



Public Health Division Influenza Report

2009-2010 Weekly Influenza Surveillance Report

Updated: Tuesday, October 13, 2009

Weekly updates will resume on Friday, October 16, 2009



Weekly Snapshot

A total of 202 hospitalized persons or persons in intensive care units (ICU) with laboratory-confirmed H1N1 were reported from week 17 (ending 5/2/09) to week 40 (ending 10/10/09) in Sacramento County. During week 40 an additional 20 hospitalized persons or persons in intensive care units were reported. As of October 10, 2009 the majority of laboratory confirmed H1N1 hospitalized persons or persons in intensive care units were between the ages of 25 to 49 years (34.2%), followed by persons ages 5 to 24 years (27.2%). A total of 74.8% (3 out of 4) H1N1 hospitalized persons or persons in intensive care units were less than 50 years of age. As of October 10, 2009 thirteen Sacramento County residents with H1N1 influenza have died.

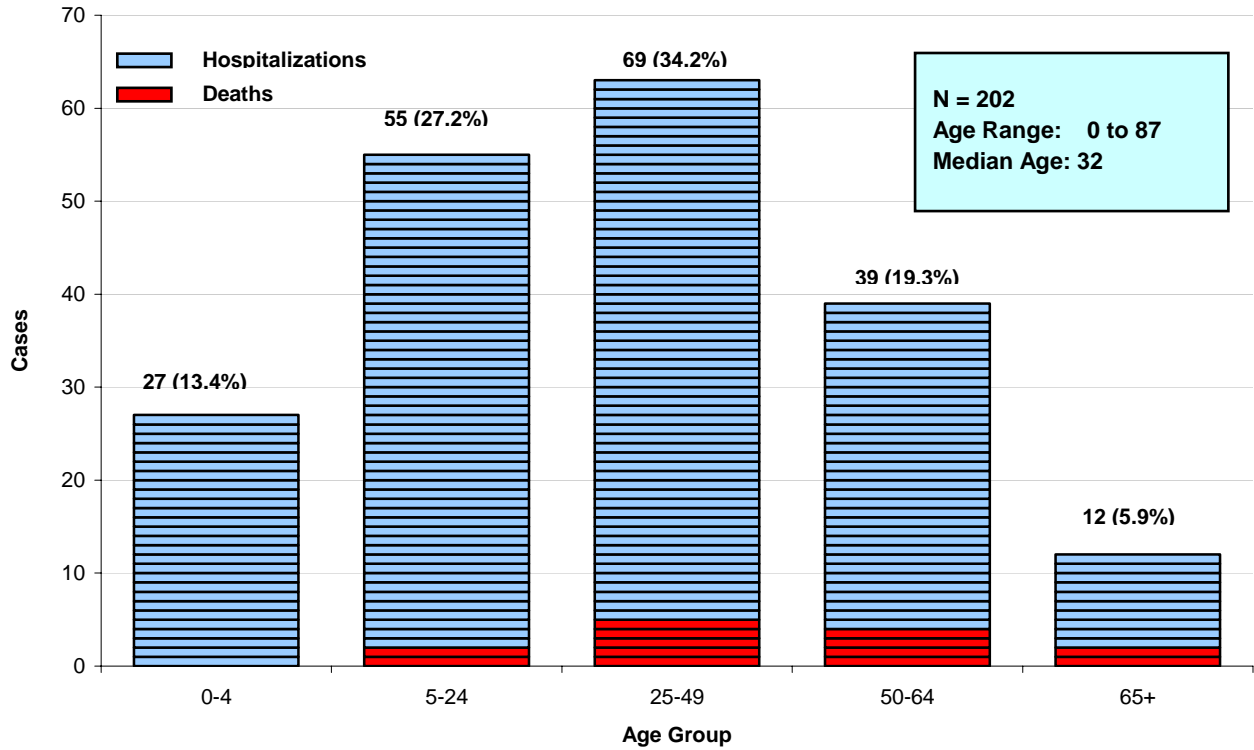
Human cases of H1N1 Influenza

Updated October 13, 2009

H1N1	Confirmed
Hospitalized	202
Deaths	13

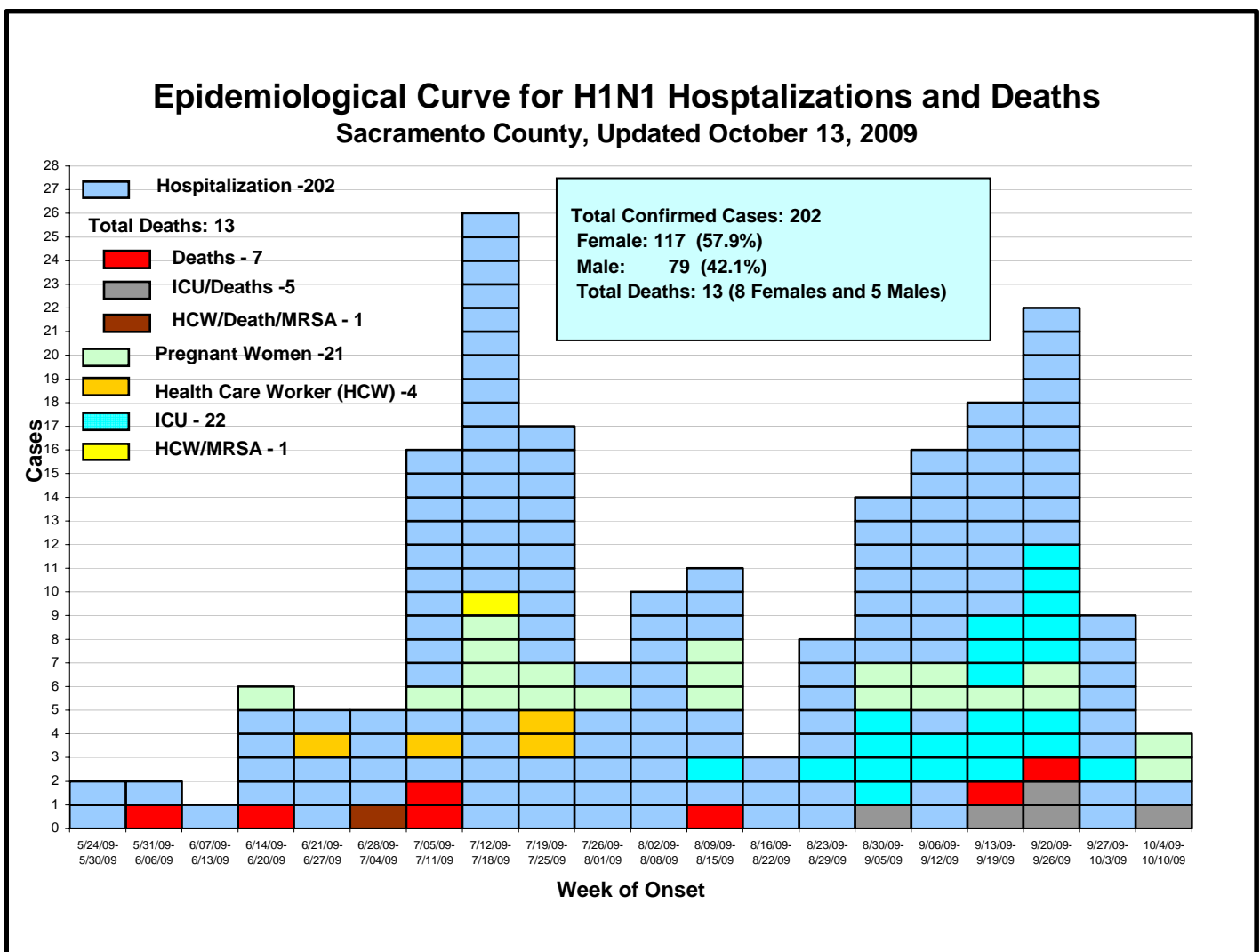
H1N1 Hospitalizations by Age Group, Sacramento County

Updated October 13, 2009



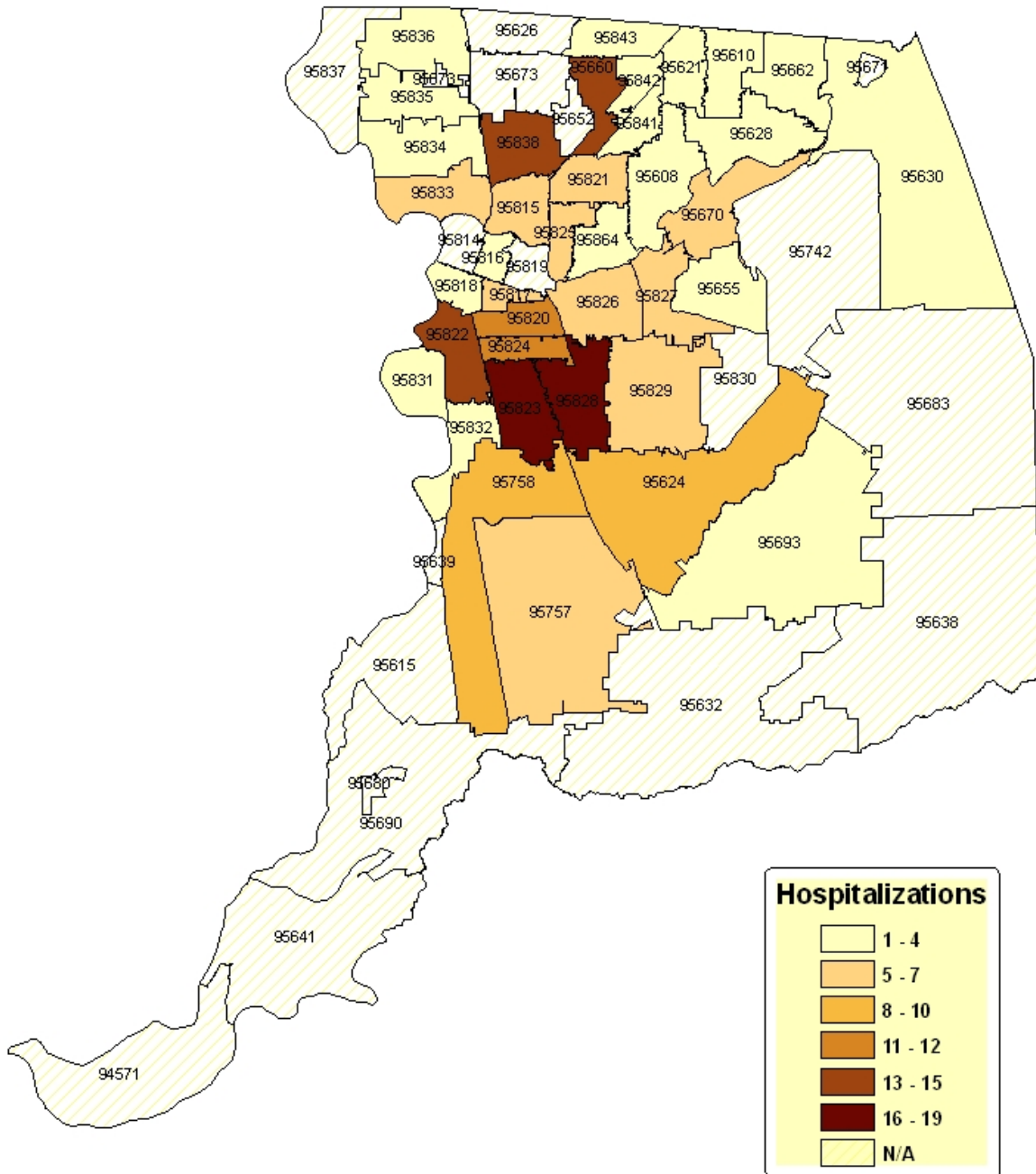
Epidemiological Curve of Hospitalizations & Deaths by Week of Onset:

The epidemic curve below for laboratory confirmed H1N1 hospitalized persons or persons in intensive care units suggest person to person transmission. The epidemic curve shows dates of onset for hospitalized persons or persons in intensive care units with H1N1 occurring from May 27, 2009 to October 10, 2009. This curve shows the peak (n=26) number of hospitalized persons or persons in intensive care units occurred the week of July 12, 2009 to July 18, 2009. Of the 26 hospitalized or ICU H1N1 cases reported during the peak, 4 were pregnant women and 1 case was a health care worker co-infected with Methicillin Resistant Staphylococcus Aureus (MRSA). The majority of hospitalized persons (56.6%) and persons who died were female. Of the laboratory confirmed H1N1 hospitalizations and ICU cases the majority occurred among residents who lived in zip codes 95828 (Florin), 95823 (Florin/Sacramento), 95822 (Sacramento), 95838 (Del Paso Heights), 95660 (North Highlands), 95824 (Fruitridge) and 95820 (Oak Park).



H1N1 Hospitalizations by Zip Code, Sacramento County

Updated October 13, 2009



Weekly School Absenteeism Reporting Results:

In Sacramento County 90% of the school districts report weekly to the Public Health Division excused absences at the school level. Epidemiology services staff calculate the median and range for each school weekly. Schools are asked to report daily if their absenteeism rate exceeds 10% on any given day, to date; two schools have reported exceeding 10% absenteeism. Schools are also asked to report influenza like symptoms including fever, cough and muscle ache.

Average Daily Absenteeism* for Schools with Enrollments of \geq 100 Students

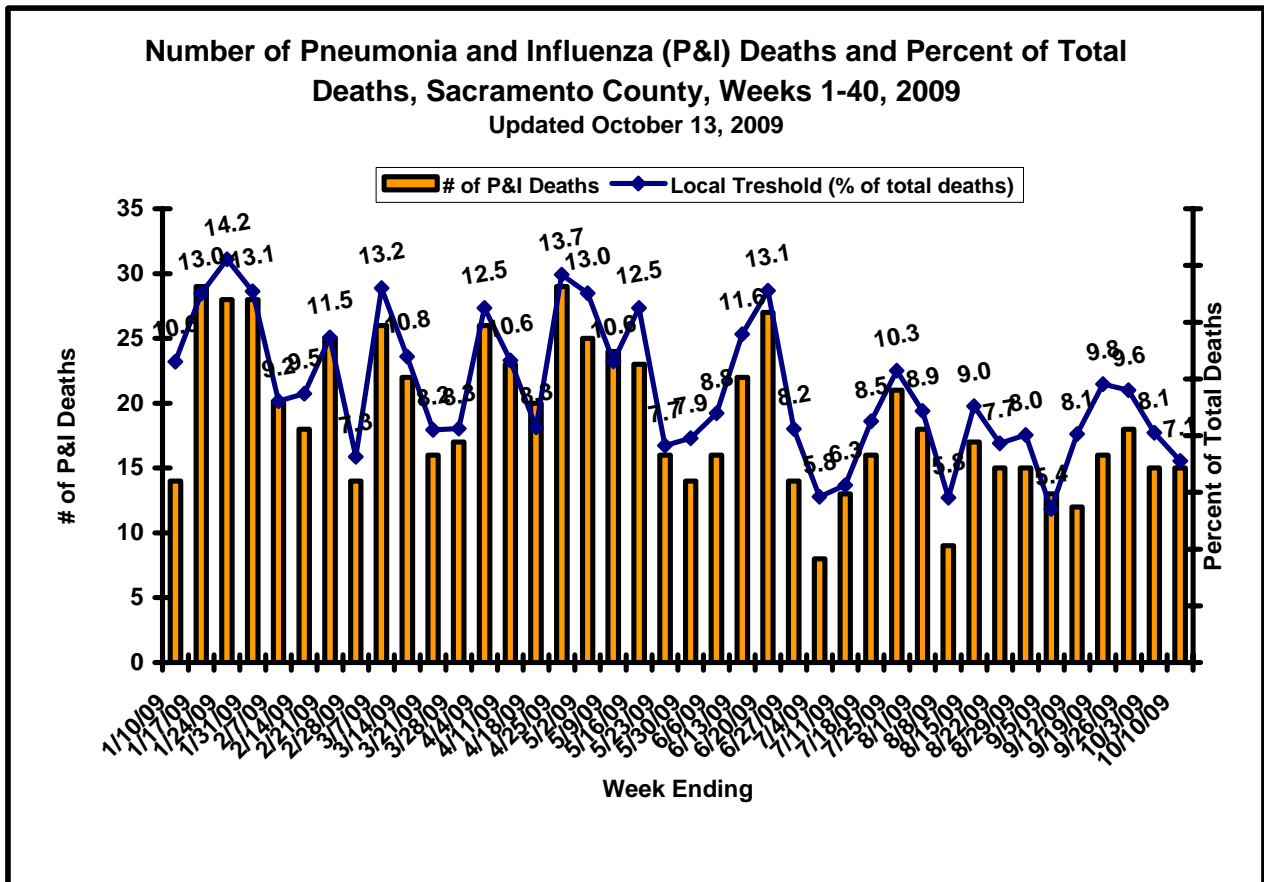
Updated October 13, 2009

Median	Range	No. of Schools Reporting $>10\%$ Absenteeism	No. Schools Reporting	Week Ending
2.0%	0.1%-9.0%	N/A	131	9/12/2009
1.6%	0.2%-5.8%	0	100	9/19/2009
1.8%	0.0% - 9.5%	0	125	9/26/2009
1.8%	0.0% - 6.1%	0	119	10/3/2009
2.6%	0.0% - 12.2%	2	157	10/10/2009

*A school can file a waiver to recoup the average daily attendance (ADA) loss from an occurrence such as an epidemic (Education Code Section 46392[a] [4]).

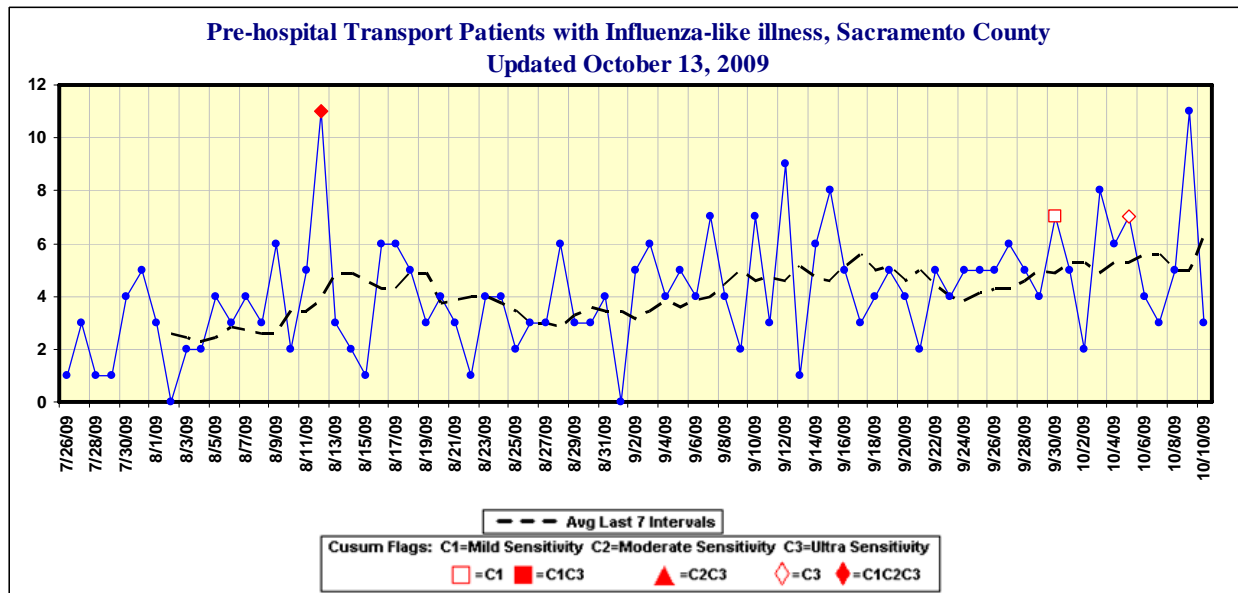
Weekly Pneumonia and Influenza Deaths:

During week 40, 7.1% of all deaths were attributed to pneumonia or influenza. At the national level the percent of all deaths attributable to pneumonia and influenza have not been reported yet. During week 39, 8.1% of Sacramento County deaths were attributed to pneumonia or influenza. The national epidemic threshold during week 39 was 6.5% for that week. During the peak of flu season, the national epidemic threshold typically ranges from 7.5 – 8.0%. The average epidemic threshold for the current year in Sacramento County is 9.4%.



Weekly Counts: Pre-hospital Transport Patients with Influenza Like-Illness

The graph below shows the daily counts of pre-hospital transport patients with influenza-like illness from the Sacramento Fire Department and Sacramento Metropolitan Fire Department. Together both agencies account for approximately 90% of all fire calls in Sacramento County. We used CuSum statistical methods to indicate recent changes or deviations in data counts by comparing daily counts to a 7-day moving average. From July 26, 2009 to October 10, 2009 CuSum methods detected increases in influenza-like illness activity among pre-hospital transports on 3 days. From the graph below using the most sensitive CuSum method a strong statistically significant increase was detected on 8/12/2009. On this day the highest number of pre-hospital patient transports with influenza like illness occurred (n=11). Likewise a statistically significant increase in pre-hospital transports with influenza like illness was detected on 10/5/2009 (n=7) whereas a much weaker statistically significant increase was detected on 9/30/2009 (n=7).



*Data above generated using the Centers for Disease Control and Prevention Early Aberration Reporting System (EARS).