygen-Airway Bag

1. Remove all supplies, equipment, pouches and Styrofoam inserts.
2. Wash in washer with soap and disinfectant; allow to air dry.
3. Wash pouches in washer with soap and disinfectant; dry in dryer.
4. Reassemble unit, inspect zippers.
5. Re-stock to conform to protocol.
6. Re-stencil if needed.

N. Lucas 3 Chest Compression System

1. Clean all surfaces and straps with a soft cloth and warm water with a mild cleaning agent or disinfectant.



B Equipment Disinfection (LCEMS Annex Level)



Equipment Disinfection (Annex Level), continued

O. Medication Box

1. Remove all equipment and supplies from box.
2. Wash box inside and out with soap and water. Wash bottom insert in washer with soap and disinfectant and let air dry.
3. Spray unit inside and out with disinfectant and hose off; air/towel dry.
4. Restock to conform to protocol.
5. Re-stencil if needed.

P. Intubation Bag

1. Remove all equipment and supplies.
2. Wash in washer with soap and disinfectant.
3. Replace equipment and supplies to match protocol.
4. Re-stencil.

Q. Pediatric Board

1. Remove wood from unit.
2. Wash cover in washer with soap and disinfectant; allow to air dry.
3. Wash case in washer with soap and disinfectant; allow to air dry.
4. Reassemble.
5. Re-stencil.

R. Glucometer

1. Wipe with surface cleaner and disinfectant.
2. Replace batteries.
3. Wash soft case in washer with soap and disinfectant. Wipe hard case with disinfectant.

S. EZ-IO Power driver

1. Wipe with surface cleaner and disinfectant.
2. Clean and manipulate trigger using cloth moistened with disinfectant.
3. With disinfectant, gently clean inside opening around metal drive shaft.
4. Wipe down soft case with disinfectant.



B Equipment Disinfection (LCEMS Annex Level)



Equipment Disinfection (Annex Level), continued

T. Magills, Hemostats, Scissors, Laryngoscope Handles, Laryngoscope Blades

1. Remove batteries from laryngoscope handle.
2. Remove bulbs from laryngoscope blades.
3. Soak in disinfectant 30 minutes.
4. Rinse with water.
5. Replace batteries and lights.
6. Towel dry

U. Padded Board Splints

1. Wash with soap and water.
2. Spray with disinfectant and hose off; towel dry.
3. Re-stencil

V. Pulse Oximeter

1. Wipe with surface cleaner and disinfectant solution.
2. Wash case in washer with soap and disinfectant.
3. Replace batteries.

W. Radios (Vehicle)

1. Wipe mobile radios, head and handsets with disinfectant.
2. Test front and rear handsets with RCOG EMS Dispatch.

X. ALS First Responder Box

1. Remove all equipment and supplies from box.
2. Wash box inside and out with soap and water. Wash bottom insert in washer with soap and disinfectant and let air dry.
3. Spray unit inside and out with disinfectant and hose off; air/towel dry.
4. Restock to conform to protocol.
5. Re-stencil if needed.

Y. Oxygen Bottles

1. Large O² bottle replaced and tested for leaks.
2. All portable bottles drained and refilled.
3. Hydrostatic date checked.
4. Cleaned with surface cleaner and disinfectant.
5. Re-stencil.



B Equipment Disinfection (LCEMS Annex Level)



Equipment Disinfection (Annex Level), continued

Z. Fire Extinguishers

1. Cleaned with surface cleaner and disinfectant
2. Gauge and date checked.
3. Re-stencil

AA. Rain Coats, Linen, Blankets, Pillows

1. Wash in washer with soap and disinfectant.
2. Dry in dryer.

BB. Flashlights

1. Replace batteries.
2. Wipe surface with cleaner and disinfectant.
3. Test.

CC. Throw Rope

1. Inspect for wear.

DD. Auto Vent

1. Dispose of all expendable accessories.
2. Spray unit with disinfectant; towel dry.
4. Test unit.
5. Inspect for cracks.

EE. ACR-4 (Ambulance Child Restraint System)

1. Wash in washer with soap and disinfectant.
2. Air dry.

FF. Smith Cot

1. Wash in washer with soap and disinfectant.
2. Dry in dryer.



C Personnel Protection (LCEMS Annex Level)



Lucas County EMS Annex personnel may be exposed to a variety of contaminants by handling contaminated equipment, vehicles and supplies. The following guidelines shall be followed when handling/cleaning contaminated vehicles, equipment and supplies:

1. Standard Precautions

- a. All annex personnel will wear double non-sterile latex gloves when handling any contaminated equipment or supplies.
- b. If an employee has any open cuts or abrasions on the hands, non-sterile latex gloves are to be worn at all times while working in the annex.
- c. Hands should be washed with a germicidal soap each time gloves are changed or removed.
- d. All exposure incidents should be reported to the Lucas County EMS Annex supervisor or his/her designee.
- e. Infection control packs should be utilized during cleaning/disinfecting where there is the possibility of contaminate splash:
 - i. Disposable cap
 - ii. Mask with shield
 - iii. Shoe covers
 - iv. Disposable gown
 - v. Double non-sterile latex gloves
- f. Guidelines listed in Tab 300, Section B will be followed when disinfecting equipment.
- g. Guidelines listed in Tab 300, Section D will be followed when disinfecting a vehicle.



C Personnel Protection (LCEMS Annex Level)



Personnel Protection (LCEMS Annex Level), continued

2. Immunizations

- a. Lucas County EMS Annex personnel will be offered all appropriate immunizations.
- b. Annex personnel will follow the chart in Tab 300, Section C-3 regarding working while ill.



C Personnel Protection (LCEMS Annex Level)



Personnel Protection (LCEMS Annex Level), continued

Disease or Condition	Work Status
Positive PPD Skin Test	May work with follow-up
Conjunctivitis	<u>Off</u> until drainage is absent
Draining Wound	<u>Off</u> until cleared up
Herpes Simplex (Cold Sore)	<u>Off</u> until cleared up
Herpes Zoster (Shingles)	<u>Off</u> until cleared up
Hepatitis A	<u>Off</u> until 7 days after jaundice disappears
Hepatitis B	<u>Off</u> until proven serologically non-infective
Mononucleosis	<u>Off</u> until directed by MD
Lice or Scabies	<u>Off</u> until treated
Streptococcal Infection	<u>Off</u> until directed by MD.
Measles, Mumps, Chicken Pox	<u>Off</u> until directed by MD
Influenza	<u>Off</u> until directed by MD
Impetigo	<u>Off</u> until cleared up



D Vehicle Cleaning / Disinfection (LCEMS Annex Level)



Lucas County EMS recommends that a comprehensive vehicle cleaning / disinfection occur with each life squad unit (including back-ups) at a minimum of four (4) times per year. The Lucas County EMS Annex is available to perform these duties upon request of the municipalities. Cleaning procedures may be requested in part or whole at any time. The procedures listed include:

- A. Vehicle disinfection
 - B. Vehicle cleaning
 - C. Maintenance checks
 - D. Equipment disinfection
 - E. Re-stocking of equipment and supplies
 - F. Victory Disinfection Atomizer
 - G. UV Disinfecting Light
1. Power wash engine using degreaser on heavily soiled areas.
 2. Thoroughly wash vehicle including wheel wells. Includes removal of any tar or bugs from vehicle exterior.
 3. Scrub all diamond plate with an abrasive cleaner and brush to remove dirt from cracks.
 4. Wax vehicle.
 5. Replace any substandard lettering.
 6. Touch up scratches or nicks in paint.
 7. Check all fluid levels and re-fill (if necessary).
 8. Check all standard and emergency lights (inside and out).
 9. Check operation of mobile suction machine.
 10. Check operation of front and rear mobile radio.
 11. Check operation of on-board inverter and all electrical outlets.
 12. Lubricate all door hinges.



D Vehicle Cleaning / Disinfection (LCEMS Annex Level)



Vehicle Cleaning/Disinfection (LCEMS Annex Level), continued

13. Remove appropriate molding for cleaning/disinfection.
14. Replace (or tighten) any loose screws.
15. Strip and disinfect floor in patient area.
16. Clean and disinfect all smooth surfaces including walls and ceiling area.
17. Clean all glass and plexiglass (inside and out).
18. Remove all equipment / supplies from cabinets for cleaning and disinfection. Replace equipment / supplies to match inventory.
19. Undercoat wheel wells as needed.
20. Shampoo all cloth upholstery.
21. Scrub cab floor.
22. Clean seats, inside of doors and dashboard.
23. Perform any other cleaning / disinfecting as needed.



E Airway Procedures- Infection Control (Field Level)



Field airway control procedures significantly increase the potential for infectious disease exposures and cross contamination of supplies and equipment. ***Standard precautions should be used on all patients.*** During any field airway maneuvers, the following infection control procedures should be followed:

1. Items listed below are single patient use and should be disposed of appropriately after use. It is unacceptable to reuse these items on another patient.
 - A. Oral airways
 - B. Tongue blades
 - C. Nasal airways
 - D. Suction Canisters
 - E. Suction catheters
 - F. Stylets
 - G. ET tubes / I-Gel / Sugraglottic Devices
 - H. Tonsil tips
 - I. Masks
 - J. Resuscitation bags
 - K. Scalpels
 - L. ET tube holders
 - M. ResQPOD
 - N. ResQGARD
2. Gloves, eye and face protection **are mandated** during airway procedures.
3. Contaminated items (i.e., laryngoscope blades), are not to be put back in medical bags or boxes until properly cleaned and disinfected (see Tab 300, Section G) as this may cause cross contamination of equipment and supplies. **Non-expendable** contaminated items should be placed in a hazardous waste bag and kept in the possession of the paramedic so these items are not accidentally disposed of.
4. When securing a patient's airway by any means, care should be taken not to spray contaminants (i.e., vomit, secretions, blood) onto yourself or other responders by ventilation or oxygen.



F Cricothyrotomy- Infection Control (Field Level)



Surgical cricothyrotomy in the pre-hospital environment is rarely indicated. Great care should be taken to follow all standard precautions:

1. Non-sterile gloves will be worn; Double glove if necessary. If available, sterile gloves should be worn in lieu of non-sterile.
2. Prep the site with providine iodine (if available), otherwise prep site with alcohol. Do not palpate the site after it has been prepped.
3. Use only a sterile #11 scalpel. Dispose of scalpel in a sharps container immediately after procedure. ***DO NOT*** recap the scalpel after procedure. If using retractable scalpel, retract blade and dispose in sharps container.
4. The endotracheal tube being used to create an airway must be sterile and not come into contact with any surface prior to insertion.



G Equipment Cleaning / Disinfection (Field Level)



Equipment cleaning and disinfection is a shared responsibility of all health care providers. Each piece of equipment should be inspected, cleaned and disinfected **after each patient use**. High contact areas include: med box, airway bag, cardiac monitor, portable, mobile radios, stethoscopes, suction machines, stretcher, laryngoscopes, CID's and backboards.

Listed below are the guidelines for cleaning and/or disinfecting:

- A. Patient cot - The cot and mattress should be washed weekly with a mild soap solution. If blood or any body fluid is present it should be washed with soap and water and then sprayed and wiped with a disinfecting solution. If the cot is highly contaminated with blood or body fluids in areas that cannot be cleaned adequately, the cot should be taken to the Annex and a back-up cot obtained. Cot nets should always be taken off and exchanged with the Annex when soiled or stained. Soiled or stained straps should be exchanged at the Annex.
- B. Cardiac Monitor - Cleaned daily with a disinfecting solution or when any blood or body fluid is present. If the unit becomes highly contaminated, it should be exchanged at the Annex. The Protect-A-Pac should be exchanged at the Annex when soiled.
- C. Suction Machine - Thoroughly cleaned with soap, water and a disinfecting solution after each use. All disposable items should be disposed of appropriately and replaced when used. If the unit becomes contaminated to the point that fluid may have entered the motor, or the soft pack has become soiled, it should be exchanged at the Annex.
- D. Traction Splints - Inspected after each use. Most times a simple wash with a disinfecting solution will suffice. However, if the Velcro becomes soiled, the unit should be exchanged at the Annex for cleaning. Ankle hitches that are stained or soiled should be exchanged at the Annex.
- E. CID - The cervical immobilization device is frequently exposed to blood and should be soaked in a bucket with soap and a disinfecting solution for at least 30 minutes. If the unit does not come clean, or straps are stained, they should be exchanged at the Annex.



G Equipment Cleaning / Disinfection (Field Level)



Equipment Cleaning/Disinfection (Field Level), continued

- F. KED - The KED board presents a unique cleaning problem with all the Velcro and straps. If the board cannot be wiped cleaned with a disinfecting solution it should be taken to the Annex to be exchanged.
- G. BP Cuffs - Inspected after each use and exchanged at the Annex if any stains are on the cloth cuff.
- H. Stethoscopes - The diaphragms and bell should be wiped with a disinfection solution daily and ear pieces cleaned at the beginning of each shift. If there is ear wax in the end of ear pieces, they should be soaked in a disinfecting solution until clean.
- I. Stair Chair - Washed weekly with mild soap and water. If blood or body fluids are on smooth surfaces, they should be washed with soap, water and wiped with a disinfection solution. If straps are stained or fluid in cracks and hinges, the chair is to be exchanged at the Annex.
- J. Backboards - Wiped with a disinfection solution after each use. If the board is heavily soiled, wash with soap, water and a disinfection solution. Soiled or stained straps should be exchanged at the Annex.
- K. Add-A-Splint - Splints are to be exchanged at the Annex when soiled.
- L. Vacuum Splints - Splints may be washed with soap, water and disinfection solution when soiled. If heavily soiled, they are to be exchanged at the Annex.
- M. Oxygen/Airway Bag - Bag should be exchanged at the Annex when soiled or stained.
- N. Med Box/ALS Responder Box - Washed with soap, water and wiped with a disinfection solution weekly or when exposed to body fluids. If contamination occurs inside the box it should be exchanged at the Annex.



G Equipment Cleaning / Disinfection (Field Level)



Equipment Cleaning/Disinfection (Field Level), continued

- O. Intubation Roll - Exchanged at the Annex when soiled or stained.
- P. Pediatric Board - Exchanged at the Annex when soiled or stained.
- Q. Glucometer - Cleaned after each use with a disinfection solution.
- R. EZ-IO Power driver – Wipe with surface cleaner and disinfectant. Clean and manipulate trigger using cloth moistened with disinfectant. Gently clean inside opening around metal drive shaft. Wipe down soft case with disinfectant.
- S. Magills, Hemostats, Scissors, Laryngoscope Blades - These items are to be soaked for approximately 10 minutes in a disinfecting solution and washed with soap and water after each use.
- T. Padded Board Splints - Washed with soap and water and wiped with a disinfection solution.
- U. Pulse Oximeter - Cleaned with a disinfection solution after each use, including inside the finger sensor.
- V. Radios - Portable radios, pagers and EPCR Table are to be wiped off with a disinfecting solution at the beginning of the shift. This also includes all hand and headsets of the mobile radios.
- W. Tourniquets, Cervical Collars, Suction Canisters, BMV, Stylets - These items are single patient use only and are to be disposed of.
- X. Auto Vent - Cleaned with a disinfectant after each use and disposable accessories disposed of appropriately.
- Y. ACR-4 (Ambulance Child Restraint System) - Exchanged at the Annex when soiled or stained.
- Z. Smith Cot –Dropped off at the Annex when soiled or stained.



G Equipment Cleaning / Disinfection (Field Level)



Equipment Cleaning/Disinfection (Field Level), continued

- AA. Lucas 3 Chest Compression System – Clean all surfaces with a soft cloth and warm water with a mild cleaning agent or disinfectant.



H Exposures



E EMS personnel are at high risk for infectious disease exposure. ***Standard precautions should be utilized with all patient contacts.***

Significant exposures should be reported to ***On-Line Medical Control*** as well as the employee's immediate supervisor. Details of the exposure should be documented on the ***Lucas County EMS Exposure Incident Form (Tab 300, Section H-2).***

Use the following guidelines for exposure notification:

- A. In settings where a patient is transported to the hospital (life squad or private transfer), the completed exposure incident form should be turned into the emergency department charge nurse. If no medical treatment is required, the emergency department has a policy in place to have the source patient (origin of infectious exposure) tested with follow up notification. ***EMS personnel should also follow their own department's policies and procedures for exposure incidents.***
- B. In settings where a patient is ***not*** transported to the hospital, EMS personnel should contact ***On-Line Medical Control*** to detail events of the exposure. Consult with medical control should help determine the best course of events for follow up documentation and care if necessary.
- C. EMS personnel requiring treatment following an exposure should work with the emergency department physician to outline the best course of medical treatment.
- D. Copies of the ***Lucas County EMS Exposure Incident Form*** should be forwarded to the employer and Lucas County EMS Administration.
- E. Exposure incidents should be documented in the electronic PCR under the "exposures" area.

Lucas County EMS
Infectious Disease Exposure Form



Person Exposed: _____ Unit #: _____
Immediate Contact Phone #: _____ Incident #: _____
Date of Exposure: _____ Time of Exposure: _____
Address / Location of exposure: _____

Describe the incident / exposure (in detail):

What were you exposed to?

HIV: Hepatitis: TB: Meningitis: Other: (Specify):

Disease was: Suspected: Confirmed: Confirmed by:

Reported Exposure (Select all that apply):

Blood: Saliva: Vomitus: Urine: Feces: Airborne:

Other: Specify:

What part(s) of your body were exposed (be specific):

Did you have any open cuts, sores, rashes that were exposed (be specific):

Check all Personal Protective Equipment you were wearing at the time of exposure:

Gloves: Surgical Mask: N95 Mask: Eye Protection: Eye Shield: Other:

Did you seek medical attention? Select

Where?

Date:

Contact to Infection Control Supervisor: Select

Date:

Source Patient Information: **DO NOT ENTER A PATIENT NAME**

Transport Vehicle:

Patient Disposition: Select one

Hospital Destination: Select one

Date Form Completed:



I Hazardous Waste Disposal



Disposal of hazardous medical waste is the responsibility of all EMS personnel rendering medical care. Contaminated items should not be thrown back into medical bags or boxes for later disposal. In addition, contaminated items should not be left at an emergency scene (i.e., gloves, bloody gauze). Items should be placed in an approved sharps container or hazardous waste bag after use. You should familiarize yourself with the location of the soiled utility rooms at each of the hospital emergency departments for disposal of hazardous waste items. For specific information on sharps disposal, refer to Tab 300, Section Q.



J Immunizations



The following immunizations are recommended by Lucas County EMS:

- A. Tetanus Diphtheria (booster every 10 years)
- B. Influenza (yearly)
- C. Mumps Vaccine (one-time dose)
- D. Rubella Vaccine (one-time dose)
- E. Hepatitis B Vaccine (three dose immunization)
- F. Any immunization identified by the local health department that would benefit emergency workers due to contact with high risk patients.

NOTE: Lucas County EMS Annex personnel are required to have all listed immunizations. Annex employees who decline specific immunization(s) must have a ***Lucas County EMS Immunization Declination Form (Tab300, Section J-2)*** on file with administration.



J Immunizations



LUCAS COUNTY EMS ANNEX PERSONNEL IMMUNIZATION DECLINATION FORM

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring a communicable disease. I have been given the opportunity to be vaccinated by my employer. I voluntarily decline the offer of the vaccination from Lucas County EMS at this time.

I understand that by declining this vaccine I continue to be at risk of acquiring an infectious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials in the performance of my duties and I want to be vaccinated, I can still receive the vaccination from Lucas County EMS at no charge to me.

Employee Signature

Date

Witness

Date



K Infection Control Kit (Pouch)



Each system paramedic, upon request, will be issued an Infection Control Kit (pouch) to be utilized during field work. Kits will contain the following items:

1. Vital signs pad (1)
2. Tourniquet (1)
3. Pen (1)
4. Trauma Scissors (1)
5. Disposable gown (1)
6. Disposable gloves (4 pair)
7. Eye protection (1)
8. N95 Healthcare Particulate Respirator (1)
9. Penlight (1)



L Intraosseous Infusion- Infection Control (Field Level)



Every effort should be made to use proper aseptic technique when establishing an intraosseous infusion line. The following techniques are to be followed:

1. Disposable gloves are to be worn. Double glove if necessary.
2. Assemble IV bag and tubing (or saline lock); end of tubing should not touch any surface prior to insertion into IV bag or IO needle. Exposed ends of tubing, which become contaminated, must be discarded.
3. Check IV bag for expiration date and clarity. Cloudy fluids or bags which have been taken out of their protective covering for more than 24 hours should not be used.
4. IO needles should not come in contact with any surface prior to insertion.
5. IO needles are single use only.
6. IO sites should be prepped with alcohol.
7. IO needles should be secured. Needle movement can increase the risk of pathogen migration along the needle into the bone.



M

Intravenous Therapy- Infection Control (Field Level)



The following techniques are to be followed when establishing intravenous infusion lines on patients. Every effort should be made to use proper aseptic techniques when possible.

1. Disposable gloves are to be worn. Double glove when necessary.
2. Determine if patient has allergies to latex, plastic, or medications.
3. Tourniquet must be clean, with no fluid or stains present.
4. Assemble IV bag and tubing (or saline lock). End of tubing must not touch any surface prior to insertion into IV bag or catheter. Exposed ends of tubing, which become contaminated, must be discarded.
5. Check IV bag for expiration date and clarity. Cloudy fluids or bags which have been taken out of their protective covering for more than 24 hours are not to be used.
6. Catheters should not come in contact with any surface prior to venipuncture.
7. Catheters are single use only.
8. The IV insertion site should be prepped with alcohol.
9. Any blood that is present after the venipuncture should be cleaned up with alcohol preps and 4x4's and disposed of properly.
10. Venipuncture site should be covered with a venigard or equivalent protective cover.
11. Catheters should be secured as movement can increase the risk of phlebitis and pathogen migration along the cannula into the vein.



N Line-Personnel Protection



Front-line field paramedics are in a high risk group for infectious disease transmission. In addition to standard precautions, the following procedures should be followed:

- A. Gloves should be changed after each patient contact and hands cleaned with an appropriate germicidal agent.
- B. All extraordinary exposure incidents should be reported to the receiving hospital and the employee's supervisor. Document exposure incidents on the **Lucas County EMS Exposure Incident Form (Tab 300, Section H)**.
- C. The amount, type, and location of personal protection equipment (PPE) will be standardized on all Lucas County life squads and ALS first response units using county owned equipment and supplies.
- D. Available PPE will include:
 - 1. Disposable gloves
 - 2. Head covers
 - 3. N95 Healthcare Particulate Respirators
 - 4. Disposable facemasks
 - 5. Eye protection
 - 6. Disposable gowns
 - 7. Infection control kit (pouch)
 - 8. Hazardous waste bags
 - 9. Various sharps containers
 - 10. Germicidal hand wipes
 - 11. Germicidal spray cleaner
 - 12. Shoe covers
 - 13. Victory Spray Disinfectant Atomizer (Available at LCEMS Annex)
 - 14. UV Disinfecting Light (Available at LCEMS Annex)
- E. Non-rebreather masks should be placed on patients with possible communicable respiratory disease. Additionally, paramedics should consider using respiratory protection during care of the patient.
- F. Care should be taken to not cross contaminate other equipment while wearing gloves (i.e., radios, steering wheel, etc.).



O Patient Protection



Care must be taken to protect patients from the transmission of infectious diseases. Many elderly and ill patients with suppressed immune systems are more susceptible to disease transmission. Procedures listed below should be followed for optimal patient protection during care:

- A. EMS personnel who have an infectious illness (i.e., cold, flu, etc.) should wear a disposable mask when treating patients.
- B. Gloves should be changed between patient contacts and hands cleaned with an appropriate germicidal agent.
- C. Equipment should be disinfected after each patient use (Tab 300, Section G).
- D. Infectious waste should be disposed of in an appropriate hazardous waste bag.
- E. Standard precautions should be use with all patient contacts.
- F. Personnel are recommended to obtain the immunizations listed in Tab 300, Section J.

P Respiratory Mask (N95 Particulate Respirator)



Lucas County EMS requires the use of an OSHA approved respiratory mask when indicated for respiratory protection. It is the responsibility of the paramedic's employer to ensure proper use and follow up after confirmed infectious exposures.

N95 Healthcare Particulate Respirator

N95 Healthcare Particulate Respirators are designed to provide respiratory protection for the wearer. This product has been tested and certified by NIOSH to have a filter efficiency of 95% or greater against solid and liquid (non oil-based) aerosols.

The N95 Healthcare Respirators are intended to minimize but not eliminate wearer to exposure to specific airborne particles. The respirators meet the CDC guidelines for TB exposure control.

1. Fit Test

- a. Each system paramedic will be issued a respiratory mask through either their department or Lucas County EMS.
- b. To ensure proper fit, a qualitative test will be performed by a recognized fit-test instructor.
- c. For respiratory masks supplied by Lucas County EMS, a fit-test record (Tab 300, Section P-4) will be kept on file at the Lucas County EMS Annex and forwarded to the paramedic's employer.
- d. Conditions which may affect respiratory mask fit:
 - i. Moustache
 - ii. Beards
 - iii. Glasses
 - iv. Facial scars
 - v. Side burns

P Respiratory Mask (N95 Particulate Respirator)



Respiratory Mask, continued

2. Respiratory Mask Declination

- a. Paramedics who decline to wear a respiratory mask must sign a ***Respiratory Mask Declination Form (Tab 300, Section P-5)***.
- b. Declination forms will be kept on file at the Lucas County EMS Annex and a copy forwarded to the paramedic's employer.

3. Respirator Mask Maintenance

- a. Respiratory masks are reusable. They should be inspected before and after each use. If the mask's configuration has been altered, it should be exchanged at the Lucas County EMS Annex. Dispose of mask no later than thirty (30) days after first use.
- b. A box of respiratory masks is supplied to each life squad unit for use. Unused respirators should be stored within the box in a clean, dry, non-contaminated area.

4. High Risk Groups (Infectious Disease Transmission)

- a. Respiratory masks should be considered for use in the following high risk patient groups:
 - i. HIV positive persons
 - ii. Sheltered or homeless persons
 - iii. Alcoholics
 - iv. IV drug abusers
 - v. Inmates
 - vi. Nursing home residents
 - vii. Any suspected potential for infectious disease transmission

P Respiratory Mask (N95 Particulate Respirator)



Respiratory Mask, continued

b. Environmental Concerns:

- i. Medical facilities
- ii. Hospice
- iii. Correctional facilities
- iv. Long term care facilities
- v. Drug treatment centers

c. Signs and Symptoms of Concern:

- i. Productive cough
- ii. Coughing up blood
- iii. Weight loss
- iv. Loss of appetite
- v. Weakness
- vi. Night sweats
- vii. Fever

5. Medical Procedures:

a. Medical procedures performed in the field increase the risk of infectious disease transmission. Respiratory masks should be considered for use when performing:

- i. Aerosolized medications
- ii. Endotracheal intubation
- iii. Suctioning
- iv. Transporting in a closed vehicle
- v. Surgical cricothyrotomy
- vi. Chest decompression



P Respiratory Mask (N95 Particulate Respirator)



FIT TEST RECORD

Employee:

Name: _____

Employer/Address: _____

Conductor of Fit Test:

Name: _____

Title/Address: _____

Conditions Which May Affect Respirator Fit:

(To be completed by Fit-Test conductor)

Clean Shaven _____	1-2 Day Growth _____	2+ Day Growth _____
Moustache _____	Facial Scar _____	Dentures absent _____
Glasses _____	None _____	Other _____

Comments: _____

Employee's Acknowledgement of Familiarity with User Instructions and Certain Limitations:

I have been instructed in the use of the TB mask and will follow said USER INSTRUCTIONS every time I use the respirator. I acknowledge that this respiratory protective device will not provide adequate protection when used under conditions other than specified or when USER INSTRUCTIONS are not followed.

Employee Signature: _____ Date: _____

Fit Test Result:

The Fit-Test Procedure was conducted in fulfillment of OSHA's Fit Testing requirement of employees wearing Half Mask Respirators (Code of Federal Regulations 29 CFR 1910.134 (3) (5) and in accordance with American National Standard Institute Practices for Respiratory Protection, ANSI Z88.2 – 1992.

Fit Test Type: Qualitative _____	Agent _____
Quantitative _____	Device _____
Size: Pass _____	Fail _____

Employee's Acknowledgment of Test Result:

Employee's Signature: _____ Date: _____
 Test Conductor's Signature: _____ Date: _____



P Respiratory Mask (N95 Particulate Respirator)



RESPIRATORY MASK DECLINATION FORM

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring an infectious disease. I have been given the opportunity to be issued a respiratory mask at no charge to myself. However, I decline the mask at this time. I understand that by declining I continue to be at risk of acquiring a respiratory transmitted disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be issued a mask, I can receive it at no charge to me.

Name: _____

Signature: _____

Date: _____

Witness: _____

Date: _____



Q Sharps Disposal



By definition, a sharp is any object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, exposed ends of dental wires and exposed metal edges. Lucas County EMS provides a variety of sharps containers for paramedic use:

1. 5489 Sharps Container (1 gallon)
2. 5557 Sharps Container (1 quart)
3. Stick-it Sharps Container
4. Sharps Shuttle
5. Other containers supplied by LCEMS and approved for use.

Sharps containers are placed in a variety of locations throughout the life squad, medical bags and boxes. All sharps containers supplied by Lucas County EMS will comply with the following:

1. Puncture resistant
2. Leak proof
3. Labeled appropriately
4. Designed to prevent from reaching inside

Please adhere to the following guidelines when disposing of sharps:

- A. Ensure that a sharps container is available prior to any medical procedure that generates a sharp.
- B. Dispose of sharps immediately after use.
- C. Do not recap needles or scalpels after use.
- D. Sharps containers are to remain upright at all time when in use.
- E. Sharps containers with any material in them should be appropriately discarded at a minimum of thirty (30) days from first use.
- F. When discarding sharps containers, lids should be closed tightly and left in approved area.
- G. At no time are personnel to reach inside of a sharps container.
- H. Sharps containers are to be stored in a fashion that will not promote movement or spillage of contents.



R Vehicle Cleaning / Disinfection (Field Level)



Patient care areas must be cleaned and disinfected after each patient use. Grossly contaminated life squad vehicles may be turned in to the Lucas County EMS Annex for cleaning and disinfection. Paramedics will changeover into a back-up life squad unit for the time necessary for vehicle cleaning and decontamination.

General guidelines for vehicle cleaning/disinfection:

- A. Cot linen and pillow changed between each patient use.
- B. Utilization of spill kit for clean-up of body fluids.
- C. All hard surfaces sprayed and wiped with a disinfecting spray as needed.
- D. Garbage pails emptied between calls.
- E. Cab and patient care area should be kept free of litter or expendable supplies.
- F. Entire vehicle should be cleaned each shift as needed.
- G. Additional services for disinfecting/cleaning available through LCEMS Annex (i.e., Victory Disinfecting Atomizer/Sprayer, UV Disinfecting Light, etc.)