March 6, 2009: Vol. 3, Issue 19 Surveillance Period (week 8): 02/22/09—02/28/09

COUNTY OF LOS ANGELES Public Health

INFLUENZA WATCH LOS ANGELES COUNTY

Los Angeles County

Overall, influenza activity increased slightly during week 8; RSV activity continues to decline. Influenza A remains predominant throughout Los Angeles County. However, parainfluenza, adenovirus, and human metapneumovirus have been detected recently. Of the 6 respiratory outbreaks reported to Public Health, two have been confirmed Influenza A (H1) and one was adenovirus.

Table 1: Surveillance System Overview

SURVEILLANCE SYSTEM*	Week 8	2008-2009 YTD
Percent Positive Influenza Tests±	11.9	4.5
Percent Positive RSV Tests‡	22.7	19.2
Percent Flu A / Flu B±	- -	91% / 9%
Severe Pediatric Influenza Cases†	0	1
Respiratory Outbreaks	0	6
Influenza Vaccines Administered (PH)	- -	60,197

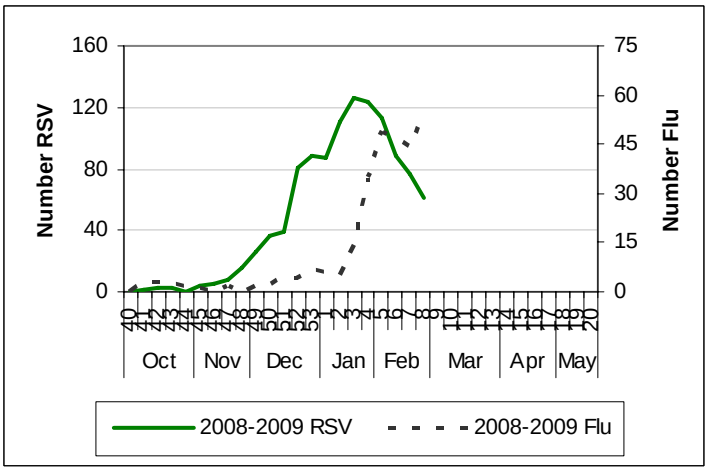
*See http://lapublichealth.org/acd/flu.htm for a description of surveillance methods.

± Sentinel sites (8 participating facilities).

‡ Sentinel sites (4participating facilities).

†The number of deaths is indicated by the parenthesis.

Figure 1: Positive Influenza and RSV Tests by Week



RSV data in Figure 1 represent testing completed in four reporting facilities for the 2008-2009 season. Influenza data represent testing completed in eight facilities.

California

During week 7 (February 15-February 21), influenza activity in California remained **regional** based on data from Northern and Southern California. Antiviral prescriptions decreased slightly throughout California. http://www.cdph.ca.gov/PROGRAMS/VRDL/Pages/CaliforniaInfluenzaSurveillanceProject.aspx

United States

Influenza activity increased during week 7. During this week, 27 states reported **widespread** activity, 17 states reported **regional** activity, 6 reported **local** activity, and none reported **sporadic** activity. Influenza activity is lower compared to the same week last year. http://www.cdc.gov/flu/weekly/fluactivity.htm

In the News

The Evolution of Influenza Resistance and Treatment

A recent editorial provided an excellent overview of influenza treatment resistance. A total of 92% of circulating influenza A (H3N2) during the 2005-2006 influenza season was resistant to adamantanes—one of two pharmaceutical classes available for the treatment of influenza. At that time, experts believed that resistance to neuraminidase inhibitors was unlikely because neuraminidase inhibitors closely resemble sialic acid (their natural substrate) so that any mutation that reduced affinity to these antivirals would also compromise viral fitness. However, during the 2008-2009 season, influenza A (H1N1) has been shown to be highly resistant (98.5% of isolates) to oseltamivir because of a mutation (H274Y) specific to the binding of oseltamivir. H3N2 strains remain susceptible as does Influenza B. Therefore, patients who are candidates for antiviral therapy should receive either zanamivir or a combination of oseltamivir and an adamantane for the treatment of influenza.

http://jama.ama-assn.org/cgi/content/full/2009.324v1

Figure 2: Percent of ED Visits for ILI by Week