



NEW MEXICO INFLUENZA SURVEILLANCE UPDATE from the Epidemiology and Response Division of the New Mexico Department of Health (NMDOH)

Weekly Report ending January 14, 2006 (MMWR Week 2) Posted on January 18, 2006.

## Summary of Influenza Activity in New Mexico for Week Ending January 14, 2006:

- Eighteen of the 21 sentinel sites reported a total of 4,748 patient visits, of which 163 (3.43%) were positive for an influenza-like illness (ILI)<sup>1</sup>. The previous week ending January 7th reported 5.54 % influenza-like illness<sup>2</sup>.
- Sentinel clinical laboratories reported that 18.06 % of influenza rapid antigen or immunofluorescence tests were positive for influenza A, and 0.81% were positive for Influenza B.
- NMDOH reported the state influenza activity as "WIDESPREAD" to the Centers for Disease Control and Prevention (CDC) (see table below for definitions).

# Laboratory Activity in NM:

- For the week ending January 14, 2006, 17 of 17 sentinel clinical laboratories reported performing 742 rapid antigen or immunofluorescence (i.e., direct fluorescent antibody staining, DFA) tests, of which 134 (18.06%) were positive for influenza A, six (0.81%) was positive for influenza B and none were indistinguishable<sup>3</sup>.
- Since October 2, 2005, 17 sentinel clinical laboratories have reported the results of 4,233 rapid influenza tests. Eight hundred and ninety-eight (21.21%) tests were positive, of which 870 detected influenza A, 23 detected influenza B, and 5 were indistinguishable.
- NMDOH Scientific Laboratory Division (SLD) has isolated influenza A in 56 of 188 (29.8%) specimens submitted since October 2005. Subtyping of the influenza A cultures has revealed 21 H3N2, and 1 H1N1 viral subtypes; antigenic characterization by CDC is pending.

# **Influenza-Related Pediatric Mortality**

CDC reported one influenza-related pediatric death in Week 1. Since October 2, 2005, CDC has received reports of six influenza-related pediatric deaths, four of which occurred during the current influenza season. There have been no reported deaths in NM.

### Flu Activity in the Mountain Region and Texas

For the week ending January 7, 2006 (the most recent data available), influenza activity was reported as "Widespread" by Texas, Nevada, Arizona and Colorado; "Regional" by Idaho, Utah and Wyoming, and "Local" by Montana.. Since October 2, 2005, laboratory testing from the National Respiratory and Enteric Virus Surveillance System (NREVSS) in the Mountain Region (NM, AZ, CO, UT, NV, ID, MT, WY) has identified 441 influenza A H3N2 isolates, 122 influenza A unknown subtype isolates, and 16 influenza B isolates.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Influenza-like Activity (ILI) is defined as Fever ( $\geq 100^{\circ}$ F [37.8° C], oral or equivalent) AND cough and/or sore throat in absence of a KNOWN cause other than influenza.

<sup>&</sup>lt;sup>2</sup> Weekly ILI data may change as additional reports are compiled.

<sup>&</sup>lt;sup>3</sup> Some rapid influenza tests cannot differentiate between types A and B.

## National Flu Surveillance and Laboratory Activity

Nationwide, 2.7% of patient visits to U.S. sentinel providers were due to influenza-like illness, which continues to be above the national baseline of 2.2%. Influenza activity was reported as 'Widespread' by 7 states, 'Regional' by 11 states, 'Local' by 9 states, and 'Sporadic' by 21 states, New York City, the District of Columbia and Puerto Rico. Two states reported 'No Activity'. More information on national surveillance can be found at http://www.cdc.gov/flu/weekly/.

For the week ending January 7, 2006, 203 (9.1%) of 2,223 specimens tested for influenza viruses were positive by culture. Of these, 90 were influenza A (H3N2), 105 were influenza A that were not subtyped, and 8 were influenza B.

Antigenic characterization of 73 influenza viruses by CDC, since October 2005, has indicated the following:

- Fifty-four (83%) out of 65 H3N2 culture isolates are A/California/7/2004-like.
- One H1 influenza A virus was antigenically similar to the vaccine strain A/New Caledonia/20/99.
- Four (57%) of seven influenza B viruses are B/Florida/07/2004-like; one is antigenically similar to the 2005-2006 vaccine strain B/Shanghai/361/2002; two strains belong to the B/Victoria lineage which is not contained in the 2005-06 vaccines.

Components of 2005-06 influenza vaccines:

- Fluvirin® (Chiron) contains A/California/7/2004-like (H3N2); and A/New Caledonia/20/99-like (H1N1); and B/Shanghai/361/2002-like strain.
- Both Fluzone® (sanofi) and Fluarix<sup>TM</sup> (GSK) contains A/New York/55/2004 (H3N2, an A/California/7/2004-like strain); and A/New Caledonia/20/99 (H1N1); and B/Jiangsu/10/2003 (a B/Shanghai/361/2002-like strain).
- FluMist® (Medimmune, live attenuated vaccine) contains A/California/7/2004-like (H3N2); and A/New Caledonia/20/99 (H1N1); and B/Jiangsu/10/2003 (a B/Shanghai/361/2002-like strain).

### Important message:

On the basis of available antiviral testing results, CDC currently recommends that neither amantadine nor rimandatine be used for the treatment or prophylaxis of influenza A in the United States for the remainder of the 2005–06 influenza season. During this period, oseltamivir or zanamivir should be selected if an antiviral medication is used for the treatment and prophylaxis of influenza.

For more information, go to www.health.state.nm.us/flu

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This information is collected by the Infectious Disease Epidemiology Bureau, Epidemiology Response Division, NMDOH. For questions, please call 505-827-0006. For more information on influenza go to the NMDOH web page: <u>http://www.health.state.nm.us/flu/</u> or the CDC web page: <u>http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm</u>

Activity Level	ILI activity*/Outbreaks		Laboratory data
No activity	Low	And	No lab confirmed cases <sup>†</sup>
Sporadic	Not increased	And	Isolated lab-confirmed cases
	OR		
	Not increased	And	Lab confirmed outbreak in one institution <sup>‡</sup>
Local	Increased ILI in 1 region**;		Recent (within the past 3 weeks) lab evidence
	ILI activity in other regions	And	of influenza in region with increased ILI
	is not increased		
	OR		
	2 or more institutional		Recent (within the past 3 weeks) lab evidence
	outbreaks (ILI or lab		of influenza in region with the outbreaks; virus
	confirmed) in 1 region; ILI	And	activity is no greater than sporadic in other
	activity in other regions is		regions
	not increased		
<b>Regional</b> (doesn't apply to states with ≤4 regions)	Increased ILI in $\geq 2$ but less	And	Recent (within the past 3 weeks) lab confirmed
	than half of the regions	1 Inu	influenza in the affected regions
	OR		
	Institutional outbreaks (ILI		Recent (within the past 3 weeks) lab confirmed
	or lab confirmed) in $\geq 2$ and	And	influenza in the affected regions
	less than half of the regions		
Widespread	Increased ILI and/or	And	Recent (within the past 3 weeks) lab confirmed
	institutional outbreaks (ILI		influenza in the state.
	or lab confirmed) in at least		
	half of the regions		

<sup>\*</sup> ILI activity can be assessed using a variety of data sources including sentinel providers, school/workplace absenteeism, and other syndromic surveillance systems that monitor influenza-like illness.

<sup>†</sup> Lab confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR. The sensitivity and specificity of these tests vary and the predicative value positive may be low outside the time of peak influenza activity. Therefore, a state may wish to obtain laboratory confirmation of influenza by testing methods other than point of care rapid tests for reporting the first laboratory confirmed case of influenza of the season. For assigning an influenza activity level, NMDOH Epidemiology and Response Division utilizes results of rapid influenza testing only after receiving evidence of at least one culture confirmed case.

<sup>‡</sup> Institution includes nursing home, hospital, prison, school, etc.

\*\*Region: population under surveillance in a defined geographical subdivision of a state. NMDOH Epidemiology and Response Division uses the five Public Health Regions for our state subdivisions.

## Influenza Surveillance Graphs:



