New York State
Department of Health
Bureau of Emergency Medical Services

POLICY STATEMENT

Supercedes/Updates: 86-15

No. 88-08

Date: 05/12/88

Re: Guidelines for Employee (Member) Health Records

SUBJECT: Guidelines for Employee (Member) Health Records

The State EMS Program has received numerous requests for guidance on the topic of infection control for EMS personnel, specifically dealing with the issue of pre-employment (membership) physical health screening, the establishment of an employee (member) health record, and recommended immunizations. These guidelines have been developed with the appropriate sections of the National Fire Protection Association's Standard 1500 "Fire Department Occupational Safety and Health Program" (1987 edition) in mind. In addition they were reviewed by the Division of Occupational Health and Environmental Epidemiology.

PRE-EMPLOYMENT (MEMBERSHIP) PHYSICAL & HEALTH SCREENING

Prior to becoming employees (members) of an EMS Provider Agency, both career and volunteer individuals should be examined and certified by a physician or Physician's Assistant as being medically and physically fit. As a health care provider, the employer (EMS Agency) must take the initiative to assure that the prospective employee (member) is at lowest risk possible for contracting an infectious disease.

The pre-employment (membership) physical for **EMS Personnel** should be a complete physical examination including a medical history. It is further recommended that the exam include a complete vision testing, audiometric testing, a TB purified protein derivative (PPD) skin test (NOT a tine test), and a chest x-ray (if indicated by PPD results). For **EMS personnel who are also firefighters** additional considerations for the physical examination should include their fitness for fire fighting duties. The exam should ascertain their cardiorespiratory status. Baseline and periodic pulmonary function testing should be included. Other tests (EKG, etc.) need not be done routinely but need to be considered in the context of the person's medical history, age, and other cardiovascular disease risk factors. For **EMS personnel who are also hazardous materials response group members** additional consideration should be given to cardiorespiratory fitness and pulmonary function testing due to the importance for them to be able to wear protective equipment. Consideration should also be given to including other baseline medical testing (CBC,

biochemistry battery, and urinalysis) in order to have baseline testing for the possible effects from exposure to toxic substances.

The physical examination should be conducted by a physician or Physician's Assistant who is familiar with the type of work performed by prehospital providers taking into account the risks and functions associated with the individual's duties and responsibilities.

The health screening portion of the exam should include a determination of the applicant's immunization status for the following diseases: Diphtheria, Tetanus, Polio, Measles, Mumps, Rubella, Hepatitis B, and Chicken Pox. The applicant should be instructed to bring a copy of his/her immunization record to the physical exam.

ANNUAL PHYSICALS & RETURN TO ACTIVE DUTY EXAMS

All active employees (members) should be re-examined by the physician or Physician's Assistant on an annual basis and prior to returning to active duty after debilitating illnesses or injuries. Employees (members) who have not satisfied these requirements of examination should not be permitted to return to active duty status.

ESTABLISHMENT OF AN EMPLOYEE (MEMBER) HEALTH RECORD

The EMS Provider Agency should establish and maintain a permanent health file on each individual employee (member) that records the results of the pre-employment (membership) physical and health screening, the results of the annual physical exams, any occupation illnesses or injuries, and agency unusual incident report on events that exposed the individual to known or suspected hazardous materials, toxic products, or a true exposure to infectious diseases. While this information should always be treated as confidential information regarding the employee, it should also be readily available to appropriate supervisory/management personnel in the event of an emergency.
If an employee (member) dies as a result of occupational injury or illness, autopsy results, if available, should be recorded in the health record.

INFECTIOUS DISEASES & IMMUNIZATION STATUS OF PERSONNEL

The EMS Provider Agency should actively attempt to identify and limit the exposure of members to infectious diseases in the performance of their assigned duties. The following are recommendations for adult immunizations of the Immunization Practices Advisory Committee (U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control):

A. **TETANUS/DIPHTHERIA** – "All adults…should complete a series of tetanus and diphtheria toxoids. A primary series for adults is three doses of preparations containing tetanus and diphtheria toxoids, with the first two doses given 6-12 months after the second. Those who have completed

primary series should receive a booster dose every 10 years. The combined toxoids for adult use, (Td), should have been used to enhance protection against both diseases. Persons with unknown or uncertain histories of receiving tetanus or diphtheria toxic should be considered unimmunized and should receive a full three-dose primary series of Td."

B. **MEASLES** – "…all health personnel born in 1957 or later who may have contact with patients infected with the measles should be immune. Such persons can be considered immune only if they have documentation of having received live-measles vaccine on or after their first birthday, a record of physician diagnosed measles or laboratory evidence of immunity. Measles vaccine is recommended for all persons lacking such documentation. Combined MMR vaccine is the vaccine of choice if recipients are likely to be susceptible to rubella and/or mumps as well as to measles. Adults born before 1957 can be considered immune to measles…"

C. **MUMPS** – "While most adults are likely to have been infected naturally with mumps, mumps vaccine may be given to adults, especially males who are considered susceptible. Males especially need to consider being vaccinated with this one time injection since 20% of adult males who contract mumps develop inflamed testes."

D. **RUBELLA** – "…health personnel who might be at risk of exposure to patients infected with rubella, or who have contact with pregnant patients, should be immune. Rubella vaccine is recommended for all such personnel unless they have either proof of vaccination with rubella vaccine on or after their first birthday or laboratory evidence of immunity. Combined MMR vaccine is the vaccine of choice if recipients are likely to be susceptible to measles and/or mumps as well as to rubella." This is a one-time injection. Women of childbearing age should consult their physician prior to receiving immunization.

E. **CHICKEN POX** – "Most persons with a clearly positive history of previous varicella are probably immune. Many with negative or unknown histories may be immune, but some may also be susceptible." No long term vaccine is available for vaircella. It should be noted that the infectious material for this disease is also commonly found in fluid filled lesions diagnosed as Herpes Zoster or more commonly known as Shingles.

F. **HEPATITIS B** – "health care personnel who may have contact with blood or blood products should be immune to hepatitis B virus (HBV) infection…Among health care personnel with frequent exposure to blood, the prevalence of serological evidence of HBV is estimated to range between 10% and 30%. Thus blood screening of these individuals is neither required nor cost effective. Vaccination of individuals who already have antibodies to HBV has not been shown to cause adverse effects."

The hepatitis B vaccine is given in a series of three shots over a six-month period. In addition, a booster may be necessary every five years.

G. **TUBERCULOSIS (TB) SCREENING** – "The tuberculin skin test is the method of choice for TB screening. The Mantoux technique is preferred…because it is the most accurate test available. A two step procedure can be used to minimize the likelihood misinterpretation, a boosted reaction as a true conversion due to recent infection. In the two step approach, an initial tuberculin skin test (Mantoux, 5 TUPPD) is given. If this test result is 0-9mm of induration, a second test is given at least one week and no more than three weeks after the first. The results of the second test should be used as the baseline test in determining treatment and follow up of these personnel. A skin test result of 10mm of induration or more is considered significant. The two step approach, however, may not always be necessary. After the initial TB screening test, policies for repeat testing can be established by the agencies physician or Physician's Assistant by considering factors that contribute to the risk that a person will acquire new infection…For personnel considered to be at significant risk, repeat skin tests may be necessary on a routine basis (i.e.: yearly). An initial chest x-ray is recommended for those individuals with history of positive skin tests or those who convert skin tests. Yearly chest x-rays of these individuals is not recommended for routine screenings, however, if a true exposure occurs a chest x-ray is recommended ten weeks after the exposure.

H. **POLIO** – All personnel should have taken the three doses of polio vaccine orally in their childhood years. If this was not done consult your physician for vaccination to the disease.

Included below is a sample standard operating procedure (SOP) that could be used by EMS Provider Agencies to establish employer (member) pre-employment physical health screening, an immunization program and maintain the necessary employee (member) health record. This SOP may be modified as appropriate to reflect the administrative or managerial structure of a particular EMS provider agency.

SAMPLE EMS AGENCY STANDARD OPERATING PROCEDURE

TOPIC: EMPLOYEE (MEMBER) HEALTH RECORDS

1. Employee (member) health records will be maintained on all employees (members) who are either active volunteer or career personnel with the (Name of Prehospital EMS Provider Agency).
   This record shall include the following as outlined in the NYS EMS Program Policy Statement Number #88-8:
   A. Pre-employment physical examination
   B. Immunization record & screening results.

C. Record of employee (member) occupational injuries of illnesses and their course i.e.: compensation forms filed, Physician's record, hospital record, etc….
D. (Name of Prehospital EMS Provider Agency) incident report pertaining to employee (member) exposure to suspected hazardous materials, toxic products, or true exposures to infectious diseases.
E. Record of annual physicals.
F. Record of Physician's approval to return to active duty after debilitating illnesses or injuries.

2. Pre-employment (membership) health physicals and screening, as outlined in the NYS EMS Program Policy Statement #88-8 shall be required for all employees (members) beginning active service after (Date). Employees (members) who began active service prior to this date, will be offered the opportunity to participate in any agency provided testing or inoculation program.

3. Routine yearly TB skin testing will be required for all employees (members) having contact with patients. For those individuals who have converted their skin test, this SOP will be waived. Instead, an initial chest x-ray will be obtained and appropriate counseling provided regarding the need to report any signs or symptoms of TB. Further chest x-rays will only be obtained when determined necessary by our agency's Medical Director.

DATE SOP APPROVED: _____
APPROVED BY: _____

The following references provide further background:

1. Hochreiter, et al, "Epidemiology of Needlestick Injury in Emergency Medical Services Personnel", Journal of Emergency Medicine, 1988, 6: 9-12.
2. Kunches, et al, "Hepatitis B Exposure in Emergency Medical Personnel", American Journal of Medicine, 1983, 75: 269-272.
3. NFPA 1500 Standard on Fire Department Occupational Safety and Health Program, 1987 Edition, Approved by the American National Standards Institute.
4. Pepe et al "Viral Hepatitis Risk in Urban Emergency Medical Services Personnel", Annals of Internal Medicine, 1986, 15: 454-457.
5. Valenzuela et al "Occupational Exposure to Hepatitis B on Paramedics", Archives of Internal Medicine, 1985, 145: 1976-1977.
6. West, Katherine H., RN Infection Control For Emergency Care Personnel, Lippincott Publishers, 1987.
7. Zimmerman, Lynn, RN, et al Infection Control Procedures for Prehospital Care Providers, Mercy Services, Inc., 1986.