



Nebraska Cases

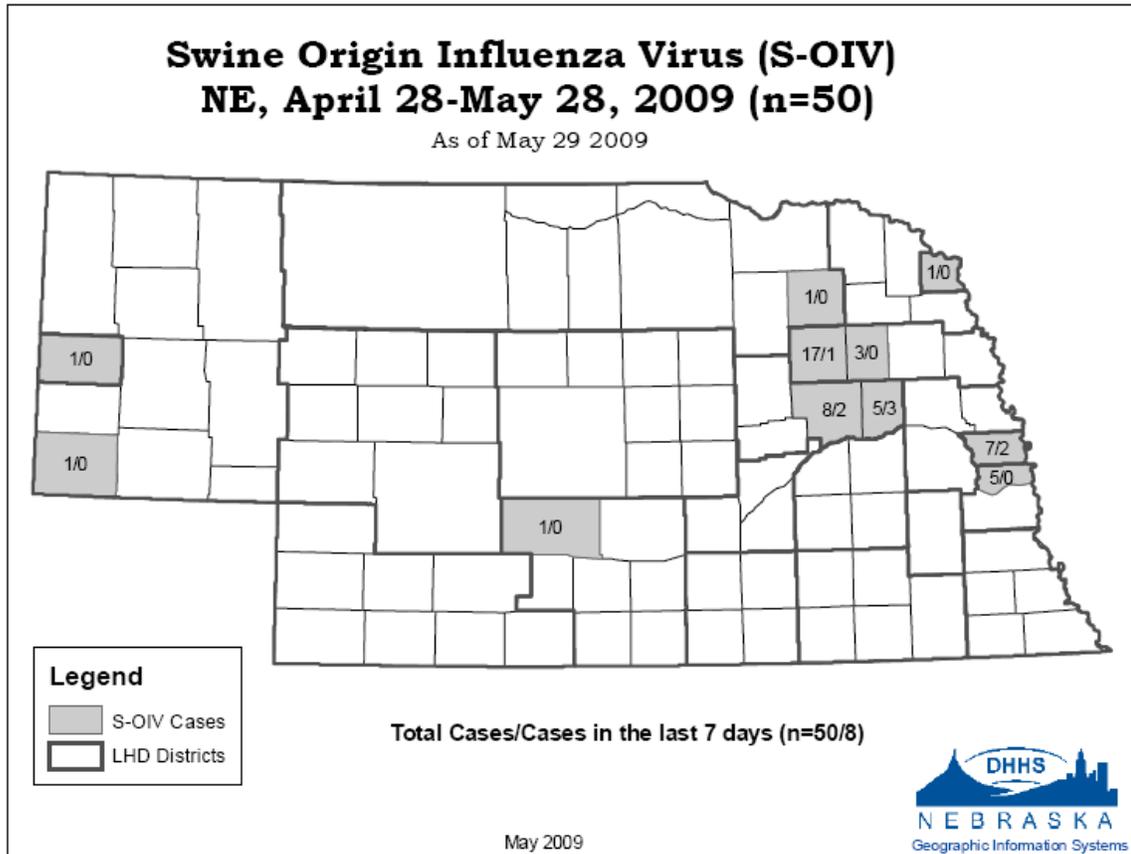
50 NE residents; 4 out-of-state persons visiting Nebraska

Table 1 compares the demographics of the 50 cases of S-OIV with the 84 cases of seasonal flu from the same period. Of note, S-OIV is affecting a younger population, with no persons reported over 62 years of age, and 31/50(62 %) patients under 25 years of age.

Table 1: Seasonal Flu A & S-OIV Demographics

Demographic		Confirmed/ Probable S-OIV	Lab Confirmed Seasonal Flu
Age	Age range	0-62 years	0-83 years
	Median	14	20
	Mean	23	24
	0-4	3(6%)	13(15%)
	5-24	28(56%)	38(45%)
	25-64	19(38%)	29(35%)
	65+	0(0%)	4(5%)
Total		<b>50</b>	<b>84</b>
Gender	Female	30	44
	Male	20	40
Hospitalized		1	
Race	Hispanic	22	
	Not Hispanic	19	
	Missing	9	

The map below shows the total number of persons with lab-confirmed S-OIV in each county, together with the number of cases diagnosed in the past seven days.



#### Surveillance at Nebraska hospitals:

Nebraska's LHDs have established relationships with the infection prevention (IP) staff at all of the Nebraska acute care hospitals. We have asked IP staff to conduct surveillance for patients with influenza-like illness admitted to the hospital. To date, we have identified only one Nebraska in-patient with S-OIV.

#### Surveillance at Nebraska laboratories:

A network of approximately 80 laboratories report the total number of influenza tests performed each week, along with the total number of positive and negative tests for both influenza A and B. These tests are rapid diagnostic tests that differentiate influenza A from influenza B, but cannot determine the A subtype (H1, H3, S-OIV). These numbers indicate a progressive decrease in patients being tested for influenza along with a decrease in the number of positive influenza lab tests.

#### Outpatient Illness Surveillance:

Each week, a select group of 14 sentinel Nebraska physicians report data to CDC on the total number of office visits and the number of those patients with influenza-like illness (ILI), by age group. This system documented that seasonal influenza peaked in mid-March and then returned to a low baseline level comparable to that seen prior to and after the usual influenza season. This system detected an up-tick in ILI visits in late April and early May but is currently showing minimal activity consistent with the typical pre- and post influenza season levels.

#### Summary:

During the past seven days we have seen a drop in the total number of lab-confirmed influenza cases, but this reduction has occurred entirely in the seasonal (H1N1, H3N2, and B) influenza isolates. The new variant S-OIV continues to circulate in a low-level but stable fashion with approximately 10 persons identified each week. These cases have clustered in populations in and around Madison County (Norfolk) and more recently Platte County (Columbus). The virus does not appear to be causing outbreaks or illness in a large segment of the population. Those infected with S-OIV seem to have an illness consistent with that caused by typical seasonal influenza, without excessive morbidity or mortality.

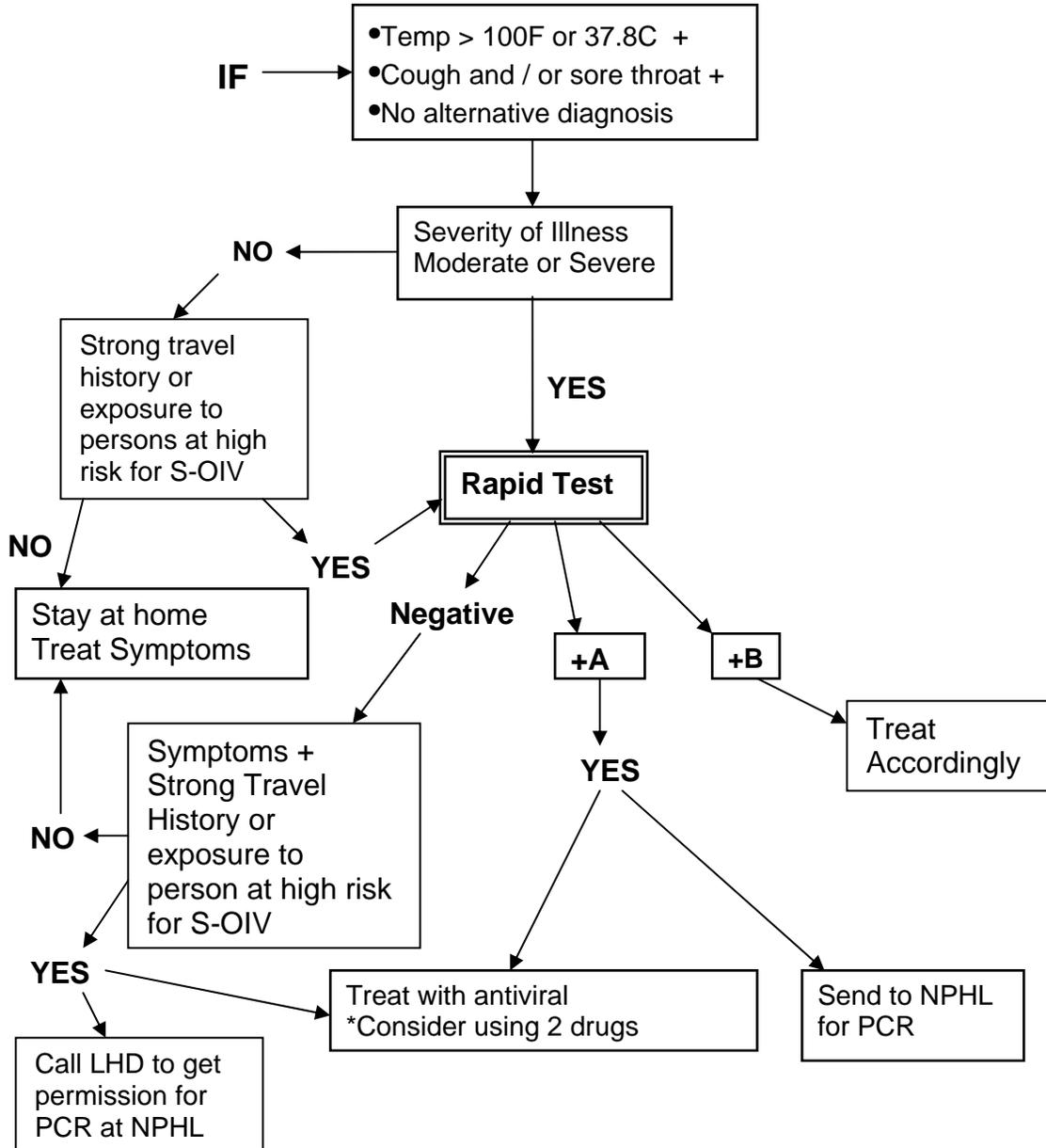
While influenza appears to be decreasing in the Nebraska population, it is unclear at this point if the virus will disappear as summer arrives. Because this situation is unprecedented and influenza behaves in a highly unpredictable fashion, we continue to urge vigilance, heightened assessment activities including lab testing, and close communication between the medical community and public health.

Comments/Recommendations:

1. The Nebraska medical community needs to remain vigilant for influenza illness throughout the summer. Because this is a new virus, many people will lack immunity to it: there is likely to be a large pool of susceptible persons. Of note, the virus appears to be sparing those over 60 years of age, suggesting some type of residual immunity.
  
2. Influenza season is just beginning in the Southern Hemisphere: their experience and whether new mutations emerge will inform our expectations for the 2009-2010 season here in the Northern Hemisphere. We continue to advise the medical community to consider influenza in persons with influenza-like illness (ILI) [defined as fever (temperature of 100°F [37.8°C] or greater) plus a cough and/or a sore throat in the absence of a KNOWN cause other than influenza]. Consider a rapid influenza test in such patients. If the test is (+) for influenza A, a second nasopharyngeal swab/washing should be obtained for PCR at the NPHL. The attached flow chart provides a suggested algorithm to be applied in the assessment and care of persons with suspected influenza. While medical providers are asked to consider the decision tree provided, these recommendations need to be adapted to individual patient circumstances and may not address every conceivable diagnostic and therapeutic situation.
  
3. For medical staff collecting flu diagnostic specimens:
  - observe recommended infection control practices  
[http://www.cdc.gov/h1n1flu/guidelines\\_labworkers.htm](http://www.cdc.gov/h1n1flu/guidelines_labworkers.htm);
  - for PCR test specimens: complete an NPHL requisition (can be downloaded from:  
<http://www.dhhs.ne.gov/puh/epi/flu/docs/flunphltestrequisition.pdf>); keep specimen refrigerated following collection; indicate on your specimen submission requisition which rapid antigen test your facility uses; do not delay in shipping to NPHL (contact NPHL client services for advice on expedited courier service 1-866-290-1406).

4. We continue to emphasize the importance of collecting a high quality nasopharyngeal (NP) specimen for both rapid and PCR flu tests. Those who collect these samples need to understand the method for collecting a quality NP sample. A video demonstrating how to do this is available at our website: <http://www.dhhs.ne.gov/H1N1flu/clinicians.htm>
5. Once an individual in a household is diagnosed with a specific type of influenza, other household members or close contacts that develop ILI are likely to be infected with the same type. Rapid influenza testing can be considered but is not required. Confirmatory PCR testing is not necessary.
6. Medical facilities and offices should stockpile infection control supplies such as masks, gloves, gowns, etc. Manufacturers and suppliers are challenged in coping with incoming orders, and have implemented an allocation process limiting how much is available to their customers. Public health entities at the local, regional, state and federal have stockpiles of infection control supplies that can be used during an emergency, but these supplies are limited. Please review the supplies available at your hospital and/or clinic and plan for future high-demand situations.
7. While public health authorities continue to recommend N95 respirators for health care workers dealing with patients suspected of influenza infection, when such devices are not available or are not practical, surgical masks should be considered on both patients and health care workers. Recommendations for the uses of facemasks are available at: <http://www.cdc.gov/h1n1flu/masks.htm>
8. To minimize spread of all types of influenza, persons who have ILI should self-isolate (i.e., stay away from others) for 7 days after the onset of illness or for at least 24 hours after symptoms have resolved, whichever is longer.
9. Providers are asked to immediately report persons with influenza-like illness in childcare, nursing home or other institutional settings to their local health department. In addition, deaths due to ILI, severe ILI disease and ILI disease in special populations such as pregnant women and health care workers should be reported promptly.

## Nebraska Recommendations for Testing, Treatment and Prophylaxis of S-OIV/ H1N1 Current Outbreak



**Recommended Prophylaxis:** for 1) health care workers who did not use proper PPE or those with chronic diseases, 2) household contacts of confirmed S-OIV with chronic medical conditions, 3) Children attending school or daycare who are at high-risk for complications of influenza and who had close contact (face-to-face) with a confirmed, probable at risk for complications.

\*Because seasonal influenza is still relatively common, persons known or suspected to have influenza and at high risk should be treated with two drug combination therapy. Current seasonal influenza is resistant to neuraminidase inhibitors (oseltamavir [Tamiflu] and zanamavir [Relenza]) but susceptible to adamantanes (amantadine and rimantadine). S-OIV is susceptible to neuraminidase inhibitors and resistant to adamantanes. Therefore, the use of combo treatment in high risk patients should be considered.