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**Pandemic (H1N1) 2009  
Health Alert Update for Local Health Jurisdictions  
September 3, 2009**

This Health Alert Update for Local Health Jurisdictions addresses **Pandemic (H1N1) 2009** information on laboratory clearance testing and submission of laboratory specimens for secondary bacterial testing.

**A. Change in Local Health Jurisdictions Reporting of H1N1 Cases**

Effective September 8, 2009, CDPH has changed the timeframe for reporting pandemic (H1N1) 2009 influenza cases. In response to requests from local health jurisdictions (LHJs), CDPH will now use a reporting week consistent with the MMWR week, namely Sunday through Saturday, rather than the Tuesday to Tuesday reporting week currently in place. **LHJs will continue to report their weekly data to CDPH every Tuesday by 12:00 pm.**

Examples of reporting timeframes for the upcoming three weeks:

- Case reports for Tuesday, September 1<sup>st</sup> (noon) to Tuesday September 8<sup>th</sup> (noon)
  - Report these data to CDPH no later than close of business (COB) on September 8<sup>th</sup>.
  - Note: the time for this report due is extended to COB on September 8<sup>th</sup> to allow LHJs additional time to accommodate the September 7<sup>th</sup> holiday
- Case reports for Tuesday, September 8<sup>th</sup> (noon) to Saturday, September 12<sup>th</sup> (11:59 pm) due to CDPH by Tuesday, September 15<sup>th</sup> by 12:00 pm
- Case reports for Sunday, September 13<sup>th</sup> (12:00 am) through Saturday September 19<sup>th</sup> (11:59 pm) due to CDPH by 12:00 pm on Tuesday, September 22<sup>nd</sup>

The reporting criteria remain unchanged as described below:

- Please report **new** hospitalized cases of novel H1N1 as weekly aggregate numbers (not as individual cases or as a line list) by the following age categories:
  - <1 year
  - 1-4 years
  - 5-18 years
  - 19-24 years
  - 25-35 years
  - 36-49 years
  - 50-64 years
  - 65+ years

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- For purposes of reporting aggregate hospitalized case totals, include:
  - All probable and confirmed cases who are hospitalized (e.g., in the hospital for at least 24 hours) on any unit of the hospital, including all ICU; and
  - Any cases identified as influenza A positive on whom no further confirmatory testing is performed until further notice; at this time all influenza A is presumed to be H1N1.
- Please separately report the **number** of hospitalized cases who are **healthcare workers** and/or who are **pregnant**.

## **B. Reporting of ICU Cases Hospitalized with Influenza [Seasonal and Pandemic (H1N1)]**

CDPH recommends that LHJs should continue to report **all** influenza fatal cases and cases hospitalized in intensive care, including cases where influenza A is identified by PCR but no further subtyping is performed. At the present time, given the high circulating levels of pandemic (H1N1), almost all cases identified as influenza A by PCR are likely to be due to pandemic (H1N1). However, many hospitals do not have subtyping immediately available and rely on the RLN or commercial laboratories. As influenza season get underway, limited resources may further delay or hinder testing of cases diagnosed with influenza A by PCR with further subtyping and confirmation with specific pandemic flu PCR. In addition, hospitals may experience confusion about which influenza cases to report if they cannot promptly identify cases as due to pandemic (H1N1) infection. Therefore, LHJs are asked to:

- Request that hospitals in their jurisdiction report all fatal cases and cases in the ICU who are diagnosed with influenza A by any laboratory method (e.g., rapid test, culture, PCR etc)
- Strongly encourage further characterization of these cases with subtyping and pandemic flu-specific PCR (where available); these cases are reported as probable or confirmed pandemic (H1N1)
- Where cases have not had further PCR, subtyping or confirmation, report these cases as “Influenza A-subtype not identified”
- In cases where influenza B is detected or subtyping has been performed and seasonal influenza A (subtype H1 or H3) are identified, CDPH requests that these cases be reported as part of enhanced surveillance. Cases should be reported on a revised H1N1 case report form which is available at: <http://www.cdph.ca.gov/HealthInfo/discond/Pages/SwineInfluenzaLHD.aspx>. The report form is also attached to the end of this health alert.

As the season progresses, this will assist CDPH in better characterizing the co-circulation of seasonal influenza with the pandemic (H1N1) virus and will facilitate future testing strategies and antiviral treatment and prophylaxis recommendations.

### **C. Respiratory Laboratory Network Laboratories are Advised to Begin Broadening Their Influenza Surveillance Testing to Include Influenza B**

VRDL has been screening for both influenza A and B throughout the summer. While the predominant circulating virus is still currently pandemic (H1N1), sporadic infections with seasonal influenza A/H3 have also been detected. Since it is unknown when or where seasonal influenza will reappear, and because knowledge of circulating influenza patterns will assist with antiviral treatment recommendations, CDPH advises all Respiratory Laboratory Network (RLN) laboratories to initiate testing for influenza B in addition to influenza A, subtypes H1 and H3, and pandemic (H1N1). In addition, RLN laboratories should continue to:

- Report all influenza A, B, subtype and confirmation results to VRDL on a weekly basis
- Continue testing of hospitalized, ICU and fatal cases. Autopsy tissue of fatal cases should be referred to VRDL for further testing and histopathologic analysis at CDC.
- As resources are available, consider broadening testing to look for other viral respiratory pathogens with R-mix and to include testing of samples from sentinel providers (if interested, contact Erica Boston at VRDL).
- Refer all cases with a CT value over 30 to VRDL for further testing and confirmation.

On a case-by-case basis, testing for antiviral resistance at VRDL is also available in special cases (e.g., persistently positive PCR on treatment).

### **D. Clearance Testing for H1N1 Influenza Infection**

Clearance testing for H1N1 influenza infection is **not recommended**. For individuals who have been identified as infected with H1N1 influenza, the isolation period is determined by their symptoms and by the setting in which they work. There is no need to retest these individuals before they can return to school or work.

On August 5, 2009, the CDC released updated recommendations for the amount of time persons with influenza-like illness should be away from others. CDC recommends that people with influenza-like illness remain at home until at least 24 hours after they are free of fever (100° F [37.8°C]) or signs of a fever without the use of fever-reducing medications. This is a change from the previous recommendation that ill persons stay home for 7 days after illness onset or until 24 hours after the resolution of symptoms, whichever was longer. The new recommendation applies to camps, schools, businesses, mass gatherings, and other community settings where the majority of people are not at increased risk for influenza complications. This guidance does not apply to healthcare settings where the exclusion period should be continued for 7 days from symptom onset or until the resolution of symptoms, whichever is longer.

### **E. CDPH Microbial Diseases Laboratory (MDL) will test Bacterial Isolates from H1N1 Patients with Secondary Bacterial Infections**

CDPH is interested in characterizing secondary bacterial infections due to group A streptococcus, *Staphylococcus aureus* (MRSA and MSSA) and *Streptococcus pneumoniae* in

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H1N1 patients. CDPH requests that available isolates of these bacterial pathogens from H1N1 patients be submitted to the Special Pathogens Unit of MDL. For submitter calls, MDL requires the following:

1. Lab-confirmed H1N1 infection
2. Source: with the exception of ETA and BAL, must be sterile site source
3. Illness: pneumonia or severe illness requiring hospitalization

Testing is for surveillance purposes only; reports will not be issued at this time. For further information regarding isolate submission and testing, contact MDL at 510-412-3903.

Pandemic (H1N1) 2009 Case History Form

(ICU and Fatal Cases)

**Case definition: 1) a clinical syndrome consistent with influenza or its complications; and 2) either probable or confirmed pandemic (H1N1) by laboratory testing; and 3) been either hospitalized in an ICU OR expired at any location (e.g. hospital, ER, home, etc)**

LHD \_\_\_\_\_ CDPH Case ID: CA \_\_\_\_\_ Date reported to LHD  
\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Last name \_\_\_\_\_ First name \_\_\_\_\_ DOB \_\_\_\_/\_\_\_\_/\_\_\_\_ Sex:  Female  Male

Street Address: \_\_\_\_\_ City \_\_\_\_\_ Zip Code \_\_\_\_\_

Race:  White  Black  Native American  Asian/PI  Other  Unknown Ethnicity:  Hispanic  Non-Hispanic

Case Status: **Probable Pandemic (H1N1)** **Confirmed Pandemic (H1N1)** **A-PCR positive subtype unknown**

**A (H3)** **A (H1)** **A-PCR unconfirmed (e.g. rapid test, culture or DFA positive only)** **B**

Date onset of symptom(s): \_\_\_\_/\_\_\_\_/\_\_\_\_\_

Level of medical care (check all that apply):

Clinic  ER  Inpatient Ward  ICU  None

If hospitalized, Date of admission: \_\_\_\_/\_\_\_\_/\_\_\_\_\_

Date of discharge: \_\_\_\_/\_\_\_\_/\_\_\_\_\_

Weight \_\_\_\_\_ Height \_\_\_\_\_ BMI: \_\_\_\_\_

Recent travel?  Yes  No If yes, where: \_\_\_\_\_

Recent ill contacts:  Yes  No If yes, who: \_\_\_\_\_

Occupation: \_\_\_\_\_

Symptoms that occurred during the current illness:

Fever  $\geq 38^\circ$   Cough  Sore throat  Rhinorrhea

Chills  Nausea/vomiting  Diarrhea  Muscle aches

Shortness of breath  Altered mental status  Seizures

Other; specify \_\_\_\_\_

Complications that occurred during the acute illness:

Pneumonia/ARDS  Bronchiolitis  2' bacterial pneumonia

Encephalitis/encephalopathy

Myocarditis  Sepsis/Multi-organ Failure

Other; specify \_\_\_\_\_

Significant Past Medical History (check all that apply)

Cardiac disease  Yes  No  Unk

Chronic pulmonary disorder  Yes  No  Unk

Immunosuppressed (e.g. HIV, cancer):  Yes  No  Unk

Metabolic disorder (e.g. DM, renal)  Yes  No  Unk

Neuromuscular disorder (e.g., seizure disorder, developmental delay/MR, hypoxic encephalopathy, etc)  Yes  No  Unk

Hemoglobinopathy (e.g. SCD):  Yes  No  Unk

Long-term aspirin therapy:  Yes  No  Unk

Genetic disorder (e.g. Downs,)  Yes  No  Unk

Immunosuppressive meds (e.g. steroids):  Yes  No  Unk

Gastrointestinal disease (e.g. GE reflux)  Yes  No  Unk

Prematurity:  Yes  No  Unk If yes, #weeks gestation: \_\_\_\_\_

Pregnant:  Yes  No  Unk If yes, EDC: \_\_\_\_\_

Obesity  Yes  No  Unk

Other conditions (e.g. hypertension):  Yes  No  Unk

If YES for any of the above, please specify:

\_\_\_\_\_  
\_\_\_\_\_

**Vaccination Status**

Vaccinated for pandemic influenza?  Yes  No  Unk

If yes, number of doses:  One  Two

If yes, approx dates vaccinated: \_\_\_\_\_

Vaccinated for seasonal flu >14 days prior?  Yes  No  Unk

If yes, and <9yrs: Number of doses:  One  Two

Vaccinated in prior seasons?  Yes  No  Unk

**Diagnostic/Laboratory Studies**

CBC: Hct \_\_\_\_\_ Plt \_\_\_\_\_ WBC \_\_\_\_\_

Chest X-ray:  Pos  Neg  Not done

Findings: \_\_\_\_\_

Other pertinent labs (LP, LFTs, MRI/CT, etc.) \_\_\_\_\_

**Microbiologic Tests [attach copy of microbiology reports]**

Rapid test done:  Yes  No  Unk If yes:  Pos  Neg

Was influenza diagnosed by other methods (check all that apply)

IFA/DFA  PCR  Viral culture  Other: \_\_\_\_\_

Rapid RSV test result  Pos  Neg  Not done

Influenza PCR:  A-subtype unknown  A (H3)  A (H1)

Unsubtypeable  Pandemic (H1N1)  B  PCR not done

Laboratory name: \_\_\_\_\_

Other viral/bacterial pathogens detected?  Yes  No  Unk

If yes, specify source:  Sputum  ET asp  BAL

Pleural fluid  Blood  Other \_\_\_\_\_

If yes, specify pathogen: \_\_\_\_\_

Other micro results: \_\_\_\_\_

**Clinical course**

Antivirals: type: \_\_\_\_\_

Dose: \_\_\_\_\_  Single  Double

Dates of treatment: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

If hospitalized, intubated?  Yes  No  Unk

Died:  Yes  No If yes, date of death \_\_\_\_/\_\_\_\_/\_\_\_\_

Hospital Contact Name: \_\_\_\_\_

Hospital: \_\_\_\_\_

Phone/Pgr: \_\_\_\_\_ E-mail: \_\_\_\_\_

LHD Contact Name: \_\_\_\_\_

Phone/Pgr: \_\_\_\_\_ E-mail: \_\_\_\_\_

TO REPORT A CASE, PLEASE CONTACT INSERT LOCAL COUNTY INFORMATION HERE (Name & Tel #) AND FAX THIS FORM TO:

( ) . Please forward any available medical records (e.g. H&P, micro reports, discharge summary, autopsy report). Please contact your local health department of CDPH to report these cases ASAP so that we can assist with collection and shipment of specimens for further characterization.