Infection Control and Communicable Disease

PURPOSE: To outline procedures for infection control through personal protective equipment use and decontamination for people, equipment, and vehicles utilized in assessment, treatment, and transport of patients along with categorization and response for exposure. ALL patients are considered potentially infectious.

NOTE: Any information obtained or exchanged regarding communicable disease exposures must be handled with strict confidentiality.

I. PRECAUTIONS AND PREVENTION

A. Standard Precautions and Body Substance Isolation (BSI)

1. Purpose: To prevent the transmission of all bloodborne pathogens that are spread by blood, tears, sweat, saliva, sputum, gastric secretions, urine, feces, CSF, amniotic fluid, semen, breast milk, skin rash and open wounds.
2. Rationale: Medical history and examination cannot identify all patients infected with bloodborne pathogens.
3. Practice: Standard Precautions/BSI will be done for patient encounters in which the risk of exposure to blood or body fluid exists.

B. Respiratory Precautions

1. Purpose: To prevent the transmission of airborne infections for patients with respiratory complaints.
2. Rationale: Medical history and examination cannot fully identify all patients with transmissible respiratory pathogens. Respiratory complaints include but are not limited to dyspnea, cough, shortness of breath, etc.
3. Practice: Respiratory precautions will be used for every patient with respiratory complaints and/or receiving aerosolized treatments.

C. Precautions for patients highly suspicious communicable disease including but not limited to:

1. Fever > 100.5 F with headache or malaise or myalgia, and cough or shortness of breath or difficulty breathing.
2. Pustular, papular or vesicular rash distributed over the body (trunk, face, arms, or legs) preceded by fever with rash progressing over days (not weeks or months) and the patient appears ill.
   a. Consider the patient to be both airborne and contact contagious.
   b. Crew PPE and procedures:
      i. N95 or higher protective mask/respiratory protection
      ii. Goggles or face shield
      iii. Gowns

iv. Utilized waterless hand sanitizer between glove changes and upon removal of gloves.

c. Source Control:
   i. Patient wear a paper surgical mask if tolerated.
   ii. Cover patient with linen sheet to reduce chance of contaminating objects in area.
   iii. Patients should be encouraged to use hand sanitizer when tolerated.

d. Notify the receiving facility as soon as possible of the patient's condition to facilitate preparation of the facility and institution of appropriate infection control procedures
   i. Confirm entrance and procedure for transfer of patient into facility.
   ii. Ensure proper notification and preparation of receiving facility for inter-facility transfers.

e. Vehicles that have separate driver and patient compartments and can provide separate ventilation to these areas are preferred for patient transportation. If a vehicle without separate compartments and ventilation must be used, the outside air vents in the driver compartment should be turned on at the highest setting during transport of patient to provide relative negative pressure in the patient care compartment.

f. DO NOT REMOVE protective equipment during patient transport.

g. Discourage non-essential personnel and family members from entry or accompanying patient in ambulance.

h. Patient cohorting may occur if resources are exhausted and patients are grouped with same disease. Cohorting should only be utilized as a last resort.

i. The ambulance(s)/transport vehicle will not be used to transport other patients (or for any other use) until it is decontaminated using the CDC guidelines for decontamination.

D. Procedures

1. Handwashing will be done before and after contact with ALL patients.
2. Nonsterile disposable gloves will be worn with patients that pose a potential exposure through blood or body fluids. Gloves will be changed in-between patients and not used repeatedly.
3. Outerwear (example: gown, coveralls, turnout gear) will be worn if contact with blood or body fluids contamination may occur.
4. Face Protection (including eye protection) will be worn if aerosolization of blood or body fluids may occur (examples include but are not limited to suctioning,

insertion of endotracheal tubes, patient with excessive coughing, invasive procedures).

5. Mouth-to-mouth resuscitation: CDC recommends that EMS personnel NOT perform mouth to mouth, instead use adjunctive aids (pocket masks, face shields, BVM).
6. N95 or higher will be worn during contact with patients with respiratory complaints, during any aerosolizing treatments, and with all mechanically ventilated patients.
7. Mechanically Ventilated Patients (including bag-valve-mask)
   a. HEPA filtration of airflow exhaust shall be used, EMS provider shall don a simple face mask.
      i. If no HEPA filtration, EMS provider shall don an N95
   b. Consult ventilator equipment manufacturer to confirm appropriate filtration capability and the effect of filtration on positive pressure ventilation.

II. CLEANING AND DECONTAMINATION

A. Wear gloves for ALL decontamination

B. Non-disposable contaminated articles:
   1. Bag according to agency procedures.
   2. Articles must be decontaminated prior to being placed back into service. Refer to manufacturer's recommendations for proper cleaning and disinfecting

C. Disposable contaminated articles
   1. Articles contaminated with blood or body fluids must be bagged and discarded in accordance with MIOSHA guidelines.

D. Medication/IV Bags or Boxes shall be inspected and all contaminated waste removed prior to bag exchange. If the medication/IV bag or box is contaminated, it must be spot cleaned or laundered prior to being placed back into service.

E. Linens soiled with blood or body fluids shall be placed in appropriately marked container.

F. Needles and syringes shall be disposed of in a rigid, puncture-resistant container. Any grossly contaminated container, or one that has reached the 'fill line', should be disposed of appropriately.

G. Blood spills shall be cleaned up promptly with a solution of 5.25% sodium hypochlorite (household bleach) diluted 1:10 with water or other FDA approved disinfectant.

H. Non contaminated but utilized equipment will be disinfected after every patient encounter in accordance with MCA approved agency guidelines.

I. Vehicle surfaces will be disinfected after every patient encounter in accordance with MCA approved agency guidelines.

III. RADIO COMMUNICATIONS

A. Radio communications of any kind regarding a communicable disease should be done so in a format that ensures patient confidentiality.

IV. EXPOSURES

A. Definitions:

1. "Emergency source patient" means an individual who is transported to an organized emergency department located in and operated by a licensed hospital or a facility other than a hospital that is routinely available for the general care of medical patients.

2. Definition of Reportable Exposure:

a. Any breach of the skin by cut,needle stick, absorption, or open wound.

b. Blood/body fluid splash to the moth, nose, eye, or other parenteral route.

c. Blood/body fluid splash into non-intact skin area

B. Reporting Exposures:

1. Police, Fire or EMS personnel who, in the performance of their duty, sustain a needle stick, mucous membrane or open wound exposure to blood or other potentially infectious material (OPIM) may request, under Public Act 368, Section 333.20191, that the patient be tested for HIV/Hepatitis B and C surface antigen. The exposed individual shall make the request on a MDHHS Form (DCH-1179): First Responder Provider Request for HIV and/or Hepatitis B Testing of Emergency Patient.

C. Cooperating Hospitals' Responsibilities

1. Each cooperating hospital in the Medical Control region will designate an infection control contact to serve as liaison(s) with the staff of medical control and all EMS agencies for the purpose of communicating information about infectious patients or potential exposures.

2. Hospitals, upon learning that any patient has a reportable infectious or communicable disease, will check the patient chart to determine if any EMS agencies were involved with the patient prior to hospitalization. When determined that EMS may have had contact with the patient, designated individual will notify the EMS agency for further follow-up and complete the required State forms.

3. Hospitals, when requested to do so, will obtain lab tests and results on source patients when exposure to a pre-hospital provider has occurred.

a. Hospitals will report the results of testing on MDHHS Form (DCH-1179) and return to the address indicated on the form.

4. Hospitals will notify transporting agencies at the time a transfer is scheduled if any infection potential exists with the patient and the precautions necessary (standard precautions and/or mask).

D. Pre-hospital Agency Responsibilities

1. Each pre-hospital provider agency will be responsible for assuring that their personnel, trainees and students are familiar with infection control procedures, epidemiology, modes of transmission and means of preventing transmission of communicable disease per CDC guidelines and MIOSHA regulations.
2. Each pre-hospital provider agency will be responsible for supplying personnel with the appropriate personal protective equipment.
3. It is recommended that each pre-hospital provider agency ensures adequate immunizations per CDC Immunization Guidelines for Health Care Workers.

E. Follow-up Care/Counseling

1. Follow-up care and counseling of exposed personnel shall be the responsibility of the pre-hospital provider agency and shall be carried out without delay upon notification of exposure.

F. Summary of EMS Personnel Post-Exposure Procedures

1. Irrigate and wash exposed area very well.
2. Notify agency supervisor of possible exposure.
3. Each exposed individual complete section 1 and sign form DCH-1179 (E) and sign
4. If source patient is transported submit (in person or via fax) DCH-1179 (E) form at hospital receiving the source patient
5. Contact (preferably in person but may be by phone) the emergency department of the health care facility receiving the source patient and review Section 1 of DCH-1179 (E).
    a. The health care facility authorized staff member will complete Section 2 of the form and determine if an exposure did or did not occur. If determined exposure did occur, the health care facility will:
        i. Complete testing of source patient for HIV, Hepatitis B, and other pathogens, as applicable
        ii. Rapid HIV testing should be conducted
        iii. If HIV rapid testing is positive, the health care facility will coordinate appropriate post exposure prophylaxis for the exposed individual.
        iv. Section 3 of form DCH-1179 (E) will be completed
    b. If determined that an exposure did not occur, the health care facility will explain the rationale of determining that it was a non-exposure.
    c. The exposed individual, health care facility, agencies and the Medical Control Authority will comply with all parts of Public Act 368, Section 333.20191
6. The exposed personnel shall follow up with the agency occupational health in accordance with agency requirements.

7. If the patient is deceased and not transported to a hospital
    a. If the source patient remains on scene or is transported to somewhere other than a hospital, collaboration between the medical examiner's office (if applicable), EMS agency, the agency occupational health provider and/or the medical control authority should be notified to facilitate source patient testing.
8. If the source patient is living and not transported the exposed individual should work with the EMS agency, the agency occupational health provider and/or the medical control authority for potential testing of the source patient.
    a. The EMS agency may contact the individual with a request for prompt testing.
    b. The exposed personnel and EMS agency shall follow up with agency occupational health and the medical control authority.

G. Any first responders (Police, Fire or EMS personnel) who may have had an exposure should be encouraged to follow the protocol as described.

Protocol Source/References: Testing and Reporting (including HIV and STI Case Reporting Forms and Aphirm) (michigan.gov)

DCH-1179, FIRST RESPONDER PROVIDER REQUEST FOR HIV AND/OR HEPATITIS B TESTING OF EMERGENCY PATIENT

Michigan Department of Health and Human Services (MDHHS)
In Accordance with Michigan Public Act 419 of 1994 (MCL 333.20191)
(Revised 11-22)

NOTICE TO EXPOSED INDIVIDUAL:

- Test results will not be provided over the telephone.
- This request should be made before the emergency patient is released from the health care facility.
- Contact the health care facility if the interpretation of test results on the emergency patient is not received by you within ten (10) days.
- **Information contained on this form is confidential.**
- See page 3 for PA 431 and non-discrimination information.

SECTION 1 – To be completed by EXPOSED INDIVIDUAL (Please Print)

1. Name of Exposed Individual
2. Job Classification
☐ Good Samaritan

3. Home Address (Number & Street, etc.) City State Zip Code

4. Home Phone Number

5. Name of Employer
6. Employer Phone Number

7. Employer Address (Number & Street, etc.) City State Zip Code

8. Emergency Source Patient ID Number
9. Date of Exposure
10. Approximate time of Exposure
☐ AM ☐ PM

11. Route of Exposure
☐ Open Wound ☐ Mucous Membrane ☐ Percutaneous ☐ Other

12. Provide a detailed description of the exposure (attach an additional sheet as needed)

13. Personal Protective Equipment used when exposed (check all that apply)
☐ Glove ☐ Gown ☐ Eye Protection ☐ Face Mask
☐ Turnout Gear ☐ None ☐ Other **explain**

14. Based on my exposure described above, I am requesting that this source individual be tested for the following (check all that apply)
☐ HIV ☐ Hepatitis B ☐ Other **explain**

15. Where do you want the Test Results Sent to: (check all that apply)
☐ Me at my Home (Address Above) ☐ My Physician (Complete #16 below)
☐ Me at Work (Address Above) ☐ Other Health Care Professional (Complete #17 below)

16. Name of Your Physician Physician Phone Number

Physician Address (Number & Street, etc.)	City	State	Zip Code

17. Name of Other Health Care Professional	Other Health Care Professional Phone Number

Other Health Care Professional Address (No. & St.)	City	State	Zip Code

- I understand that the NAME of the source individual to be tested, and that person's test results are confidential according to Section 5131 of Michigan Compiled Laws (MCL). I understand that a person who discloses information in violation of this Section is guilty of a misdemeanor.
- I also understand that I am ultimately responsible for the payment of the charges associated with the testing of this individual to whom I have been exposed, unless an agreement has been worked out between me and my employer, or is otherwise covered by my health care or benefits plan.

18. Signature of Exposed Individual	Date

- "First Responder Provider" is defined as a police officer, fire fighter, or an individual licensed under MCL.333.20950 or 333.20952 as one of the following: medical first responder, emergency medical technician, emergency medical technician specialist, paramedic, or an emergency medical services instructor or coordinator. A lay citizen, or Good Samaritan, if they assist an emergency patient, may also be included as a pre-hospital provider (for purposes of this law).
- "Emergency source patient" means an individual who is transported to an organized emergency department located in and operated by a licensed hospital or a facility other than a hospital that is routinely available for the general care of medical patients.

SECTION 2 – EVALUATION OF EXPOSURE – To be completed by the HEALTH CARE FACILITY.

1. Name of Exposed Individual	2. Emergency Source Patient ID Number

3. Based upon the information provided
☐ Exposure DID Occur (see #4 below) ☐ Exposure DID NOT Occur (see #5 below)

4. Exposure DID Occur – The type of exposure was determined to be
☐ Open Wound ☐ Mucous Membrane ☐ Percutaneous ☐ Other

Was the emergency patient informed at the time of admission about the possibility of being tested if a first responder exposure occurred? (In accordance with MCL 333.5133)? ☐ Yes ☐ No

NOTE: The Exposed Individual **SHOULD BE** counseled and tested for HIV and Hepatitis B. Testing for hepatitis C is also recommended although it is not mentioned in the law. Prophylaxis should also be considered for the exposed individual. If appropriate, please refer the exposed individual for follow-up medical evaluation.

5. Exposure did not Occur – Explain

Print Person's Name	Job Title

Authorized Signature at Health Facility	Date

SECTION 3 – TEST RESULTS – to be completed by the HEALTH FACILITY

1. Emergency Patient was Tested for (check all that apply)

☐ HIV ☐ Hepatitis B ☐ Other **explain**

2. Test Results on Source Individual

HIV:	Rapid Test:	☐ Reactive*	☐ Non-Reactive	
	EIA:	☐ Reactive	☐ Non-Reactive	
	Western Blot:	☐ Reactive	☐ Non-Reactive	☐ Indeterminate
Hepatitis B:	HBsAG:	☐ Found	☐ Not Found	

Other **(explain)**

*HIV Rapid Tests are for screening purposes only. A reactive Rapid Test requires follow-up testing to confirm patient status.

3. Emergency Patient was NOT Tested

☐ Emergency source patient refused testing/to have blood drawn.
☐ Emergency source patient expired before test(s) could be performed.
☐ Emergency source patient was released from the health care facility before testing could be performed.
☐ Emergency source patient did not present to this facility for care.

Date Test Results were Completed | Date Test Results were Reported Out

Print Name and Title of Person Providing Test Results | Signature of Person Providing Test Results

Test Results were Mailed to (Name)

Address Results were mailed to (Number & Street) | City | State | Zip Code

The Michigan Department of Health and Human Services will not exclude from participation in, deny benefits of, or discriminate against any individual or group because of race, sex, religion, age, national origin, color, height, weight, marital status, partisan considerations, or a disability or genetic information that is unrelated to the person's eligibility.

AUTHORITY: PA 419 OF 1994 (M.C.L. 333.20191

COMPLETION: Is voluntary, but is required if testing of the source patient is desired.