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**2009 H1N1 and Seasonal Influenza**  
**CDPH Guidance for School (K-12) Responses to Influenza**  
**During the 2009-2010 School Year**  
**December 7, 2009**

*Revision History: Supercedes:*

*“CDPH Guidance for School (K-12) Responses to Influenza During the 2009-2010 School Year (8/24/09)”*

*“CDPH Health Alert: H1N1 Influenza Update for Schools and Local Health Departments (School portions only; 8/13/09)”*

*“CDPH Interim Novel Influenza A (H1N1) Virus Student Dismissal Guidance (5/19/09)”*

## **Introduction**

This California Department of Public Health (CDPH) Interim Guidance for K-12 Schools is intended as a practical supplement to World Health Organization (WHO), U.S. Centers for Disease Control and Prevention (CDC) and California Department of Education (CDE) guidance documents referenced below. The CDPH document will not repeat much of the information from the material referenced, but will try to focus on specific responses people in California might consider. The background guidance documents include:

- WHO Measures in school settings (Sept 11, 2009):  
[http://www.who.int/csr/disease/swineflu/notes/h1n1\\_school\\_measures\\_20090911/en/index.html](http://www.who.int/csr/disease/swineflu/notes/h1n1_school_measures_20090911/en/index.html)
- CDC Guidance for State and Local Public Health Officials and School Administrators for School (K-12) Responses to Influenza during the 2009-2010 School Year (Oct 21, 2009):  
<http://www.cdc.gov/h1n1flu/schools/schoolguidance.htm>
- CDC Recommendations for the Amount of Time Persons with Influenza-Like Illness Should be Away from Others (Oct 23, 2009):  
<http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>
- California Department of Education: Pandemic Flu Checklist for Local Educational Agencies in California (May 2009):  
<http://www.cde.ca.gov/ls/he/hn/documents/leapfluchecklist.doc>

- California Department of Education: Procedures in Response to Flu Outbreak:  
<http://www.cde.ca.gov/nr/el/le/yr09ltr0429h1n1.asp>

Epidemiologic conditions of the 2009 H1N1 influenza virus continue to evolve so these recommendations may change as warranted by further developments.

## Objective and Scope

The goals of this guidance document are:

- Decrease exposure of children and their families to seasonal influenza and 2009 H1N1 influenza to limit transmission.
- Decrease the incidence of influenza cases.
- Slow the spread of severe disease.
- Spread out absenteeism in businesses, educational institutions, etc.
- Protect the health care system from being overloaded by a surge of seriously ill people.
- Reduce mortality from influenza and complications.
- Limit the disruption of day-to-day social and economic activities in the community
- Preserve the vital learning that goes on in schools.
- Reduce “safety risks” to children sometimes associated with school dismissal.
- Avoid negative consequences, including students being left home alone, health workers missing shifts when they must stay home with their children, and students missing meals.

CDPH encourages families, local health departments and school systems, in collaboration with CDE, to implement those measures that they deem appropriate based on evolving circumstances and interagency cooperation. Collaboration is essential: CDC, the U.S. Department of Education, state and local public health and education agencies, schools, students, staff, families, businesses, and communities all have active roles to play. CDPH will issue additional guidance for school responses during times of increased influenza severity as epidemiology, conditions, or federal guidance changes.

## Highlights

This interim CDPH Guidance for School (K-12) Responses to Influenza during the 2009-2010 School Year is an updated version of the August 24, 2009 CDPH interim K-12 guidance. Resources used for this version include background and reference materials from WHO and CDE. Subjects introduced in this version that were not in prior versions include information on 2009 H1N1 influenza vaccines as well as expanded information on school response and planning based on CDE documents. Hand hygiene is covered in less detail in this version. Direct input was sought from constituents as this version was drafted.

## CDPH Recommended Responses under Conditions with Severity Similar to the Spring 2009 H1N1 Influenza A

- **Vaccines**

Vaccines are the most important tool we have for preventing influenza.

2009 H1N1 influenza vaccine availability fell behind schedule in the fall of 2009, which made it less obtainable than had been planned. As vaccine availability is assured, local public health departments may choose to coordinate with schools and school systems and health care providers to plan community vaccination campaigns (<http://www.cdc.gov/h1n1flu/vaccination/>).

- **Stay home when sick**

CDPH recommends that individuals with influenza-like illness remain at home until at least 24 hours after they are free of fever (100° F [37.8° C] or greater), or signs of a fever, without the use of fever-reducing medications. Information for parents and school staff about flu should be updated and sent to families via e-mail or notes as needed. Influenza is often more severe and can last longer than a regular cold and can cause asthma to get worse. People recovering from influenza may need time to regain their usual strength. Parents should use their judgment and knowledge of their children before asking them to return full time to school or activities. Children who are recovering from influenza-like illnesses should be encouraged to rest as needed until they are fully recovered but also should begin working on school assignments as soon as they can.

Advice nurses in clinicians' offices would be a good resource for families with questions about specific children. However, neither testing nor a doctor's note are needed or required for children and adolescents to return to school. Providers who care for children and adolescents should be focusing on helping the patients who need their clinical care.

Epidemiologic data collected during spring 2009 found that most people with 2009 H1N1 influenza who were not hospitalized had a fever that lasted 2 to 4 days; this would require an exclusion period of 3 to 5 days in most cases. Those with more severe illness are likely to have fever for longer periods of time. Sick individuals should avoid contact with others. When people who have had influenza-like illness return to school they should continue to practice good respiratory etiquette and hand hygiene and avoid close contact with people they know to be at increased risk of influenza-related complications.

- **Separate ill students and staff**

Sick students and staff should always be required to stay home. **CDPH recommends that students and staff who appear to have an influenza-like illness at arrival or become ill during the day be promptly separated from other students and staff and sent home as soon as possible.**

A limited number of staff should be designated to care for ill persons until they can be sent home. When possible, these should be people with limited

interactions with other students and staff and therefore decreased risk of spreading influenza in the school setting. If possible, these persons should not be at increased risk of influenza complications (for example, pregnant women) and they should be familiar with infection control recommendations to prevent spread of influenza. They should be immunized for H1N1 and seasonal influenza as soon as possible. When possible and if the sick person can tolerate it, he or she should wear a surgical mask when near other persons. School nurses, and other staff who act in this capacity, are likely to come into close contact with students and staff with influenza-like illness and should use appropriate Personal Protective Equipment (PPE) to avoid exposure. CalOSHA has indicated that the new Aerosol Transmissible Disease Standards apply to school nurses and their school district employers. So school staff designated to provide care for ill students are to be provided respiratory protection at least as protective as an N95 respirator per CalOSHA standards. Respirators and other PPE purchased with funds from CalEMA have been released to distribute to schools for this purpose.

For information about facemask and respiratory use, visit the CDPH website at [http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH\\_Swine\\_Flu\\_Interim\\_Mask\\_Respirator\\_Guidance.pdf](http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH_Swine_Flu_Interim_Mask_Respirator_Guidance.pdf) or the CDC website at <http://www.cdc.gov/h1n1flu/masks.htm>.

Also see: Aerosol Transmissible Disease Standards CalOSHA Title 8 Subchapter 7. Group 16. Article 109. §5199 Aerosol Transmissible Diseases <http://www.dir.ca.gov/title8/5199.html>

- **Hand hygiene**

Influenza may spread via contaminated hands or inanimate objects that become contaminated with influenza viruses. **CDPH recommends that students and staff be encouraged to wash their hands often with soap and water, especially after coughing or sneezing.** Alcohol-based hand cleaners are also effective at killing influenza viruses. The use of alcohol-based hand sanitizers (gels, foams, or wipes) containing at least 60% alcohol should be promoted in California schools. Alcohol-based hand sanitizers can be used safely in the classroom with a few simple precautions.

For additional information on hand hygiene and hand sanitizers, please visit the CDC website at <http://www.cdc.gov/features/handhygiene/>.

- **Respiratory etiquette**

Influenza viruses are thought to spread in large part from person to person in respiratory aerosols (as opposed to particles or drops) created when an infected person coughs or sneezes. This can happen when aerosols from the cough or sneeze of an infected person are propelled through the air and land in the eyes, nose, or mouth of someone nearby. **CDPH recommends covering the nose and mouth with a tissue when coughing or sneezing and throwing the tissue in the trash after use.** Clean your hands promptly after coughing or sneezing with soap and water or an alcohol-based hand sanitizer. If a tissue is

not immediately available, coughing or sneezing into your arm or sleeve (not into your hand) is recommended. To encourage respiratory etiquette, students and staff should have access to tissues and must be educated about the importance of respiratory etiquette, including keeping hands away from the face. Visit the CDC website for more information on respiratory etiquette at <http://www.cdc.gov/flu/protect/covercough.htm>.

- **Routine cleaning**

The American Academy of Pediatrics provides guidance for school cleaning and sanitizing which is appropriate for influenza. **Schools should regularly clean all areas and items that are more likely to have frequent hand contact by multiple persons** (for example, door handles) and also clean these areas immediately when visibly soiled. Use the cleaning agents that are usually used in these areas. Schools should ensure that custodial staff and others (such as classroom teachers) who use cleaners or disinfectants read and understand all instruction labels and understand safe and appropriate use. Instructional materials and training should be provided in languages other than English as locally appropriate. CDPH does not believe any additional disinfection of environmental surfaces beyond the recommended routine cleaning is required.

The EPA provides a list of EPA-registered products effective against influenza at <http://www.epa.gov/oppad001/influenza-disinfectants.html>.

For additional information, see the American Academy of Pediatrics' *Managing Infectious Diseases in Child Care and Schools: A Quick Reference Guide, 2nd Edition (2009)* for guidance on cleaning and sanitizing in schools.

- **Early treatment for high-risk students and staff**

**CDPH recommends that schools encourage ill staff and parents of ill students at higher risk of complications from influenza to seek early treatment.** High-risk students and staff who have had close contact with others who are sick with an influenza-like illness should contact their health care provider to discuss whether they may need to take influenza antiviral medications (requires a prescription).

For a Summary of CDPH Interim Guidance on Antiviral Recommendations for Pandemic (H1N1) 2009 Virus Infection, visit [http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH\\_H1N1\\_HealthAlert\\_072209.pdf](http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPH_H1N1_HealthAlert_072209.pdf).

For information on antiviral medications, see the CDC Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season at <http://www.cdc.gov/h1n1flu/recommendations.htm>.

- **School Planning and Response**

The following recommendations are based on a summary of the Pandemic Flu Checklist for Local Educational Agencies in California - California Department of Education- May 2009 and on WHO recommendations. These recommendations are provided in this CDPH document so that public health, health care, and community-based organizations will be aware of the kinds of interventions that K-12 educational institutions will be considering.

(<http://www.cde.ca.gov/ls/he/hn/documents/leapfluchecklist.doc>)

- **Mitigation and Prevention:**

- Convene or re-convene community guidance committee(s) or emergency advisory council(s) with defined procedures to provide smooth implementation of K-12 school interventions with a clear delineation of authority among educational, public health, health care, and governmental agencies to establish and/or maintain trust and encourage transparent communication between health officials and the population at large. Develop procedures for multi-directional communicating that include working with the media, in coordination with local health department and local government.
- Since agencies may not be used to working with entities outside their area of responsibility, and may have their own clearly defined governance structures and language, conflicts can arise between official bodies as policies are being formulated. Before disagreements occur, adjudicating mechanisms can be established to resolve interagency conflicts. A strong local leader or an appropriately designed emergency advisory council are two possibilities. [Stern, AM, Cetron, MS, Markel, H. Health Aff (Millwood). 2009;28(6):w1066–78 (published online 29 September 2009; [10.1377/hlthaff.28.6.w1066](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2791111/))]
- Ideally school systems will have the resources to develop alternative instructional delivery systems and will be able to communicate that information to staff, students, and families to ensure that students continue to receive instruction and academic credit in the event of school dismissals. If resources could be made available, educators at the local, regional and state levels could address this issue collectively so individual teachers would not have to create such systems during crises.
- Work with your local health department pandemic planning committee on the possible need for school sites to help meet the health-related needs of the community.
- Identify strategies to provide meals for those children who rely on school meals as their primary source of daily nutrition.
- Design procedures to communicate with and educate all staff, students, and families about school plans to be implemented if influenza becomes widespread or severe.

- **Preparedness:**
  - Develop a continuity of operations system for essential central office functions.
  - Review procedures for communicating with staff, students, and families.
  - Promote hand hygiene and respiratory etiquette and be stocked with appropriate supplies.
  - Establish proper cleaning, ventilation, and measures to reduce crowding.
- **Response:**
  - Use prevention strategies
  - Cover coughs and sneezes.
  - Wash hands often and properly—for at least 20 seconds. Provide soap and/or hand sanitizers for both student and staff use.
  - Plans should be in place, and space made available, to isolate students and staff who become ill while at school.
  - School personnel who are sick should stay home.
  - Students who are sick should stay home.
- **School dismissals and class suspensions**

School dismissal is not advised for any specified number of cases of 2009 H1N1 influenza by CDC and CDPH and, in general, is not advised unless there is a magnitude of faculty or student absenteeism that interferes with the school's ability to function. As noted above, the primary means to reduce spread of influenza in schools should be early identification of ill students and staff, and discouraging students and staff from being at school when ill. Promoting good cough etiquette and hand hygiene (hand-washing with soap and water, or using a hand sanitizer) is always a good idea, whether or not there is a flu outbreak. Consult with your local health department to determine if they have any additional recommendations or specific reporting requirements for school dismissals or student absences.

Recommendations by WHO Pandemic (H1N1) 2009 briefing note 10. Measures in school settings (September 11, 2009)

[http://www.who.int/csr/disease/swineflu/notes/h1n1\\_school\\_measures\\_20090911/en/index.html](http://www.who.int/csr/disease/swineflu/notes/h1n1_school_measures_20090911/en/index.html)

Decisions about if and when schools should be dismissed during the pandemic are complex and highly context-specific. WHO cannot provide specific recommendations for or against school dismissal that are applicable to all settings.

School dismissal can operate as a proactive measure, aimed at reducing transmission in the school and spread into the wider community. School dismissal can also be a reactive measure, when schools are dismissed or

classes are suspended because high levels of absenteeism among students and staff make it impractical to continue classes.

Policies for school dismissal need to include measures that limit contact among students when not in school. If students congregate in a setting other than a school, they will continue to spread the virus, and the benefits of school dismissal will be greatly reduced, if not negated.

- **Economic and social costs**

“When making decisions regarding school dismissal, health officials and school authorities need to be aware of economic and social costs that can be disproportionately high when viewed against the potential benefits.

The main economic cost arises from absenteeism of working parents or guardians who have to stay home to take care of their children. Studies estimate that school closures can lead to the absence of up to 16% of the workforce, in addition to normal levels of absenteeism and absenteeism due to illness. Such estimates will, however, vary considerably depending on several factors, including the structure of the workforce.

Paradoxically, while school closure can reduce the peak demand on health care systems, it can also disrupt the provision of essential health care, as many doctors and nurses are parents of school-age children. Decisions regarding school dismissal also need to consider social welfare issues. Children’s health and well-being can be compromised if highly beneficial school-based social programs, such as the provision of meals, are interrupted or if young children are left at home without supervision.” ([WHO Pandemic \(H1N1\) 2009 briefing note 10](#))

Utilize the School Dismissal Monitoring System established by the CDC and the U.S. Department of Education to report 2009 H1N1 influenza-related school dismissals and/or district closures by completing and submitting the form found at: [http://www.cdc.gov/h1n1flu/schools/dismissal\\_form/index.htm](http://www.cdc.gov/h1n1flu/schools/dismissal_form/index.htm)

- **Recovery:**

Provide staff with information on activities that may assist students and inform staff of the signs and symptoms of emotional distress to watch for.

## Summary

This guidance addresses WHO, CDE, CDPH and CDC-recommended school (K-12) responses under influenza conditions with similar severity as in spring 2009. CDPH will issue additional guidance for school responses during times of increased influenza severity as epidemiology, conditions, or federal guidance changes.

**Thank you for your ongoing commitment to the 2009 H1N1 Influenza response.**