

**Tempe Fire Department Policies and Procedures**  
**Infectious Disease Exposure Prevention**  
**210.08C**  
**Rev 01-23-09**

**PURPOSE**

The procedures outlined below will help to prevent or reduce the risk of occupational infectious disease exposure. These procedures are in concert with the City of Tempe OSHA approved Exposure Control Policy.

Exposure control procedures have been developed to minimize the risk of acquiring an infection from contact with contaminated devices, or surfaces, or a transmission of infectious agents between patients and health care workers. They are designed to prevent transmission of disease and provide a margin of safety in the varied situations encountered in the prehospital environment. Department members work in environments that provide inherently unpredictable risks of exposures; general infection control procedures should be adapted to those work situations. Exposures are unpredictable and Department members should take body substance isolation precautions even if the patient does not exhibit symptoms of a disease.

**PROCEDURE**

Infectious agents include blood and other potentially infectious materials (OPIM). Routes of transmission may include inhalation, ingestion, injection, and direct or indirect contact with objects, substances, or infected persons.

Generally, the human skin is a barrier against exposure to infectious contaminants. If however, the skin has open sores, cuts, or abrasions, this protective barrier is broken. Patients or health care providers who cough or sneeze also increase the risk of exposure to surrounding persons.

Protective measures include:

- Limit the number of members who encounter the patient to an absolute minimum
- Limit exposure time
- Use the clean person concept when operating at scenes to prevent equipment cross contamination
- Move patients with known or suspected respiratory diseases to an open-air location for treatment. This will reduce crewmember exposure to possible airborne contaminants in a concentrated confined atmosphere.
- Contaminated needles are to be handled with extreme care. They should be disposed of in a safe manner. Needles shall not be purposely bent or broken by hand, removed from syringes or stowed in uniform pockets. Needles will be recapped only when a Sharps container or Point-Lok protector is not immediately available. When recapping, use the "one-handed" technique.
- Single use disposable bag valve masks should be used for respiratory assistance and resuscitation. When using the automatic transport ventilator, always use a disposable vent circuit to prevent contamination of the ATV.
- Approved disposable HEPA (N95) masks should be worn when dealing with patients who are actively coughing or that may have suspected respiratory disease.
- Handwashing with anti-bacterial soap and water or an approved disinfecting solution is to be done after each patient contact. Do not wipe your nose, mouth or eyes after patient contact until your hands are washed.
- Clothing contaminated from blood, body fluids, or other contaminants shall be immediately changed and decontaminated.

- Personal protective equipment (PPE) shall be worn when appropriate. Consult PPE policy 210.08B for the exposure precaution matrix.
- EMS equipment carrying handles become contaminated when carrying boxes with contaminated gloves during emergency incidents. Disinfect handles and equipment as needed with an approved cleaning solution (see Disinfection/Decon. Policy and Procedure 210.08D). Employees should use caution with writing instruments that are handled with contaminated gloves to complete documentation and then used later for non-emergency use.
- Dispose of contaminated supplies in an approved biohazard bag. The biohazard bag should then be placed in an approved biohazard container provided at each fire station or at the receiving hospital.
- Dispose of full sharp containers (Torpedo, 2 quart tubs and gallon tubs), with lid secured, in the approved biohazard containers at each station.
- Wear appropriate protective isolation equipment when decontaminating equipment. (See Blood Borne Pathogen Matrix)

### **Engineering Controls and Work Practices**

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

- Needleless IV systems
- Safety IV catheters (B Braun Introcan)
- Safety blood glucose lancets
- Safety syringes
- Puncture proof sharp containers (Torpedo, 2 quart tubs, 1 gallon tubs)

The Department identifies the need for changes in engineering control and work practices through review of OSHA records and evaluations from frontline personnel.

The Department evaluates new procedures or new products regularly through the Research and Development committee. Both frontline personnel and staff are involved in this process. Any department member can make a product recommendation for review to the Research and Development committee. The Infection Control Officer will ensure effective implementation of any approved engineering controls and work practices.