

MINNEAPOLIS FIRE DEPARTMENT
INFECTION CONTROL POLICY
2009



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**MINNEAPOLIS FIRE DEPARTMENT
STANDARD OPERATING PROCEDURES**

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POLICY STATEMENT

SECTION 1.0

Why Is An Infection Control Policy Necessary?

An infection control policy maximizes an individual's protection against communicable disease and it is required by the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.130).

This department recognizes that communicable disease exposure is a hazard of this job. Communicable disease transmission is possible during any aspect of emergency response, including in-station operations. The health and welfare of each member is a joint concern of the member, the chain of command, and this department. While each member is ultimately responsible for his or her own health, the department recognizes a responsibility to provide as safe a workplace as possible. The goal of this program is to provide all members with the best available protection from occupational acquired communicable disease.

It is the policy of the Minneapolis Fire Department:

- ❑ To provide fire, rescue and emergency medical services to the public without regard to known or suspected diagnoses of communicable disease in any patient.
- ❑ To regard all patient contacts as potentially infectious. Standard precautions will be observed at all times and will be expanded to include all body fluids and other potentially infectious material.
- ❑ To provide all members with the necessary training, immunizations and personal protective equipment (PPE) needed for protection from communicable diseases.
- ❑ To recognize the need for work restrictions based on infection control concerns.
- ❑ To prohibit discrimination of any member for health reasons (e.g. HIV/AIDS or Hepatitis).
- ❑ To regard all medical information as strictly confidential. NO patient or employee information will be released without the signed written consent from the patient or employee.

MANAGEMENT AND RESPONSIBILITIES

SECTION 2.0

What Is My Responsibility To The Infection Control Plan?

There are five major categories of responsibility that are central to the effective implementation of this infection control policy. They are:

1. The Top Management Team
2. The Deputy Chief of EMS
3. Battalion Chiefs
4. Company Officers
5. Fire Motor Operators and Firefighters

The Top Management Team:

Responsible for setting policy and providing the resources required for the program to function effectively.

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The Deputy Chief of EMS:

- ❑ Acts as the Infection Control Officer, responsible for managing the Department's infection control program and for coordinating efforts surrounding the investigation of an exposure. During an exposure incident, should the Deputy Chief of EMS not be present, the incident commander or Battalion Chief shall fill this role.
- ❑ Reviews the infection control policy annually to update and/or insure compliance with current law.
- ❑ Develops and coordinates programs of training related to the infection control plan and develops a comprehensive cadet training program with subsequent annual refresher training to each member.
- ❑ Maintains infection control training records as required by OSHA.
- ❑ Evaluates the circumstances of any reported exposure to infectious materials to insure that the risk of future exposures is reduced. Insures the notification, verification, treatment and follow up of members.
- ❑ Monitors post-exposure evaluation and continuing care of members reporting on exposure to infectious materials. Examines compliance procedures to insure their effectiveness.
- ❑ Acts as the MFD contact person to medical community.
- ❑ Evaluates and recommends infection control equipment and supplies.
- ❑ Recommends new methods or procedures to prevent the spread of infection.
- ❑ A liaison member to the MFD Safety Committee as required by NFPA 1581-2-4.5.

Battalion Chiefs:

- Responsible for implementation and compliance with this policy in their respective districts.

Company Officers:

- ❑ Insures that all members are familiar and comply with this plan.
- ❑ Insures that all personal protective equipment (PPE), Emergency Medical Services (EMS) equipment and supplies are available and being used correctly by each member.
- ❑ Insures that all EMS lockers, equipment and supplies are properly maintained and stocked according to the provided inventory lists.
- ❑ Insures that all damaged equipment is properly disinfected and packaged appropriately, prior to being sent in for repair.
- ❑ Encourages members to report exposure incidents and ensures that any member who has experienced an exposure receives medical guidance, evaluation, and treatment as soon as practical and when possible within 2 hours of the exposure incident.
- ❑ Completes a Supervisors Report of Injury (SRI). Forward the completed SRI through department channels by the end of that shift.

All SRI exposure incidents should include:

1. A description of what happened.
 2. Where the firefighter was exposed (eyes, mouth, skin).
 3. What body fluid the firefighter was exposed to (sputum, blood, vomit).
 4. What the firefighter was doing at the time of the exposure.
 5. What the firefighter was wearing for PPE.
 6. Name of the facility where the firefighter was evaluated.
- ❑ Completes **FIREHOUSE** Incident Involvement User Fields [EMS Patient Information] narratives detailing the circumstances of the exposure. Insert patient name-source inside the [NOTES] section ONLY.

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Fire Motor Operators and Firefighters:

- ❑ Understanding and complying with all established departmental protocols and procedures.
- ❑ Participation in health maintenance programs (immunizations, fitness programs, etc.).
- ❑ Practicing good personal hygiene habits.
- ❑ Reporting any personal medical conditions that might require work restrictions or work practice changes (i.e. latex allergies, pregnancy, open wounds or skin disorders).
- ❑ Reporting and documenting all exposure incidents immediately.
- ❑ Complying with recommended post-exposure protocol, counseling and/or treatment.
- ❑ Assuring proper decontamination of equipment, clothing and/or person after each incident and proper storage/disposal of contaminated waste.

FIREFIGHTER RISK

SECTION 3.0

What Job Tasks Place Us At Risk For Disease Exposure?

The following tasks are reasonably anticipated to involve exposure to blood, body fluids or other potentially infectious materials:

Hazards by Job Tasks

The following tasks and procedures may place the firefighter at greater risk to diseases:

- Providing positive pressure ventilation (PPV)
- Assisting paramedics with oral or nasal tracheal intubation.
- Assisting with CPAP or nebulizer treatments.
- Providing or assisting paramedics with suctioning.
- Assisting EMS with the transport of patients with active coughing / sneezing.
- Patients that cough, laugh, sneeze or spit into the firefighter's unprotected face
- Management of **ANY** body fluids.
- Emergency childbirth.
- Performing extrications, rescue or recovery of victims.
- Handling or cleaning contaminated inanimate objects.
- Laryngeal Mask Airway (LMA) placement.
- Providing care to contaminated patients at HAZMAT or terrorism incidents.

The unpredictable and emergent nature of exposures encountered by firefighters on the scene of a medical emergencies make differentiation between hazardous body fluids and those which are not considered hazardous impossible to know. Therefore, treat **ALL** body fluids as potentially hazardous.

Hazards by Job Classification

The following job classifications **have occupational exposure** to communicable or infectious disease.

- Firefighter
- Fire Motor Operator
- Fire Captain
- Battalion Chief
- Deputy Chief

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The following members **may have exposure** to communicable or infectious disease:

- o Fire Prevention Bureau Personnel
- o Fire Investigators
- o Public Fire/EMS Educators
- o Fire/EMS Training Personnel
- o Administrative Staff

All members in these job classifications are trained as Emergency Medical Technicians or higher and would be expected to render medical care to the public if they came upon an incident or otherwise became involved in situations outside their normal job duties.

The following members **may be involved in some tasks or procedures** that potentially could result in an occupational exposure to a communicable or infectious disease:

- o Storekeeper
- o Equipment Repair Personnel
- o Clerical Support Personnel

These employees would not normally come in contact with bloodborne pathogens unless equipment used in emergency medical care or fire suppression operations was not properly decontaminated when turned in for repair or replacement. Any inadvertent exposure will be handled on a case-by-case basis. These employees are not at risk for exposure to airborne pathogens.

DISEASE PREVENTION

SECTION 4.0

How Do I Protect Myself Against Disease?

Section 4.1

Contacting an infected patient does not always result in the transmission of a disease. Certain conditions must be met in order for a communicable disease to be passed on. Each of the factors listed below is a link in the chain of transmission. When you interrupt this chain of transmission you can prevent disease.

Breaking the Chain of Disease Transmission:

CHAIN OF TRANSMISSION	BREAKING THE CHAIN
Bugs (bacteria, virus, toxin)	Stay Informed http://www.cdc.gov - Section 5.1
Receiving Host (You)	Vaccinations & Disease Screening- Section 5.2
Portals of Entry (non-intact skin, eyes, nose, mouth and respiratory tract)	Barriers of Protection (PPE & Disposable Equipment and Supplies) – Section 5.3
Mode of Transmission (dirty hands, needles)	Safe Work Practices – Section 5.4

Which Diseases Pose The Greatest Threat?

Section 4.2

Disease exposure can occur as a result of providing emergency medical care, through living in close quarters with other firefighters and/or through a deliberate act of terrorism. Most often these diseases are caused by viruses, bacteria or toxins and are spread through contact with blood or body fluids (HIV, Hepatitis), through exposure to droplets spread during coughing, laughing or sneezing or through the air (Tuberculosis). A brief list of the diseases that pose the greatest threat to firefighters and that require precautions beyond Standard Precautions can be found below. A detailed description of these diseases can be downloaded off the internet at <http://www.cdc.gov/ncidod/diseases/index.htm>.

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Which Disease Can Be Prevented Through Vaccinations Or Disease Screening? Section 4.3

All new employees of the Minneapolis Fire Department shall receive an initial medical examination to include documentation of childhood vaccination or immunity against Diphtheria/Tetanus, MMR (Measles, Mumps, and Rubella), Polio, and Chickenpox. To protect all its members on an on-going basis, the Fire Department has implemented a vaccination and/or screening program for all employees with risk of an occupational exposure to the following preventable diseases:

HEPATITIS-is a liver disease caused by a virus that is spread by direct contact with infected blood or body fluids. <http://www.cdc.gov/ncidod/diseases/hepatitis/>

Hepatitis Vaccination Policy:

Any fire department employee that may reasonably anticipate an exposure to bloodborne pathogens will be offered the Hepatitis vaccination series at no cost. Immunity testing and all post exposure follow up will be offered at no charge to ANY employee who experiences an occupational exposure to blood or body fluid.

- All medical evaluations and vaccinations will be made available to the employee while on duty.
- All medical care will be performed by or under the supervision of a licensed physician or other health care professional licensed to perform or supervise such vaccinations.
- All medical care and vaccinations will be administered according to the Center for Disease Control (CDC) recommendations for medical practice current at the time of the vaccination.
- A signed informed consent is necessary before administration of the hepatitis vaccination series.
- No employee shall be allowed to receive the hepatitis vaccine without first attending training.

Hepatitis Vaccine Declination:

- Any firefighter who after receiving training chooses not to take the hepatitis vaccination series (for any reason) will be required to sign a declination statement.
- The hepatitis vaccine series shall be given free of charge to any emergency service provider who has previously declined it and subsequently decides to accept it.
- Members who have started the vaccination series may later decline to participate further by signing the same declination form. The series may later be resumed at any time.
- A signed declination form is still required if the employee has written proof of having received the hepatitis vaccine prior to their hire date. The department will offer the employee immunity testing against hepatitis prior to station assignment.

Hepatitis Immunity Testing:

- Twelve weeks after completing the three shot series, Cadets will be offered a blood test to determine their immunity against hepatitis at no charge.
- If the employee does not have immunity after the three shot series, a booster or the entire three shot series (based on medical director recommendations) will be offered again at no additional cost to the employee.
- At the end of the second series a second blood test will be offered at no additional charge.

Ineligible for Hepatitis Vaccination:

- Those immune or show written proof of vaccination within 7 years.
- Allergy to yeast.
- Woman who are pregnant or breastfeeding.
- Individuals with serious heart or lung disease or who are immunocompromised.
- Those who are sick with more than a cold or who have a fever should wait until well.

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Hepatitis Vaccination Procedures:

- The vaccination is a series of three injections administered in the arm. The first dose is given prior to the end of the employee's first week of Cadet training or during the Cadet pre-hire physical. The second injection is given one month from the initial injection and while the Cadet is still in training. The final dose is given six months from the initial dose during the Cadet's first six-month station assignment.
- The department is currently offering a genetically prepared Hepatitis B Recombinant vaccine (Engerix B) alone (OR) in combination with Inactivated Hepatitis A vaccine (Twinrix). Side effects of the vaccine include: tenderness at the injection site, low grade fever, headache, or weakness.

Scheduling Hepatitis Vaccinations:

- Initial new-hire hepatitis vaccinations will be offered and scheduled prior to station assignment.
- Hepatitis vaccinations will be scheduled through the EMS Deputy Chief or the Deputy Chief of Personnel.

Hepatitis Record Keeping:

- All immunization records are secured with the employee's medical record at the Occupational Clinic.
- All new employees that receive the hepatitis vaccine will receive wallet cards as proof of vaccination.

TUBERCULOSIS is a bacterial disease usually infecting the lungs that is spread through the air.

<http://www.cdc.gov/tb/faqs/default.htm>

Tuberculosis Screening

Any fire department employee who may reasonably anticipate an exposure to Tuberculosis shall be offered the TB skin test at no cost. Should the community incidence of Tuberculosis increase, testing may become mandatory (MN OSHA Directive CPL 2-2.48, June 18, 1996). Should an employee experience an occupational exposure to Tuberculosis post-exposure follow-up and further medical evaluation will be provided at no cost to the employee.

Tuberculosis Screening

- All medical evaluations and procedures including the TB skin test will be made available to the employee while on duty.
- All medical care will be performed under the supervision of a licensed physician or other health care professional licensed to perform or supervise such testing.
- TB testing and treatment will be administered according to the Center for Disease Control (CDC) recommendations for medical practice current at that time for tuberculosis.
- Disease specific training will be provided to each employee prior to being offered TB skin testing.
- Initial training is provided to each employee during Cadet Training or during the pre-employment physical exam. At the end of Cadet Training, testing and continuing education will be offered on an annual basis.

TB Testing Declination:

- Any employee that chooses not to participate in annual TB skin testing must sign a declination statement.
- An employee who declines the TB skin test may later change their mind and be tested at a later date by contacting the EMS Deputy Chief or Deputy Chief of Personnel.

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TB Testing Procedures:

- The TB skin test is an injection of 0.1ml of purified protein derivative containing 5 tuberculin units injected just under the surface of the skin on the palm surface of the forearm, used to detect tuberculosis infection.
- Once given, the results of the test are read within 48 – 72 hours. A positive skin test consists of a hardened, raised area surrounding the injection site of 5 millimeters or more.
- The positive skin test does not necessarily mean that the employee has active TB but rather that the employee has been exposed to tuberculosis. These employees will be referred to the Occupational Health Clinic for additional follow up.
- Those employees with past positive skin tests will be scheduled for an initial chest x-ray and then complete an annual health questionnaire annually (instead of repeating the skin test), at no cost to the employee.
- Evaluation and management of employees with a positive skin test or signs and symptoms of TB will occur at no cost to the employee.

Scheduling TB Testing:

- Cadets will receive a TB skin test as part of their pre-hire physical.
- TB skin testing for active duty personnel will be offered annually or after a known exposure to Tuberculosis and will be scheduled through the EMS Deputy Chief or Deputy Chief of Personnel.

TB Testing Record Keeping:

- All TB screening records are secured with the employee's medical record at the Occupational Clinic.
- A copy of this screening may be obtained by contacting the EMS Deputy Chief.

INFLUENZA-is a viral infection of the nose, throat, bronchial tubes and lungs that is easily transmitted through contact with droplets from the nose and throat of an infected person during coughing.

<http://www.cdc.gov/flu/>

The influenza vaccination or flu shot is recommended annually (NOT mandated) and offers protection against influenza of all health care workers who have close contact with high-risk patients. Firefighters are strongly encouraged to get this shot every year. You can die from complications of influenza. This vaccination is typically offered in the fall free-of-charge through the firefighter's health insurance while on shift.

Influenza Vaccination Procedures:

- The vaccination requires an injection in the upper arm. The viruses in the vaccine have been killed, so you can **NOT** get influenza from the vaccine.
- Side effects might include redness or soreness at the injection site, local swelling, low grade fever and/or body aches.
- Tell the physician or nurse, if you have an allergy to eggs, if you have ever had an allergic reaction after getting influenza vaccine, if you were ever diagnosed with Guillain Barre Syndrome or if you currently have a fever.

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Pandemic Influenza-A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide (*See Appendix I "MFD All Hazard Pandemic Plan"*).

What Personal Protective Equipment (PPE) does MFD provide?

Section 4.4

Each employee will be equipped with PPE to include; non-latex gloves, shielded face masks, safety glasses, disposable sleeves or gowns, filter respirator masks (N-95), work uniforms, turnout gear and self contained breathing apparatus (SCBA). Each firefighter is taught how to use this equipment during Fire Cadet training.

Protection: HANDS/ARMS

GLOVES: Disposable non-latex (Nitrile) medical exam in varying sizes are provided and may be found inside the apparatus cabs. Structural firefighting gloves are issued to each employee during Fire Cadet training and should be replaced when torn or soiled with blood or body fluids through Fire Stores.

SLEEVES: Disposable sleeves, uniforms and turnout coats are provided. Disposable sleeves may be found in the EMS bag. Turnout coats are issued to each employee during Fire Cadet training and should be replaced when torn or soiled with blood or body fluids through Fire Stores. Uniform shirts may be purchased and/or replaced using the employee's annual uniform allowance.

PPE Technique: HANDS/ARMS

- Gloves must be worn when treating patients. Wear the correct size and carry a spare. Change gloves between patients.
- Dispose of contaminated gloves by pulling them off cuff first and leaving them in the patient's trash receptacle or in the designated area inside the ambulance.
- Long sleeve uniform shirts, turnout coat or disposable sleeves should cover arms when treating patients. Prior to leaving the scene, dispose of contaminated sleeves by pulling them off elbow-end first and pulling them down over the dirty sleeve toward the wrist (leaving them inside out), in the patient's trash can or in the designated area inside the ambulance. Sleeves should be removed before gloves.
- Always wash your hands after each patient contact and/or after the removal of disposable gloves/sleeves. When this is not possible, utilize the antiseptic towelettes or waterless soap located inside the EMS bags.
- Remove gloves and/or sleeves before washing your hands and eating, drinking or smoking. After washing your hands apply Bio-Safe lotion to your hands. This lotion is located in a wall dispenser near the slop-sink and provides added antimicrobial protection. Bio-Safe lotion should be reapplied after every hand washing or every five hours, whichever comes first. Using this lotion does not replace hand-washing or use of medical exam gloves.
- Medical exam gloves should not be used for contact with chemical or industrial cleaners. When cleaning contaminated areas or equipment, a heavy-duty grade vinyl or latex (unless allergic) glove will be used. If you wear a latex or rubber glove for cleaning, remember to change the gloves and wash your hands frequently to avoid developing a latex allergy (see latex allergy section below).
- Where possible personnel should wear medical exam gloves under structural Firefighting gloves. **UNLESS** working in an environment with high ambient heat conditions.

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Latex Glove Allergies

Workers exposed to latex products (latex exam gloves, stethoscope tubing, blood pressure cuffs) may develop allergic reactions such as skin rashes, hives, nasal, eye or sinus symptoms, asthma and shock. Firefighters with allergies to natural rubber latex should take the following steps:

- Use non-latex exam gloves for patient care or handling rubber latex products.
- Frequently clean station areas (carpets, upholstery, ventilation ducts).
- Frequently change station ventilation filters and vacuum cleaner bags.
- Learn to recognize the symptoms of latex allergy.
- If you develop symptoms, avoid contact with latex products and see a physician.
- If diagnosed with a latex allergy avoid contact with latex products, tell your employers, physicians, nurses, and dentists that you have a latex allergy and wear a medical alert bracelet.
- Take advantage of all latex allergy education and training provided by the Fire Department and/or visit the CDC website at www.cdc.gov/niosh/topics/latex/

Protection for Eyes/Nose/Mouth

Goggles or Safety Glasses: MFD provides both goggles and safety glasses. Goggles may be found inside the EMS bag and each employee is issued safety glasses during Fire Cadet training. Goggles or safety glasses can be replaced through Fire Stores.

Face Masks (Shielded): MFD provides disposable shielded face masks. These may be found inside the airway bag(s) and can be replaced through Fire Stores.

Filter Respirator Masks (N95): MFD provides two types of disposable filter respirator (N95) masks. The 3M 1910 filter masks are individually wrapped and can be found inside the airway bag(s). These filter masks resemble a simple surgical mask. The second filter respirator masked stocked and cached is the MSA Affinity Mask. This is a form fitting mask that comes in a variety of sizes and may be found inside a blue stuff sack inside the outside spare O2 compartment.

PPE Technique: Eyes/Nose/Mouth

- Employees shall wear goggles or safety glasses or masks with face shields whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated.
- Wear a face mask and eye protection for complete shielding of the eyes, nose and mouth.
- Unless prescription eyeglasses have side shields, wear additional face shield or safety glasses.
- Do not place a filter or surgical mask on a patient if it will interfere with the patient's airway or if the patient is vomiting, unconscious or requiring oxygen.
- If you have a cough but have been cleared for active duty, wear a mask when giving patient care.
- When treating a patient with known or suspected tuberculosis (fever, cough, weight loss, night sweats), place the patient on high flow O2 and don a filter respirator mask (N-95). All new personnel will be fit-tested and trained in the proper use of these masks during their Cadet training and annually thereafter.
- When treating a patient with unknown or suspected airborne diseases (flu-like symptoms, fever, cough and/or rash) consider placing the patient on high flow O2 and donning a filter respirator mask (N-95) or if you find multiple patients from different locations exhibiting the same respiratory complaints-don your SCBA.

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- All new firefighters will be fit-tested and trained in the proper use of this equipment during their Cadet training and annually thereafter.
- Should an employee experience a 10-pound weight change after their initial fit testing, s/he should contact the EMS Deputy Chief or Deputy Chief of Personnel for re-testing.
- Contaminated reusable goggles or safety glasses should be cleaned with bleach and water solution (1/4 cup bleach to 1 gallon water) or disinfectant (e.g. Cavicide) found near the decontamination areas in each fire station.

Protection: Body

Class C Uniforms: An annual uniform allowance is provided each employee by the department and will be used to purchase or replace class C uniforms.

Turnout Gear: Turnout coats and bunker pants are issued to each employee during Fire Cadet training and should be replaced when torn or soiled with blood or body fluids through Fire Stores.

Disposable Gowns: May be found in the EMS Lockers or at Fire Stores for use during decontamination or in the event of wide-spread (pandemic) disease outbreak.

Tyvek Suits: Disposable Tyvek suits are cached in the event of wide-spread (pandemic) disease outbreak.

PPE Technique: Body

- Wear turnout gear during all rescue, extrication or recovery activities. This equipment should include the helmet with the face shield down, turnout coat, structural fire fighting gloves, bunker pants and boots.
- On EMS runs if you are wearing your short sleeved class C uniform shirt, cover your arms by donning your turnout coat or a pair of disposable sleeves before or shortly after arriving at the scene or when there is the potential for spurting blood or other potentially infectious material to be present (e.g. caller states patient put their arm through plate glass door).
- Don bunker pants, Tyvek or disposable gowns (anticipating splash) when cleaning contaminated equipment, the apparatus cab or the decontamination area.
- Dispose of Tyvek suits or disposable gowns by removing it back first and pulling it off inside out, leaving it in the trash receptacle.
- Decontaminate work uniforms and turnout gear as outlined in this plan (Washing Uniforms).

Applies to ALL PPE:

- All PPE will be provided, repaired, or replaced by MFD at no cost to the employee.
- The firefighter shall wear issued PPE when performing procedures in which exposure to their skin, eyes, mouth, other mucous membranes, or respiratory tract is anticipated. The articles worn will depend on a reasonably anticipated exposure (see table below).

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EMS Activities Requiring PPE:

Task	Gloves	Glasses	Masks	Body
Taking Vital Signs	yes			
Patient Contact	yes			
Minimal Bleeding	yes			
Coughing Patients	yes	yes	yes	
Respiratory Disease	yes	yes	yes	
LMA Placement	yes	yes	yes	
Suctioning	yes	yes	yes	
Spurting Bleeding	yes	yes	yes	yes
Projectile Vomiting	yes	yes	yes	yes
Heavy Bleeding	yes	yes	yes	yes
Childbirth	yes	yes	yes	yes
Extrication/Rescue	yes	yes	shield s	yes
Decontamination	yes	yes	yes	yes

- All PPE is available for personal use while on duty. A variety of sizes are in stock.
- The company officer is responsible for supervising the maintenance or replacement of PPE and insuring that proper PPE is used at all times.
- Do not touch eyes, nose, or mouth while wearing contaminated PPE. These areas provide disease a direct route into the body.
- PPE shall be replaced as soon as feasible when contaminated, torn, punctured or when its ability to function as a barrier is compromised. Change PPE when contaminated and when working on different patients to avoid cross contamination.

Disposal of PPE:

- Do not wash or decontaminate single-use PPE for re-use.
- Remove contaminated PPE before entering the cab of the vehicle.
- Remove contaminated PPE before touching personal items, such as combs, pens, and eyeglasses to prevent items from becoming indirect routes of disease transmission.
- Under no circumstances should used or non-decontaminated PPE be left in the fire apparatus or stations. When in a patients' home, dispose of PPE in their trash container. When in a medical facility, dispose of PPE in the appropriate container at that facility.
- Disposable PPE that is dripping blood or body fluid should be placed in one of the (red) biohazard bags located inside the EMS bag or in each station decontamination area. Disposable PPE that is contaminated with dried blood, body fluid or other products of infectious material (OPIM) may be disposed of in the trash.

The Fire Company involved in the response, should contact the Battalion Chief and once permission is obtained, transport any (red) biohazard material to the Hennepin County Medical Center (HCMC) EMS garage or the Emergency Department (ED) for disposal.

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MEDICAL EQUIPMENT AND SUPPLIES

Section 4.5

Disposable equipment and/or supplies are designed to eliminate or reduce an employee's exposure to infectious materials. MFD provides the following ONE-TIME disposable items:

- Nasal or Oral Airways
 - Pocket Masks with One-Way Valves.
 - Oxygen (simple or non-rebreather) Masks
 - Oxygen Nasal Cannula's
 - Oxygen Tubing
 - CPR Study Masks/POD's
 - Bag-Valve-Masks (BVM)'s
 - Laryngeal Mask Airways (LMA)'s
 - Suction Devices (catheters, liners)
 - Soft Goods (dressing, bandages, masks, gowns, sleeves, gloves)
 - Cervical Collars
 - Hot/Cold Packs
 - Emergency Childbirth Kits
 - All Syringes
 - SAM Splints
 - AED Electrodes
- Non-disposable equipment and/or supplies, shall be decontaminated (cleaned) and re-used according to the procedures outlined in this plan.
 - Puncture- resistant sharp containers are provided by the ambulance services and located on each ambulance. All sharps shall be discarded utilizing safe work practice controls outlined in this plan.

Decontamination of Medical Equipment and Supplies:

- Each station has a designated decontamination area which should be kept neat and clean. This cleaning area shall have proper ventilation, lighting and a septic floor drain.
- At no time will the decontamination of personnel, clothing or equipment be conducted in the fire station kitchen, living, sleeping or personal hygiene areas.
- The counters and appliance surfaces should be cleaned daily with soap and water and the floors mopped with a mild detergent.
- Near each decontamination area or next to the slop sink, you should find:
 - (1) box of disposable non-latex gloves
 - (2) mid-arm rubber or vinyl (utility) gloves
 - (2) disposable gowns
 - (1) box of shielded face masks
 - (1) broom
 - (1) mop
 - (2) buckets
 - (5-7) red biomedical bags
 - (1 gallon) Hospital disinfectant (Cavicide)
 - (3-4 gallons) of bleach
 - (1 gallon) of liquid oxygenated bleach (see Section 10)
 - (1 gallon) of liquid laundry detergent (see Section 10),
 - (3) sponges and several disposable towels
 - (3) soft-bristle brushes (tooth or finger-nail type),
 - (3) scrub brushes
 - (1) Bio-Safe hand lotion dispenser

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(1) Emergency eyewash station

- Each station's decontamination area shall be properly marked with the biohazard label.
- The station's decontamination area's are as follows:
 - Stations 17, 22, 27 28 have dedicated EMS rooms designed to accommodate all decontamination tasks.
 - All other fire stations will use the slop sink room off the apparatus floor for decontamination tasks.
- Laundry areas have been designated for use in the decontamination of work uniforms and personal protective clothing only.

Storage of Medical Equipment and Supplies:

- Medical supplies and equipment should be stored in a room, locker or closet near the apparatus floor. An inventory list will be located on the inside door of each medical supply closet and medical supplies will be stocked accordingly.
- The medical supply closet will be checked weekly and supplies restocked from MFD Stores as needed.
- One blood pressure cuff and one stethoscope shall be kept in or near the coop for walk-in blood pressure checks. This cuff will be designated as the coop set only.
- Contaminated (dirty) medical supplies and equipment shall not be cleaned, transported or stored in any of the living, sleeping, kitchen or personal hygiene areas.

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How Can Safe Work Practices Prevent Disease Transmission?

Section 4.6

4.6A EMERGENCY RESPONSES

On every EMS call you will ALWAYS use the following STANDARD PRECAUTIONS and increase your level of protection when the patient exhibits the signs or symptoms as described beside each of the following precautionary levels.

I. USED ON ALL PATIENTS: STANDARD PRECAUTIONS

- **WASH HANDS** using alcohol-based waterless hand cleaner (i.e. Isagel) before and after every patient contact. Upon return to the station use soap & water.
- **WEAR GLOVES** when touching blood, body fluids, secretions, excretions, and contaminated items such as linen or inanimate objects.
- **WEAR MASK & GLASSES** (shielded face mask or simple mask with safety glass or helmet with face shield down) during rescue operations such as vehicle extrications or when performing procedures such as suctioning or with patients that may spit or spray blood, body fluids, secretions or excretions through coughing, sneezing, laughing.
- **USE DISPOSABLE VENTILATION DEVICES** with one-way valves or BVM with 100% O₂ as an alternative to mouth-to-mouth resuscitation.
- When handling sharps **DO NOT RECAP NEEDLES** & use puncture proof containers for disposal. (Refer to “Sharps Techniques” at the end of this section).
- **COVER BREAKS IN YOUR SKIN** with an appropriate bandage or dressing prior to coming on shift in the morning. These bandages should be changed frequently or as needed.
- **DO NOT COME TO WORK SICK** or when you have a fever, they have been on antibiotics for an illness for less than 48 hours, they have open sores or lesions that can NOT be completely covered or are NOT scabbed over, they have a communicable disease for which their physician has not released them back to work. This practice prevents other employees and patients from exposures to their illness. Supervisors should monitor employees for obvious signs of illness.

Diseases requiring STANDARD Precautions: Common Cold, Epiglottitis, Viral Meningitis, Mononucleosis, Viral Encephalitis, Syphilis, Hepatitis B & C, HIV, Anthrax, Tularemia, Q Fever, Ricin, Brucellosis.

Patients physically contaminated with suspected Biological Agents-**Wet, Strip, Flush & Cover**. Do NOT touch clean items, supplies or your mucous membranes with contaminated gloves. If your clothing is contaminated, wet clothing down, strip it off and don your turnouts, seal contaminated clothing in a bag to wash upon return to the station. Always wear PPE while performing decontamination. In the event, a situation involving biological contaminants goes unrecognized, follow the above noted procedures and contact your supervisor for additional follow up instructions.

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II. USED ON ALL PATIENTS WHO ARE NOT IN CONTROL OF THEIR BODY FLUIDS (such as diarrhea, wound drainage, weeping or oozing sores): CONTACT PRECAUTIONS

Use Standard Precautions **PLUS:**

- **COVER ALL EXPOSED SKIN** by wearing the disposable sleeves that can be found in the EMS bag or wear class “C” uniform or full turnout gear for patients with diarrhea, uncontrolled body fluids, uncovered lesions, wounds or ulcers, and any drainage from tubes such as colostomy (this is a tube that drains stool from bowel).

Diseases requiring CONTACT Precautions: Hepatitis A & E, Shingles (<5 lesions), Lice, Scabies, Shigella, Impetigo, MRSA, VRE, Herpes, Chickenpox lesions.

III. USED ON ALL COUGHING OR SNEEZING PATIENTS: DROPLET PRECAUTIONS

Standard Precautions **PLUS:**

- **PLACE OXYGEN OR SIMPLE MASK ON PATIENT** unless it will interfere with the patient’s airway or if the patient is vomiting or unconscious.
- **VENTILATE THE AMBULANCE ENROUTE TO HOSPITAL.**

Diseases requiring DROPLET Precautions: Influenza, Bacterial Meningitis, “Whooping Cough” or Pertussis, Strep Throat, Pneumonic Plague.

IV. USED ON ALL PATIENTS W/SUSPECTED OR KNOWN [TB] OR PATIENTS W/RECENT TRAVEL ABROAD NOW COMPLAINING OF FEVER, RASH OR UNEXPLAINED BLEEDING: AIRBORNE PRECAUTIONS

Standard Precautions **PLUS:**

- **WEAR N-95 RESPIRATOR (FILTER) MASK.** Should rationing become necessary don a shielded face mask over the N95, disposing of the shielded face mask after each use and the N95 once soiled or you are unable to maintain a seal. **ONLY** don your SCBA as a last resort since it will require decontamination after its use in this setting.
- Diseases requiring AIRBORNE Precautions: Tuberculosis, Avian Influenza “H5N1” or Bird Flu, Severe Acute Respiratory Syndrome (SARS), Smallpox, Viral Hemorrhagic Fevers (Ebola, Marburg, Lassa Fever) Chickenpox (unless immune), Full-body Shingles, Measles (Rubeola) and ANY suspected release of an aerosolized biological weapon with positive field assay until proven otherwise

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SHARP TECHNIQUES

Do not transport contaminated sharps back to the fire station. In the event needles or sharps are found on the ground at the end of the emergency call or around a fire station or a sharp has been turned in by a citizen, it will be necessary for personnel to assist in the disposal of the sharp. Handle all sharps as outlined below:

Proper sharps or needle techniques include:

- Never dispose of any sharp, whether contaminated or not, in any trash receptacle.
- Don a pair of medical exam gloves or structural firefighting gloves.
- Pick the sharp up by the plastic blunt ended hub or barrel.
- Using ONE HAND place the sharp in a puncture-resistance sharp shuttle or box, pop can or milk carton. Always place the needle in the container by inserting the needle in first.
- Do not force or stuff needles or other sharp items into a sharps container.
- Never insert fingers into sharps containers for ANY reason.
- Needles should never be manipulated, recapped, bent or broken.
- Sharp shuttles that contain a sharp should be transported to public health on a DAILY basis.
- If a citizen presents with a sharp to one of the fire stations (assist as above) using one of the sharps shuttles found in the EMS Locker, contact MCV or the Battalion Chief to transport the closed sharp shuttle to the City Public Health laboratory at 250 South 4th Street Room 510 in the Public Service Center Building between 0800-1630 M-F 612-673-2301 or HCMC EMS Ambulance garage or Emergency Department.

4.6B FIRE STATION LIVING

General

- Do not handle, prepare, or consume food or drink in the decontamination areas.
- Keep contaminated medical equipment out of the living areas.
- Never lie on a bed or sit on furniture with contaminated clothing or skin areas.
- Don't bring protective clothing, such as bunker gear, into the living areas.
- Used sealed equipment carrying bags when transporting equipment in a personal vehicle.
- Use fire station washers and dryers for contaminated uniforms or turnout gear only.

Kitchen

- Clean food preparation surfaces with a disinfectant daily, before and after use.
- Do not share utensils when preparing food.
- Do not use a common spoon when stirring coffee and other beverages.
- Clean cooking utensils thoroughly between uses.
- Cover and refrigerate food with a lid or plastic wrap to prevent contamination. This is especially important for foods that will not be reheated, such as salads.
- Throw away food left at room temperature for an extended period of time.
- Reheat food at 165 degrees for at least 15 seconds to kill bacteria.
- Discard food that has been sitting out for 4 hours or more.
- Clean sponges or utensil brushes by running them through the dishwasher.
- Sweep and mop floors at least once daily.

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Day Room

- Use your own or department issued blanket to cover with when lying or sitting in the day room.
- Vacuum the upholstered furniture daily.
- Vacuum the carpets daily.
- Wipe down hard surfaces (chairs, countertops, phones) daily with Hospital disinfectant (Cavicide).
- Keep a blood pressure cuff and stethoscope in or near the front door or coup dedicated to taking patient's blood pressures only. Then remember to wipe them down between blood pressures or at least weekly using Hospital disinfectant (Cavicide).

Bathrooms

- Wash your hands after using the restroom.
- Use a hand towel or paper towel to protect just washed hands when turning off faucets.
- Clean bathroom door knobs (inside/out) using hospital disinfectant (e.g. Cavicide) daily.
- Clean sinks, toilets (inside/out) daily.
- Sweep and mop floors daily.

Sleeping Quarters

Infection Control Nurses recommend that for optimal hygiene, linen that comes in contact with skin, should be changed at the end of every shift or no later than at the end of every second shift back and/or after the firefighter has been sick.

Beds

Each firefighter will be assigned a bed upon station assignment. Each mattress shall be kept clean and after each linen change, the mattress shall be turned and aired prior to remaking the bed. These mattresses will remain cloth style mattresses.

Each firehouse will be furnished with a watch and tramp bed. A watch bed and any used tramp bed will be stripped of its linen at the end of every assigned shift. Over time, these mattresses will be replaced with a wipe-off style mattress and after every use shall be wiped down using an anti-microbial spray and allowed to air dry prior to being remade or reused.

Pillows

Each firefighter will be assigned a Foss-fill antimicrobial pillow upon employment and prior to station assignment. These cloth style pillows are machine washable. Each firefighter is responsible for the maintenance and upkeep of their pillow. In the event an assigned pillow is lost or forgotten, a wipe-off style pillow may be obtained from Fire Stores or one of old-style pillows may be used from house stock. Pillow cases are provided by the department and shall be changed when soiled (or) after they have been slept on by a firefighter who is sick (or) when a supervisor becomes aware of foul smell, observes obvious staining or becomes concerned about disease transmission. Place dirty pillow cases in the dirty laundry hamper for pick up and obtain a clean one(s) from house stock.

A wipe-off style pillow will be assigned to each tramp and watch bed and shall be cleaned after each use with an anti-microbial spray and allowed to air dry prior to its next use.

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Sheets/Blankets

Sheets and blankets are provided by the department and laundered weekly through a local vendor. Sheets and blankets will be changed when soiled (or) after they have been slept on by a firefighter who is sick (or) when a supervisor becomes aware of foul smell, observes obvious staining or becomes concerned about disease transmission. Place dirty sheets or blankets in the appropriately marked dirty laundry hamper for pick up and obtain a clean one(s) from house stock. The local linen vendor will only leave one clean blanket for every dirty blanket that is left for pick up.

Personal Bedding

Personal bedrolls, sleeping bags or blankets (any color or design) are allowed. Each firefighter is expected to keep his/her bedding clean. All bed rolls shall be stored in the individual's personal locker when not in use and washed when soiled (or) after they have been slept on by a firefighter who is sick (or) when a supervisor becomes aware of foul smell, observes obvious staining or becomes concerned about disease transmission.

EXPOSURE REPORTING

SECTION 5.0

How Will I Know If I Have Experienced A Significant Exposure?

Section 5.1

Any firefighter who experiences a needle stick or laceration from a contaminated object, whose face (eyes, nose, mouth) are exposed to sputum or their open unprotected skin comes in contact with blood, body fluids, drainage from wounds or open weeping sores, has experienced a "significant exposure" and should report it to their supervisors immediately. All exposure information is considered confidential.

What Should I Do If I Experience A Significant Exposure?

Section 5.2

1. CLEAN UP ON SCENE

- ✓ Wipe off the blood or body fluid with the antiseptic towelette found in the EMS bags.
- ✓ Wash your hands and/or wound (puncture, laceration or abrasion) with soap and water as soon as possible. If soap and water are not available, use the waterless hand soap found inside the EMS bags.
- ✓ Irrigate splashed or contaminated eyes or mouths with either tap water, Normal Saline or using the emergency eyewash bottle found in the in the EMS bag, blow or wipe your nose.
- ✓ Do not eat, drink, smoke, apply cosmetics or handle contact lenses **BEFORE** washing your hands. Do not touch eyes, nose or mouth while wearing contaminated gloves.
- ✓ Remove contaminated gloves before entering the cab of the vehicle or touching personal items.
- ✓ Soiled uniforms can be decontaminated, as outlined in this plan, upon return to the station.
- ✓ Uniforms that are dripping with blood or body fluids that you can wring out should be removed as soon as feasible (if a degree of privacy can be provided). Contaminated uniforms should be placed in a (red) biohazard bag found in the EMS Bag and turnout gear should be worn to return to the station. The company shall remain out of service to the station and through the end of the decontamination process.

2. **GET THE NAME OF THE PATIENT** and find out what the patients transport destination is prior to leaving the scene (enter the patients name in the NOTES section of your NFIRS report and on the Supervisors Report of Injury).

3. **NOTIFY YOUR SUPERVISOR** s/he will determine the fire company's response status and/or the employee's mode of transport to the hospital.

4. **FOLLOW THE PATIENT TO THE HOSPITAL** within 2 hours of the exposure. This will facilitate collecting the patient's blood for testing and offer the employee any necessary post exposure medications.

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5. **COMPLETE A SUPERVISOR'S REPORT OF INJURY (SRI)** upon return to the station, after all injuries have been treated and the employee has seen the doctor.

What Should I Expect During My Post Exposure Hospital Visit?

Section 5.3

It is the responsibility of the evaluating hospital staff to obtain patient (exposure source) consent to test their blood. Patients (except those under arrest) may refuse to allow testing of their blood. Should the patient refuse or not be available for testing, then the firefighter who has sustained the significant exposure (as outlined above) will be offered testing and disease specific counseling. All post exposure testing and treatment will adhere to Centers for Disease Control recommendations and are disease specific. At the completion of the ER evaluation, if it is determined by the physician that the employee may return to work, the employee should inform their immediate supervisor of their work eligibility and request transport back to their assigned station. The Captain or employee's supervising officer shall complete the **SRI** before submitting it through the department channels to the Deputy Chief of Personnel or EMS Deputy Chief within 24 - 48 hours.

The Fire Company Captain will then complete the **FIREHOUSE** Incident Involvement computer screen entitled, [User Fields "EMS Patient Information"] and write a narrative description of what happened in the [NARRATIVE]. Be sure NOT to use the employee's name, as these reports are available to the public upon their request. Type in the firefighter's name and the name of the patient the firefighter was exposed to in the private [NOTES] section ONLY.

Is Follow Up Testing Necessary?

Section 5.4

The individual firefighter is responsible for contacting the Deputy Chief of Personnel or the EMS Deputy Chief (within 24 - 48 hours) after their exposure to schedule their follow up appointment(s) with the City Doctor. The employee will get their test results during this City Doctor visit. All further testing, treatment or counseling is free-of-charge to the employee. If no further action or follow up is required, the Fire Department is notified that all recommended testing and/or treatment is complete and the report remains with the employee's medical record. All medical records must be kept confidential and maintained for at least the duration of the employee's employment plus thirty years. Only the employee can obtain a copy of his or her medical records or anyone having the employee's written consent.

DECONTAMINATION

SECTION 6.0

How Should I Clean Up After An Emergency Call?

Section 6.1

Decontamination can be defined as the use of physical or chemical means to remove, inactivate, or destroy pathogens on a surface to the point where they are no longer capable of transmitting infectious particles and the surface or item is considered safe for handling, use or disposal. MFD, like all fire departments, accomplishes this by utilizing a chlorine bleach solution (1/4 cup bleach to 1 gallon water) or a commercial hospital disinfectant (e.g. Cavicide), located in each of the station decontamination areas.

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6.1A Decontamination of Personnel

- Firefighters with contact of their body areas with blood or body fluid should wash exposed skin or shower using soap and water. The crew should remain out of service until this is done.
- Firefighter uniforms that are dripping with blood or body fluid, should exit the apparatus and go directly to that station decontamination area:
 - He/she should wash their hands in the slop sink with soap and water then don clean exam gloves located in the decontamination area.
 - The company Captain shall ensure the employee's privacy and the employee should then remove his/her clothing, placing the contaminated clothing in the slop sink located in the decontamination area.
 - If turnout gear was used to cover grossly contaminated clothing, unsnap the turnout shell and remove it. Take off the turnout lining, leaving it turned inside out. Place it in the slop sink. Next remove the contaminated clothing, placing it in the slop sink in preparation for decontamination.
 - The employee should then remove their gloves by pulling the cuff over the fingers and turning the gloves inside out. If the gloves are dripping blood or body fluids they should be discarded in a biohazard (red) waste bag. When gloves are contaminated with dried blood or body fluids or there is no visible blood or body fluid present, they may be discarded in the trash.
 - The employee should wash their hands in the slop sink over the contaminated clothing, utilizing a paper towel to handle the faucets. The paper towel should then be discarded in the biohazard (red) waste bag and the employee should exit the decontamination area to take a shower with soap and water.
 - Upon completion of showering, the employee shall don a clean uniform and cover it with a clean disposable non-penetrable gown (located in the Infection Control Packet in the EMS closet) and a pair of medical exam gloves. Decontamination of the employee's uniform, EMS jacket, turnout gear, equipment or non-disposable supplies may now proceed.
 - Once personnel and/or clothing have been decontaminated, clean countertops and appliance surfaces in the decontamination area with a bleach solution (by adding 1/4 cup of bleach to 1 gallon of warm water) or hospital disinfectant (Cavicide). Mop the floor and empty the used bleach solution in the slop sink.
 - Any area inside the apparatus that came in contact with contaminated equipment or personnel shall be decontaminated with a bleach solution or hospital disinfectant (e.g. Cavicide). Disposable towels should be discarded in the trash. All used disinfectants may be emptied down the slop sink drain. Rinse the slop sink with Bleach solution (1 cup of bleach and at least 4 gallons of warm water) to complete the decontamination process. Any waste generated during the decontamination process that is dripping blood or body fluid should be placed in one of the (red) biohazard bags located inside the Medical Bag or in each station decontamination area. Waste that is contaminated with dried blood or body fluids may be disposed of in the trash.
 - The Mobile Command Van (MCV) driver should be contacted for all (red) bagged biohazard material and it will be transported to the Hennepin County Medical Center (HCMC) EMS garage or the Emergency Department (ED) for disposal. In the event that the MCV is unable to respond and transport the Fire Company involved in the response, should contact the Battalion Chief and once permission is obtained, transport the waste to Hennepin County Medical Center (HCMC) for disposal.

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6.1B Decontamination of Uniforms or Turnouts

Spot Cleaning: Pre-cleaners can be used to clean light spots and stains on protected clothing. Pre-cleaner should be squirted once or twice onto the soiled areas. The fabric should be rubbed and carefully rinsed off with cool water.

Pre-treating: Liquid detergent should be applied directly from the bottle onto the soiled areas. The fabric should be rubbed together gently until foam appears on the surface. The garments should be placed into the washing machine as specified below and the remaining amount of the recommended detergent added. To clean garments that are heavily soiled, a liquid detergent or pre-cleaner solution should be used in the following manner prior to laundering:

- The garment should be air-dried before applying product.
- The liquid detergent or pre-cleaner should be squirted directly onto the stain and the surrounding areas (3 or 4 squirts). It should be made certain that the soiled area is soaked with the product.
- A soft bristle brush (toothbrush or fingernail-type brush dipped in water) should be used to scrub the soiled area gently for about 1 minute.
- The liquid detergent or pre-cleaner should be reapplied to the soiled areas again (1 or 2 squirts).
- The garment should be placed into the washing machine as instructed below.

Washing: Protective clothing should be washed separately from other garments. All hooks and eyes should be fastened, and the garment should be turned inside out or placed in a large laundry bag that can be tied shut to avoid damage to the washtub. These instructions may be used for cleaning any of the following wash loads in a large capacity (16 gallon) top loading or front loading washing machine.

- One protective coat and one protective trouser;
- Two protective coats;
- Two protective trousers;

- While the washing machine is filling with hot water [120F-130F], 1/2 cup (4 ounces) of liquid oxygenated bleach (chlorine bleach should **NOT** be used) and 1 cup (8 ounces) of liquid detergent should be added. These items can be located in the decontamination area above or below the slop sink.
- The washing machine should be filled to the highest water level. The garments to be washed should be added.
- The washing machine should be set for normal cycle, cotton/white or similar setting.
- The machine should be programmed for double rinse. If the machine will not automatically double rinse, a complete second cycle should be run without adding detergent or oxygenated bleach. Double rinsing helps remove any residual dirt and ensures detergent removal.
- The garments should be removed from the washing machine and dried by hanging in a shaded area that receives good cross ventilation, or should be hung on a line and a fan used to circulate the air.
- The washing machine is considered clean, like the clothing, at the wash cycle's end.

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6.1C Decontamination of Reusable Equipment

Contaminated reusable equipment (i.e. backboards, radios or electronic equipment, AED's, blood pressure cuffs, medical bags etc.), shall be cleaned only in the station's designated decontamination area. At no time should the contaminated reusable equipment be brought into the living areas of the fire stations. The fire crew shall remain out of service until decontamination is complete.

To avoid splash don gloves, safety glasses or shielded facemask before decontaminating reusable equipment. Leather structural firefighting gloves once saturated with blood or body fluid are not reusable and will need to be replaced.

The following procedure shall be used when decontaminating equipment.

- Fill one bucket with warm, soapy water.
- Fill second bucket with a bleach solution (1/4 cup of bleach and 1 gallon) of warm water **(or)**
- Use hospital disinfectant (e.g. Cavicide-spray bottle or liquid gallon container) disinfectant
- Wipe down non-disposable equipment with soap and warm water first then wipe it down a second time with a disinfectant.

Damaged equipment should be decontaminated before being sent in for repairs. Once the equipment has been decontaminated, clean any area within the apparatus that came in contact with the equipment during transport and all countertops or appliance surfaces utilized in the decontamination area with a bleach solution or hospital disinfectant (e.g. Cavicide). Mop the floor and empty the used disinfectant in the slop sink. Rinse the slop sink with 1cup bleach and at least 4 gallons of warm water to complete the decontamination process.

Disposal of Medical Waste

Section 6.2

Any waste generated during the station decontamination process that is dripping blood or body fluid should be placed in a (red) biohazard bag found inside the Medical Bag or located in each station decontamination area. Contaminated waste that is contaminated with dried blood, body fluid or other products of infectious waste may be disposed of in the trash.

The Mobile Command Van (MCV) driver should be contacted for all (red) bagged biohazard material and it will be transported to the Hennepin County Medical Center (HCMC) EMS garage or the Emergency Department (ED) for disposal. In the event that the MCV is unable to respond and transport the Fire Company involved in the response, should contact the Battalion Chief and once permission is obtained, transport the waste to Hennepin County Medical Center (HCMC) for disposal.

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PATIENT CONFIDENTIALITY

SECTION 7.0

The Minnesota Government Data Practices Act establishes categories and definitions for types of government kept data. This statute restricts release of certain types of data. In general, an employee or agent of the Minneapolis Fire Department should not read or otherwise have knowledge of specific information about a patient or employee which is not required for the employee or agent to perform his or her duties. Any data which the employee or agent is aware of should not be shared unless required by another employee in the performance of his/her duties. Employees or agents of the Minneapolis Fire Department are responsible for complying with the various rules, regulations, and laws governing the collection, creation, storage, maintenance, dissemination, and access to data.

- Patient information found in a medical record or created by a patient encounter is private.
- The emergency care provider may access the necessary information to do work activities.
- Do not discuss or share patient or employee information with another individual unless it is necessary for that individual to perform their work activities and they are authorized to have access to this information.
- Exercise discretion in conducting conversations or acting in a manner which would reveal confidential information while in public or semi-public areas.
- Prevent unauthorized persons from accessing and viewing patient or employee information by not leaving this information unattended in public or semi-public areas.
- The employee shall inform the commanding officer should he/she observe or hear an untrained or unauthorized person obtaining confidential information.
- Acknowledge that an employee may be disciplined in a manner consistent with the City of Minneapolis Human Resources Policies and Minnesota Government Data Practices Act, should that employee violate any of the above provisions.

TRAINING

SECTION 8.0

All employees who are at risk for potential occupational exposure will be trained regarding contact, droplet, and airborne pathogens prior to assignments where exposure may occur and at least annually, during work hours. The training approach will be tailored to the educational level of the employee, will be interactive, integrated into the employees EMS continuing education program offered while the employee is on duty and will include an opportunity for employees to have their questions answered by the trainer. Videos and other audiovisual aids may be utilized to assist in training. All initial infection control-training sessions may include a written test on the material covered. Refresher or update training may utilize scenario-based training to evaluate the student's comprehension of the material, with post-scenario session critiques. Each Company Officer is expected to reinforce exposure control measures through continuing education, drills, observation and feedback.

The Minneapolis Fire Department conducts training on infection control practices upon hiring, annually thereafter and whenever there are changes in tasks or procedures which the firefighters potential for occupational exposure.

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Initial or Cadet Infection Control Training

- Upon completion of Initial training, the firefighter shall:
 - Describe the policies and procedures, which are intended to minimize exposure to communicable diseases.
 - Review what procedure to follow in the event of an exposure incident.
 - List and know the limitations of PPE and the reasons for its use.
 - Name the steps to handle contaminated equipment, supplies and/or PPE.

- The following content will be included in the firefighter's Initial Infection Control Training:
 - Receive an explanation of the bloodborne and airborne pathogen standard.
 - Discuss disease origin, transmission and symptoms of the most common bloodborne, airborne, droplet and contact diseases.
 - Understand the MFD infection control plan and its implementation.
 - Learn procedures and tasks, which may expose firefighters to blood or other potentially infectious materials (OPIM)
 - Understand engineering controls and methods that prevent or reduce the risk of exposure to blood or OPIM
 - Understand the basis for selection of PPE and it's limitations.
 - Know where to locate, properly use, and dispose of PPE in the work place.
 - Demonstrate the proper decontamination, disinfecting procedures for equipment and/or PPE, including the disposal of biohazard waste.
 - Be familiar with the Hepatitis B vaccination program and the have the opportunity to participate or refuse the vaccination.
 - Be comfortable with the appropriate procedures to use in an emergency involving blood or OPIM.
 - Understand what procedure to follow if an exposure incident occurs.
 - Be familiar with the post-exposure evaluation and its follow up procedures.
 - Recognize warning labels and/or biohazards color-coding.

Annual Updates and/or Refresher Training

Update training will occur after changes to the infection control plan, and will cover all changes or additions to the plan. Refresher training will occur at least annually through the EMS continuing education program, and may be included with training on the updated plan.

Instructor Qualifications

The person conducting the training must be knowledgeable in the subject matter, especially as it relates to firefighters. S/he must be current in infection control issues as they relate to prehospital setting and provide an opportunity for a question and answer period in each training session.

Training Records

Training records will be maintained by the MFD Training Division for at least three years from the date on which training occurred. The following information shall be included on the training record:

- Dates and location of training sessions.
- Contents or summary of training sessions.
- Names and qualifications of trainer(s).
- Names and job titles of all persons attending.

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QUALITY CONTROL

SECTION 9.0

MFD is committed to the delivery of exceptional emergency medical care and the employees responsible for providing this service. In an effort to ensure this, the following quality controls shall be maintained:

- Observation of on-scene activities, ensuring that each employee takes the necessary and appropriate precautions against potential exposures to infectious materials, by supervisors.
- Inspection of station facilities for violations or rules, regulations or mandates as they relate to infection control, by supervisors.
- Evaluation and analysis of reported exposures to potentially infectious materials by the EMS Chief or his/her designee.
- An annual review and update of the exposure control plan.
- Training personnel in current infection control practices or procedures, ensuring that each employee is familiar with the contents of this plan.
- An on-going evaluation and critique of new equipment or techniques as they relate to the delivery of patient care and the prevention of infectious exposures.
- Staying current on issues as they relate to infection control and making any recommendations that might serve to improve the quality of this plan or the service we provide.

LABELS AND SIGNS
10.0

SECTION

Communication of Hazards

- All MFD employees will be informed of hazards through a system of color-coding and labeling, as well as, a training program (outlined above).
- Warning labels shall be affixed to containers of biohazard waste or contaminated equipment that can not be decontaminated and/or placed in a red biohazard bag or container.
- Labels shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color. The label shall have the biohazard symbol and the text **BIOHAZARD**. Red bags or red containers may be substituted for the warning labels.
- Area ambulances shall provide red sharps containers located in each ambulance and shall be utilized for all sharps disposal.
- It is the responsibility of each Captain to request the appropriate labels and signs from Stores and see that each of these are posted appropriately. These labels and signs are as follows:
 - **[WASH YOUR HANDS]** sign in the kitchen, bathrooms and EMS decontamination area or above the slop sink.
 - **[BIOHAZARD]** label for any container or equipment not clean prior to repair.
 - **[DO NOT SMOKE, EAT, OR DRINK IN THIS AREA]** sign for the decontamination room or area.
 - Use red **[BIOHAZARD]** bags for packing contaminated waste prior to transport to the HCMC EMS garage or Emergency Department for disposal.

MINNEAPOLIS FIRE DEPARTMENT

**ALL-HAZARD
PANDEMIC PLAN**

July 2009



APPENDIX I

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What Constitutes a Pandemic & Why is a Plan Necessary?

A pandemic is a global disease outbreak. A pandemic illness occurs when a new virus or bacteria emerges for which there is little or no immunity in the human population, causing serious illness and spreads easily person-to-person worldwide. The Minneapolis Fire Department (MFD) recognizes that communicable disease exposure is a hazard of this job and disease transmission is possible during any aspect of our emergency response, in-house operations or public safety responsibilities. This plan has been written to provide all members with the best available protections from occupational acquired disease during a public health emergency. The EMS Deputy Chief has been designated as the MFD Pandemic Response Coordinator 612-209-4512 and in their absence the Assistant Chief of Operations will assume this responsibility 612-751-3818. If a public health emergency declaration appears imminent or one has been declared, Fire Administration in consult and/or under the advice of our Physician Medical Director will activate this plan. This document is interim guidance and will likely change as dictated by the changing circumstances of the pandemic.

How Do Germs Spread Person-to-Person?

Viruses and bacteria are the organisms most commonly responsible for the spread of disease. Disease results from an invasion of a host (human) by one of these disease producing organisms. A communicable (or contagious) disease is one that can be transmitted (passed) from one person to another. A communicable disease-producing organism must be present for pandemic disease to exist. This organism or germ is transmitted person-to-person via the **BLOODBORNE**, **AIRBORNE** or **DROPLET** routes. **BLOODBORNE** diseases (e.g. hepatitis, HIV) are spread by direct contact with blood or body fluids of an infected person. To prevent disease transmission through contact, cover non-intact skin when touching blood or body fluids or wear gloves (wash hands after glove use, before eating or after going to the bathroom), prevent sharp injuries or splash by covering your eyes, nose or mouth with a mask and wear a pair of safety glasses. **AIRBORNE** diseases are transmitted by small 3-5 micro-droplets (referred to as **AIRBORNE**) or large droplets (referred to as **DROPLET**) of the disease-producing organism being expelled into the air by a productive cough or sneeze or by direct contact with infected bodily secretions. To prevent disease transmission through droplet spread, ask the patient to cover their cough or place a simple or oxygen mask over their nose and mouth if it will not interfere with their airway. First responders should cover their eyes, nose and mouth by using a simple mask for large droplet disease (e.g. Influenza) or particulate respirator (N95) mask for small droplet (e.g. Smallpox or TB) disease when working within 3 feet of the infected person or when performing suctioning, intubation, or assisting with aerosolizing procedures such as CPAP or nebulizer treatments and always wear gloves when touching wounds or contaminated surfaces.

The disease-producing organisms responsible for a pandemic illness may be new or never before seen in the community. Its specific disease-producing characteristics may be unknown or ever-changing creating a dynamic prevention strategy. Be patient, stay alert. Specific disease education, transmission guidance, treatment and/or (personal protective equipment) PPE recommendations will be provided by our physician medical director and/or the Minnesota State Public Health Department located at www.health.state.mn.us or the Centers for Disease Control at www.cdc.gov/. Pandemic information will be disseminated or updated as the situation unfolds.

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What are my Exposure Risks to Pandemic Illness at Work?

Fire Department personnel are at high risk of occupational exposure to illness anytime personnel are required to be in close proximity (within 3 feet) of sick people (e.g. EMS runs), or they are required to have repeated or extended contact with known or suspected sources (e.g. station living or assisting paramedics with hospital transport). Influenza for example, unlike most illness, is transmittable PRIOR to the onset of symptoms making it imperative that firefighters take precautions for ALL patient encounters if the prevalence of disease is high or the disease is severe. The MFD Pandemic Response Coordinator will monitor both national and state public health advisories to inform all fire departmental personnel of their exposure risk from the community.

How Could a Severe Pandemic Illness Affect the Fire Department?

Unlike natural disasters or terrorist events, a pandemic will be widespread, affecting multiple areas of the United States and other countries at the same time. A pandemic will also be an extended event, with multiple waves of outbreaks in the same geographic area; each outbreak could last from 6 to 8 weeks and waves of outbreaks may occur over a year or more. A pandemic could affect as many as 30-40% of the workforce during periods of peak influenza illness. Many employees will be absent because they are sick, they must care for sick family member, schools and day care are closed, they are afraid to come to work or the employee has died.

During this period there will be no vacation granted and MFD will staff utilizing a staffing grid (seen below). This grid reflects a 30% reduction in daily staffing. Should our daily staffing number drop below 74 the Duty Deputy Chief in consult with the Assistant Chief of Operations will determine which additional apparatus ride down or close. In addition our Fire or EMS responses may be modified (e.g. sending one Engine Company instead of one Engine/one Ladder to Freeway Personal Injury Accidents) to reflect our daily numbers.

When Fire resources are limited and prior to implementing "Level Red" triage protocols (see below) it may become necessary to assign a Deputy Chief to the 911 dispatch center in order to modify Fire responses or triage EMS calls. When EMS resources are limited and they are pending transports, it may be necessary for MFD personnel to staff the MFD Mass Casualty Incident/Rehabilitation (MCI/REHAB) Van (capable of transporting 12 stretcher patients or 10 seated) or the MFD "Big Red" Bus (capable of transporting approximately 30 seated patients). These resources will be activated (locally or regionally) as a mutual aid response under the direction of the Assistant Chief of Operations and in consultation with the EMS Operations Managers and the MFD Medical Director.

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Pandemic Operational Response Contingency Staffing Grid

DAILY STAFFING GUIDE

Revised 02-09

District 1

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
ENG 1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4
ENG 16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RES. 1	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	4	4	4	4	4	4	5	6	6	6	6
LAD 4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
LAD 11	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
MCV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	22	22	22	22	22	22	22	22	22	22	21	22	22	25	25	24	24	25	25	25	25	26	27	27	28	28

District 2

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
ENG 8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 22	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 27	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
LAD 5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	16	16	16	16	16	16	16	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19

District 3

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
ENG 5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3
ENG 12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 19	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
LAD 3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
LAD 2	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
SALVAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	16	16	16	16	16	16	16	16	16	16	20	20	20	20	20	23	24	24	24	24	24	24	24	24	24	24

District 4

	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
ENG 2	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4
ENG 11	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ENG 14	3	3	3	4	3	3	4	3	3	4	3	3	4	3	3	3	3	3	3	3	3	3	3	3	4	4
ENG 15	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
ENG 20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RES 9	4	4	5	5	4	5	5	4	5	5	4	4	4	4	5	4	4	4	5	5	5	5	5	6	6	6
LAD 10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	20	20	21	22	23	24	25	23	24	25	23	23	24	23	24	23	23	23	24	25	26	26	26	27	28	28

74 74 75 76 77 78 79 80 81 82 83 84 85 87 88 89 90 91 92 93 94 95 96 97 99 99

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Phone Triage Protocols:

Hennepin County Medical Center (HCMC) EMS is our [Home Base]. Typically HCMC EMS uses Medical Priority Dispatch System which relies on patient complaint protocols to help the Emergency Medical Dispatcher obtain information from the caller and send an appropriate response. In a pandemic LEVEL RED response category (see "LEVEL RED EMS Protocol") the Minneapolis Fire Department (MFD) Assistant Chief of Operations, MFD EMS Deputy Chief, HCMC EMS Ambulance Administration in coordination with the Medical Director and the Minneapolis Emergency Communication Center (MECC) Dispatch Supervisor will activate the [PANDEMIC EMERGENCY] nature code (seen below). The scope of any response intervention will be sufficient to ensure to the best of our ability that the EMS System continues to function and is prioritized to answer calls that pose a life safety threat.

PANDEMIC EMERGENCY

[PAN]

Definition: A medical emergency that occurs during a declared Pandemic outbreak. The Use of this PNC can only be authorized by the MECC acting supervisor or designee [Activate 911 pre-recorded message].

All illness-related medical emergencies will be assessed with this protocol when in effect.

ALWAYS USE COMMENTS WITH THIS CODE! NO EXCEPTIONS!

IF...	THEN...
A. Party is reporting a medical problem that is related to injury (i.e. TRAUMA).	A. Assess with normal protocol but be sure to advise the party that EMS response may be delayed.
B. Party is reporting a medical problem that is NOT related to injury (i.e. medical condition or ILLNESS).	B. Ask the questions listed under #3 below and dispatch as indicated per protocol.

Related SOPs: 2-XXX Pandemic Situation

911 Operator: Enter standard call details (refer to the Call Processing SOP) in addition to the following:

1. Nature and severity of the problem.
 - ✓ Patient is or was unconscious at time of 911 call – use **UNCON**
 - ✓ Ears, lips or fingers blue or gasping for breath (unable to talk) – use **SOB**
 - ✓ Chest pain with history of heart probs & pain constantly present – use **HEART**
 - ✓ Any severe bleeding (bright red squirting blood) – use **BLEED**
 - ✓ Pt. unable to talk normally, confused or moving arms/legs unevenly – **STROKE**
2. If any of the above is true, enter the call and transfer the caller to PAI. If PAI is NOT available consult the acting supervisor or continue to attempt to transfer.
3. Ask the caller if she/he has a fever, cough, sore throat, body aches, runny or stuffy nose, diarrhea or vomiting, chills or sweats, headache or sudden onset of sever pain. **If the caller answers "yes" to more than 2 of these questions, the caller should be transferred to 311** [Active 311 pre-recorded messages].
4. If the caller insists that their illness requires an EMS response, enter a call using this [PAN] nature code and include contact information to call back the caller if needed. Advise the caller that EMS services are severely affected right now by the pandemic situation and that response may be delayed.
5. If there are additional questions or you are unsure of the medical nature of the problems being reported, you may attempt to transfer the caller to PAI.

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Firefighter Screening:

Once a shift (upon arrival) each Fire Captain shall screen their assigned personnel for individual illness or family illness at home. Each house will be provided a list of screening questions specific to the pandemic illness along with thermometers to evaluate their assigned personnel for fever. The screening questionnaire (see APPENDIX A example for "H1N1 Novel Influenza A" form) will be provided by the Minnesota Department of Health (MDH), obtained and/or replaced through MFD Fire Stores. The screening form ONLY needs to be completed and submitted to Fire HQ when a firefighter is found to have a fever and 2 or more symptoms characteristic of the on-going pandemic (see "H1N1 Novel Influenza A" symptom sample list below).

The Captain or Acting Captain "Screener" will evaluate the employee for the following:

- Fever (100.4 F or higher)
- cough
- difficulty breathing
- sore throat
- weakness
- headache
- diarrhea
- vomiting
- runny or stuffy nose
- joint or muscle aches (body aches)

PREGNANT or IMMUNOCOMPROMISED FIREIGHTERS:

If you are pregnant, breastfeeding or undergoing chemotherapy let the Duty Deputy Chief or EMS Deputy Chief know and with a letter from your physician light duty will be provided to you.

Any firefighter with signs or symptoms consistent with the pandemic illness will be isolated (taken out of service) from the remainder of the crew. The EMS Deputy Chief or Deputy Chief of Personnel will be contacted for further follow up instructions to occupational health and/or the firefighter will be sent home ill. Treatment of the ill-firefighter with anti-viral medications or antibiotics may be recommended after consult with the Minneapolis Fire Department Medical Director, Occupational Physician and/or the Minnesota Department of Health 651-201-5414 or 1-877-676-5414 (24 hours) and as available, provided at no charge to the employee. Home quarantine (see "Isolation & Quarantine" instructions) may be necessary. Medications (e.g. anti-viral) are available from State and Federal stockpiles but may be used only for treatment of illness, not for prophylaxis (prevention) and will be provided according to directions from the Minnesota Department of Health and/or Center for Disease Control (CDC). Vaccinations (when available) will be encouraged and offered at no charge to the firefighter. Whether or not medications or vaccinations will be offered to firefighter's families will be determined by availability and access.

Firefighter Exposure Reporting

If a firefighter sustains a "direct" cough, splash or spit to their unprotected face (no mask, no safety glasses) and/or transferred blood or body fluid from a patient to their non-intact and unprotected skin, complete a Supervisor's Report of Injury (SRI). Include in the SRI, the name of the person or contact (referred to as the "source") believed to have made you sick or causing the exposure. If on an EMS run document the "source" name in the [NOTES] Section and write a brief description of the incident to include the words, "possible pandemic exposure" in the [COMMENTS] Section of the National Fire Incident Reporting (NFIRS) report. Exposures may be difficult to track given the contagiousness of a disease prior to the onset of symptoms and thus, firefighters would be allowed to work unless they exhibit symptoms of the pandemic illness.

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Isolation & Quarantine

Isolation refers to keeping sick individuals from exposing others – for example, a firefighter with a fever during a pandemic would be required to stay home and asked to minimize exposure to others. Quarantine refers to keeping individuals that may have been exposed under watch for symptoms and sometimes keeping them in a single location. There is no role for involuntary isolation and quarantine the recommendations for these are to help prevent further spread of illness.

Requests for “self-imposed-fire-house” isolation and quarantine to prevent taking illness home will be discouraged based on the fact that it doubles well-firefighter’s exposures. Additionally, fire stations are not equipped to handle long term firefighter isolation and quarantine.

If a firefighter becomes ill, responds poorly to treatment and/or treatment is unavailable, under the direction of the MFD Medical Director, the City Doctor and/or the Minnesota Department of Health, periods of isolation and/or quarantine may be necessary. Listed below are best “Home Isolation” practices in order to reduce the spread of disease to well family members.

Home Isolation Checklist

1. Limit physical contact between those who are sick and those who are not.
 - The ill household member(s) needs to be physically separate from non-ill persons living in the home. Pick one room in the house where the ill person(s) can stay for their entire infectious period. That is one day before clinically ill and two days after symptoms resolve (around 7 days). If more than one person in the home is sick all ill persons can share the same room. The ideal room for ill person(s):
 - has windows that open to increase air circulation.
 - gets natural light (UV light will often kill the causative agent)
 - has a door that closes.
 - doesn’t share bathroom space with well persons
 - One person in the home should be the designated caregiver; all others should have limited to no contact. The designated caregiver can bring meals, beverages and medicines to the room of the ill person.
 - Ill persons should not leave their room or the home during the period when they are most likely to be infectious. When travel outside the home is allowed and necessary (e.g. for medical care), the ill person should cover their mouth and nose when coughing and sneezing and should wear a surgical or procedure mask (not an N95). Types of masks to be used may depend on supply. Recommendations will be issued at the time of the event (see APPENDIX C for “Make a Simple Mask”).
 - If contact between infected and not infected cannot be avoided (e.g. during transport in a car), place a surgical or procedure mask over the nose and mouth of the ill person (the well person in the vehicle should wear an N95 when available), and open the windows to increase air circulation.
2. Contain the respiratory or wound secretions of the ill. All persons with signs and symptoms of a the pandemic illness regardless of presumed cause, should:
 - Cover their nose and mouth when coughing or sneezing and/or keep weeping wounds covered
 - Use tissues to contain respiratory secretions or dressings to cover wounds
 - Dispose of tissues or dressing materials in the nearest waste receptacle after use

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- Wash your hands after contact with respiratory/wound secretions and contaminated objects/materials.
 - Wear a simple mask (surgical mask – soft type) when in contact with others.
3. Protect the well with personal protective equipment (PPE) such as a mask (an N95 when available) and encourage frequent hand washing. The primary caregiver, or anyone who cannot avoid contact with the ill household member, can protect themselves by:
- Wearing an N95, surgical or procedure mask when in close contact (<3 feet) with an infectious person. Masks should be changed and discarded when they become moist. Wash hands or use alcohol based hand rub after touching or discarding as mask. Mask recommendations will be updated at the time of an event.
 - Wear gloves if there is likely to be contact with wound or respiratory secretions. Discard gloves immediately after use.
 - Wash hands with warm water and soap or when not available an alcohol-based hand rub or anytime after contact with a person who may be ill, after removing mask or gloves, or after touching items or surfaces that may be soiled.
4. Keep environment clean
- Tissues or waste (dressings) used by the ill person should be placed in a bag and disposed of with other household waste.
 - Laundry may be washed in a standard washing machine with warm or cold water and detergent. It is typically not necessary to separate soiled linen and laundry used by a sick person from other household laundry. Care should be used when handling soiled laundry (i.e. avoid “hugging” the laundry) to avoid self-contamination. Clean hands after handling soiled laundry.
 - Soiled dishes and eating utensils should be washed either in a dishwasher or by hand with warm water and soap. Separation of eating utensils for use by a sick patient is not necessary.
 - Environmental surfaces in the home can be cleaned using normal procedures and detergents or 1:10 bleach solution. An EPA registered hospital disinfectant can be used according to manufacturer’s instructions, but is not necessary. There is no evidence to support the widespread disinfection of the environment or the air.
5. Prevent illness among household members
- Persons who have not been exposed to pandemic illness and who are not essential for patient care or support should not enter the home while persons are actively ill with pandemic symptoms.
 - Household members should monitor closely for the development of symptoms and contact a telephone hotline such as the MDH hotline (www.health.state.mn.us) or their own medical care provider if symptoms occur.

The City of Minneapolis Public Health in conjunction with the Minnesota Department of Health (MDH) will update these home care recommendations should isolation and quarantine become necessary.

Mass Dispensing

In any biological event it may become necessary to provide all essential personnel with medications, vaccinations or cached PPE. In the metro-region we have developed a First Responder Distribution and Dispensing Annex using a “Hub & Spoke” style distribution system that can be utilized, when needed, to advance antibiotics to

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providers from local caches prior to the arrival of outside assets'. The licensed ambulance that serves your public service area is considered your "Home Base". The Minneapolis Fire Department's Home Base is HCMC EMS. Upon activation by the MDH the Metro 911 EMS Coordinator will notify each Home Base of the cache pick up location and a courier will be dispatched to retrieve the necessary drugs and/or supplies. Each Home Base is responsible for distributing medications and/or supplies to the public service agencies (Police, Fire, Dispatch) in their PSA. Depending on the pandemic disease-producing organism, immunizations or vaccinations (when available) may be offered. When that is the case, vaccination centers may be used over the "Hub & Spoke" distribution system as an alternative means for mass distribution.

In years past we have had you complete a paper version (**Appendix E**) of "First Responder Mass (Drug) Dispensing Form" (in the event computer access is not available, this form may be found on the M:/drive>Fire Shared Documents>EMS folder>Drug Form) when you came to EMS. This form is in the process of being replaced by an automated form designed to be fail-safe and confidential. This screening form is available on the [First Responder and Personnel who Perform Mission Critical Functions] website. It is a tool used for prescribing oral antibiotics to first responders and personnel who perform mission critical functions in the event of exposure to **Anthrax, Plague or Tularemia**. Please follow the instructions below to sign you and your family members up to receive drugs in event mass dispensing should become necessary:

First Responder Mass (Drug) Dispensing Form:

1. Click on the following link:

<https://www.responderdispense.org>

2. Sign up as a user on the left hand side. Enter your **EMPLOYEE NUMBER** as **USERNAME** and (work or home) **EMAIL** address.

3. In the **AGENCY** drop down list, select "Minneapolis Fire Department" (specify shift e.g. A, B or C Shift or Day Shift if you are an hour 8 a day employee, MECC if assigned to dispatch).

4. Enter your **FIRST** name, **LAST** name and choose your own **PASSWORD** unique to yourself.

5. Use XXXX as your **SIGN UP CODE** (located on M:/drive>Fire Shared Documents>EMS>Drug Form).

6. Click through the site & enter data for pertinent to yourselves and your household members. Use the **EDIT** tab to show your profile and the **UPDATE** button to fill out the questionnaire.

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If the need for mass dispensing antibiotics were to become necessary the Minnesota Department of Health (MDH) will look at our aggregate (Minneapolis Fire Department) profile and see how many doses of antibiotics (Doxy, Cipro or Amoxicillin) are needed per household. An MFD representative will be dispatched to the mass dispensing site to pick up our allotted amount and deliver our pre-screened number of each drug to the employee at their assigned stations.

Levels of Personal Protective Equipment (PPE) and Procedures

Guidance will be provided by the Center for Disease Control (CDC) and/or the Minnesota Department of Health (MDH) regarding the appropriate level of personal protective equipment (PPE) that will be necessary to protect you against the pandemic disease-producing organism. This information will be disseminated electronically or through interdepartmental mail from the Assistant Chief of Operations or the EMS Deputy Chief.

There are three levels of MFD PPE protection:

- **Hand**-This is the basic level of protection to include non-latex medical exam gloves. Gloves should be worn on every EMS call and/or anytime you anticipate touching patients their wounds, their body fluids or contaminated surfaces in their proximity. Wash your hands after every glove use, after the bathroom or before putting anything (cigarette, gum) in your mouth.
- **Face**-This is the second step in PPE protection and should be used in conjunction with the first or basic hand protection to include goggles or safety glasses and a face mask (MDH will provide specific mask guidance) to protect your eyes, nose and mouth. This level of protection should be worn anytime you anticipate splash, spit, splatter, cough or sneezing or while performing CPAP, suctioning, assisting with intubation, setting up a nebulizer treatment, rolling over and checking "one downs" or anytime you will be within 3 feet of a coughing, sneezing patient that is warm to touch or covered in full body rash.

MFD has shielded face masks and filter (N95) masks. In the event that N95's are limited it may be necessary to re-use masks (see APPENDIX B), decontaminate used masks using ultra-violet light and drying or you may be required to wear a simple face mask over the N95. If we can no longer get ANY masks (N95 or simple) it may be necessary to wear your SCBA or make our own (see APPENDIX C). No mask (N95, simple or home-made) should be reused once it is wet, visibly soiled or you are unable to get a good fit check).

- **FULL Body**-This is the highest level of protection and should be used in conjunction with the first (hand) and second (face) levels to include donning disposable coveralls (during body recovery or anticipated delivery) or wearing full turnout gear along with an N95 particulate respirator mask (when available). In the event N95 masks are not available and/or the pandemic disease producing organism requires airborne protection, you may be required to wear your SCBA.

Pandemic Supply Cache

The Minneapolis Fire Department has cached antibiotics for all its firefighters plus up to 10 family members, antiviral medications for 33% of its work force who may become ill and enough PPE (N95 masks, simple masks, shielded face masks, safety glasses, disposable sleeves, gowns, Tyvek coveralls, hand sanitizers, bio-safe lotions and disinfectants) for 3 months EMS calls and 100% compliance. The fact remains that during a pandemic (lasting as long as 18 months) we may exhaust our cache and replacement may be difficult or impossible. While the City of Minneapolis Public Health, Hennepin County Public Health and the Minnesota Department of Health have

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(PPE/medication) stockpiles that may be made available to public safety, it will be imperative to utilize PPE appropriately and adhere to safe work practices and procedures as recommended below or by the MDH.

Safe Work Practices & Procedures

- Pre-Response
 - Do NOT come to work sick.
 - Cover all open wounds.
 - Inventory personal PPE (must be able to cover eyes, nose, mouth, hands) & EMS bags.
 - Keep turnout clean (use station washers/dryers, do NOT use bleach).
 - Wash hands after going to bathroom or before putting anything into your mouth (chewing gum, smoking).
 - Keep station clean- vacuum carpets/upholstery daily, sweep/mop floors daily, wipe down all hard surfaces with disinfectant (especially common areas such as door knobs, railings, phone receivers, computer keyboards), do NOT share personal items or utensils, use paper towels to turn off faucets, elbows to cover coughs or open doors, discard used tissues in waste can that has a liner or flush down the toilet.
 - Change bed linen (sheets/pillow case) DAILY and air out mattress. May be required to wash your own linens in the event there is limited or no linen service.
 - Use ONLY your own blankets or a laundered blanket not yet used.
 - Keep a clean uniform and a pair of shoes in your locker and do NOT wear dirty uniform or work shoes home.
 - Keep at least 6 feet between your bed and the next. As weather allows, open the dorm room windows to encourage fresh air exchange.
 - Review city emails, intradepartmental memos and/or listen to AM Radio Test Page to learn about what level of PPE you need for the day.
 - Use rubber maid gloves and Cavicide or Bleach (1/4 cup bleach to 1 gallon water) for disinfecting contaminated equipment or hard surfaces or inanimate surfaces inside apparatus cab.

- Making-the-Response
 - Don the appropriate level of PPE for the day (identified in the AM radio test or via written and/or electronic intradepartmental communications).
 - Wear medical exam gloves whenever you make an EMS response or you anticipate meeting, greeting or touching the public or inanimate objects such as bed railings or door knobs.
 - ANYTIME you will be less than 3 feet of an individual (e.g. suctioning, intubation, CPAP, nebulizer treatments) cover your eyes nose and mouth (shielded face mask or safety glasses w/mask). Whether or not you use a shielded face mask or an N95 will depend on what level of PPE you have been instructed to use. This information will be dynamic. Pay attention to the AM MECC radio test and/or to intradepartmental written or electronic communications.
 - If you sustain a “direct” cough, splash or spit to their unprotected face (no mask, no safety glasses) and/or transferred blood/body fluid from a patient to their non-intact and unprotected skin IMMEDIATELY wash contaminated skin with soap and water (if available) or use waterless hand soap ASAP, flush your eyes, blow your nose, gargle your mouth out and at the end of the call return to the station for further decontamination and follow up instructions.
 - Instruct all patients to cover their cough, wear a surgical or procedure mask, or put them on an oxygen mask with O2 flowing appropriate.
 - Guidance may be given during the event to place a simple mask on all patients.
 - During transport assistance open ambulance box windows and do not re-circulate cab/box air.

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- Remove PPE and discard in ambulance trash containers prior to leaving the scene or in patient's trash containers. Identify and/or dispose of sharps in ambulance sharps containers.
- After-the Call
 - Any firefighter who sustained a "direct" cough, splash or spit to their unprotected face (no mask, no safety glasses) and/or transferred blood/body fluid from a patient to their non-intact and unprotected skin, wash your contaminated skin with soap and water or further flush your eyes, blow your nose or gargle, take a shower, don a clean uniform and wash the contaminated uniform in the station washer/dryers (hot water and detergent will kill the bacteria/virus). Complete a Supervisor's Report of Injury (SRI) to include the patient's name in the [NOTES] Section and write a brief description of the incident to include the words, "possible pandemic exposure" in the [COMMENTS] Section of the National Fire Incident Reporting (NFIRS) report. Monitor for signs and symptoms of pandemic illness such as: fever, cough, rash, difficulty breathing, sore throat, weakness, headache, diarrhea, fatigue, joint or muscle aches. Should you become ill, follow the instructions outlined in the section entitled, "Firefighter's Exposure Reporting" listed above.
 - Clean all non-disposable equipment or hard surfaces using Cavicide or bleach (ratio 1/4 cup bleach to 1 gallon water) while wearing gloves. Discard waste (unless DRIPPING blood or body fluid-then red bag and call MCV to transport waste to HCMC EMS garage for disposal) in trash can with liner.
 - Wash hands using soap and water, apply Bio-Safe lotion.
 - Restock your EMS bags and turnouts with PPE supplies.

This MFD All-Hazard Pandemic Plan is intended to supplement the existing MFD Infection Control Policy and not replace it. For the latest recommendation related to the on-going Pandemic Illness refer to the following web sites www.cdc.gov or www.pandemicflu.gov or www.health.state.mn.us.

LEVEL "RED" EMS PROTOCOLS:

During a pandemic event the Minnesota EMS Regulatory Board has identified conditions which may be used by EMS providers that trigger changes to operations based on resource availability. These conditions or LEVELS are as follows:





1. GREEN: Operations as usual.
2. YELLOW: EMS services are pending or not answering calls that normally would warrant a Code 3 response.
3. RED: EMS Services are pending or not answering calls for which there is a significant risk of death for the patient.

These standing orders will be used to provide the best pre-hospital care to the greatest number of people during an extreme situation. They will only be put into place when resources are defined by the system as "Level Red," which means EMS services are pending or not answering calls for which there is a significant risk of death for the patient. They do not supersede other protocols. You will be notified by MFD Assistant Chief of Operations or the MFD EMS Deputy Chief when this status has been activated.


When LEVEL RED protocols are in effect and the patient presents with complaint you will assess the patient's objective condition and triage him/her into the following categories:







	<ul style="list-style-type: none">○ provide homecare information
---	--

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	○ refer to a clinic or other medical destination
	○ refer to use of alternate transportation to a hospital, clinic or other medical destination
	○ transport by (and at the discretion of) law enforcement
	○ transport by ambulance to a hospital or other medical destination

Standing Orders


- A. If the patient's complaint or symptoms are not listed in these protocols, Paramedic or Fire Officer (in the event a Paramedic is NOT available) discretion is advised as long as the decision is not in conflict with SOP.
- B. During a Pandemic "Level Red," assess the patient, once it has been determined Ambulance transport  is necessary, the Fire Officer will notify MECC dispatch they have a CODE 3 transport, then proceed to treat and package the patient within their level of EMT-Basic scope of practice, pending transport arrival:





	1. Paramedic or Fire Captain's discretion – suspicion of critical illness/injury
	2. Altered vital signs (or age-specific abnormal vital signs), including any one of these: <ul style="list-style-type: none"> ○ Top number blood pressure < 90 ○ Pulse Ox < 92% ○ RR > 30 (or respiratory distress) ○ HR > 120, or delayed capillary refill
	3. Breathing: <ul style="list-style-type: none"> ○ Respiratory distress ○ Cyanosis, or pallor/ashen skin
	4. Circulation/Shock: <ul style="list-style-type: none"> ○ Signs or symptoms of shock ○ Severe/uncontrollable bleeding ○ Large amounts of blood (or suspected blood) in emesis or stool
	5. Neurologic: <ul style="list-style-type: none"> ○ Unconscious or altered level of consciousness ○ New focal neurologic signs (Stroke, etc.) ○ Status, multiple or new-onset seizure ○ Severe headaches – especially sudden onset or accompanied with neck pain/stiffness ○ Head injuries with more than brief loss of consciousness or continued neck pain, dizziness, vision disturbances, ongoing amnesia or headache, and/or nausea and vomiting
	6. Trauma:

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	<ul style="list-style-type: none"> ○ Significant trauma with chest/spinal/abdominal/neurologic injury deemed unstable or potentially unstable ○ Suspected fractures or dislocations that cannot be safely transported by private vehicle
--	--


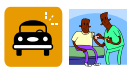

C. When resources during a Pandemic are “Level Red,” consider patients with the following presentations for:

- transportation by ambulance  - Note that many ‘transport by ambulance’ patients will not require emergency transport to the hospital – in which case, the crew may answer additional calls until the ambulance is full, or a critical patient is picked up, depending on system call volumes.
- transportation by alternate means:

private vehicle  or police  to clinic  or hospital. Except in very limited cases, the patient should NOT self-transport to the hospital/clinic, but could be driven by someone else.
- homecare  Give patient the “Homecare Forms” for their complaint and advise to contact physician if symptoms persist or worsen. The “Homecare Forms” will have information pertaining to their complaint and list ways of caring for themselves, as well as what to look for that would prompt self-transport to a clinic or hospital, or transport via ambulance to the hospital. Advise the patient that this does not restrict them from seeking care at a clinic or hospital on their own, should they desire. These forms will be provided through MFD Fire Stores during a pandemic event and prior to instituting LEVEL RED protocols.

Specific Patient Care Guidelines:





1. ABDOMINAL PAIN:

	<ul style="list-style-type: none"> ○ Pulsating mass (felt as a mid-line abdominal pulse) ○ Marked tenderness/guarding ○ Pain radiating into back and/or groin/inner thighs ○ Recurrent severe vomiting not associated with diarrhea
	<ul style="list-style-type: none"> ○ Recurrent severe vomiting associated with diarrhea – to emergency if associated with signs/symptoms of dehydration, to urgent care or clinic if no dizziness nor vital sign changes and normal exam
	<ul style="list-style-type: none"> ○ Intermittent vomiting and diarrhea without blood or evidence of dehydration





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2. ANAPHYLAXIS OR STINGS:

	<ul style="list-style-type: none"> ○ Patients who have had epinephrine administered for symptoms ○ Patients experiencing airway, low blood pressure or respiratory symptoms, after an allergy exposure
  	<ul style="list-style-type: none"> ○ Patients with itching after exposure – if rapid onset of symptoms, may require EMS transport; if delayed > 1hour, safe for private transport. All patients with history of anaphylaxis should be seen in emergency room if possible. Others may be seen in clinic or urgent care. EMS may administer Benadryl prior to clearing scene, up to 1mg/kg.

3. BACK PAIN:

	<ul style="list-style-type: none"> ○ Acute trauma with midline bony spinal tenderness ○ New onset of extremity weakness, numbness or tingling, other neurological changes, no control of urine or bowel, can not urinate, or bloody urine ○ Concern for abdominal aortic aneurysm ○ Pain radiating into abdomen, or groin/inner thighs
 	<ul style="list-style-type: none"> ○ Inability to ambulate/care for self
	<ul style="list-style-type: none"> ○ Concern for kidney stone, bloody urine

4. BEHAVIORAL:




	<ul style="list-style-type: none"> ○ Uncontrolled agitation requiring sedation by EMS
 OR  OR 	<ul style="list-style-type: none"> ○ Suicidal ideation – must be left with a responsible party
 OR 	<ul style="list-style-type: none"> ○ Other emotionally disturbed patients may be transported at law enforcement's discretion or by other means

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5. BLEEDING (LACERATIONS, ABRASIONS OR AVULSIONS):

	<ul style="list-style-type: none"> ○ Patient is on “Coumadin” or other blood thinner with significant ongoing bleeding or large hematoma
	<ul style="list-style-type: none"> ○ Significant lacerations after bandaging – heavily contaminated, bite-related, likely to involve foreign body, deep structure injury, sensory/motor deficit – to emergency room ○ Lacerations requiring simple repair – consider self-transport to physician’s office or urgent care center (however, some offices do not do procedures; patient will need to call ahead)
	<ul style="list-style-type: none"> ○ Abrasions or avulsions not requiring suturing or repair, no significant contamination. ○ Minor lacerations that do not require sutures

6. BURNS:

	<ul style="list-style-type: none"> ○ All chemical or electrical burns ○ Suspected inhalant burn ○ Significant third degree burns ○ Second degree burns to $\geq 5\%$ of body area ○ Second degree burns to face, mouth ○ Severe pain
	<ul style="list-style-type: none"> ○ Second degree burns to hands or feet, or to other location 1%-5% body surface area (size of patient’s palmer surface)
	<ul style="list-style-type: none"> ○ Second degree burns < 1% body surface area, non-critical location ○ First degree burns



7. CARDIAC ARREST:

	<ul style="list-style-type: none"> ○ Witnessed down time ≤ 10 minutes – follow usual resuscitation protocols
	<ul style="list-style-type: none"> ○ All others – report death to dispatch and return to service; do not wait for law enforcement or medical examiner arrival



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8. CHEST PAIN:

	<ul style="list-style-type: none"> ○ Chest pain or other signs or symptoms suspicious for cardiac ischemia, pulmonary embolus, or other life threat
	<ul style="list-style-type: none"> ○ Chest pain ongoing for >12 hours and a normal ECG ○ Chest pain with deep breath or movement (pulse ox and color normal) ○ Chest pain reproducible on physical exam to palpation is generally NOT concerning; unless ECG changes or known cardiac disease, unlikely to require treatment for acute coronary syndrome

9. DIABETIC:

	<ul style="list-style-type: none"> ○ Any patient on oral diabetes medications with low blood glucose – if transported by private vehicle must NOT drive self ○ Critical high glucose or signs of hyperglycemia/dehydration
	<ul style="list-style-type: none"> ○ Patients with typical hypoglycemia and explanation for low sugar (did not eat, etc.) can be left without medical control contact as long as family/friend is present and patient is eating

10. ENVIRONMENTAL:




	<ul style="list-style-type: none"> ○ Heat-related illness with any alteration in mental status (confusion, decreased LOC) ○ Frozen extremity ○ Hypothermia with AMS
	<ul style="list-style-type: none"> ○ Frostbite to face, hands, feet, other location suspected deeper injury, blisters, or frozen to touch
	<ul style="list-style-type: none"> ○ Heat-related illness without alteration in mental status – initiate external cooling at home under supervision of friends/family ○ Minor frostbite with tissues now soft, pink, no blisters, and NOT involving fingers

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11. ETOH/SUBSTANCE ABUSE:

	<ul style="list-style-type: none"> ○ Very decreased LOC or other confounding issues (head injury, suspicion of aspiration)
	<ul style="list-style-type: none"> ○ Otherwise may be transported at law enforcement's discretion
	<ul style="list-style-type: none"> ○ Patient may be left with a responsible individual who can assist the patient ○ Able to ambulate safely without assistance



12. EYE PAIN:

	<ul style="list-style-type: none"> ○ Impaled objects or possible penetrating injury to eye, or globe rupture ○ Chemical exposures (alkaline) – after decontamination and initial rinsing
 OR  	<ul style="list-style-type: none"> ○ Eye pain and/or acute changes to vision should receive transport for urgent evaluation to emergency department or other qualified clinic (e.g. eye clinic) ○ Chemical exposures (non-alkaline) – consult poison control for instructions; transport if symptoms / dangerous exposure
	<ul style="list-style-type: none"> ○ Chemical exposures (non-alkaline) – consult poison control for instructions; if no symptoms and limited toxicity likely, give instruction sheet

13. FEVER:

	<ul style="list-style-type: none"> ○ Fever plus altered mental status including confusion ○ Fever plus severe symptoms by paramedic assessment ○ Fever plus seizures, lethargy, stiff neck, rash, or blistering
 OR  	<ul style="list-style-type: none"> ○ ≤ 3 months with fever estimated at 100.5 degrees – to emergency room or clinic urgently ○ > 3 months with fever that does not reduce with Tylenol or Ibuprofen, or fever lasting more than 5 days – emergency room, urgent care, or clinic

14. HEADACHE:





	<ul style="list-style-type: none"> ○ With vision changes, lethargy, or page 1 qualifiers (fever, etc.)
	<ul style="list-style-type: none"> ○ New headaches for patient require assessment ○ Usual headaches for patient may require treatment

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15. MUSCULOSKELETAL INJURIES (ISOLATED):

	<ul style="list-style-type: none"> ○ Loss of distal pulses ○ Unable to effectively splint the affected part ○ Neurological changes or deficits (not moving extremities equal or numbness and tingling) ○ Open fractures ○ Displaced fractures or pain requiring injectable narcotics
	<ul style="list-style-type: none"> ○ Suspected fractures that are stable and do not require injected analgesia may be splinted appropriately and transported by private vehicle
 OR 	<ul style="list-style-type: none"> ○ Neck pain and back pain after MVC, that is delayed in onset and not associated with midline tenderness or neurologic symptoms



16. NOSEBLEED:

	<ul style="list-style-type: none"> ○ Signs of hypovolemia (weakness or dizziness upon standing) ○ Patient is on blood thinners (Coumadin, lovenox, clopidogrel, etc.) ○ Continued high blood pressure (SBP >200) in setting of nosebleed ○ Continued severe bleeding despite EMS efforts to control
	<ul style="list-style-type: none"> ○ All other

17. OB/PREGNANCY:

	<ul style="list-style-type: none"> ○ Imminent delivery ○ Pain in abdomen or back ○ Profuse vaginal bleeding ○ Third trimester (>24 weeks) bleeding ○ Pre/eclampsia – syncope, seizure, altered mental status, SBP≥140
	<ul style="list-style-type: none"> ○ All other



18. SWALLOWING PROBLEM:

	<ul style="list-style-type: none"> ○ Patient unable to manage own secretions due to pain or obstruction
	<ul style="list-style-type: none"> ○ All other



19. SYNCOPED:

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	<ul style="list-style-type: none"> ○ History of coronary disease or heart failure ○ Age =>55 ○ Pregnant ○ Chest pain, headache, or shortness of breath (or other symptoms concerning to paramedics)
	<ul style="list-style-type: none"> ○ Likely dehydration, with dizziness preceding the syncope ○ Other underlying medical conditions

20. TOXICOLOGIC (Overdose):

 	<ul style="list-style-type: none"> ○ Overdose or other toxic exposure – contact Poison Control and/or on-line medical control ○ If intentional, see Behavioral Health in this Appendix
--	--

21. VULNERABLE PERSON IN POTENTIAL DANGER:

	<ul style="list-style-type: none"> ○ EMS should assure that person will not be left in dangerous environment ○ If safe disposition and transport can be arranged and the injuries do not otherwise require medical evaluation, other transport may be appropriate
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APPENDIX I-A: Sample Captain Screening Form (e.g. H1N1 Novel Influenza A)

Suspect (H1N1) Novel Influenza A Screening Form

1. Symptoms

Fever or feverishness (chills) Yes No Highest temp: _____
Cough Yes No
Sore throat Yes No
Nasal congestion or runny nose Yes No
Date of first symptom onset ____/____/____

2. Is this patient:

Complaining of lower respiratory symptoms (chest pain, shortness of breath, cough)?
Contact to a confirmed or suspect case of (H1N1) Novel Influenza A virus infection?

IF patient has 2 or more symptoms THEN:

Complete form with Firefighter demographics and submit via interdepartmental mail to FIRE HQ

Firefighter/Patient's Last Name: _____ Patient's First Name: _____

Date of Birth ____/____/____ Age _____ Sex: M ___ F ___

Patient's Street: _____

City: _____ State: _____ Zip: _____

Patient Phone: _____ (cell/home/work) _____ (cell/home/work)

If patient in minor, name of parent or guardian: _____

Fire Captain/Submitter Information *CONTACT MFD EMS Deputy Chief 612-209-4512

Name (person completing form): _____ Phone: _____

Provider name (currently responsible for care): _____

Pager/cell: _____

Station Assignment: _____ SHIFT: _____

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APPENDIX I-B:

**Interim Respirator Re-Use Protocol for
H1N1 novel influenza (does not apply to TB patients)
May 4, 2009**

Reuse of respirator masks is current best practices of Metro Hospitals.

Any reuse is restricted to a single person: mask cannot be shared between employees.

A disposable N95 respirator can be reused with the following precautions

- Protective covering such as a medical mask or a clear plastic face shield may be worn over the respirator if tolerated to protect it from surface contamination
- The inside of the mask should not be handled with contaminated gloves or hands
- Mask should be carefully stored in a paper bag between uses

Application:

- Perform hand hygiene, put on clean gown and gloves, don N95 respirator and fit check.
- If needed, apply loose fitting surgical mask or clear plastic face shield over the N95 if tolerated. Put goggles on AFTER applying mask.



Removal:

- Remove gloves / gown and perform hand hygiene.
- Remove surgical mask/face shield using straps, avoiding contact with the front of the mask/shield. Discard the surgical mask by the straps if used. (Face shield re-use - disinfect exterior surfaces with disinfectant wipes)
- Remove N95 respirator by straps without touching inside of mask, place in a clean paper bag*, and again perform hand hygiene. You do not need a clean bag each time – may consider discarding bag when mask discarded
- Do not store paper bag/mask in patient rooms



Discard N95 when:

- **Damaged**
- **Defective** (failing fit-test, broken straps, etc)
- **Damp** (from provider respirations)
- **'Dirty'** – soiled or contaminated (directly coughed on or secretions from patient). Masks should be assumed to be 'dirty' after airway procedures such as intubation. May become dirty much faster if covering mask is not used

PAPR Use:

Personnel using hooded PAPRs as an alternative to N95 masks should disinfect unit with wipes after use and allow to dry. Airflow should be checked for adequacy every shift using manufacturer-supplied meter (float system) or described process. Canisters need only be replaced when airflow does not meet minimum requirements.



APPENDIX I-C: MAKE A SIMPLE MASK (CENTER FOR DISEASE CONTROL)

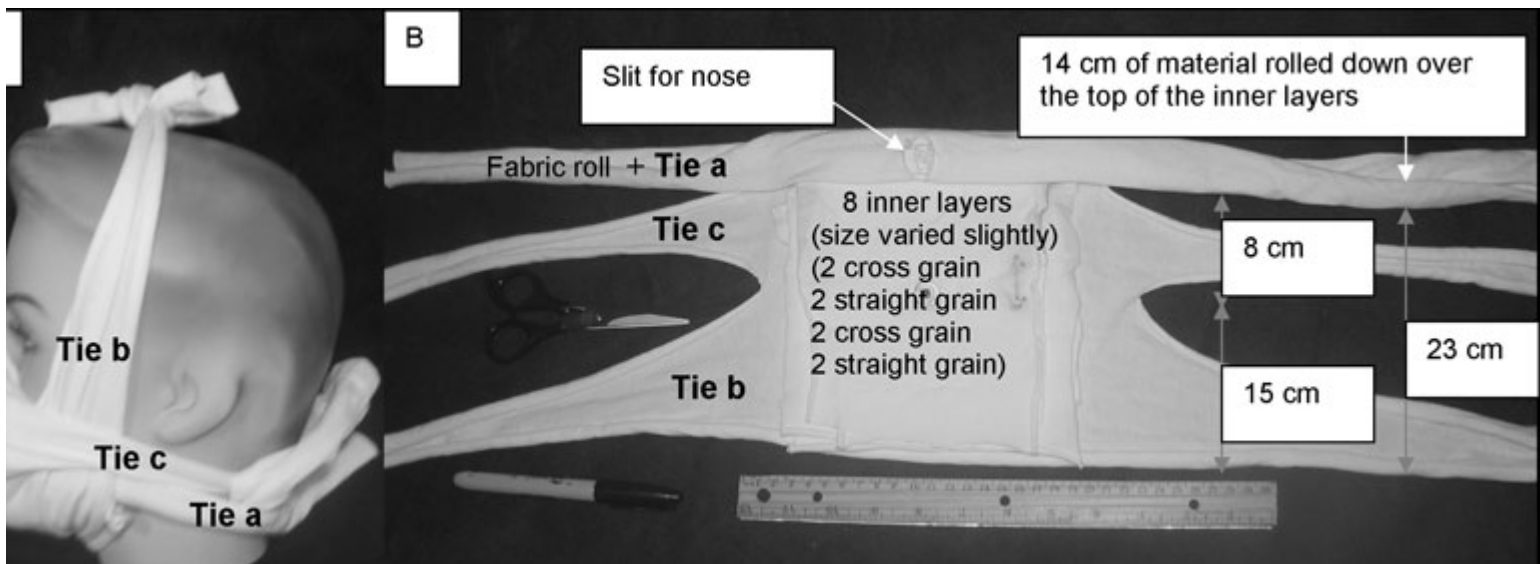
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Simple Respiratory Mask

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Figure. Prototype mask using “T”-shirt material. A) Side view, B) Face side. This mask consisted of 1 outer layer ($\approx 37 \text{ cm} \times 72 \text{ cm}$) rolled and cut as in panel B with 8 inner layers ($\leq 18 \text{ cm}^2$) placed inside (against the face). The nose slit was first placed over the bridge of the nose, and the roll was tied below the back of the neck. The area around the nose was adjusted to eliminate any leakage. If the seal was not tight, it was adjusted by adding extra material under the roll between the cheek and nose or by pushing the rolled fabric above or below the cheekbone. Tie b was tied over the head. A cloth extension was added if tie b was too short. Finally, tie c was tied behind the head.

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APPENDIX I-E

Client Screening - Anthrax, Plague or Tularemia Post-Exposure Prophylaxis											
Interim Version June 2007											
Date: _____		Not for use in a U.S. Postal Service Biodetection System exposure event.									
A Home Address: Street _____			City _____			State _____		Zip Code _____		County _____	
Phone #: _____					Cell Phone #: _____						
B Check all that apply: <input type="checkbox"/> I am picking up medications for myself. I agree to take them as prescribed. <input type="checkbox"/> I am picking up medications for others in my household or people who are unable to pick up their own medications. I am authorized to sign for all of these people, and I agree to provide medications and instructions to all of them. None of these people is receiving additional medications at other mass dispensing clinics. <i>I understand that the decision to take medications is voluntary. All of the information I have provided to the clinic is true, correct, and complete to the best of my knowledge.</i> X _____ Signature					C Enter the names and birthdates of all the people that you are picking up medication for. Put yourself on line 1. Use additional forms if you need to.						
					Self		Others		Self		Others
1.		2.		3.		4.		5.			
First name _____		First name _____		First name _____		First name _____		First name _____			
Date of birth: _____		Date of birth: _____		Date of birth: _____		Date of birth: _____		Date of birth: _____			
Age: _____ years _____ months		Age: _____ years _____ months		Age: _____ years _____ months		Age: _____ years _____ months		Age: _____ years _____ months			
D If you or anyone you are picking up for is on any of the medications listed below, put the initial(s) of the drug under the name of the person who is taking it. (Refer to medications list as needed)											
1. Taking? (C)=Coumadin (I)=Insulin (D)=Digoxin (P)=Probenecid (G)=Glyburide (T)=Tetracycline											
2. Allergic* to any Tetracycline antibiotics? Circle answer <i>*Allergic reactions include: hives, difficulty breathing, or wheezing.</i>											
3. Currently pregnant, breastfeeding, or under 6 months old?											
4. Taking? (A)=Accutane (P)=Phenobarbital (L)=Lithium (R)=Rifampin (M)=Methotrexate (T)=Tegretol											
5. If less than 75 pounds, list weight. _____ lbs											
6. Experiencing kidney failure and/or on dialysis? Circle answer											
7. Taking? (Ci)=Ciprofloxacin (R)=Ropinirole (Cy)=Cyclosporine (Th)=Theophylline (D)=Dilantin (Tz)=Tizanidine											
8. Allergic to? (Q)=Quinolones including Ciprofloxacin (P)=Penicillin including Amoxicillin											
STOP Staff Use Only					STOP Staff Use Only						
Doxy Adult (75 lbs and over) 100 mg twice a day Under 75 lbs: enter dose if different than 100 mg <input type="checkbox"/> Dosing chart given											
Cipro Adult (75 lbs and over): 500 mg once a day <input type="checkbox"/> 500 mg twice a day <input type="checkbox"/> Under 75 lbs: enter dose (mg/freq) if different <input type="checkbox"/> Dosing chart given											
Other Medication: _____											
Quantity <input type="checkbox"/> 7 days <input type="checkbox"/> 10 days <input type="checkbox"/> 14 days <input type="checkbox"/> 50 days <input type="checkbox"/> Other: _____											
Write in lot number or use label		Write in prescription (Rx) # or NDC # or use label		Lot		Rx #/NDC #		Lot		Rx #/NDC #	

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Pandemic Plan: ACKNOWLEDEMENTS, CONTRIBUTIONS & REVIEW:

1. Charlotte Holt, EMT-P, BGS, R.N., Deputy Chief of EMS, Minneapolis Fire Department-Pandemic Plan
2. Dr. Brian Mahoney, MD, FACEP, Medical Director MFD and HCMC EMS: HC EMS Council Pan Flu TF
3. Chris Kummer, NREMT-P, Hennepin County Medical Center, Communications Manager: Triage Protocols
4. Suzanne Gaines, Hennepin County Human Services & Public Health Dept: Staff, HC EMS Council Pan Flu TF
5. Christine McPherson, Minneapolis Emergency Communications Center, Shift Supervisor: Triage Protocols
6. Hennepin County EMS Council Pan Flu Task Force: Pandemic Influenza Appendix
7. Centers for Disease Control (CDC) <http://www.cdc.gov/> Infection Control Guidelines
8. National Highway Transportation Safety Admin.(NHTSA): EMS Pandemic Influenza Planning Checklist
9. Minnesota Department of Health (MDH) <http://www.health.state.mn.us> Infection Control Guidelines
10. Emergency Medical Services Regulatory Board <http://www.emsrb.state.mn.us> Pandemic Response Plan
11. Laura Eiklenborg, City of Minneapolis Health Emergency Preparedness: Mass Dispensing Software
12. Dr. John Hick, M.D., Hennepin Faculty Associates: Pandemic Response Plan & HC EMS Council Pan Flu TF
13. Mary Ellen Bennett, RN, MPH, CIC, Hennepin County Medical Center: Infection Control Guidelines

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Appendix II:
FEDERAL REFERENCES

AGENCY	NOTES
United States Fire Administration National Fire Programs 16825 South Seton Avenue Emmitsburg, MD 21727 http://www.usfa.fema.gov/	Developed <i>Guide to Managing an Emergency Service Infection Control Program</i>
U.S. Department of Health and Human Services Public Health Service, Centers for Disease Control 1600 Clifton Rd. Atlanta, GA 30333 http://www.cdc.gov	Conducts ongoing research Oversees National Prevention Information Network Publishes MMWR A-Z disease listing
Morbidity and Mortality Weekly Report Epidemiology Program Office MS C-08 Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333 http://www.cdc.gov/mmwr/	Weekly reports from CDC on communicable diseases and treatment recommendations.
National Highway Traffic Safety Administration Division of EMS Department of Transportation 400 7 th Street, N.W. Washington, D.C. 20590 http://www.nhtsa.dot.gov/people/injury/ems/Leaderguide/index.html	Developed <i>A Leadership Guide to Quality Improvement for Emergency Medical Services Systems</i>
U.S. Department of Labor Occupational Health & Safety Administration Office of Public Affairs, Room N3647 200 Constitution Avenue, N.W. Washington, D.C. 20210 http://www.osha.gov/	29 CFR Part 1910.1030 <i>Occupational Exposure to Bloodborne Pathogens; Final Rule</i> (http://www.osha- slc.gov/Preamble/Blood_data/BLOOD9.ht ml)

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Appendix III:

NATIONAL REFERENCES

AGENCY

Association for Professionals in Infection Control
1275 K. St. N.W., Suite 1000
Washington, D.C. 20005-4006
(202) 789-1890
<http://www.apic.org/>

NOTES

Published *APIC Text of Infection Control and Epidemiology*

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269-9904
(800) 344-3555 (to order documents)
<http://www.nfpa.org>

NFPA 1581, *Standard on Fire Department Infection Control Program*

International Association of Firefighters
Department of Occupational Health & Safety
1750 New York Avenue, N.W.
Washington, D.C. 20006
(202) 737-8484
<http://www.iaff.org>

Develops knowledge within the fire service so firefighters, paramedics and EMT's can recognize and control the safety and health hazards associated with the profession

International Association of Fire Chiefs
1329 18th St., N.W.
Washington, D.C. 20036
(202) 833-3420
<http://www.iafc.org>

Promotes infection control policies and practices

National Prevention Information Network
P.O. Box 6003
Rockville, MD 20850
800-458-5231
<http://www.cdcnpin.org/scripts/index.asp>

Formerly AIDS Information Clearinghouse. Distributes HIV/AIDS, STD, and TB information

LOCAL REFERENCES:

- Minneapolis Fire Department, Infection Control Policy (all references listed therein), 1995, 1998, & 2002.
- Hennepin Faculty Associates, Minneapolis Fire Department Medical Director, Dr. Brian Mahoney, M.D.
- Hennepin Faculty Associates, Dr. John Hick, M.D.
- Kathleen Steinmann, M.T. (ASCP), CIC, Hennepin County Medical Center