Current Situation

The first culture-confirmed case of influenza A, which was subsequently typed as an H3 virus, was identified in Clark County on December 11th. Complete subtyping and antigenic characterization on the positive culture are pending; national data show that a majority of influenza A strains have either been un-typed, or typed as H3N2 (Chart 1). Positive rapid influenza tests also continue to be reported, although the numbers have been low.

The proportion of patient visits to sentinel providers for influenza-like illness (ILI) during week 49 (the week ending December 10th) was 2.59% (weighted average). Nationally, 1.8% of patient visits to sentinel providers were for ILI, which is below the national baseline. Criteria for inclusion as a case of ILI are fever of 100°F and cough or sore throat.

During week 49 the proportion of mortality due to pneumonia and influenza (P&I) in Clark County was 12%, more than double the previous weeks percentage of 5.2%. The national P&I mortality was 6.4%, with the national threshold for influenza outbreaks being 7.6% for week 49.

Syndromic Surveillance continues to show low levels of influenza activity; significant increases in the number of patients presenting with ILI, or overall increases in hospital utilization have not been identified.

Laboratory testing has identified influenza A in the majority of isolates, both nationally and in Western states. All 14 A(H3N2) viruses characterized by the Centers for Disease Control and Prevention were characterized as A/California/07/2004-like, which is a component of this year’s vaccine

Analysis

The current pattern of influenza seen in Clark County is typical for this time of year: although influenza is circulating in the community, the number of cases remains low.

In previous seasons, the first positive culture has preceded community-wide influenza activity by a few weeks, with significant increases occurring around the beginning of the year. Although it is impossible to predict the changes in the influenza season, the 2005-2006 season has been very similar to the 2004-2005 season.

The positive influenza culture result will increase the level of influenza activity in Nevada for week 50 to at least the local level, which is consistent with surrounding states (Chart 2).

The significance of the increase in P&I deaths is unclear, as P&I data exhibit a wide degree of variability. This data will have to be evaluated with data from future weeks to determine its significance.

The match between circulating strains and the vaccine strains should help reduce influenza levels in the community this year.

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