NEW MEXICO INFLUENZA SURVEILLANCE UPDATE from the Epidemiology and Response Division of the New Mexico Department of Health (NMDOH)
Weekly Report ending January 7, 2006 (MMWR week 1)
Posted on January 12, 2006.

Summary of Influenza Activity in New Mexico for Week Ending January 7, 2006:

- Nineteen of the 21 sentinel sites reported a total of 5,209 patient visits, of which 289 (5.54%) were positive for an influenza-like illness (ILI)[1]. The previous week ending December 31st reported 4.01% influenza-like illness[2].
- Sentinel clinical laboratories reported that 21.5% of influenza rapid antigen or immunofluorescence tests were positive for influenza A, and 0.22% 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 7, 2006, 17 of 17 sentinel clinical laboratories reported performing 902 rapid antigen or immunofluorescence (i.e., direct fluorescent antibody staining, DFA) tests, of which 194 (21.5%) were positive for influenza A, two (0.22%) was positive for influenza B and none were indistinguishable[3].
- Since October 2, 2005, 17 sentinel clinical laboratories have reported the results of 3,491 rapid influenza tests. Seven hundred and fifty-eight (22%) tests were positive, of which 736 detected influenza A, 17 detected influenza B, and 5 were indistinguishable.
- NMDOH Scientific Laboratory Division (SLD) has isolated influenza A in 49 of 148 (33%) specimens submitted since October 2005. Subtyping of the influenza A cultures has revealed 9 H3N2, and 1 H1N1 viral subtypes; antigenic characterization by CDC is pending.

Influenza-Related Pediatric Mortality

No influenza-related pediatric deaths were reported for Week 52. Since October 2, 2005, CDC has received reports of three influenza-related pediatric deaths, three 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 December 31, 2005 (the most recent data available), influenza activity was reported as "Widespread" by Texas, Utah, Nevada, Arizona and Colorado; "Regional" by Idaho; "Local" by Montana, and "Sporadic" by Wyoming. 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 348 influenza A H3N2 isolates, 72 influenza A unknown subtype isolates, and 12 influenza B isolates.[3]

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[1] Influenza-like Activity (ILI) is defined as Fever (≥ 100°F [37.8° C], oral or equivalent) AND cough and/or sore throat in absence of a KNOWN cause other than influenza.
[2] Weekly ILI data may change as additional reports are compiled.
[3] Some rapid influenza tests cannot differentiate between types A and B.

National Flu Surveillance and Laboratory Activity
Nationwide, 3.3 % 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 3 states, 'Local' by 9 states and the District of Columbia and 'Sporadic' by 27 states and New York City. Two states reported 'No Activity' and 2 states did not report. More information on national surveillance can be found at http://www.cdc.gov/flu/weekly/.

For the week ending December 31, 2005, 169 (10.1%) of 1,677 specimens tested for influenza viruses were positive by culture. Of these, 117 were influenza A (H3N2), 2 were influenza A (H1N1), 48 were influenza A that were not subtyped, and 2 were influenza B. Antigenic characterization of 31 influenza viruses by CDC, since October 2005, has indicated the following:

- Twenty-one (92%) out of 23 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™ (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).

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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: http://www.health.state.nm.us/flu/ or the CDC web page: http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm

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

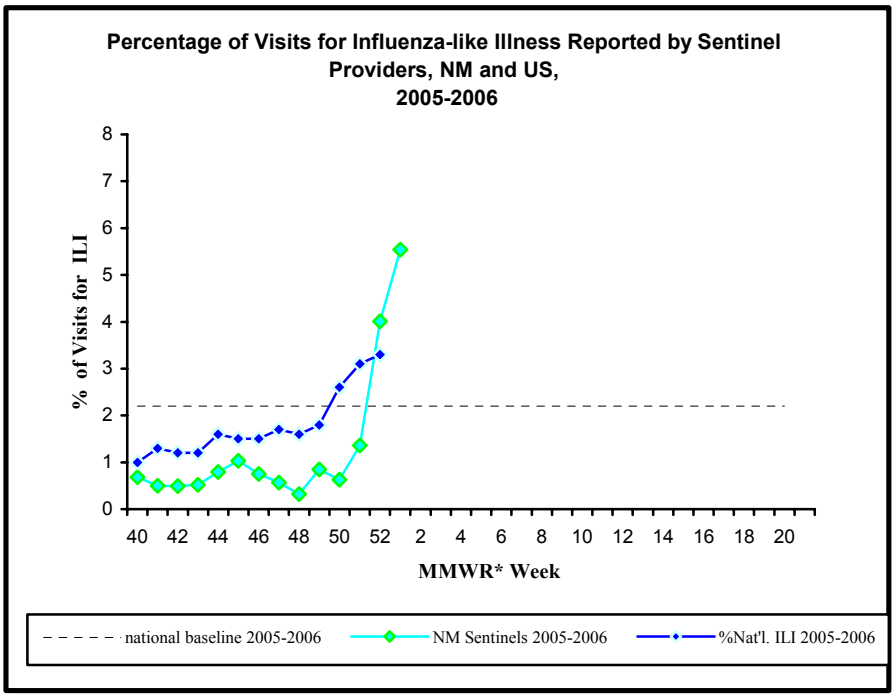
* ILI activity can be assessed using a variety of data sources including sentinel providers, school/workplace absenteeism, and other syndromic surveillance systems that monitor influenza-like illness.

† 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.

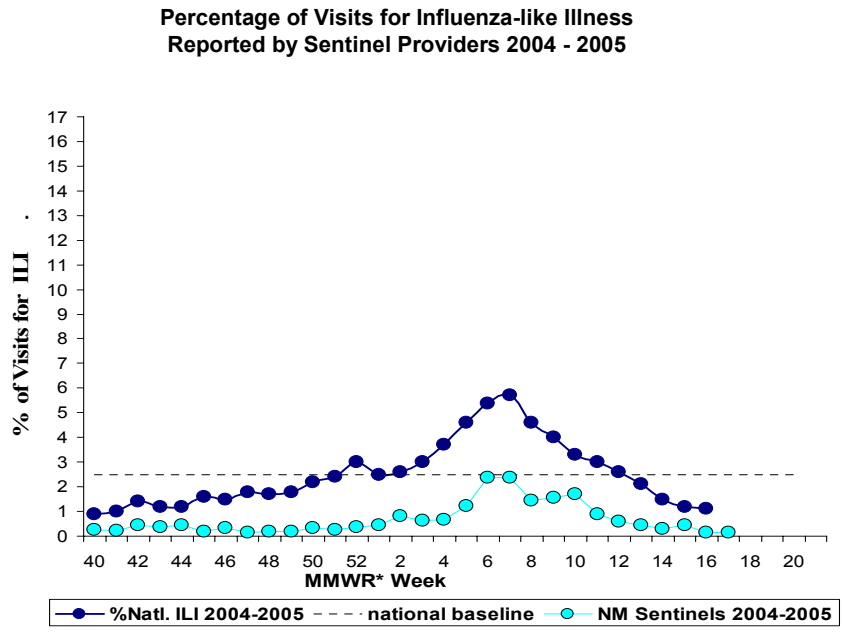
‡ Institution includes nursing home, hospital, prison, school, etc.

**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:



Surveillance from 2004-05 Influenza Season



*Morbidity and Mortality Weekly Report (published by the CDC)