Surveillance Period (weeks 8-9): 02/21/10 - 03/06/10

COUNTY OF LOS ANGELES Public Health

INFLUENZA WATCH
LOS ANGELES COUNTY

Los Angeles County (LAC)

The total number of positive flu tests remained low during weeks 8-9 (Feb 21 - Mar 6) (Figure 1). The % of flu tests that tested positive is also low and remains well below 2007-08 and 2008-09 levels (Figure 1). Two respiratory outbreaks were reported during week 8 (1 in a youth center and 1 in a nursing home) (Table 1). The % of emergency department visits due to ILI continued to decrease in weeks 8 and 9 and remains lower than previous years (Figure 3). As RSV data is incomplete for weeks 7-9, these numbers are omitted from Table 1 and Figure 2.

Table 1: Surveillance System Overview

SURVEILLANCE SYSTEM*	Weeks 8-9	2009-10 YTD
Percent Positive Influenza Tests±	0.2	13.3
Percent Positive RSV Tests‡	——**	7.7**
Percent Flu A / Flu B±	100.0 / 0.0	99.4 /0.6
Severe Pediatric Influenza Cases†	0 (0)	103 (9)
Respiratory Outbreaks	2	347
Influenza Deaths	0	99

*See http://lapublichealth.org/acd/flu.htm for a description of surveillance methods. 2009-2010 surveillance began 8/30/09 (week 35) and ends 10/22/2010 (week 20)

± Sentinel sites (8 participating facilities in week 8, 7 in week 9)

‡ Sentinel sites (3 participating facilities in weeks 8and 9)

**RSV data is incomplete for weeks 7-9. YTD is through week 6.

†The number of deaths is indicated by the parenthesis.

California

During week 9 (Feb 28-Mar 6), influenza activity in California remained **sporadic.**

http://www.cdph.ca.gov/PROGRAMS/VRDL/Pages/CaliforniaInfluenzaSurveillanceProject.aspx

United States

Flu activity remained the same in the US during weeks 8 and 9. In week 9 (Feb 28-Mar 6) no states reported widespread activity, 5 states reported regional activity, 6 states reported local activity, 33 states reported sporadic activity, and 5 states reported no activity. Four of the five states reporting regional activity are in the Southeast. All subtyped flu A viruses reported to CDC in week 9 were pandemic H1N1 (pH1N1) viruses. www.cdc.gov/flu/weekly

Figure 1: Total Positive Flu and % Positive Flu by Week

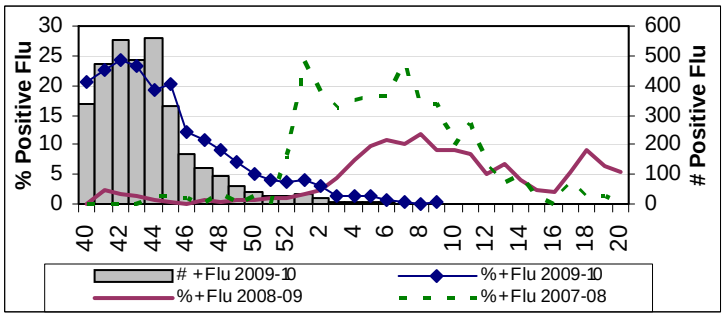


Figure 2: Total Positive RSV and % Positive RSV by Week

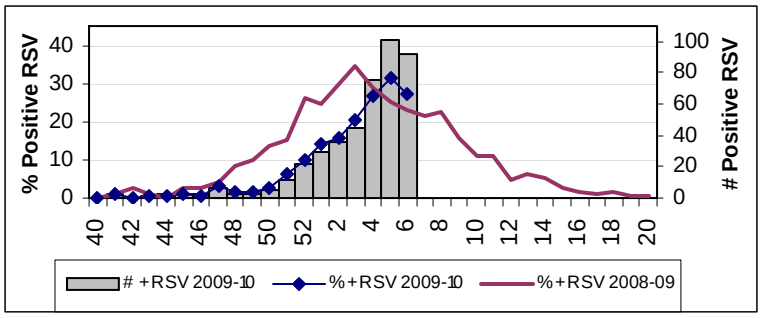
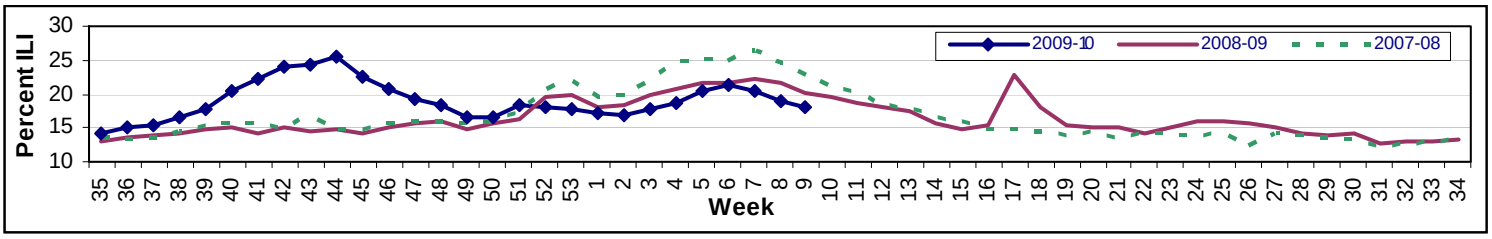


Figure 3: Percent of Emergency Department Visits for Influenza-Like Illness by Week, All Ages



In the News

A study published in the March issue of *Emerging Infectious Diseases* compares different data sources of influenza activity from Kaiser Permanente Northern California from January through July 2009. The study found that, in the beginning of the pandemic in late April, the total number of respiratory tests rose dramatically when media coverage was high. The number of outpatient visits, hospitalizations for pneumonia and influenza, and total patient calls for influenza increased as well. While the total number of respiratory tests skyrocketed during this initial phase, the number of positive influenza A tests increased only slightly resulting in a low percentage of all tests that were positive for influenza A (5-7%). These results indicate a low prevalence of pH1N1 in the community during the beginning of the pandemic. The author suggests that the increase in testing in late April seems to be, at least in part, a result of a "pandemic scare" rather than a significant increase in influenza incidence. http://www.cdc.gov/eid/content/16/3/504.htm

COUNTY OF LOS ANGELES Public Health

INFLUENZA WATCH

LOS ANGELES COUNTY

Analysis of Influenza Cases in Los Angeles County (LAC)

Figure 4 shows the % of flu tests that were positive along side the total number of tests that were conducted in 9 sentinel hospital laboratories within LAC. In contrast to findings from the study discussed in *In The News* on page 1, the data presented here shows a bump in % positive along with a bump in testing during the beginning of the pandemic in weeks 17 and 18. However, the increase in testing during these couple of weeks was also not as dramatic as that of Kaiser Permanente Northern California. This suggests that there may have been less of a "pandemic scare" in Southern California than in Northern California. Other explanations for the apparent differences between Northern California and Los Angeles County include differences in type of test conducted, testing protocol, resources and capabilities, as well as differences in true prevalence of influenza. It is interesting to note the spike in the number of tests performed in week 45 (Nov. 8 - Nov. 14) which occurred in absence of a concurrent increase in % positive in Figure 4. This increase in testing occurred one week after the % of emergency department (ED) visits due to ILI (Figure 3) and the number of ICU/deaths (Figure 5) peaked. Thus, it is possible that the increased testing at this time was a result of heightened sensitivity of physicians to increases in both measures in the preceding weeks.

Since the beginning of the pandemic in April, 2009 there have been 371 ICU admissions and 141 deaths due to confirmed pH1N1 in LAC according to individual case reporting. Of the 141 deaths, 129 (91.5%) had been admitted to the ICU. The number of pH1N1 ICU admissions and deaths remains low during this time of year (Figure 5).

Consistent with other data featured in *Influenza Watch*, the number of hospitalizations due to *any* influenza as well as the rate (per 1,000 hospital beds) of laboratory-confirmed influenza remained low in weeks 8 and 9 (Figure 6).

Figure 4: Total # tests performed and % positive flu detected in 9 hospital laboratories in Los Angeles County, 01/03/2009 - 3/06/2010

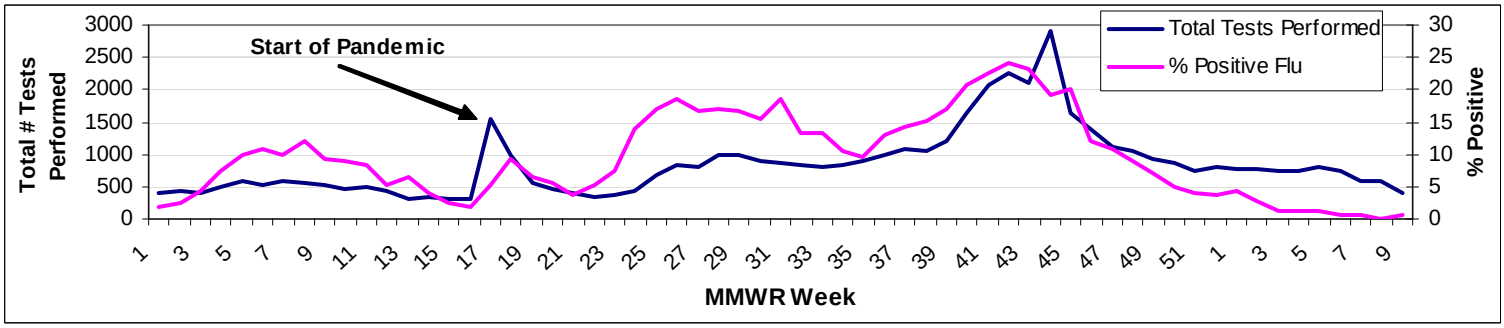


Figure 5: Number of Pandemic H1N1 Cases by Week of Onset as of March 5, 2010, Individual Case Reporting

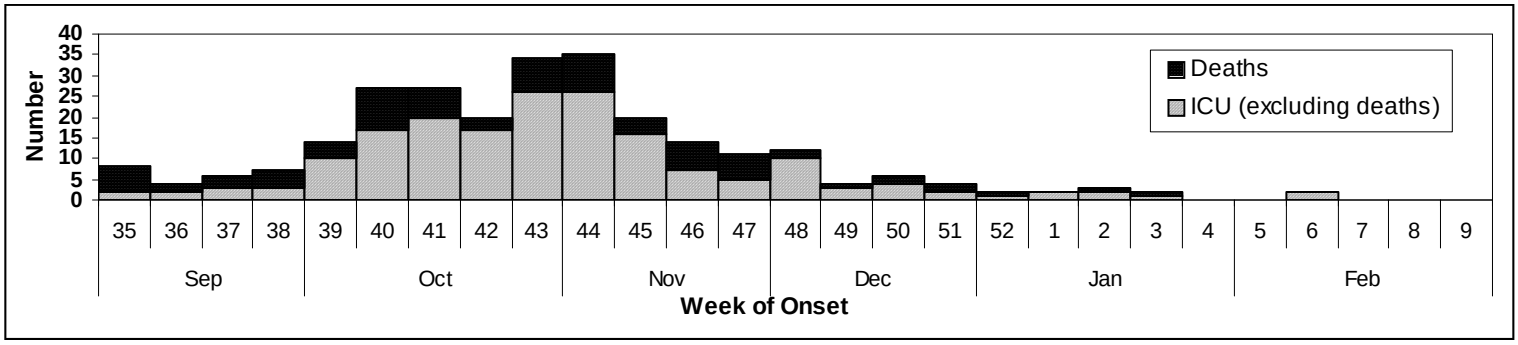


Figure 6: Number and Rate of Hospitalized Influenza (*Any* Influenza) Cases, Aggregate Reporting, 08/30/2009 - 03/06/2010