

**TRAINING BULLETIN #82**

**DATE OF ISSUE 3-93**

**INFECTIOUS DISEASE PROTOCOLS**

The following protocols are to be implemented for the protection of both patients and pre-hospital care providers.

Prior to Responding to an Incident

All uniformed personnel are recommended to have immunizations for the following diseases:

- Diphtheria
- Tetanus
- Polio
- Rubeola (Measles)
- Mumps
- Rubella (German Measles)
- Hepatitis B

Most of these immunizations are provided as standard care through the member's City provided health plan. Currently, the City's Occupational Health and Safety Division will provide Hepatitis B immunization for uniformed personnel.

Skin testing for Tuberculosis should be monitored at least every five years.

Responding to the Incident

Uniformed personnel shall anticipate the possible need for respiratory assistance and take appropriate equipment which is carried on Department apparatus.

## At the Incident

The following shall be adhered to when a communicable disease is suspected or when there may be an exposure to blood, body fluids, or excreta:

1. Disposable gloves shall be worn. If sharp objects are involved (i.e., glass splinters or sharp metal edges) it is recommended that the double-glove technique be used (rubber or leather).
2. All contaminated needles shall be handled with extreme care. A self-covering catheter shall be used when establishing I. V. lines (refer to Departmental Bulletin 92-1). All needles shall be disposed of in a safe manner in the puncture resistant containers. Should the need to recap a needle arise, members shall use the one-hand recap technique.
3. A mechanical device shall be used whenever possible for respiratory assistance or resuscitation.
4. Patients who are actively coughing shall have a mask put on them. If the patient cannot/will not wear a mask, members shall wear a mask.
5. Whenever there is potential blood or body fluid exposure to the eyes or mucous membrane, such as when intubating a patient, childbirth, major trauma, etc., a protective mask shall be worn.
6. Before leaving the scene, all trash created by members during the incident shall be collected and placed in the ziplock bags provided by the Department. These shall be discarded at the hospital in the red-labeled biohazard bag or containers.

## After the Incident

1. Handwashing with soap and water or an approved substitute shall be done, as soon as practical, after every patient contact. Handwashing with soap and water shall follow the use of an approved substitute as soon as facilities are available.

2. Members shall wear disposable gloves and eye protection when decontaminating clothing or equipment.

Clothing which has been contaminated with blood, vomitus, or other body fluids shall be decontaminated, as soon as possible, as follows:

- a. Contaminated clothing shall be changed as soon as possible. Clothing may be pre-washed in a disinfectant-detergent solution using hot water in the station's utility sink. The clothing can then be laundered in a normal manner.
  - b. Contaminated turnouts, leather and rubber boots shall be brush scrubbed with a disinfectant-detergent solution and then air dried. Bleach solution shall not be used to clean turnouts.
  - c. Large non-delicate pieces of equipment such as backboards, MAST suits, and traction splints shall be washed with a disinfectant-detergent solution and then air dried. The bag-valve masks shall be decontaminated in the same manner.
  - d. Delicate equipment such as the scope/defibrillators, radios, and aspiration equipment shall be wiped down with a 1:10 dilution of household bleach to water as soon as possible. The passenger seats and interior of the vehicles can be decontaminated in the same manner.
3. If a known or suspected exposure to an infectious disease, or an exposure to blood and body fluid has occurred, the member shall do the following:
    - a. Check the "Inquiry Recommended" Box on the 902M.
    - b. Complete and forward F-420, "Communicable Disease Exposure and Notification Report."
    - c. Complete an Injury/Exposure Report (either an F-225 or F-166) including both the nature of the exposure and the procedure being performed at the time. Forward this report, through channels, to the Medical Liaison Unit.
    - d. Notify your responsible supervisor.
    - e. Notify the Medical Liaison Unit of all Level III Exposures.
    - f. Follow up with the infection control nurse at the receiving hospital.

## APPENDIX

The following information is provided as a quick reference guide to the common communicable diseases that pre-hospital care personnel may encounter.

A communicable disease should be suspected when fever, skin rash and/or weeping lesions, jaundice, diarrhea, or cough are present.

The following chart is provided as a guide and by no means gives complete information or recommendations regarding the diseases.

You are encouraged to call the Department's Medical Liaison Unit if you have any further questions.

<u>EXPOSURE CATEGORY</u>		<u>ACTION CATEGORY</u> (Refer to Infectious Diseases Reference Chart.)
LEVEL I	Contact limited to merely being in the presence of a person suspected of having a communicable disease.	A - No special action required.
LEVEL II	Contamination of clothing or equipment by blood or body fluids.	B - Decontamination. Complete Injury/Exposure Report (F-225 or F-166) .
LEVEL III 0	Exposure of skin/mucous or conjunctival membranes to blood or body fluids, i.e., blood, vomitus, feces. This category includes ingestion of "possible" contaminated food, needle puncture, and human bites.	C - Special action indicated; complete Minor Injury/Exposure Report (F-225 or F-166), and notify the Medical Liaison Unit.

DISEASE	INCUBATION PERIOD	HOW CONTACTED	SIGNS AND SYMPTOMS	WHAT TO DO IN CASE OF EXPOSURE DURING A RESCUE	WHAT TO DO IN CASE OF EXPOSURE TO FELLOW EMPLOYEE
Acquired Immune Deficiency Syndrome (AIDS) HIV Virus	Up to-9 Years	Blood-to-blood exposure; sexual contact, blood to skin, contaminated needle sticks	May not be detected by pre-hospital responders. Be alert in any case where open sores are present. The high risk population are I. V. drug abusers, homosexual and bisexual men. and hemophiliacs.	Exposure Action <u>Category</u> <u>Category</u>  I            A II            B III           B, C	Exposure Action <u>Category</u> <u>Category</u>  I            C II            C III           C
Hepatitis, Viral (Hepatitis A)	15 - 50 Days Average 28 - 30 Days	Person-to person spread by fecal-oral route. Ingestion of contaminated food or water.	Onset is usually abrupt, with fever, malaise, loss of appetite, nausea, and abdominal discomfort, followed within a few days by jaundice.	I            A II            B III           B  Immune serum globulin (ISG) may be recommended by physician based on extent of exposure.	I            A II            B III           B, C
Hepatitis B	45 - 160 Days Average 60-- 90 Days	Percutaneous or mucous membrane inoculation of blood or blood products from an infected person. Sex. transmiss.	Onset is usually gradual, with loss of appetite, vague abdominal discomfort, nausea, and vomiting often progressing to jaundice.	I            A II            B III           B, C Physician may recommend HBIG and Hepatitis B vaccine based on extent of exposure.	I            A II            B III           B, C
Hepatitis Non-A, Non-B	14 - 180 Days Average 42 - 56 Days	Blood transfusion.	Onset usually gradual, with loss of appetite, vague abdominal discomfort, nausea, and vomiting.	I            A II            B III           C	I            A II            B III           C
Herpes Simplex Virus Type I		Direct contact with mucous skin lesions	Cold sore, ulcers in mouth; most infections are reactivation of latent virus.	I            A II            B III           B	I            A II            B III           B

DISEASE	INCUBATION PERIOD	HOW CONTACTED	SIGNS AND SYMPTOMS	WHAT TO DO IN CASE OF EXPOSURE DURING A RESCUE		WHAT TO DO IN CASE OF EXPOSURE TO FELLOW EMPLOYEE	
				Exposure Category	Action Category	Exposure Category	Action Category
Meningitis, Aseptic (Viral)	2 - 21 Days Depending on etiologic agent.	Varies with the specific infections agent.	Sudden onset of fever with headaches, stiff neck.	I II III	A A A	I II III	A A A
Meningitis II Influenza (Is the most common bact. meningitis in children 2 mos. to 5 yrs. in U. S.)	Probably Short Within 2 - 4 Days	Droplet infection and discharges from nose and throat	onset usually sudden with fever, vomiting, lethargy, and meningeal irritation consisting of bulging fontanelle in infants or stiff neck and back in slightly older children. This disease is unusual in persons over the age of 5 Years	I II III	A A A	I II III	A A A
Meningitis, Meningococcal only	2 - 10 Days; Average 3 - 4 Days	Person-to-person by droplet spread and discharges from nose and throat during infectious period	Sudden onset of fever, headache, nausea, vomiting, stiff neck	I II III	A B B, C		Prophylaxis and observation 'as recommended by physician. Disinfection of objects/articles contaminated with nose and throat discharges. Ventilate living/sleeping Quarters

DISEASE	INCUBATION PERIOD	HOW CONTACTED	SIGNS AND SYMPTOMS	WHAT TO DO IN CASE OF EXPOSURE DURING A RESCUE	WHAT TO DO IN CASE OF EXPOSURE TO FELLOW EMPLOYEE								
Pediculos (Lice)	7 - 14 Days	Direct contact with infested person; contact with infested articles or objects.	Infestation of the scalp or the hairy parts of the body including eyebrows and clothing with adult-lice, larvae, or eggs	No special action indicated for any category.	When infestation is evident, all suspected infested clothing, bedding, and personal articles should be thoroughly washed in hot water (140 degrees), or dry cleaned: The interior of the premises suspected to be infested should be thoroughly cleaned and vacuumed.								
Syphilis	10 - 90 Days Usually 21 Days for appearance of chancre (lesion).	Direct contact with infectious lesion. Sexual transmission.	Primary (First Stage): Presence of a painless lesion in area of contact. Secondary: Varies from rash on palms of hands and soles of feet and/or generalized rash.	<table border="0"> <tr> <td><u>Exposure Category</u></td> <td><u>Action Category</u></td> </tr> <tr> <td>I</td> <td>A</td> </tr> <tr> <td>II</td> <td>B</td> </tr> <tr> <td>III</td> <td>B</td> </tr> </table>	<u>Exposure Category</u>	<u>Action Category</u>	I	A	II	B	III	B	Not transmitted through the usual casual workplace setting.
<u>Exposure Category</u>	<u>Action Category</u>												
I	A												
II	B												
III	B												
Tuberculosis Pulmonary	From infection to primary phase: 4 - 6 Weeks. May be many years before secondary disease.	Inhalation of aerosol of respiratory secretions of an UNTREATED person,	Cough, fatigue, fever, weight loss, hoarseness, chest pain, and blood in sputum may occur but are often absent until the disease is advanced.	<table border="0"> <tr> <td>I</td> <td>A</td> </tr> <tr> <td>II</td> <td>B</td> </tr> <tr> <td>III</td> <td>C</td> </tr> </table>	I	A	II	B	III	C	Health Programs Coordinator should be notified for all categories.		
I	A												
II	B												
III	C												