NEW MEXICO INFLUENZA SURVEILLANCE UPDATE from the Epidemiology and Response Division of the New Mexico Department of Health (NMDOH)
Weekly Report ending February 18, 2006 (MMWR Week 7)
Posted on February 22, 2006.

Summary of Influenza Activity in New Mexico for Week Ending February 18, 2006:

- Twenty of the 21 sentinel sites reported a total of 5, 261 patient visits, of which 55 (1.0%) were positive for an influenza-like illness (ILI)[1]. The previous week ending February 4th reported 1.3 % influenza-like illness[2].
- Sentinel clinical laboratories reported that 5.9 % of influenza rapid antigen or immunofluorescence tests were positive for influenza A, and 1.3% were positive for Influenza B.
- NMDOH reported the state influenza activity as "LOCAL" to the Centers for Disease Control and Prevention (CDC) (see table below for definitions).

Laboratory Activity in NM:

- For the week ending February 18, 2006, 16 of 17 sentinel clinical laboratories reported performing 475 rapid antigen or immunofluorescence (i.e., direct fluorescent antibody staining, DFA) tests, of which 28 (5.9 %) were positive for influenza A, 6 (1.3%) were positive for influenza B and none were indistinguishable[3].
- Since October 2, 2005, 17 sentinel clinical laboratories have reported the results of 7,210 rapid influenza tests. One thousand, two hundred and thirty-one (17.1 %) tests were positive, of which 1,191 detected influenza A, 35 detected influenza B, and 5 were indistinguishable.
- NMDOH Scientific Laboratory Division (SLD) has isolated influenza A in 67 of 191 (35%) [2] specimens submitted since October 2005. Subtyping of the influenza A cultures has revealed 46 H3 and 1 H1 viral subtypes; N subtyping by CDC is pending.

Influenza-Related Pediatric Mortality

CDC reported no influenza-related pediatric deaths in Week 5. Since October 2, 2005, CDC has received reports of fourteen influenza-related pediatric deaths, twelve 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 February 11, 2006 (the most recent data available), influenza activity was reported as "Widespread" by Texas, Wyoming and Colorado; "Local" by Montana, Nevada, New Mexico and Arizona; and "Sporadic" by Utah and Idaho. 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 725 influenza A H3N2 isolates, 5 influenza A H1N1 isolates, 505 influenza A unknown subtype isolates, and 46 influenza B isolates.[3]

---

[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 and lab 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, for the week ending February 11, 2006, 2.5 % of patient visits to U.S. sentinel providers were due to influenza-like illness, which is above the national baseline of 2.2%. Influenza activity was reported as 'Widespread' by 13 states, 'Regional' by 21 states and New York City, 'Local' by 11 states and the District of Columbia, and 'Sporadic' by 5 states and Puerto Rico. More information on national surveillance can be found at http://www.cdc.gov/flu/weekly/.

For the week ending February 11, 2006, 455 (19 %) of 2,438 specimens tested for influenza viruses were positive by culture. Of these, 136 were influenza A (H3N2), 6 were influenza A (H1N1), 280 were influenza A that were not subtyped, and 33 were influenza B. All states have reported lab-confirmed influenza this season. During the past three weeks (weeks 4-6), the largest number of isolates have been reported from the Mountain and South Atlantic regions.

Antigenic characterization of 189 influenza viruses by CDC, since October 2005, has indicated the following:

- One hundred and twenty-three (82%) out of 149 H3N2 influenza A isolates are A/California/7/2004-like.
- Seven (77 %) of the 9 H1 influenza A isolates were antigenically similar to the vaccine strain A/New Caledonia/20/99.
- Nineteen (61%) of the 31 influenza B viruses belong to the B/Yamagata lineage: seventeen are B/Florida/07/2004-like (a minor antigenic variant of B/Shanghai/361/2002) and two are antigenically similar to the 2005-2006 vaccine strain B/Shanghai/361/2002. Twelve (39%) influenza B viruses 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).

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

****

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.

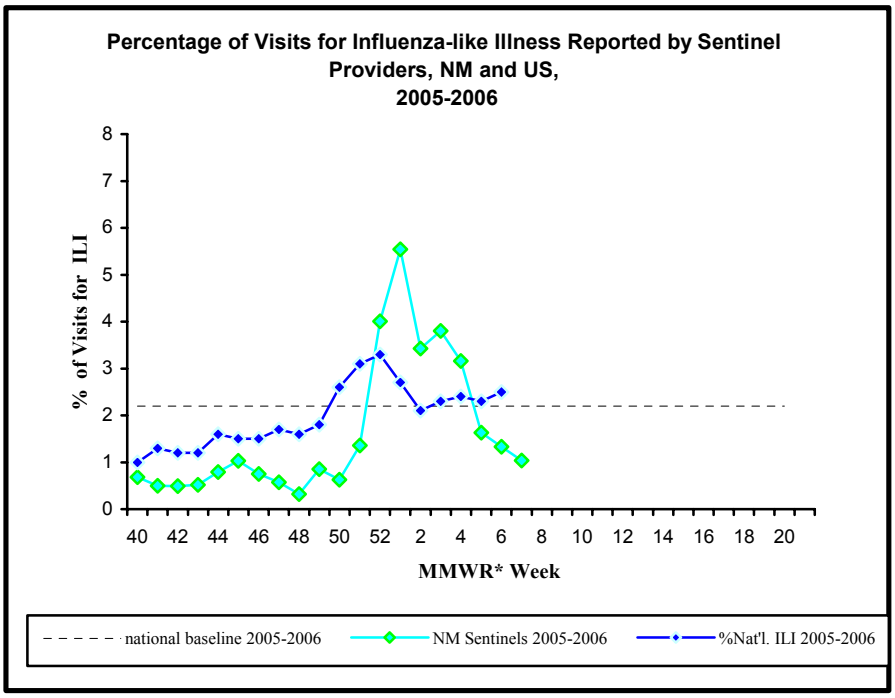
* ILI activity can be assessed using a variety of data sources including sentinel providers, school/workplace absenteeism, and other syndromic surveillance systems that monitor influenza-like illness.

† 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.

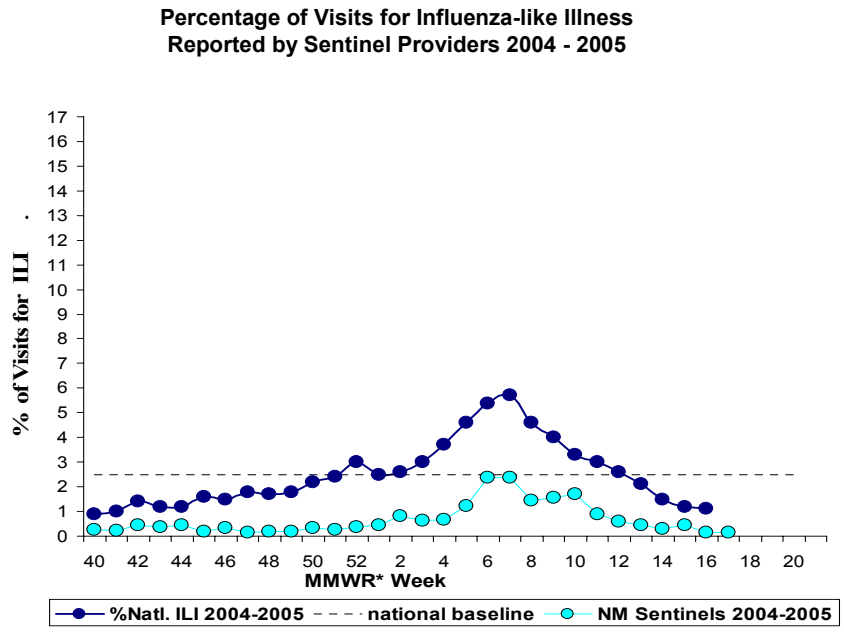
‡ Institution includes nursing home, hospital, prison, school, etc.

**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)