



Epidemiology and Response Division

NEW MEXICO INFLUENZA SURVEILLANCE UPDATE 2008 - 2009 Influenza Season

| Week Ending | Activity Level |
|------------------------|----------------|
| 4/11/09 (MMWR Week 14) | Regional |

NMDOH reported the state influenza activity as “**Regional**” to the Centers for Disease Control and Prevention (CDC) for week ending April 11th, the most recent week that data are available (see table on page 3 for definitions). As of April 17th, the Scientific Lab Division (SLD) has received 631 culture specimens since the beginning of the season. One hundred and forty-six (23.1%) specimens have been culture-positive: 135 type A (109-H1, 22-H3, 4- pending subtyping), two with A/B isolation, and nine type B (1–Yamagata; 3-Victoria lineage and 5 -not characterized).

Summary of Influenza Outpatient Surveillance in NM for Week Ending 4/11/09¹:

Twenty-three of the 26 sentinel provider sites reporting:

- total of 7,275 patient visits seen for any reason,
- 128 (1.8%) were positive for influenza-like illness (ILI)², and
- previous week (ending April 4th) reported 1.4% influenza-like illness.

Summary of Sentinel Laboratory Influenza Testing in NM:

| Period of 2008-2009 Influenza Season | Number of Tests Performed** | Positive Type A (n,%) | Positive Type B (n,%) | Positive Type Unknown ³ (n,%) | Total Positive All Types (n,%) |
|---|-----------------------------|-----------------------|-----------------------|--|--------------------------------|
| Week ending 4/11/09 (31 of 32 labs reporting) | 300 | 13 (4.1%) | 12 (3.8%) | 0 (0.0%) | 25 (7.8%) |
| Cumulative as of 9/28/08 | 12,663 | 1015 (8.0%) | 215 (1.7%) | 64 (0.5%) | 1293(10.2%) |

**Includes rapid antigen and immunofluorescence testing (i.e., direct fluorescent antibody staining)

Note: The sensitivity and specificity of point of care rapid diagnostic tests vary during times when influenza is not circulating widely. The NM Influenza Surveillance Program expects some false positive rapid diagnostic results outside the time of peak influenza activity (i.e., beginning and end of season). The first NM laboratory confirmed case of the influenza season is based on a positive **viral culture** result.

Influenza-Related Pediatric Mortality:

Eight new influenza-associated pediatric deaths were reported to CDC in the time frame 3/22/09 to 4/4/09. A total of 53 pediatric deaths have been reported to CDC in this season.

Influenza Activity, Mountain Region and Bordering States, Week Ending 4/11/09:

| State | Activity Level | State | Activity Level |
|------------|----------------|----------|----------------|
| Montana | Local | Arizona | Regional |
| Idaho | Regional | Utah | Sporadic |
| Wyoming | Local | Nevada | Regional |
| Colorado | Regional | Texas | Local |
| New Mexico | Regional | Oklahoma | Local |

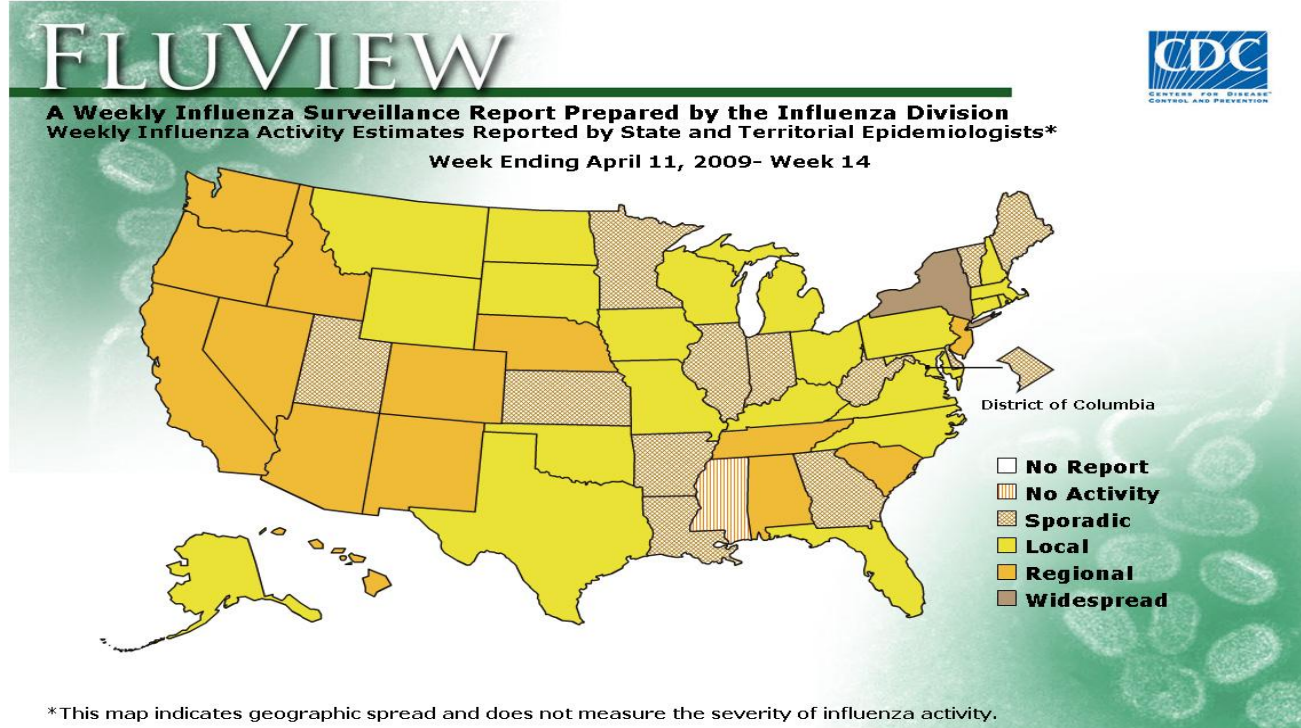
¹ Weekly ILI and lab data may change as additional reports are compiled.

² Influenza-like Activity (ILI) is defined as Fever ($\geq 100^{\circ}\text{F}$ [37.8°C], oral or equivalent) AND cough and/or sore throat in absence of a KNOWN cause other than influenza.

³ Some rapid influenza tests cannot differentiate between types A and B.

National Flu Surveillance and Laboratory Activity, Week Ending 4/11/09:

Flu Activity: Nationwide, for the week ending 4/11/09, 1.7% of patient visits to U.S. sentinel providers were due to ILI, which is below the national baseline of 2.4%. Refer to map below for state by state reported activity. More information on national surveillance can be found at: <http://www.cdc.gov/flu/weekly/>.



Laboratory Activity (National):

| | Week 14 | Cumulative for the Season |
|---|----------------|----------------------------------|
| No. of specimens tested | 2,873 | 178,393 |
| No. of positive specimens (%) | 259 (9.0%) | 25,407 (14.2%) |
| Positive specimens by type/subtype | | |
| Influenza A | 137 (52.9%) | 16,979 (66.8%) |
| A (H1) | 39 (28.5%) | 6,151 (36.2%) |
| A (H3) | 11 (8.0%) | 713 (4.2%) |
| A (unsubtyped) | 87 (63.5%) | 10,115 (59.6%) |
| Influenza B | 122 (47.1%) | 8,428 (33.2%) |

Antigenic Characterization Testing (National): Since October 1, 2008, all influenza A (H1N1) virus strains have been characterized as A/Brisbane/59/2007-like and all influenza A (H3N2) viruses have been characterized as A/Brisbane/10/2007-like, the influenza A (H1N1) and influenza A (H3N2) components included in the 2008-09 influenza vaccine. Evaluation of the influenza B viruses has revealed 50 out of 264 (19%) isolates are of the Yamagata lineage, the B component of the 2008-09 vaccine. The remaining 214 (81%) viruses belong to the B/Victoria lineage and are not related to the influenza B vaccine strain.

This information is collected by the Influenza Sentinel Surveillance Program, 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>

Table: Influenza Activity Levels

| Activity Level | ILI activity*/Outbreaks | | Laboratory data |
|--|--|------------|--|
| No activity | Low | And | No lab confirmed cases [†] |
| Sporadic | Not increased | And | Isolated lab-confirmed cases |
| | OR | | |
| 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 | | |
| Regional (doesn't apply to states with ≤4 regions) | 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 |
| | OR | | |
| 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 |
| | 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. |

*Influenza-like illness: Fever (≥ 100°F [37.8°C], oral or equivalent) and cough and/or sore throat (in the absence of a known cause other than influenza)

[†] Lab confirmed case = case confirmed by rapid diagnostic test, antigen detection, culture, or PCR. Care should be given when relying on results of point of care rapid diagnostic test kits during times when influenza is not circulating widely. The sensitivity and specificity of these tests vary and the predictive 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.

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

**Region: population under surveillance in a defined geographical subdivision of a state. A region could be comprised of 1 or more counties and would be based on each state's specific circumstances. Depending on the size of the state, the number of regions could range from 2 to approximately 12. The definition of regions would be left to the state but existing state health districts could be used in many states. Allowing states to define regions would avoid somewhat arbitrary county lines and allow states to make divisions that make sense based on geographic population clusters. Focusing on regions larger than counties would also improve the likelihood that data needed for estimating activity would be available.

Influenza Surveillance Graphs— 2008-2009 Season:

