



INFLUENZA WATCH LOS ANGELES COUNTY

Los Angeles County (LAC) The total number of positive influenza tests as well as the percent of influenza tests that tested positive increased in week 39 (Figure 1). Rhinovirus, adenovirus, and parainfluenza are also currently circulating. Four severe pediatric flu cases occurred during week 39. Thirteen new ILI (influenza-like illness) outbreaks (11 in elementary schools, 1 in a pre-school, and 1 in a middle school) were reported during week 39. The percent of emergency department visits due to ILI remained higher compared to the same time in previous years (Figure 2), especially in those 5-14 years old.

Surveillance System Overview

SURVEILLANCE SYSTEM*	Week 39	2009-2010 YTD
Percent Positive Influenza Tests [±]	16.1	13.7
Percent Positive RSV Tests [‡]	0.0	0.1
Percent Flu A / Flu B [‡]	99.4 / 0.6	99.3 / 0.7
Severe Pediatric Influenza Cases [†]	4 (0)	11 (3)
Respiratory Outbreaks	13	47

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

± Sentinel sites (6 participating facilities in week 39)

‡ Sentinel sites (2 participating facilities in week 39)

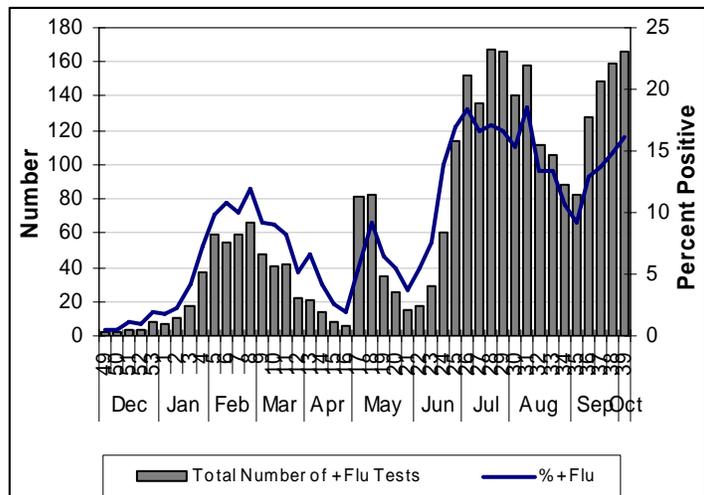
†The number of deaths is indicated by the parenthesis.

California During week 39 (September 27-October 3), influenza activity in California remained **widespread**.

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

United States Influenza activity remained elevated across the United States during week 38 (September 20-September 26). In week 38, 27 states reported widespread activity, 2 states reported regional activity, 18 states reported local activity, 1 state reported sporadic activity, and 2 states did not report. Approximately 99% of all subtyped influenza A viruses being reported to CDC in week 38 were novel influenza A (H1N1) viruses. <http://www.cdc.gov/flu/weekly>

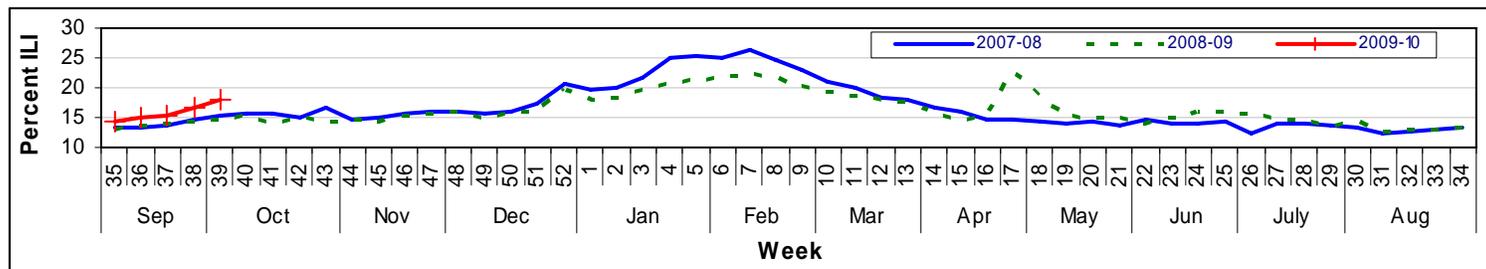
Figure 1: Total Positive Flu and % Positive Flu by Week



*Influenza data represent testing completed in nine facilities except for weeks 38 and 39 when influenza data represent testing completed in 8 and 6 facilities respectively.

In the News An open access article in the New England Journal of Medicine from October 8, 2009 summarizes the clinical characteristics of patients who were hospitalized with 2009 H1N1 influenza in the United states from April to mid-June. Of the 272 patients studied, 25% were admitted to the ICU and 7% died. Only 5% of the cases were 65 years or older while 48% were under the age of 18. Nearly three quarters (73%) of the hospitalized cases had at least one underlying medical condition, including asthma; diabetes; pregnancy; and heart, lung and neurological diseases. Of the patients who had a chest x-rays, 40% were diagnosed with pneumonia. Antiviral medication was administered in 75% of the cases for which this information was available. The median initiation time for such therapy was 3 days after onset of illness. Receipt of antiviral medication within 2 days of onset of illness was significantly associated with a positive outcome. <http://content.nejm.org/cgi/content/full/NEJMoa0906695>

Figure 2: Percent of ED Visits for ILI by Week

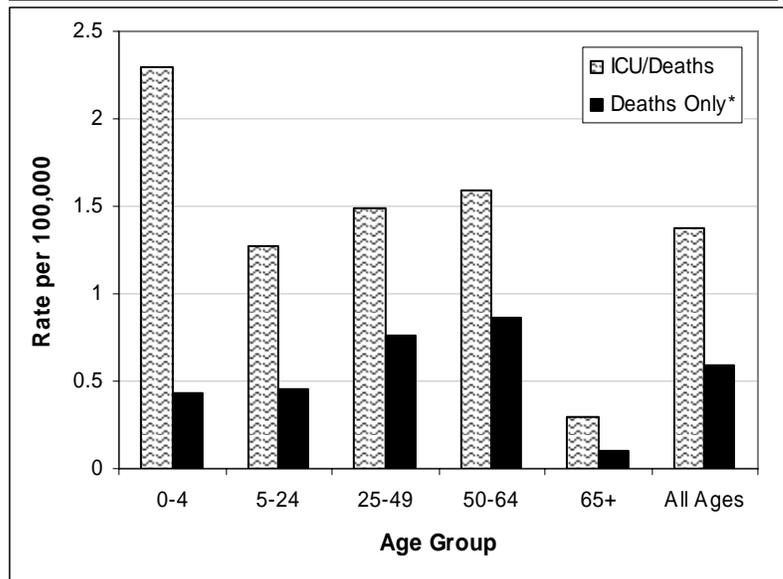




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Breakdown of Influenza Cases in Los Angeles County

Figure 3: Rate per 100,000 of H1N1 ICU/Deaths by Age Group



*Rates may be unstable due to small number of cases.

As of October 8, 2009 there have been 132 ICU/deaths due to confirmed pandemic influenza A type H1N1. Of these cases, 57 have been deaths. The highest rate (per 100,000 population) of ICU admission/death has occurred in persons 0-4 years of age (Figure 3). However, when we look at deaths alone, this age group has the lowest rate of death due to H1N1 except for those aged 65 years and older. The number of ICU/deaths seems to have dropped off significantly in August (Figure 4). This drop off coincides with a change in reporting procedures for influenza hospitalizations and might be a reporting artifact. Over the past 5 weeks, the number of ICU/deaths seems to have remained relatively stable. However, as there is often a lag in reporting time these numbers may increase especially for more recent weeks. Since aggregate reporting began in week 32 (August 9 - August 15), the rate of hospitalized cases due to any influenza remained relatively stable until week 37 (9/13-9/19) when a slight increase in the rate is noted (Figure 5). For more information on testing, treating, and preventing influenza in Los Angeles County go to: <http://publichealth.lacounty.gov/acd/h1n1.htm>.

Figure 4: Number of Pandemic H1N1 by Week of Onset as of October 8, 2009 (Individual Case Reporting)

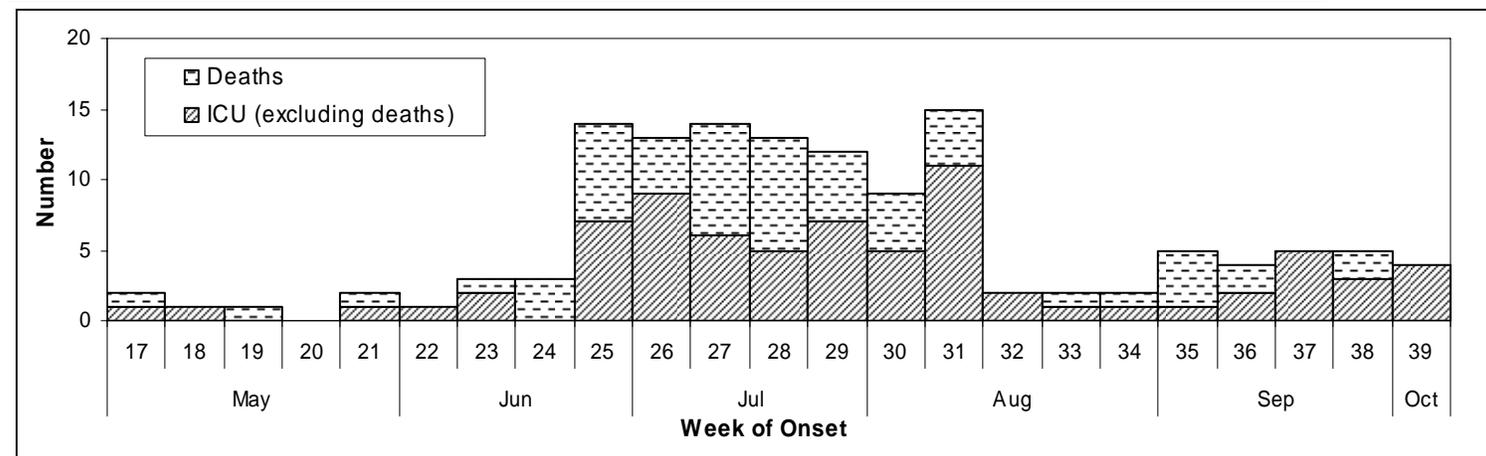


Figure 5: Hospitalized Influenza (Any Influenza) Cases from August 23 through October 3, 2009, Aggregate Reporting

Week	Hospitals reporting	% of hospitals reporting*	Total hospitalized influenza cases	Rate** of lab confirmed influenza hospitalizations
8/23-8/29	66	70.22	30	1.65
8/30-9/5	63	67.02	31	1.75
9/6-9/12	67	71.28	23	1.23
9/13-9/19	68	72.34	46	2.34
9/20-9/26	63	67.02	47	2.68
9/27-10/03	63	67.02	44	2.46

*There are 94 acute care hospitals in Los Angeles County.

**Rate is per 1,000 hospital beds.