



Recommended EMS Guidelines

Pandemic Influenza - Response

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Acknowledgements and Contributions

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Sample Template Guidelines:

This sample pandemic influenza guideline template can be used, edited and adopted by EMS Providers statewide to fit local planning and response guidelines. It is recommended the guidance is reviewed and approved by local medical direction, public health and emergency management to ensure preparedness consistency across local planning jurisdictions.

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Guideline Purpose:

Novel H1N1 Influenza (formerly known as swine flu) is a respiratory illness caused by a virus. State health officials are monitoring the Novel H1N1 Influenza (H1N1) situation. Based on the current status of H1N1 the following guidelines will help to facilitate a coordinated local and regional EMS response to an emerging H1N1 outbreak using the National Incident Management System (NIMS) and following guidance that has been established and directed by the Local Ambulance Service Medical Director in coordination with the Minnesota Department of Health (MDH), Minnesota Homeland Security and Emergency Management (HSEM), Local Public Health (LPH) and Local Emergency Management (LEM). These guidelines will be update as more Minnesota-specific outbreak information becomes available.

Current Definitions for H1N1 Include:

Definition of Influenza-Like Illness (ILI)

- A suspect case is defined as a person with influenza-like illness with a fever $\geq 100^{\circ}\text{F}$ ($\geq 37.8^{\circ}\text{C}$) AND cough and/or sore throat in the absence of another cause.

H1N1 Suspect Case Definition:

- A suspect case is defined as a person with the above symptoms

H1N1 Confirmed Case Definition:

- A confirmed case is defined as a person with influenza-like illness and laboratory-confirmed novel influenza A (H1N1) infection by one or more of the following tests:
 - Real-time RT-PCR
 - Viral culture

Medical Direction:

The ambulance service medical director in coordination with the ambulance service manager and local public health has authority and direction over guidelines developed and implemented for response to H1N1 pandemic outbreaks. The medical director will plan for EMS Resource Poor Situations which may include changes in patient care guidelines and/or denial of service when call volume overwhelms resources that are available. The Service Medical Director will approve any necessary modifications to patient care procedures during an influenza outbreak.

EMS Agency Staffing Considerations:

- ILI Calls from Staff - have a plan to determine what personnel are ill with ILI symptoms, (e.g., when personnel calls in sick, be able to ask yes/no –“do you have a fever / cough?” to identify ill employees and target personnel for possible anti-viral treatment). Track all ‘exposed’ and ‘ILI’ staff to the extent possible.
- Consider how non-response staff (office/billing/other) could work from home if needed.
- Consider how to adjust day/night staffing, shift types and duration, system status management pattern based upon call volumes.
- Consider that all personnel may be working under ‘work quarantine’ (being monitored for fever and symptoms and having to wear a mask at all times) considering their exposure risks should a pandemic occur.
- Can childcare/pet-care/eldercare be arranged for employees?
- Staff will need to be screened for symptoms at start of each shift and self-monitor during shifts.
- Consider alternative staffing if need would arise during Yellow or Red pandemic phases (Refer to Resource-Poor information in this guideline).

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Personal Protection During Response:

All EMS personnel should consistently practice standard infection control procedures including the use of personal protective equipment (PPE), personal protective measures, hand hygiene, cough and respiratory hygiene and vehicle/equipment decontamination regardless of the likelihood of an influenza situation. EMS agencies should adopt day-to-day infection control and decontamination procedures consistent with the most recent Center for Disease Control (CDC) and Occupational Safety and Health Administration (OSHA) guidance.

Infection control procedures and guidelines should at minimum follow all personal protection measures identified in these guidelines.

EMS Provider Definition:

For purposes of this section, “**EMS Providers**” means pre-hospital EMS, Law Enforcement and Fire Service First Responders.” EMS providers' practice should be based on the most up-to-date H1N1 Novel Influenza clinical recommendations and information from appropriate public health authorities and EMS medical direction.

Personal Protection Equipment and Measures When Providing Patient Care:

During all patient encounters **EMS Providers** are encouraged to practice standard infection control procedures including wearing gloves, eye protection and surgical, N-95 or commercially purchased masks (if patient symptoms warrant the mask). Mask use should be based on current guidance provided by MDH, the CDC or OSHA. Mask recommendations may change based on the current status of H1N1 in Minnesota. EMS providers are encouraged to limit droplet contamination of symptomatic patients. EMS responders may determine that using a mask on the patient is most appropriate.

The following **Personal Protective Equipment (PPE) and Measures** are recommended for all medical responses and patient care encounters and for patients that meet suspected H1N1 case definition. Personal Protection Equipment should be based on the level of patient care involvement that an EMS Providers will have:

- Maintain **Distance** between the **EMS Provider** and the **Patient** during the initial situation evaluation.
- **Gloves** at all times and specifically when touching blood, body fluids, secretions, excretions, mucous membranes, and open skin/wounds. Gloves should be changed often depending on the level of involvement the responder has with caring for the patient.
- Wear a **Mask** (surgical mask, N-95 or commercially purchased masks) and **Eye Protection** or a **Face Shield** to protect mucous membranes of the eyes, nose, and mouth during patient care activities that are likely to generate **splashes or sprays of blood, body fluids, secretions, and excretions**.
- Use a clean, fluid-resistant **Gown** to protect skin and to prevent soiling of clothing during patient care activities that are likely to generate **splashes or sprays of blood, body fluids, secretions, and excretions**.

Patient Care/Transport Considerations During an H1N1 Outbreak:

- Determine when screening questions for pandemic influenza will be asked (e.g.; fever/respiratory symptoms are automatically asked). Determine what screening criteria might be applied to pandemic influenza calls.
- Assure understanding of destination hospital for initial case/cases and assume closest hospital transport rules would be invoked during widespread outbreak.

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- Consider authority/latitude crews will have in denying service once on-scene if call acuity does not warrant transportation in relation to calls pending.
- Consider that transports may be to non-hospital facilities depending upon acuity of patient condition (may be routed to flu centers, etc).
- Consider whether you would 'pool' certain calls (e.g.; pick up several patients in a given geographic area and transport together to nearest facility as long as they are stable).
- Consider potential security needs of EMS if civil unrest develops.

Procedure Considerations During Patient Transport:

At this time there are no recommended changes to current patient care protocols/guidelines. However, the following should be considered when doing procedures that are consider as aerosol-generating. Avoid the following aerosol-generating procedures during transport, unless medically essential or you are able to filter exhaled gases. Aerosol-generating procedures include: suctioning, intubation, nebulization, BiPAP/CPAP. These procedures should be done prior to moving the patient into the enclosed ambulance for transport, if possible.

Personal Hygiene After Contact with Patient having Suspected H1N1:

The following guidance is recommended for **EMS Provider Hand Hygiene** during and after patient care is completed.

- It may be necessary to clean hands between tasks and procedures on the same patient to prevent cross-contamination of different body sites.
- Clean hands immediately after gloves are removed, between patient contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.
- Clean hands after touching blood, body fluids, secretions, excretions, and contaminated items, whether or not gloves have been worn.
- Perform hand hygiene by using an alcohol-based hand rub (unless hands are visibly soiled) or wash hands with soap and water.

Vehicle and Equipment Cleaning Procedures:

Locally established procedures for transport vehicle and equipment cleaning procedures should be used. The Center for Disease Control (CDC) does have vehicle and equipment guidance available at: http://www.pandemicflu.gov/plan/healthcare/cleaning_ems.html

Vehicle and equipment cleaning guidance may be modified based on the current status of H1N1 and should be reflected in an ambulance services operational procedures specifically "maintaining ambulance and equipment."

EMS Resource Coordination Considerations During H1N1:

During an H1N1 outbreak EMS agencies should utilize mutual aid per usual agreements. If mutual aid resources are insufficient, or the EMS resource needs are large enough to require mutual aid regionally or statewide the ambulance service should contact the State Duty Officer (1-800-422-0798). During Resource-Poor situations local medical direction and service operations personnel will coordinate and implement adaptive response policies and patient care protocols/guidelines.

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Dispatch / Call Triage:

EMS providers, medical directors, local public health and local emergency management will coordinate with local Public Safety Answering Points (PSAPs / Dispatch Centers) to implement procedures for response when EMS service requests overwhelm resources available for EMS response. Coordination will include but is not limited to:

- Mutual aid requests and agreements.
- Assign single-agency response for certain calls (e.g.; first responders only on motor vehicle accidents unless injuries requiring EMS transport confirmed) to reduce burden on strapped agencies.
- Denial of service for certain calls (see template resource poor patient care and transport guidelines below) to be tiered/prioritized depending upon need and resource availability.
- Auto-answer for very high call volumes (may divert some calls to other resources based on need at the time – record appropriate information for callers to hear if dispatchers are all busy).
- Requests for Regional or State assistance.
- Consider the following planning tool developed by the US Department of Transportation: Preparing for Pandemic Influenza: Recommendations for 9-1-1 Personnel & Public Safety Answering Points (PSAPs):
<http://www.nhtsa.gov/people/injury/ems/PandemicInfluenza/PDFs/Task%206.1.4.2Lo.pdf>
- Suggested PSAP/Dispatch Algorithm during H1N1 Resource Poor Situations:
<http://www.nhtsa.gov/people/injury/ems/PandemicInfluenza/PDFs/Figure1.pdf>

EMS H1N1 Pandemic Phases:

EMS PSAP/Dispatch algorithm has been based on three (3) phases during an H1N1 Pandemic Influenza outbreak. The phases include:

- **GREEN PHASE – Resources Adequate**
- **YELLOW PHASE – Resources Inadequate (Over Capacity - But Not Overwhelmed)**
- **RED PHASE – Resources Overwhelmed**

Note: EMS providers must be in regular communication with local medical direction, public health, emergency management, PSAP/Dispatch Centers on current status of EMS resources and staff that are available for response to help determine the current response phase (Green, Yellow, Red) and the need to implement Resource Poor policies and altered level of patient care and transportation plans.

Guidance and Recommendations for Resource-Poor Situations:

The Hennepin County – EMS Pandemic Influenza Response Task Force (HC-EMS Task Force) has developed a plan for altered patient care and transportation protocol/guidelines that could be implemented during a Pandemic Influenza Red Phase (Resource Poor Situation), when local and mutual aid resources and staff resources are overwhelmed.

Suggested Guidance When EMS has been determined to be in “Red Phase”:

http://www.hcmc.org/education/ems/documents/Pandemic_Influenza_Appendix_Approved_4-9-09.pdf

Note: The above **Red Phase** patient care and transport protocol/guidelines were approved by the **HC-EMS Task Force** on April 9, 2009. The HC-EMS Task Force has submitted these

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protocol/guidelines for review by the Minnesota Department of Health for approval in accordance with Minnesota Statutes § 12.61. The EMSRB-Medical Direction Standing Advisory Committee and EMSRB have reviewed the patient altered level of care protocols/guidelines that have been developed by the **HC-EMS Task Force** and are recommending these guidelines/protocols as a template that could be used by medical directors or jurisdictions for implementation during **Red Phase Pandemic** situations. In most cases, the altered level of care guidelines would only be implemented in the event a State of Emergency was to be declared. EMS providers will be notified by the EMSRB when a State of Emergency has been declared in Minnesota related to an H1N1 Influenza Pandemic situation.

Suspension of EMS Requirements during a Declared Disaster

The EMSRB under the authority of Minnesota Statutes, section 144E.266 authorizes ambulances services to operate during declared disasters in ways not authorized under normal operations. This could include variations in crew configurations, tiered response, or other requirements that might facilitate operations during a major pandemic type event. Information about any such special authorizations would be communicated to EMS providers using various emergency communications systems.

During this time of extensive disaster preparedness planning, the EMSRB would allow for suspension of certain ambulance requirements during legally declared disasters. The following legislation was enacted during the 2005 session and became effective August 1, 2005. The requirements would be applicable to a declaration during pandemic influenza outbreak. Link to the statute is: <https://www.revisor.leg.state.mn.us/statutes?id=144E.266>

Additional Resources for H1N1 and Pandemic Influenza Guidance and Planning are provided on the EMSRB Website at the Following Link:

http://www.emsrb.state.mn.us/docs/Influenza_Preparedness_Documents-193.htm

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