

INFLUENZA WATCH

Influenza and Related Disease Updates for Los Angeles County

January 17, 2014

Surveillance Week 2

Ending 1/11/14

Volume 8, Issue 7

All Markers of Influenza Activity are Up

Influenza activity in Los Angeles County (LAC) is widespread with multiple surveillance measures showing increased numbers. Percent positive testing from our sentinel labs are at 25.7% with 11 total influenza-associated deaths reported, 1 pediatric (Table 1). All adult fatal cases had underlying medical conditions or past medical history that put them at higher risk for complications from influenza illness. One common and often overlooked risk factor for severe influenza illness is being overweight or obese which was identified in 42% of fatal flu cases from the last influenza season. Hypertension and heart disease rounded out the top 3 comorbidities. The 2012-13 influenza season summary for LAC can be found at <http://publichealth.lacounty.gov/acd/docs/Flu/Season12-13/IW2012-13SeasonSum.pdf>

Table 1. LA County Surveillance Summary 2013-2014

LA County Surveillance Summary	Week 2 1/5/14-1/11/14	2013-14 YTD (9/1/13-Present)
Positive Flu Tests/Total Tests† (Percent Positive Flu Tests)	522/2170 (24.1%)	1158/14828 (7.8%)
Percent Flu A/B	99/1	98/2
Community Respiratory Outbreaks	0	3
Flu Deaths, Confirmed††	2	10
Pediatric Flu Deaths	0	1

†Sentinel sites (9 participating)
 ††Confirmed influenza death is defined by a positive lab test, compatible symptoms, and clear progression from illness to death

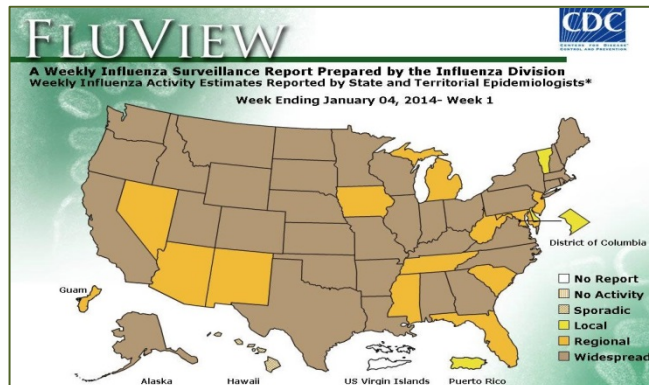
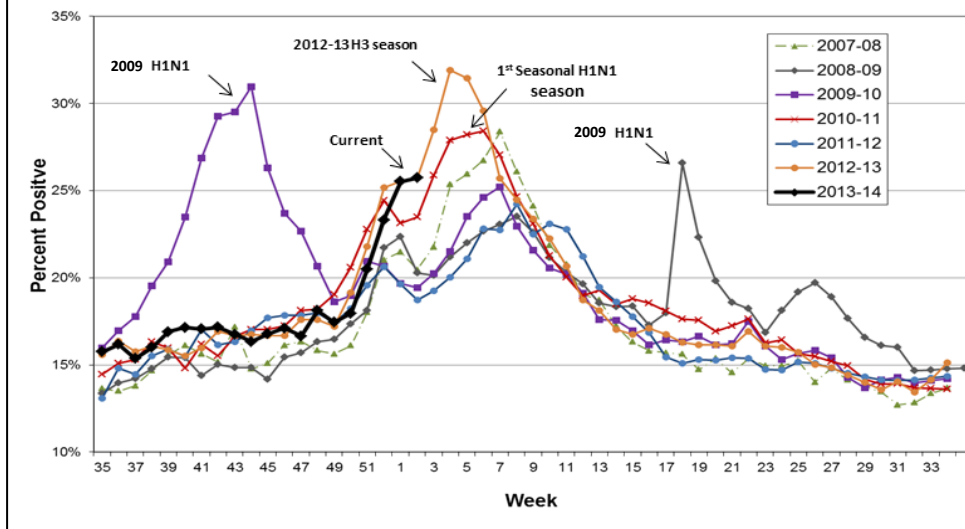


Figure 1. Percent Positive Influenza Like Illness In participating LAC Emergency Departments



H1N1 is a Seasonal Strain

Flu A H1N1 2009 has been a regular seasonal strain for the past 4 years. H1N1 affects indiscriminately across the age spectrum, and often disease is seen in younger adults that are otherwise healthy, in addition to those more typically affected; the very young, very old, and those with underlying medical conditions. Furthermore, the young adult age group is least likely to be vaccinated even though H1N1 is and has been included in the seasonal vaccine for the last 3 seasons.

Figure 1 (above) compares percent positive visits for influenza like illness (ILI) to emergency departments in LAC across the past 7 influenza seasons. It is important to note that our last season in 2012-13 (orange) was predominated by a different strain than what we are experiencing currently, therefore it is not accurate to compare an H1 season to an H3 season. Both are type A but each has very different ramifications. Instead, we should look to other pandemic H1N1 dominated seasons; 2009-10 (purple and grey lines) was the first time most of the population had seen H1N1 and was drastically worse than the rates we are currently experiencing. By the next season in 2010-11 (red), H1N1 had become a seasonal strain and more of the population had been exposed. With less immunologically naïve people H1N1 activity decreased. The same trend continued in 2011-12 (blue) with even lower levels of H1N1 and flu activity in general and then in 2012-13 H3 became the most dominant strain with a completely different epidemiology. Our current 2013-14 H1N1 season is similar to 2010-11 activity when H1N1 became a seasonal strain.