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

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April 28, 2009

SWINE INFLUENZA A (H1N1)
HEALTH ALERT
(Revision of April 26, 2009)

Current Situation

- As of today, 11 California residents in three counties (San Diego, Imperial and Sacramento) have been diagnosed with confirmed swine influenza A (H1N1) virus infection; there are also currently four probable cases in these counties under investigation. All but two patients have had self-limited Influenza-like illness (ILI); two patients with underlying conditions were hospitalized. All have recovered.

- Because there was a probable case in a Sacramento school with an epi-link to another possible case and evidence of other students with ILI, a decision was made to dismiss school until 7 days after the last day an infectious child attended school.

- CDPH has drafted an interim policy on school dismissal and received input from local Health Officers in a conference call today.

- Definitions:
  - Probable case of swine influenza A (H1N1) virus infection: a person with an acute respiratory illness with an influenza test that is positive for influenza A, but human H1 and H3 negative (i.e., unsubtypeable).
  - Influenza-like illness: fever $\geq$37.8°C (100°F) and a cough and/or sore throat.

Influenza Surveillance Recommendations

Because of the rapidly evolving situation and in an attempt to focus laboratory resources, revised enhanced surveillance guidance is being issued. At this time, testing at public health laboratories should be focused on:

- Hospitalized patients with ILI

- Outpatients with ILI in the following categories:
  - Patient is a contact of a confirmed swine influenza A (H1N1) case
  - Patient is in a high-risk setting for transmission (e.g., school, prison)

- Patient is part of a cluster of people with ILI (only one patient needs laboratory confirmation)
- Patient returned from Mexico within 7 days of illness onset or cared for ill household members with this travel history

Influenza sentinel surveillance providers should continue submitting specimens according to protocol to the CDPH Viral and Rickettsial Disease Laboratory (VRDL). Any influenza A non-subtypeable results will be reported to the LHD immediately.

The CDPH VRDL will continue to support those LHDs that do not have access to PCR testing for influenza as well as local public health laboratories that need assistance with their testing as demand increases. Please alert VRDL if you are sending specimens from patients in any of the above listed categories so testing can be prioritized (e-mail cynthia.jean@cdph.ca.gov and david.cottam@cdph.ca.gov

Case and contact investigation
Case and contact report forms and laboratory report forms are posted on the CDPH swine influenza website at:http://www.cdph.ca.gov/HealthInfo/discond/Pages/SwineInfluenza.aspx

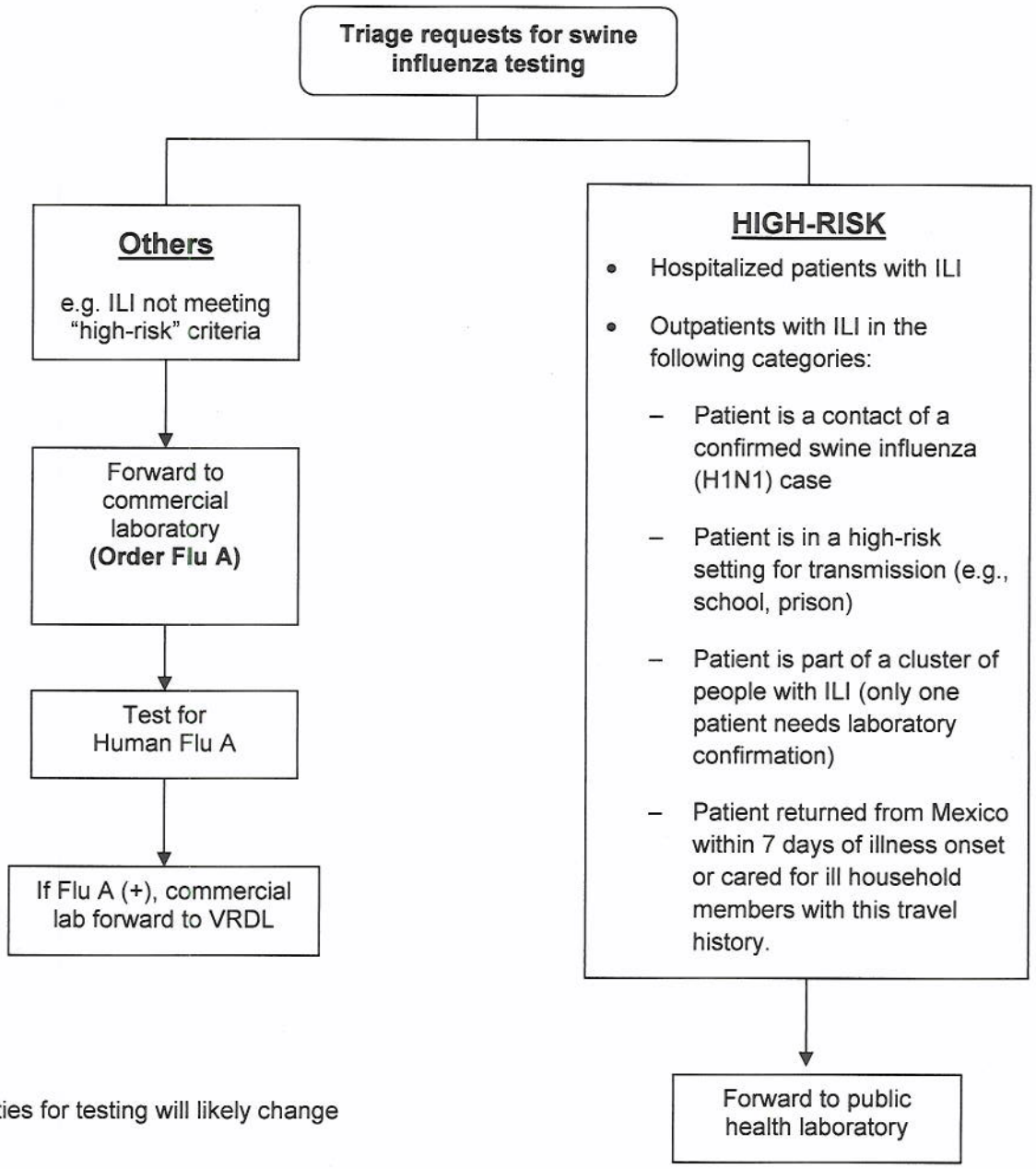
Laboratory Updates:
On a statewide call with laboratory directors it was decided that for Northern CA Kaiser patients, specimens from suspect swine influenza cases will first be tested for Flu A at Kaiser Regional Laboratory. Specimens that test positive for Flu A will be forwarded to VRDL for sub-typing. For positive flu A cases, Kaiser will alert the patient's public health county of residence of positive test result.

VRDL has requested a large supply of swabs, viral transport media and shipping boxes. We ask that the local public health laboratories contact us (by e-mailing david.cottam@cdph.ca.go and tong.kong@cdph.ca.gov) with your anticipated supply needs in the next 48 hours. We plan to be sending out those supplies to local public health laboratories within the next few days. All requests from individual hospitals and clinics for specimen collection supplies will be referred to the local health department for assistance.

Commercial laboratories do not currently offer swine influenza testing. We are asking that requests for swine influenza testing be triaged at the clinic or hospital laboratory in the following way:

Hospital Prioritization Scheme for Swine Influenza H1 (SwH1) Testing*

[rev. 04/27/09]



* Priorities for testing will likely change

Specimen collection and algorithm for testing in public health laboratories (See attachments)

- Specimen collection: Please collect one to two respiratory samples (depending on specimen collection resources) from each patient with ILI. Nasopharyngeal swabs and nasal aspirates are preferable; throat swabs are acceptable if an NP swab or nasal aspirate cannot be obtained. The swabs should be placed in a standard container with 2-3 ml of viral transport media. If the patient is hospitalized with pneumonia, specimens from the lower respiratory tract (e.g., tracheal aspirate, bronchoalveolar lavage) should also be obtained.

- Specimens should be collected within the first 24-72 hours of onset of symptoms and no later than 5 days after onset of symptoms.

- Specimen storage: The specimens should be kept refrigerated at 4°C and sent on cold packs if they can be received by a public health laboratory within five days of the collection date. If samples will be received by the laboratory in five or more days from collection, they should be frozen at -70 °C or below and shipped on dry ice.

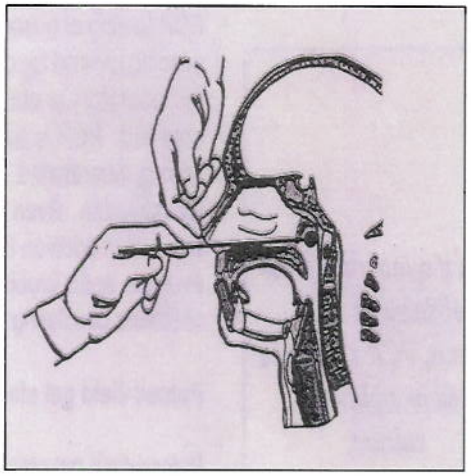
- Nasopharyngeal swab collection
  Materials:
  - Dacron-tipped nasopharyngeal swab with flexible wire handle*
  - Viral transport media
  - Mask and gloves

  *Cotton or calcium alginate swabs are **not** acceptable. PCR assays may be inhibited by residues present in these materials

  Procedure:
  1. Put on mask and gloves.
  2. Have patient sit with head against a wall as patients have a tendency to pull away during this procedure.
  3. Insert swab into one nostril **straight back** (not upwards) and continue along the floor of the nasal passage for several centimeters until reaching the nasopharynx (resistance will be met). The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. Do not force swab, if obstruction is encountered before reaching the nasopharynx, remove swab and try the other side.
  4. Rotate the swab gently for 5-10 seconds to loosen the epithelial cells.
  5. Remove swab and immediately inoculate viral transport media by inserting the swab at least ½ inch below the surface of the media. Bend or clip the wire swab handle to fit the transport medium tube and reattach the cap securely. A dry swab is not acceptable for PCR testing.

6. Specimen should be transported at refrigerator temperature and received by laboratory as soon as possible and ≤3 days from time of collection.

For a video of NP swab collection, please see:
http://video.cdc.gov/asxgen/nip/isd/swabdemo.wmv



Infection Control Precautions
CDPH concurs with CDC's "Interim Guidance for Infection Control for Care of Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection in a Healthcare Setting," April 24, 2009, which can be accessed at:
http://www.cdc.gov/swineflu/guidelines_infection_control.htm

Recommendations for antiviral therapy and prophylaxis for swine influenza A (H1N1)
These recommendations are subject to change based on current conditions

CDPH concurs with the Center for Disease Control and Prevention's (CDC's) current "Interim Guidance on Antiviral Recommendations for Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection and Close Contacts," which can be accessed at:
http://www.cdc.gov/swineflu/recommendations.htm

This guidance refers to the current recommended daily dosage of influenza antiviral medications for treatment and chemoprophylaxis.

Higher doses of oseltamivir (e.g., 150 milligrams twice daily) may be considered on a case-by-case basis in severe swine influenza A (H1N1) infections, particularly if there is pneumonic disease at presentation or evidence of clinical progression. There is

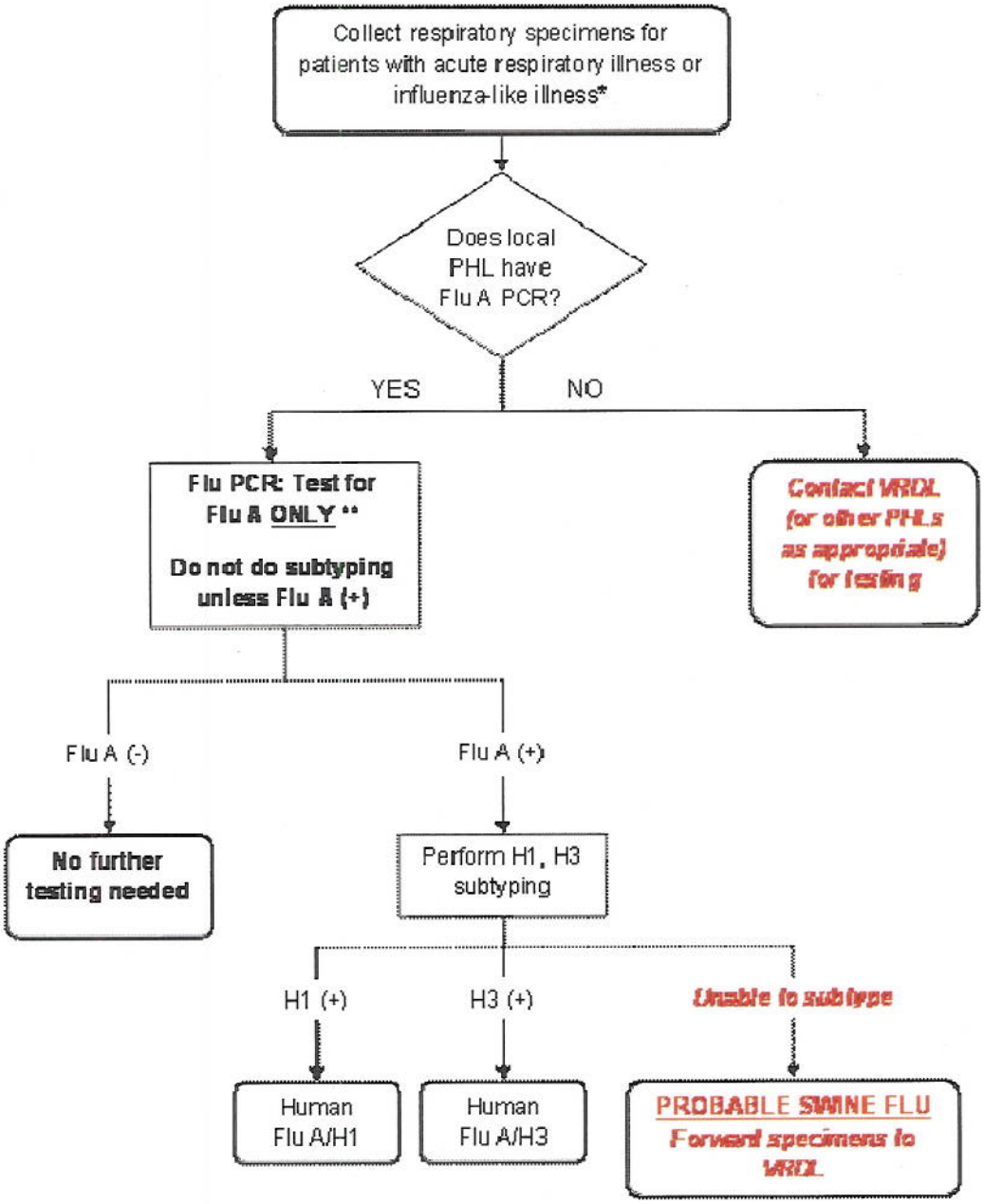
currently no evidence for enhanced efficacy of high-dose oseltamivir therapy in swine A (H1N1) infections, but this recommendation aligns with World Health Organization Advice for Avian Influenza A (H5N1) infections. High-dose therapy appears to offer no additional benefit for the treatment of seasonal influenza.

Other CDC Guidance Documents

Interim Guidance for Swine influenza A (H1N1): Taking Care of a Sick Person in Your Home, April 25, 2009. http://www.cdc.gov/swineflu/guidance_homecare.htm
Interim Recommendations for Facemask and Respirator Use in Certain Community Settings Where Swine Influenza A (H1N1) Virus Transmission Has Been Detected, April 26, 2009. http://www.cdc.gov/swineflu/masks.htm
Swine Influenza A (H1N1) Virus Biosafety Guidelines for Laboratory Workers, April 24, 2009. http://www.cdc.gov/swineflu/guidelines_labworkers.htm

Community Strategy for Pandemic Influenza Mitigation February 2007
http://www.pandemicflu.gov/plan/community/commitigation.html

Algorithm for Swine Influenza H1 (SwH1) Testing in California Public Health Laboratories (PHLs) (rev. 04/26/09)



* Priorities for testing will likely change
** This will increase the volume of specimens that can be tested
VRDL = Viral and Rickettsial Disease Laboratory, California Department of Public Health