



# Epidemiology and Response Division

## NEW MEXICO INFLUENZA SURVEILLANCE UPDATE 2007-2008 Influenza Season

*Epidemiology and Response Division, New Mexico Department of Health (NMDOH)*

Week Ending	Activity Level
10/20/07	No Activity

NMDOH reported the state influenza activity as “**No Activity**” to the Centers for Disease Control and Prevention (CDC) (see table below for definitions).

### Summary of Influenza Activity in New Mexico for Week Ending 10/20/07<sup>1</sup>:

- Twenty-three of the 24 sentinel provider sites reported a total of 7,046 patient visits, of which 65 (0.92%) were positive for an influenza-like illness (ILI)<sup>2</sup>. The previous week ending October 13th reported 0.61 % influenza-like illness.

### Summary of Sentinel Laboratory Activity in New Mexico:

Period of 2007-2008 Influenza Season	Number of Tests Performed**	Positive Type A (n,%)	Positive Type B (n,%)	Positive Type Unknown <sup>3</sup> (n,%)	Total Positive All Types (n,%)
Week ending 10/20/07 (30 of 31 labs reporting)	113	0(0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Cumulative as of 10/1/07	254	1(0.39%)	0 (0%)	0 (0.0%)	1 (0.39%)

\*\*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:

No influenza-related pediatric deaths were reported to CDC for week 41 (ending 10/13/07). NM has had no influenza-related pediatric deaths reported this season.

### Reported Flu Activity in the Mountain Region and Texas, Week Ending 10/13/07:

State	Activity Level	State	Activity Level
Montana	None	Arizona	None
Idaho	Sporadic	Utah	Sporadic
Wyoming	None	Nevada	Sporadic
Colorado	None	Texas	None

### National Flu Surveillance and Laboratory Activity, Week Ending 10/13/07:

Nationwide, for the week ending 10/13/07, 1.3% of patient visits to U.S. sentinel providers were due to ILI, which is less than the national baseline of 2.2 %. Influenza activity was reported as

<sup>1</sup> Weekly ILI and lab data may change as additional reports are compiled.

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

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

“Sporadic” by 12 states and the District of Columbia. Thirty-eight states reported “No Activity”. More information on national surveillance can be found at <http://www.cdc.gov/flu/weekly/>.

During this same week, the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories reported 1,136 specimens tested for influenza viruses, 21 (1.9%) of which were positive: 5 influenza A (H1) viruses (Mountain region), one influenza A (H3) virus (South Atlantic region) and 14 influenza A viruses that were not subtyped (various regions), and one influenza B virus (Pacific region).

### **Summer 2007 Laboratory Surveillance, National and New Mexico:**

From week ending May 26, 2007 to September 29, 2007, WHO and NREVSS labs tested 24,247 specimens and 511 (2.1%) were positive for influenza.

Of the positive results, 103 (20.2%) were influenza A (H1) viruses, 89 (17.4%) were influenza A (H3) viruses, 245 (47.9%) were influenza A viruses that were not sub-typed and 74 (14.5%) were influenza B viruses.

In New Mexico, 24 of 31 (>75%) labs in the sentinel surveillance laboratory network continued reporting on rapid influenza testing through the summer. A total of 491 tests were reported from week ending May 26<sup>th</sup> to week ending September 29<sup>th</sup> (weeks 21-39) with 3 (0.6%) positive results (two influenza A and one influenza B). One influenza result was subsequently cultured with isolation of A (H3) subtype. This was a probable imported case on an international traveler.

### **Recommended vaccine composition of influenza virus vaccines for use in the 2007-2008 influenza season:**

- an A/Solomon Islands/3/2006 (H1N1)-like virus (a recent antigenic variant of A/New Caledonia/20/1999-like)
- an A/Wisconsin/67/2005 (H3N2)-like virus<sup>a</sup>
- a B/Malaysia/2506/2004-like virus (B/Victoria lineage)

<sup>a</sup> Vaccine viruses include:

A/Wisconsin/67/2005 (H3N2) and A/Hiroshima/52/2005

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This information is collected by the Infectious Disease Epidemiology Bureau, Epidemiology Response Division of NMDOH.

In future issues of this weekly report, NMDOH will be reporting on added influenza surveillance program components (e.g. school surveillance, hospitalization surveillance, and border and tribal surveillance) as data become available.

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

\*Influenza-like illness: Fever ( $\geq 100^{\circ}\text{F}$  [ $37.8^{\circ}\text{C}$ ], oral or equivalent) and cough and/or sore throat (in the absence of a known cause other than influenza)

<sup>†</sup> 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 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.

<sup>‡</sup> 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— 2007-2008 Season:

