

Pandemic H1N1 Update

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Flu seasons are unpredictable in a number of ways, including when they begin, how severe they are, how long they last and which viruses will spread and when. There were more uncertainties than usual for the 2009-10 flu season because of the emergence of the pandemic 2009 H1N1 influenza virus (previously called "novel H1N1" or "swine flu"). The Nebraska Department of Health and Human Services Division of Public Health (NDHHS-DPH) continues to work closely with our local health department (LHD) partners and the Nebraska Public Health Laboratory (NPHL) in addressing the various issues raised by the 2009 H1N1 flu virus. This article provides updated information and guidance regarding epidemiology, lab testing, antiviral use, and influenza vaccine.

Nebraska surveillance data indicate that influenza activity has dropped to a level below our tracking system's ability to detect, and may have totally disappeared from the state. This is based on 1) weekly surveillance of 81 Nebraska laboratories performing rapid influenza tests; 2) weekly surveillance of designated primary care physicians across the state who track influenza-like illness (ILI) in their practices; and 3) weekly surveillance of Nebraska hospital ILI admissions.

Since early September, 2009, all but one (which was an influenza A /H3 subtype in September 2009) influenza A viruses subtyped at NPHL have been the pandemic 2009 influenza A (H1N1) strains (n=525). Sporadic testing showed that these isolates were susceptible to oseltamivir (Tamiflu), zanamivir (Relenza), and peramivir but not to the adamantanes (Amantadine and Rimantadine). Rapid influenza testing has continued to decrease around the state, with fewer than 10 positive tests per week. Many of these are likely false-positives. Fewer than 10 specimens are being submitted weekly to the NPHL for confirmatory PCR testing. Providers should collect a rapid test on any person (hospitalized or outpatient) suspected of influenza, and should forward a naso-pharyngeal sample to the NPHL on any patient with a positive rapid flu test, or any patient strongly suspected of influenza, regardless of the result of the rapid flu test. The last positive specimen confirmed by PCR testing was collected on April 9, 2010, and was the pandemic H1N1 strain. The previous positive specimen prior to that was collected on March 29, 2010, and was also the same strain.

Although many people are now immune to this virus as a result of infection and/or vaccination, many people in the United States remain susceptible to the 2009 H1N1 virus. CDC flu experts have recently expressed concerns about a resurgence of influenza. The vaccination still remains the most effective means of preventing influenza. The vaccine should continue to be made available through provider offices, retail settings, and health departments. At this point, targeted outreach may be the most appropriate strategy, (e.g. to those at high risk of severe illness, to parents of young children who need to return for the second dose of vaccine, minority and hard-to-reach populations, college and university students, and people 65 years and older). Both the seasonal (trivalent) vaccine and the monovalent pandemic H1N1 vaccine can be provided to all persons who seek the vaccine provided they lack contraindications to the vaccine as stipulated in the package insert.

Nebraska

Sentinel Laboratory Surveillance 2009-2010			
Season-to-Date (August 30, 2009 - May 1, 2010) Totals			
	All Influenza	Influenza A	Influenza B
Total Positive	4338	4261	77
Total Tests Performed	30825	30825	30825
% Positive	14.07%	13.82%	0.25%
Current Week's Influenza Data (week ending April 25-May 1, 2010)			
	All Influenza	Influenza A	Influenza B
Total Positive	3	3	0
Total Tests Performed	117	117	117
% Positive	2.56%	2.56%	0.00%
RSV Surveillance	Current Week	Season-to-Date	
Total Positive	9	1907	
Total Tests Performed	106	8372	
% Positive	8.49%	22.78%	