

EMERGENCY MEDICAL SERVICES AUTHORITY

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**Interim Emergency Medical Services (EMS) Specific Guidance #4
Guidance and Recommendations for Local EMS Agencies and EMS Providers for
2009-10 Novel H1N1 Influenza A (2009-10 Influenza or Swine Flu) Response
January 14, 2010**

To date, the 2009-10 Novel H1N1 Influenza A (2009-10 H1N1 Influenza or Swine Flu) response remains fluid and subject to rapid change. Additionally, the EMS Authority recognizes that each local EMS agency (LEMSA) may have a different approach based upon the number of confirmed or suspected cases within their jurisdiction.

CURRENT STATUS

International:

On June 11, 2009, the World Health Organization (WHO) raised the level of 2009-10 H1N1 Influenza pandemic alert to phase 6. A phase 6 represents a sustained community-level transmission of the virus taking place in more than one region of the world. On October 24, 2009, President Obama signed a proclamation declaring the 2009-10 H1N1 Influenza pandemic a National Emergency. The term pandemic identifies the influenza virus as new to human beings; more importantly, the virus has appeared, is spreading, and is causing disease in many parts of the world. Globally, the 2009-10 H1N1 Influenza is considered moderate in severity. Additional international information can be obtained from the World Health Organization at www.who.int.

National:

This new virus was first detected in people in the United States in April 2009. On April 26, 2009, the Secretary of Health and Human Services declared a public health emergency in response to the 2009 H1N1 influenza virus [http://www.hhs.gov/secretary/phe_swh1n1_april_2009.html]. The Secretary has renewed that declaration twice, on July 24, 2009 [http://www.hhs.gov/secretary/phe_swh1n1.html], and October 1, 2009. On October 24, 2009, President Barack Obama signed an emergency declaration for H1N1 [<http://www.whitehouse.gov/the-press-office/declaration-a-national-emergency-with-respect-2009-h1n1-influenza-pandemic-0>]. The Centers for Disease Control and Prevention (CDC) identifies 2009-10 H1N1 Influenza as a new influenza virus causing illness in people. This virus is spreading from person-to-person worldwide, probably in much the same way that regular seasonal influenza viruses spread. Unlike the seasonal flu, however, the 2009-10 H1N1 Influenza has caused greater disease burden in people younger than 25 years of age than older people.

The seasonal flu varies in terms of timing, duration, and severity for each infected person. Seasonal influenza can cause mild to severe illness, and at times can lead to death. Each year in the United States, 36,000 people on average die from flu-related complications, and more than 200,000 people are hospitalized from flu-related symptoms. Of those hospitalized,

20,000 are children younger than 5 years old. Over 90% of deaths and about 60 percent of hospitalizations occur in people older than 65.

The Centers for Disease Control and Prevention (CDC) identifies 2009-10 H1N1 Influenza as a new influenza virus causing illness in people. In April 2009, this new virus was detected in people in the United States. This virus is spreading from person-to-person worldwide, probably in much the same way that regular seasonal influenza viruses spread. Human infections with 2009-10 H1N1 Influenza are ongoing in the United States. Most people who have become ill with this new virus have recovered without requiring medical treatment. The CDC routinely works with states to collect, compile, and analyze information about influenza, and has done the same for the new 2009-10 H1N1 Influenza virus since the onset of the outbreak. This information is presented in a weekly report called [FluView](#). Additional national information can be obtained from www.cdc.gov/h1n1flu.com.

California:

On April, 28 2009, Governor Arnold Schwarzenegger proclaimed a State of Emergency to support and facilitate the state health departments' response to the 2009-10 H1N1 Influenza outbreak [<http://www.gov.ca.gov/proclamation/12148/>]. On October 6, 2009 Governor Arnold Schwarzenegger issued Executive Order S-22-09 (EO) to support and facilitate California's aggressive approach to addressing the spread of the 2009-10 H1N1 Influenza [<http://www.gov.ca.gov/index.php?/press-release/13476/>]. The Governor's EO ensures the state has the flexibility to respond to a potential flu crisis by renewing the ability for departments to cut through contracting red tape to obtain goods and services to fight the spread of the H1N1 virus.

Due to the pandemic nature of the 2009-10 H1N1 Influenza, on October 24, 2009 the California Department of Public Health (CDPH) ceased displaying confirmed and probable cases to displaying the provisional number of severe cases (severe cases, Intensive Care Unit cases, and deaths) in California by local Health Jurisdictions. Additional information can be obtained from www.cdph.ca.gov/data/statistics/Pages/H1N1FluDataTables.aspx.

CDPH continues to perform surveillance and provides testing (polymerase chain reaction [PCR] testing for influenza, and confirmatory testing for 2009-10 H1N1 Influenza), guidance and assistance to our local public health partners. Additional information can be obtained from <http://www.cdph.ca.gov/data/statistics/Pages/H1N1FluData.aspx>.

Initially, in the fall of 2009, the 09-10 H1N1 Influenza vaccine arrived in California in small amounts. More vaccine will continue to arrive weekly throughout the fall and early winter months. Please monitor information from your LEMSA and local health departments to find out when and where the 09-10 H1N1 Influenza vaccine will be available in other areas. Additional information can be obtained from <http://www.cdph.ca.gov/HealthInfo/discond/Pages/H1N1Vaccine.aspx>.

RECOMMENDATIONS TO LOCAL EMS AGENCIES

This is a rapidly evolving situation and there continues to be additional information available to assist EMS in identifying potential patients, protecting EMS personnel, providing excellent patient care, and participating in California's public health process.

The Emergency Medical Services (EMS) Interim Specific Guidance #4 addresses important EMS issues related to the current 2009-10 H1N1 Influenza response. We encourage local

EMS agencies (LEMSAs) to review this document for local system application. The information contained in this document is intended to complement existing guidance for healthcare personnel from the CDC and OSHA.

The EMS Authority has reviewed the following publications:

August 5, 2009 *Interim Guidance for Emergency Medical Services (EMS) Systems and 9-1-1 Public Safety Answering Points (PSAPs) for Management of Patients with Confirmed or Suspected Swine-Origin Influenza A (H1N1) Infection* from CDC retrieved from http://www.cdc.gov/h1n1flu/guidance_ems.htm

October 14, 2009 *Questions and Answers about CDC's Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel* from CDC retrieved from http://www.cdc.gov/h1n1flu/guidance/control_measures_qa.htm

November 5, 2009 *Employer Guidance: Reducing Healthcare Workers' Exposures to the 2009 H1N1 Virus* from Occupational Safety & Health Administration (OSHA) retrieved from <http://www.osha.gov/h1n1/healthcare.html>

As the implementation of Phase 6 of the Pandemic Alert ensues, the following EMS-related recommendations are provided to the LEMSA Administrator and Medical Director for consideration when addressing the needs of its EMS community during this public health emergency:

Dispatch:

As part of a coordinated, community-wide strategy, Public Safety Answering Points (PSAPs) and other emergency call centers may consider using modified caller queries and interrogations containing a specified influenza symptom set. In some cases, national dispatch protocol tools have been developed to prioritize Influenza-like illness (ILI)-type responses. LEMSAs could enable ILI-specific responses when possible.

It is important for the PSAPs to question callers to ascertain if anyone is possibly infected with an ILI or the 2009-10 H1N1 Influenza virus, if there is a possible risk to EMS personnel prior to their arrival at the incident location, and to ensure an appropriate level of EMS resource response. An Emergency Medical Dispatcher (EMD) should interrogate callers for signs or symptoms of ILI or the 2009-10 H1N1 Influenza. The symptoms of 2009 H1N1 flu virus in people include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people may have vomiting and diarrhea. People infected with the flu, including 2009 H1N1, may have respiratory symptoms without a fever. Severe illness and death have occurred as a result of illness associated with this virus. Additional information such as transmission, incubation period, clinical findings, complications, high risk groups for complications, medical care, virus testing, reporting, and antiviral chemoprophylaxis can be found within *Interim Guidance for Clinicians on Identifying and Caring for Patients with Swine-origin Influenza A (H1N1) Virus Infection* from CDC at <http://www.cdc.gov/h1n1flu/identifyingpatients.htm>.

A data collection mechanism (preferably real-time) should be in place to obtain this information. Comparison of this data with actual EMS patient care record data and ultimately with hospital outcome data will result in a complete patient record. The development of this system should be developed under the direction of the LEMSA in collaboration with public health and EMS dispatch and provider agencies.

Patient Assessment:

Due to the pandemic nature of 2009-10 H1N1 Influenza and the CDC and OSHA documents referenced above, EMS healthcare providers should begin assessment for ILI symptoms six feet from the patient. If ILI symptoms are present then the healthcare provider should don a fit-tested N95 respirator and local policy appropriate droplet precautions personal protective equipment (PPE).

EMS Surveillance:

The EMS Authority is currently working with select LEMSAs and select EMS providers with real-time electronic data systems to monitor EMS transports with suspected ILI. Provider impression data for this surveillance includes the following symptoms: respiratory distress, fever, gastrointestinal problems (nausea, vomiting, and/or diarrhea), malaise, and other flu-like impressions that may be collected. This data will provide us with current snapshots of how the EMS system may be affected by the current 2009-10 H1N1 Influenza response.

LEMSAs with electronic data systems may consider utilizing their system to provide ILI response data. The National EMS Information System (NEMSIS) data dictionary provides data elements that may be modified to fit the need for EMS surveillance:

- E 23_08 *Required Reportable Conditions* – while this element is used for reporting federal and/or state regulated conditions, it may be modified to include a field value of “ILI”.
- E23_09 *Research Survey Field* – this element is designed to be modified to fit the needs of a system to collect additional documentation on any EMS issue.

For those EMS systems utilizing NEMSIS *Gold* compliant software, check with the vendor on the electronic availability of these data elements and potential modifications. If mechanisms exist, consider sharing EMS and 9-1-1 data with your local public health department as part of a comprehensive surveillance system.

Personnel Protective Equipment:

LEMSAs should ensure that all emergency and non-emergency providers have sufficient types and quantities of Personal Protective Equipment (PPE) for their personnel to meet the needs of the November 5, 2009 *Employer Guidance: Reducing Healthcare Workers' Exposures to the 2009 H1N1 Virus* from Occupational Safety & Health Administration (OSHA) available at <http://www.osha.gov/h1n1/healthcare.html>

Fit-Tested N95 Respirator Concerns:

It is recommended to have a fit-tested N95 respirator. Ideally, a fit-tested N95 respirator should be disposed of as infectious medical waste in any situation where an EMS responder feels the mask has potentially been contaminated. PPE, including fit-tested N95 respirator, should be removed in such a manner as to prevent potentially contaminated material from the PPE coming into contact with the rescuer or any other person surface. Refer to the specific manufacturer's instructions for the proper application and removal of fit-tested N95 respirator and all other PPE.

Patients with suspected ILI symptoms should have surgical masks placed on them, if tolerated.

Estimating Fit-Tested N95 Respirator Use:

A common question posed is, “How do I determine the appropriate stock of fit-tested N95 respirator for EMS personnel”? A proposed calculation is: number (S) of staffed ambulances and/or first responder units, times number (P) personnel per ambulance and/or unit, times

number (F) estimated ILI runs a day. This number (F) can change based on your Medical Director's determination. To calculate fit-tested N95 respirator use by number of ILI contacts (with one mask per contact) estimate calls per provider.

$(S) \times (P) \times (F) =$ appropriate stock of fit-tested N95 respirator for EMS personnel

Cleaning EMS Transport Vehicles after Transporting a Suspected ILI Patient:

The following general guidelines are for cleaning or maintaining EMS transport vehicles and equipment after transporting a suspected or confirmed ILI patient. This guidance may be modified, and additional procedures may be recommended by the CDC as new information becomes available.

The basic components of effective environmental management of influenza are routine cleaning with soap or detergent and water to remove soil and organic matter, followed by the proper use of disinfectants. Reducing the number of influenza virus particles on a surface through these steps can reduce the chances of hand transfer of the virus. Influenza viruses are susceptible to inactivation by a number of chemical disinfectants readily available from consumer and commercial sources.

After the patient has been removed but prior to cleaning, the air within the vehicle may be exhausted by opening the doors and windows of the vehicle while the ventilation system is running. This should be done outdoors and away from pedestrian traffic. Routine cleaning methods should be employed throughout the vehicle and on non-disposable equipment.

For additional guidance on ambulance decontamination EMS personnel may refer to August 5, 2009 *Interim Guidance for Emergency Medical Services (EMS) Systems and 9-1-1 Public Safety Answering Points (PSAPs) for Management of patients with Confirmed or Suspected Swine-Origin Influenza A (H1N1) Infection* from CDC retrieved from

http://www.cdc.gov/h1n1flu/guidance_ems.htm

PARAMEDIC – ADMINISTERED VACCINATION

The local health/EMS systems have jointly determined that the administration of influenza vaccine by paramedics is a key part of the local vaccination plan. Influenza vaccination administration by paramedics will be a time-limited local optional Scope of Practice (SOP). To receive approval for this optional SOP, the local EMS agency must complete the Request for Emergency Approval of Local Scope of Practice for Influenza Vaccine Administration form located at <http://www.emsa.ca.gov/about/files/EMSA0391A.doc> and submit it to the Director of the EMS Authority for approval.

ADDITIONAL INFORMATION

The EMS Authority will continue to monitor information as it becomes available and provide information and guidance to its EMS partners by identifying trends, sharing best practices and disseminating information. LEMSAs are encouraged to share their experiences, policies, procedures and other relevant information as we work towards concluding this public health emergency. In addition, LEMSAs should communicate daily with hospitals and local county health departments, monitor news reports and government resources for developing situations, and maintain an open line of communication with the EMS Authority.