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State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
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Re: Invitation for Your Participation in Enhanced Surveillance for Severe Pediatric Influenza Cases: 2008-2009 Season

Dear Infection Control Practitioners, Hospital Epidemiologists and Pediatric Infectious Diseases Specialists/Chiefs,

Influenza is here! The California Department of Public Health (CDPH) has already had reports of cases of laboratory-confirmed influenza in both Northern and Southern California.

Since December 2003, your local health department and CDPH have conducted surveillance for severe pediatric influenza cases requiring care in an intensive care unit (ICU) and for pediatric influenza-associated deaths. Last season, 96 severe cases, including 6 deaths, were reported. Of these, 60% were influenza type A, 37% were influenza type B, and 3% were unspecified. Only 9% were known to have been vaccinated. Twelve cases reported bacterial co-infection, including with *Haemophilus influenzae* (3), *Pseudomonas aeruginosa* (2), *Moraxella catarrhalis* (2), *Streptococcus pneumoniae* (2), *Staphylococcus aureus* (2) and *Enterobacter cloacae* (1).

The California Viral and Rickettsial Disease Laboratory (VRDL) further characterized specimens from 26 of 42 specimens submitted from severe cases. These included influenza A/H1/Solomon Islands/3/2006 (8 cases), influenza A/H3/Brisbane (5 cases) and B Florida/4/2006 (13 cases). All fourteen isolates tested for antiviral resistance (9 subtype H1 and 5 subtype H3) were sensitive to neuraminidase inhibitors (e.g., oseltamivir). All of the subtype H1 viruses but none of the subtype H3 viruses were sensitive to the adamantane drugs (e.g., amantadine).

CONTINUED SURVEILLANCE FOR SEVERE INFLUENZA IN CHILDREN

Your local county health department and CDPH would like to once again request that you monitor your hospital for cases meeting the following case definition and report them to your local health department as quickly as possible.

A. PEDIATRIC INFLUENZA CASES HOSPITALIZED IN AN ICU:

- Age 0-17 years; AND
- A clinical syndrome consistent with influenza or its complications, including lower respiratory tract infection, acute respiratory distress syndrome, apnea, cardiopulmonary arrest, myocarditis, Reye or Reye-like Syndrome, or acute CNS syndrome (e.g., encephalitis, seizures); AND
- Confirmation by laboratory testing for influenza..

B. PEDIATRIC INFLUENZA-ASSOCIATED DEATHS:

- Age 0-17 years; AND
- A fatal clinical syndrome consistent with influenza or its complications, including lower respiratory tract infection, acute respiratory distress syndrome, apnea, cardiopulmonary arrest, myocarditis, Reye or Reye-like Syndrome, or acute CNS syndrome (e.g., encephalitis, seizures); AND

- Confirmation by laboratory testing for influenza; AND
- No period of complete recovery between the illness and death.
- Hospitalization or ICU admission not required.

The two associated case report forms are attached. For cases hospitalized in an ICU, please complete the:
1) Pediatric Severe Influenza Case History Form (slightly revised for 2008-09)

For any deaths, please complete the:

- 1) Pediatric Severe Influenza Case History Form; and the
- 2) Pediatric Death Supplemental Form.

Please fax completed forms to your local health department. Local health departments should fax these forms to CDPH (Attn: Sabrina Gilliam/Maria Nevares) at 510-307-8599.

REQUEST FOR TIMELY SPECIMENS

As in past seasons, we would like to collect clinical specimens from cases for further testing at local public health laboratories and the State VRDL. Therefore, your clinical laboratory may receive a request to hold residual specimens for transport by courier to either your local public health laboratory or the State VRDL (arrangements will vary depending on your county).

.Our goals are to confirm influenza infections in these cases and to characterize any circulating influenza viruses by performing additional testing, such as viral culture, strain typing and testing for the presence of antiviral resistance. Laboratory characterization will be critically important in detecting possible emerging strains of influenza virus that may be presenting first in the susceptible pediatric population.

Since last season, serious *S. aureus* infection is now legally reportable in California. Please continue to inform your local health department if *S. aureus*, or any other bacteria, has been isolated from any source in severe pediatric influenza cases. We may also ask that any *S. aureus* isolate be saved for further characterization

Updates about severe pediatric influenza cases occurring in California will be sent electronically throughout the influenza season. As long as you remain on our severe pediatric influenza surveillance list you will receive these updates. If you wish to be removed from this list please notify Janice Louie at janice.louie@cdph.ca.gov.

Thank you in advance for your participation.

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