



2009 H1N1 Influenza

California Department of Public Health (CDPH) Interim Guidance: Considerations Regarding Management of 2009 H1N1 Influenza in the Postpartum Period in the Hospital and Home Setting

May 10, 2010

Introduction

There is a paucity of data upon which to make precise recommendations on how to handle infection control and “housing” of the newborn of a mother with suspected, probable or confirmed 2009 H1N1 influenza during the postpartum period. CDPH recommends that the mother of a newborn infant and her clinicians choose from two options, a conservative/cautious approach based on the November 2009 Centers for Disease Control and Prevention (CDC) interim guidance (see below) and a more flexible approach, allowing for clinical judgment. Both approaches rely on expert input and they differ due to dissimilar emphasis on maternal/infant separation, rather than disagreement about risks of infection or the importance of breast feeding.

Due to the demonstrated risks from 2009 H1N1 influenza to both pregnant women and their infants, and surveillance safety data, CDC and CDPH strongly recommend that all pregnant women get both the 2009 H1N1 influenza and seasonal influenza vaccines.

On November 10, 2009, CDC issued "Interim Guidance: Considerations Regarding 2009 H1N1 Influenza in the Intrapartum and Postpartum Hospital Setting," which is available at: <http://www.cdc.gov/h1n1flu/guidance/obstetric.htm>.

This interim guidance was issued to clarify clinical considerations related to the management of suspected or confirmed maternal infections with 2009 H1N1 influenza infection in the postpartum and newborn setting in the hospital.

Current Recommendations

Option One

CDC Interim Guidance: “Pregnant women who enter the hospital setting with illness from suspected or confirmed 2009 H1N1 influenza virus infection represent a special population warranting clinical management that considers the specific risks that 2009 H1N1 virus exposure poses to the newborn infant.

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The location of the mother and newborn should be considered based on postpartum and/or newborn ward configuration and existing infection control policies. As clinically indicated, providers should consider a two-step process to manage postpartum and newborn care.

Step 1: Providers should consider temporarily separating the potentially flu infected mother from the newborn within her room (in an isolette) or in separate rooms until the risk of infectious transmission is reduced, defined as having met ALL of the following criteria:

- The mother has received antiviral medications for at least 48 hours and;
- The mother is without fever for 24 hours without antipyretics and;
- The mother can control cough and respiratory secretions.

Once these criteria are met, the mother and infant can initiate close contact throughout the postpartum period with droplet precautions and the mother can begin infant feedings.

Step 2: Once the mother and infant are able to initiate close contact, the following guidance is offered for mothers immediately prior to feeding and handling the infant in order to protect the newborn from aerosol and contact exposure:

- The mother should clean her hands with soap and water or an alcohol-based hand rub;
- The mother should put on a face mask;
- The mother should observe all respiratory hygiene/ cough etiquette guidelines.” (<http://www.cdc.gov/h1n1flu/guidance/obstetric.htm>)

Option Two

CDPH infection control guidelines for postpartum women with suspected or confirmed 2009 H1N1 influenza and their infants.

- Families can choose:
 - The conservative/cautious approach as described above from the CDC Interim guidance, or
 - an alternative approach that protects the infant without interfering with mother-infant bonding and direct breast feeding, as long as the mother’s condition allows for at-the-breast feeding.
- When planning for or implementing postpartum hospital or post-discharge accommodations for newborns of mothers suspected of having or confirmed with 2009 H1N1 influenza infection, clinicians should review choices with their patients and families for housing and care of the infant and the postpartum mother.

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- Prior to delivery, if possible, clinicians should prepare and present material explaining the choices for handling postpartum accommodations that families can select, accompanied by a consideration of the clinical details (including but not limited to current circulating respiratory viruses, relevant patient test results, clinical condition of the patient) and a review of the scientific evidence on which the choices are based.

Rooming-in with Mother:

Postpartum staff:

- Breastfeeding should be supported at all times because of the protection from respiratory infection that breast milk provides to the infant. The mother with influenza-like illness should be encouraged and assisted to breastfeed.
- Newborn infants of influenza-infected mothers may stay in the same hospital room as the mother if possible.
- Pay careful attention to handwashing prior to any contact.
- Monitor the maternal-infant interaction on perinatal floors and encourage adherence to protective measures.

Postpartum mothers with suspected or confirmed 2009 H1N1 influenza should:

- Wear a face mask to prevent nasal secretions and spontaneous coughs or sneezes from inoculating the infant when within 3-6 feet of the infant, if possible.
- Change to a clean gown or clothing when picking up the infant, if clothing has been exposed to byproducts of coughing and sneezing.
- Adhere to strict hand hygiene--pay careful attention to handwashing prior to any contact with the infant.
- Adhere to strict cough etiquette when in contact with the infant.
- Breastfeed or bottle feed the infant directly.
- If contact with respiratory secretions is suspected, wash the breasts with mild soap and water and rinse well prior to breastfeeding.
- Use clean blankets and burp cloths for each contact.
- Continue these protective measures, both in the hospital setting and at home, until symptom-free (fever has resolved without fever reducing medicines) for 24 hours.

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In the Nursery:

- If a newborn infant of an influenza-infected woman is housed in the hospital nursery instead of the mother's room, standard precautions (including good hand hygiene) should be used for the infant.
- Any visitor (including mother) with symptoms of viral illness (fever, cough, rhinorrhea, etc.) should NOT visit the nursery.

Hospital visitors of influenza-infected mothers and their infants should receive infection control education on droplet precautions and hand hygiene and should be asked to practice appropriate measures during their hospital visit.

CDPH recommendations for hand hygiene in the hospital and home setting:

Hand hygiene

- When washing hands with soap and water, wet the hands first with water, apply soap to the hands, and rub the hands together vigorously for 15-20 seconds, covering all surfaces of the hands and fingers. Rinse the hands with water and dry them thoroughly with a towel. Use the towel to turn off the faucet.
- Avoid using hot water because repeated exposure to hot water may increase the risk of irritation to hands.
- Liquid, bar, leaflet or powdered forms of plain soap are acceptable for washing hands.
- When bar soap is used, soap racks that facilitate drainage and small bars of soap should be used.
- Use effective hand hygiene products and hand lotions or creams to minimize irritating the skin.
- If hands are not visibly soiled, an alcohol-based hand rub can be used.
- When cleaning the hands with an alcohol-based hand rub, apply the product to the palm of one hand and rub the hands together, covering all surfaces of the hands and fingers, until dry.

Hand hygiene recommendations excerpted from Guideline for Hand Hygiene in Health-Care Settings, Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force MMWR October 25, 2002 / 51(RR16);1-44.

See: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm>.

Respiratory hygiene/cough etiquette:

The following measures to contain respiratory secretions are recommended for all individuals with signs and symptoms of a respiratory infection.

- Cover the mouth and nose with a tissue when coughing or sneezing.
- Put the used tissue in a waste basket.
- If a tissue is not available, cough or sneeze into the upper sleeve or elbow, not into the hands.
- Put on a face mask to protect others.

Health care facilities should ensure the availability of materials for adhering to Respiratory Hygiene/Cough Etiquette in waiting areas for patients and visitors.

- Provide tissues and no-touch receptacles for used tissue disposal.
- Provide conveniently located dispensers of alcohol-based hand rub; where sinks are available, ensure that supplies for handwashing (i.e., soap, disposable towels) are consistently available.

Recommendations excerpted from *Respiratory Hygiene/Cough Etiquette in Healthcare Settings*"

(<http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>)

These precautions in postpartum women with febrile respiratory illness should be followed until at least 24 hours after they no longer have a fever, without the use of fever-reducing medicines.

Use of Antiviral Medications:

- "Treatment with antiviral medications is recommended for pregnant women or women who are up to 2 weeks postpartum (including following pregnancy loss) with suspected or confirmed influenza and can be taken during any trimester of pregnancy. The duration of antiviral treatment is 5 days.
- Hospitalized patients with severe infections (such as those with prolonged infection or who require intensive care unit admission) might require longer treatment courses. Some experts have advocated use of increased (doubled) doses of oseltamivir for some severely ill patients, although there are no published data demonstrating that higher doses are more effective.
- Treatment should be initiated as early as possible because studies show that treatment initiated early (i.e., within 48 hours of illness onset) is more likely to provide benefit. However, some studies of hospitalized patients with seasonal and 2009 H1N1 influenza have suggested benefit of antiviral treatment even when treatment was started more than 48 hours after illness onset.

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- Treatment should not wait for laboratory confirmation of influenza because laboratory testing can delay treatment and because a negative rapid test for influenza does not rule out influenza. The sensitivity of rapid tests can range from 10 % to 70%.
- For treatment of pregnant women or women who are up to 2 weeks postpartum (including following pregnancy loss) with suspected or confirmed influenza, oseltamivir is currently preferred because of its systemic absorption.
- Since rapid access to antiviral medications is essential, health care providers who care for pregnant and postpartum (including following pregnancy loss) women should develop methods to ensure that treatment can be started quickly after symptom onset.”

Updated Interim Recommendations for Obstetric Health Care Providers Related to Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season (December 29, 2009):

http://www.cdc.gov/H1N1flu/pregnancy/antiviral_messages.htm

Both Options One and Two require that:

- The mother, with suspected or confirmed 2009 H1N1 influenza infection, clean her hands with soap and water or an alcohol-based hand rub before she picks up her baby;
- The mother, with suspected or confirmed 2009 H1N1 influenza infection, put on a face mask if she is coughing or sneezing or has nasal discharge; and,
- The mother, with suspected or confirmed 2009 H1N1 influenza infection, observe all respiratory hygiene/ cough etiquette guidelines.

Appendix

Background

Both Options:

Recommendations in the CDC and CDPH Interim Guidelines are based on:

- Consideration based on the immunologic naïveté of the newborn.
- The potential seriousness of 2009 H1N1 influenza infection in infants.
- The recommendation to not use antiviral prophylaxis for infants < 3 months due to lack of information on the safety of such chemoprophylaxis in infants of that age.

Option One:

Recommendations in the CDC Interim Guidelines are based on a desire to formulate a cautious approach with options based on hospital configuration.

Option Two:

Until more data are available, CDPH recommendations are based on a health alert from the San Francisco Department of Public Health and a Bay Area pediatric, neonatal and obstetric expert working group; San Mateo Health System Seasonal and Novel H1N1 (swine) Flu A in Pregnancy Management Guidance for Clinicians, October 2009; published opinions from the American Academy of Pediatrics Section on Breastfeeding Executive Committee; and the CDC Interim Guidance:

The alternative proposal addresses:

- Protecting mother-infant bonding.
- Encouraging the establishment of breast feeding in the newborn period,
- Encouraging maintenance of breast feeding throughout infancy.
- The potential seriousness of the infection in the newborn.

Recommendations excerpted from AAP News Vol. 30 No. 11 November 2009, p. 11

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(<http://aapnews.aappublications.org/cgi/content/full/30/11/11>)

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