

H1N1: What have we learned?

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H1N1 Diagnosis

- Clinical: Influenza-Like illness (ILI)
fever, sore throat/cough, body ache, diarrhea
- Rapid Influenza Diagnostic Tests (RIDTs)
Office test, Immunofluorescence (DFA or IFA)
- rRT-PCR

Treatment of H1N1: adult doses

		Treatment	Prophylaxis
Oseltamivir	Tamiflu	75 mg twice daily for 5 days	75 mg once daily for 10 days
Zanamivir	Relenza	2 inhalations twice daily for 5 days	2 inhalations once daily for 10 days

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What about children?

Oseltamivir (Tamiflu)

Age or weight	Dose Oseltamivir
< 3 months	12 mg
3-5 months	20 mg
6-11 months	25 mg
< 15 Kg	30 mg
15-23 Kg	45 mg
23-40 Kg	60 mg
> 40 Kg	75 mg

Zanamivir (Relenza)

Same dose all ages

Treatment: 7 years and older

Prophylaxis: 5 years and older

Per Kg: 3.5 mg/kg/dose for \geq 9 months

3.0 mg/Kg/dose for < 9 months

PT: 1-1.5 mg/kg/dose for neonates (?)

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What about Pregnancy?

- If sick, treat, regardless of trimester.
Oseltamivir (Tamiflu) may be preferred
- If “exposed” but not sick, consider degree of exposure
- If significant exposure consider prophylaxis
Zanamivir (Relenza) may be preferred

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- Who needs treatment?

Groups at Risk for Influenza Complications
- Children < 2 years of age
- Persons > 65 years of age
- Pregnant women
- Persons of any age with certain medical conditions

- Who needs prophylaxis?
 - Groups at Risk of Influenza Complications
 - HCW

Consider early treatment as an alternative to chemoprophylaxis

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Flu vaccine(s)

- Seasonal (trivalent: H1N1, H3N2, B)
H1N1 (monovalent)
- Injectable: TIV
Intranasal: LAIV

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Priority groups H1N1 vaccination

- Pregnant Women
- Persons who live or provide care for infants < 6 mo
- Health care workers
- Persons 6 months-24 years of age
- Persons age 25-64 years with medical conditions

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SUMMARY OF CDC RECOMMENDATIONS FOR H1N1:

- High risk populations:
 - children < 2 years and pregnant women are considered high risk for complications of H1N1 virus infection

- Transmission:
 - H1N1 is transmitted primarily through large-particle respiratory droplet transmission
 - other possible sources are contact with contaminated surfaces, small-droplet nuclei (air-borne transmission)
 - all respiratory secretions and bodily fluids (diarrheal stool) of H1N1 cases should be considered potentially infectious

- Pregnant women exposed to H1N1
 - women who have symptoms of influenza-like illness (temp > 100, cough sore throat) should be treated as if they had influenza

- Pregnant woman with confirmed, probable or suspected H1N1 flu
 - initiate appropriate antiviral treatment
 - isolate mother from healthy pregnant women
 - place surgical mask on ill mother during labor and delivery to decrease exposure of newborn and healthcare personnel
 - place mother in isolation after delivery
 - in order to reduce risk of transmission of virus to newborn, consider avoiding close contact with infant until
 - mother has received antiviral medications for 48 hours, fever has fully resolved and can control cough and secretions
 - when these conditions are met
 - wear face mask
 - change to clean clothing
 - adhere to strict hand washing and cough etiquette
 - may begin breast feeding
 - continue protective measures for 7 days after onset of symptoms or until symptom free for 24 hours

- Newborns of ill mothers:
 - newborn should be considered to be potentially infected if delivery occurs during the 2 days before through 7 days after illness onset in the mother
 - infection control procedures developed for H1N1 flu should be used for the newborn throughout the hospital stay
 - respiratory hygiene, cough etiquette
 - droplet precautions (surgical mask for close contact)
 - newborn should be monitored closely for signs and symptoms of influenza
 - if signs or symptoms develop, testing should be performed
 - chemoprophylaxis of infants < 3 months is not typically recommended

- Infant considerations:
 - only adults who are not sick should care for the infant
 - breast milk is not potential source of influenza infection
 - antiviral medication treatment or prophylaxis is not a contraindication for breastfeeding
 - careful adherence to hand hygiene and cough etiquette is essential
 - educational information available for parents from CDC website(<http://www.cdc.gov/flu/protect/habits.htm>)

<http://www.cdc.gov/h1n1flu/antiviral.htm#recommendations>