

CDC GUIDANCE & DEFINITIONS for Seasonal Flu and Novel H1N1

Confirmed Case	Probable Case
Diagnosis of: influenza – like illness	Diagnosis of: influenza – like illness
LAB: confirmed novel influenza A (H1N1) virus infection by the CDC: - real-time RT-PCR - viral culture	LAB: pos flu A but neg for H1 & H3 - RT-PCR
Suspected Case (optional) Diagnosis of: person doesn't meet the confirmed or probable case, and not novel H1N1 test negative, and is/has: - < 65yrs hospitalized for influenza – like illness OR - influenza – like illness and lives in state without confirmed cases, but has traveled to a state or country with confirmed or probable cases OR - influenza – like illness and epidemiologic link in the past 7 days to confirmed case or probable case	

Infectious period: 1 day prior to the case's illness onset to 5-7 days after onset.

Close contact: within about 6 feet of an ill person who is a confirmed or suspected case of the seasonal or novel H1N1 flu virus infection during the case's infectious period.

Acute respiratory illness or sepsis like syndrome: recent onset of at least 2 of the following: rhinorrhea or nasal congestion, sore throat, cough (with or w/o fever), severe headache, hypotension

High-risk groups: A person who is at high-risk for complications is defined as; A person who requires hospitalization; A person at high-risk for severe disease ie: Adults and children who have chronic pulmonary, cardiovascular, hepatic, hematological, neurologic, neuromuscular, or metabolic disorders

Special Considerations for Children: Aspirin or aspirin-containing products should not be administered to any confirmed or suspected ill case of the seasonal or novel H1N1 flu virus infection aged 18 years old and younger due to the risk of Reye syndrome. For relief of fever, other anti-pyretic medications are recommended such as acetaminophen or non steroidal anti-inflammatory drugs.
<http://www.cdc.gov/h1n1flu/update.htm>

LABORATORY TESTING PROTOCOL

Consider: Performing influenza testing on patients with **suspected cases of H1N1**, especially those with **severe illness**.

RECOMMENDED TESTS

Rapid antigen or other laboratory test	Predominant virus(es) in community	Preferred medication(s)	Alternative (combination antiviral treatment)
Not done or negative, but clinical suspicion for influenza	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Not done or negative, but clinical suspicion for influenza	H3N2 or B	Oseltamivir or Zanamivir	None
Positive A	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Positive A	H3N2 or B	Oseltamivir or Zanamivir	None
Positive B	Any	Oseltamivir or Zanamivir	None
Positive A+B**	H1N1 or unknown	Zanamivir	Oseltamivir + Rimantadine*
Positive A+B**	H3N2 or B	Oseltamivir or Zanamivir	None

Adult H1N1 (Swine Flu) Anti Viral Recommendations		
Drug	Treatment	Chemoprophylaxis
Oseltamivir	75 mg capsules 2 times per day for 5 days	75 mg capsules 1 times per day for 10 days
Zanamivir	2 5-mg inhalations (10 mg total) 2 times per day for 5 days	2 5-mg inhalations (10 mg total) 1 times per day for 10 days

Seasonal Flu B Anti Viral Recommendations		
Drug	Treatment	Chemoprophylaxis
Oseltamivir	75 mg capsules 2 times per day for 5 days	75 mg capsules 1 times per day for 10 days
Zanamivir	2 5-mg inhalations (10 mg total) 2 times per day for 5 days	2 5-mg inhalations (10 mg total) 1 times per day for 10 days
Amantadine	100 mg twice daily for 5 days	
Rimantadine	100 mg twice daily for 5 days	

HOME CARE GUIDANCE FLU

^{CDC} Flu Precautions

- __ stay home until at least 24 hrs AFTER they are free of fever or signs of a fever without the use of fever-reducing medications
- __ avoid close contact with others – **DO NOT** go to work or school while ill
- __ get plenty of rest
- __ drink clear fluids to keep from being dehydrated
- __ cover coughs and sneezes
- __ clean hands with soap & water or an alcohol-based hand rub often
- __ be watchful for emergency warning signs (see below) that might indicate you need to seek medical attention

EMERGENCY WARNING SIGNS

- | Children | Adults |
|---|---|
| <ul style="list-style-type: none"> • Fast breathing or trouble breathing • Bluish or gray skin color • Not drinking enough fluids • Severe or persistent vomiting • Not waking up or not interacting • Being so irritable that the child does not want to be held • Flu-like symptoms improve but then return with fever and worse cough | <ul style="list-style-type: none"> • Difficulty breathing or shortness of breath • Pain or pressure in the chest or abdomen • Sudden dizziness • Confusion • Severe or persistent vomiting • Flu-like symptoms improve but then return with fever and worse cough |

PNEUMONIA RISK STRATIFICATION

CURB-65:
Criteria for pneumonia risk stratification:
1pt each: • confusion • uremia (BUN > 19 mg/dL) • resp rate ≥30
• SBP < 90 or DBP < 60 • age ≥ 65

SCORE
Interpretation of score: (mortality%)

• Low risk; consider home treatment (0.6%- 0.7%)	0
• Low risk; consider home treatment (2.7% - 3.2%)	1
• Short inpatient hospitalization or closely supervised outpatient treatment (6.8%-13%)	2
• Severe pneumonia; hospitalize and consider admitting to intensive care (14 %-17%)	3
• Severe pneumonia; hospitalize and consider admitting to intensive care (27.8-57%)	4 - 5

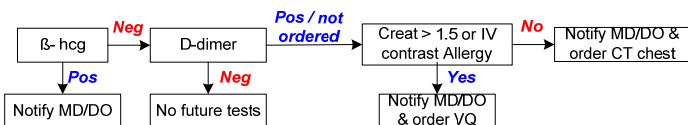
PULMONARY EMBOLISM TOOLS

PERC Rule
likelihood of PE is low if all criteria met
• Age ≤50 years • HR ≤100 • RA sat ≥94% • no prior DVT or PE
• no recent trauma / surgery • no hemoptysis • no hormonal use
• no unilateral leg swelling

Wells Criteria for PE
D-Dimer does not reliably rule out PE if Wells >4
3 pts each: • clinically suspect DVT • Dx most likely PE
1.5 pts each: • HR > 100 • immobilization / surgery (past 4 wks)
• Prior DVT/PE
1pt each: • Hemoptysis • Cancer Tx (past 6 months)

SCORE
LOW (0-2pts) (3.6%) MOD (3-6pts) (20.5%) HIGH (> 6pts) (66%)

PE Algorithm



ANTIBIOTIC RECOMMENDATIONS (IDSA / ATS GUIDELINES)

Non ICU patients	ICU patients	Pseudomonal Risk
β-lactam(IV or IM) + Macrolide(IV or IM) OR Antipseudomococcal Quinolone monotherapy (IV or PO)	β-lactam(IV) + Macrolide(IV) OR β-lactam(IV) + Antipseudomococcal Quinolone (IV) OR If documented β-lactam allergy Aztreonam(IV) + Antipseudomococcal Quinolone (IV)	<i>These drugs are acceptable for ICU and Non-ICU pts with risk</i> Antipseudomonal β-lactam (IV) + Antipseudomonal Quinolone (IV) OR Antipseudomonal β-lactam (IV) + Aminoglycoside (IV) + EITHER Antipseudomonal Quinolone (IV) OR Macrolide (IV) OR If documented β-lactam allergy Aztreonam(IV) + Antipseudomococcal Quinolone (IV) + Aminoglycoside (IV)
OR β-lactam(IV or IM) + Doxycycline(IV or PO) OR If less than 65 with no risk factors for drug resistant <i>Pneumococcus</i> Macrolide monotherapy (IV or PO)		