

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Basic, EMT – Paramedic**

**SMO: Pre-hospital Emergency Medical Care of Acute Febrile Respiratory Syndrome Patients including Suspected (SARS)**

**Overview:** The frequency that EMS personnel take care of persons with potentially contagious respiratory syndromes as well as a potential recurrence of an outbreak of Severe Acute Respiratory Distress Syndrome makes this policy necessary. This policy is intended to assist Emergency Medical Services (EMS) to manage the Acute Febrile Respiratory Syndrome patient as well as suspected SARS patients while ensuring the safety of patients and transport personnel. These recommendations are based on the CDC guidelines and on standard infection control practice and epidemiologic information regarding the transmission of SARS.

Acute Febrile Respiratory Syndrome as used in this protocol does not refer to a specific disease entity. Instead it refers to a spectrum of respiratory infections that could possibly be transmitted to EMTs and/or other persons. The precautions set forth in this protocol amount to utilizing a Universal Respiratory Etiquette Strategy. The guidelines set forth in this policy are really a reminder of precautions we should already be taking which will minimize exposure of EMTs to respiratory bugs such as Influenza, TB etc.

SARS is a viral respiratory illness caused by a coronavirus. SARS was first reported in Asia in February 2003. Over the next few months, the illness spread to more than two dozen countries in North America, South America, Europe and Asia. The SARS outbreak of 2003 was contained; however it is possible that the disease could re-emerge. SARS seems to be spread by close person-to-person contact. It is thought to be transmitted most readily by respiratory droplets. Droplet spread can happen when droplets from a cough or sneeze of an infected person are propelled a short distance (generally up to 3 feet) through air to the respiratory tract of persons who are nearby. For more detailed information on SARS go to the CDC website <http://www.cdc.gov/ncidod/sars/>

All EMS personnel are advised to utilize these precautions whenever they are transporting patients with high fever and respiratory illness. Currently the CDC recommends using “standard precautions (with eye protection to prevent droplet exposure), plus Contact and Airborne precautions. Respiratory protection using respirators providing at least 95% filtering efficiency (e.g., N-95) with appropriate fit-testing is recommended when there is a known SARS outbreak. It is the responsibility of each EMS agency to obtain and maintain all necessary personal protective equipment specified in this policy in order to provide protection to their EMS staff. This obligation includes the need to obtain and perform OSHA mandated fit testing on all personnel who may be required in the performance of their duties to wear N-95 masks in accordance with this policy.

In instances where there is no known SARS outbreak but EMS is dealing with a febrile patient with respiratory illness, we recommend the utilization of standard surgical masks in place of the N-95 mask. This substitution will be more cost effective while still helping to prevent the transmission of other respiratory infections to EMS providers.

## **INFORMATION NEEDED**

- Any incidence of SARS outbreak in area or world, utilize N-95
- History of travel to area where SARS outbreak is occurring, utilize N-95

### **OBJECTIVE FINDINGS**

#### **KNOWN SARS OUTBREAK**

- Patient temperature or history of temperature greater than 100.4 degree F [ > 38.0 deg. C]
- Symptoms of headache/bodyache
- Dry cough and mild respiratory symptoms which may proceed to pneumonia

#### **ACUTE RESPIRATORY SYNDROME**

- Patient temperature or history of temperature greater than 100.4 degree F [ > 38.0 deg. C]
- Cough productive or non-productive

### **TREATMENT**

#### **GENERAL CONSIDERATIONS:**

- Transport Febrile Respiratory Syndrome patients using minimum number of EMS personnel i.e. minimum legal staffing in the vehicle.
- Do not allow non-Acute Respiratory patients or passengers to accompany Acute Respiratory Syndrome patient in vehicle
- Contact number for CDC regarding concerns of movement of possible SARS patients CDC 24 hour response number (770)488-7100.

#### **INFECTION CONTROL MEASURES:**

- Hygiene is of utmost importance.
- Protective Equipment should be used throughout transport.
- Personal activities (including eating, drinking, handling of contact lenses etc) should not be performed during patient transport.
- Protective Equipment:
  - Disposable, non-sterile gloves must be worn for all patient contact.
  - Gloves should be removed and disposed of into biohazard waste bag after patient care is completed or when soiled or damaged.
  - Hands must be washed or disinfected with a waterless hand sanitizer immediately after removal of gloves.
  - Disposable fluid-resistant gowns should be worn during all direct patient care. Gowns should be removed and disposed of into biohazard waste bag after patient care is completed or when soiled or damaged.
  - Eye-protection must be worn in the patient-care compartment and when working within 6 feet of the patient. Corrective eye glasses alone are not appropriate protection.
  - N-95 (or greater) respirators should be worn by personnel in the patient-care compartment during transport. Personnel wearing respirators should be fit tested.
  - The door/window between the driver and patient care compartment should be closed before the suspected SARS patient is brought on-board. N-95 respirators should be worn by the driver if the driver's compartment is open to the patient-care compartment.

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Reviewed:

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EMS/ Region1 SMOs

- Oxygen delivery with non-rebreather facemasks may be used for patient oxygen support during transport.
- The patient may wear a paper surgical mask to reduce droplet production, if tolerated.
- Positive pressure ventilation should be performed using a resuscitation bag-valve mask, preferably one equipped to provide HEPA or equivalent filtration of expired air.
- Cough generating procedures should be avoided during pre-hospital care (e.g. , nebulizer treatments).

#### **WASTE DISPOSAL**

- Dry solid waste, e.g. used gloves, dressings, etc., should be collected in biohazard bags for disposal as regulated medical waste in accordance with local requirement at the destination hospital.
- Waste that is saturated with blood, body fluids should be collected in leak-proof biohazard bags or containers for disposal as regulated medical waste in accordance with local requirement at the destination hospital.
- Sharp items such as used needles or scalpel blades should be collected in puncture resistant sharps containers for disposal as regulated medical waste in accordance with local requirements at the destination hospital.
- Suctioned fluids and secretions should be stored in sealed containers for disposal as regulated medical waste in accordance with local requirements at the destination hospital. Handling that might create splashes or spills should be avoided.
- Suction devices should be fitted with in-line HEPA or equivalent filters in accordance with manufacturers' recommendations.

#### **CLEANING AND DISINFECTION AFTER TRANSPORTING AN ACUTE RESPIRATORY SYNDROME PATIENT**

- Compressed air that might re-aerosolize infectious material should not be used for cleaning the vehicle or reusable equipment.
- Personnel performing the cleaning should don non-sterile gloves, disposable gowns, and eye-protection.
- Patient care compartments and reusable equipment should be cleaned using an EPA registered hospital disinfectant in accordance with manufacturers recommendations.
- Spills of body fluids during transport should be cleaned by placing absorbent material over the spill and collecting the used cleaning material in a biohazard bag. The area of the spill should then be cleaned using an EPA registered hospital disinfectant.
- Contaminated reusable patient care equipment should be cleansed promptly in accordance with manufacturer's instructions.

#### **FOLLOW-UP OF EMS PERSONNEL WHO TRANSPORT SUSPECTED SARS PATIENTS**

- Personnel who have transported a suspected SARS patient and develop symptoms of SARS within the 10 day exposure period should be directed to seek medical evaluation and should be reported to the state health department and to the CDC at the number listed above.
- Personnel may continue working during the 10 day post-exposure period if they have no symptoms of fever or respiratory illness.

**Documentation of adherence to protocol:**

\_\_\_ Documentation of utilization of appropriate PPE utilized as specified in this policy

**PRECAUTIONS AND COMMENTS**

- Although there may not be a known SARS outbreak, it is expected that EMS personnel will treat every ACUTE FEBRILE respiratory case meeting criteria of this policy as if they could be contagious. By doing so, EMS personnel will benefit with reduced exposure and risk to develop respiratory infections such as Tuberculosis and Influenza. These disease entities are much more prevalent than SARS and pose a significant risk of transmission to EMS personnel.