



INFLUENZA WATCH LOS ANGELES COUNTY

Los Angeles County (LAC) The total number of positive flu tests, the percent of flu tests that tested positive (Figure 1), and the percent of emergency department visits due to ILI (Figures 2 and 3) are approaching levels normally expected during this time of year. Thirteen new ILI (influenza-like illness) outbreaks (9 in elementary schools, 2 in preschools, 1 in a middle school, and 1 in a nursing home) were reported during week 49 (Table 1). While pandemic H1N1 activity appears to be decreasing in Los Angeles County, respiratory season is now beginning and we anticipate another possible increase in H1N1 as well as an increase in seasonal flu and other respiratory viruses that normally appear during this time of year. See page 2 for more information.

Table 1: Surveillance System Overview

SURVEILLANCE SYSTEM*	Week 49	2009-2010 YTD
Percent Positive Influenza Tests [±]	5.6	17.8
Percent Positive RSV Tests [‡]	1.8	0.7
Percent Flu A / Flu B [±]	100 / 0	99.7 / 0.3
Severe Pediatric Influenza Cases [†]	0 (0)	85 (7)
Respiratory Outbreaks	13	351
Influenza Deaths	0	56

*See <http://apublichealth.org/acd/flu.htm> for a description of surveillance methods. 2009-2010 surveillance started on 8/30/09 (week 35) and ends May 22, 2010 (week 20)

± Sentinel sites (8 participating facilities in week 49)

‡ Sentinel sites (3 participating facilities in week 49)

†The number of deaths is indicated by the parenthesis.

California During week 48 (November 29-December 5), influenza activity in California remained **widespread**.

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

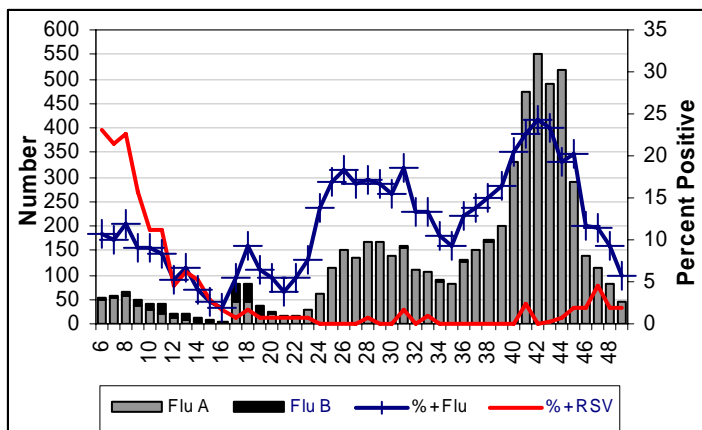
United States Influenza activity decreased in the US during week 48 (Nov 29-Dec 5). In week 48, 25 states reported widespread activity, 17 states reported regional activity, 6 states reported local activity, and 2 states reported sporadic activity. Over 99% of subtyped influenza A viruses reported to CDC in week 48 were novel influenza A (H1N1) viruses.

www.cdc.gov/flu/weekly

In the News A December 15th article in *Clinical Infectious Diseases* described the initial outbreak of pandemic H1N1 (pH1N1) in military personnel in San Diego in April/May of 2009. A total of 97 infections were identified. Persons who tested positive for H1N1 were more likely to have fever, cough, headache, and myalgias than those who tested negative. Sore throat, rhinorrhea, and GI symptoms were not significantly different between the two groups. Persons who tested positive for pH1N1 were more likely to have had close contact with someone else with pH1N1 or influenza-like illness (ILI). A total of 571 persons had both rapid and RT-PCR tests for pH1N1. Using the RT-PCR as the “gold standard,” rapid tests were only 51% sensitive and 98% specific. Sensitivity decreased with age possibly because children have increased viral shedding.

<http://www.journals.uchicago.edu/doi/abs/10.1086/648508>

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



*Influenza data represent testing completed in 9 facilities except in weeks 39 and 44-49 in which data represent testing in 8 facilities.

Figure 2: Percent of ED Visits for ILI by Week, All Ages

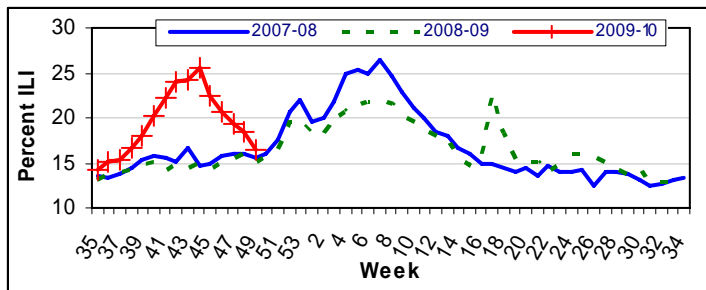
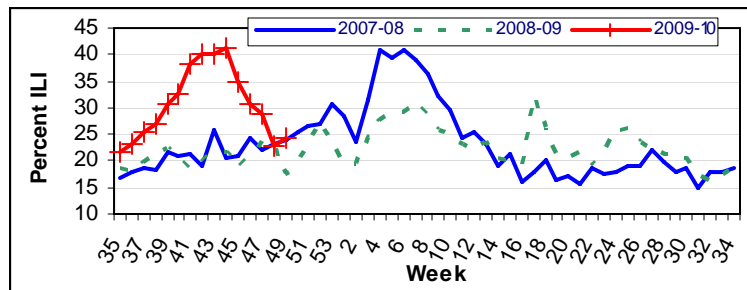


Figure 3: Percent of ED Visits for ILI by Week, 5-14 Years





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Analysis of Influenza Cases in Los Angeles County (LAC)

The number of respiratory outbreaks has remained relatively low since week 46 (Figure 4). The etiology for 53 of the 412 respiratory outbreaks that have been reported since April has been identified. Of these 53 outbreaks, 38 were confirmed pH1N1, 2 were seasonal flu A, 10 were flu A (unknown type), 1 was flu B, and 1 was both flu A (seasonal) and flu B, and 1 was due to adenovirus. As viral respiratory season is beginning, and as the Public Health Laboratory has the capacity to test for 12 different respiratory viruses including many that most clinical laboratories cannot test for, clinicians are encouraged to report outbreaks to the Los Angeles County Department of Public Health in a timely manner so that the etiology may be determined. Please note that 1 confirmed case of (nosocomial) flu in a licensed medical facility is considered an outbreak and should also be reported. Please call 1-888-397-3993 to report outbreaks.

Since the beginning of the pandemic in April, 2009 there have been 318 ICU/deaths due to confirmed pandemic influenza A type H1N1. Of these cases 108 have been deaths. The number of ICU admissions and deaths due to H1N1 appears to have decreased in week 49 (Figure 5). Of note, all ICU admissions/deaths due to *any* strain of influenza are currently reportable.

The number of hospitalizations due to any influenza as well as the rate (per 1,000 hospital beds) of laboratory-confirmed influenza decreased in week 49 (Figure 6).

Figure 4: Number of Respiratory Outbreaks by Week of Report

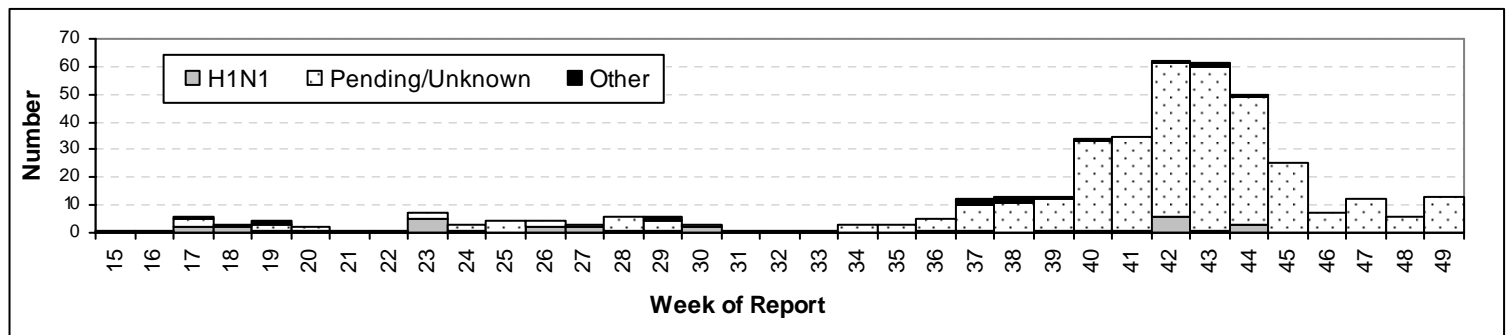


Figure 5: Number of Pandemic H1N1 Cases by Week of Onset as of December 16, 2009, Individual Case Reporting

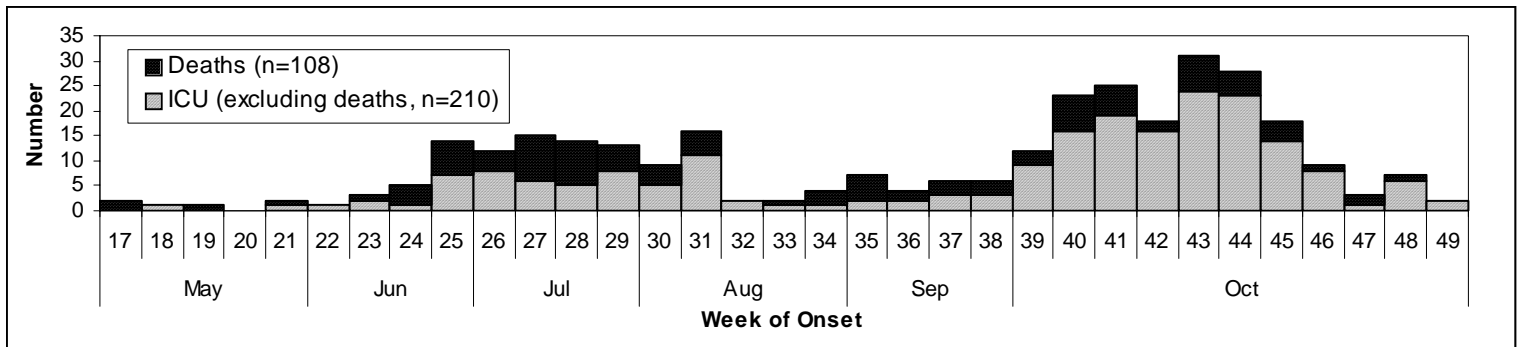


Figure 6: Number and Rate of Hospitalized Influenza (Any Influenza) Cases, Aggregate Reporting

