Influenza Update

January 19, 2007

Current Situation

The proportion of patient visits to sentinel providers for influenza-like illness (ILI) during the week ending January 6th (week 1) was 4.5%. This is a decrease from the previous week (week 52, ending December 30, 2006) which 7.1% of patient visits were due to ILI. Nationally, 2.3% of patient visits to sentinel providers were due to ILI, this is a decrease from the past week but still remains above the national baseline of 2.1% for the fourth consecutive week. Regionally, the percent of visits ranged from 1.5% in New England to 4.1% in the West South Central (1).

During week 1 the proportion of mortality due to pneumonia and influenza (P&I) in Clark County was 3.7%. This has dropped significantly from the previous week (week 52) when the proportion of P&I deaths was 8.7%. Nationally, after week 1 the P&I mortality was 6.9%; which is below the epidemic threshold of 7.5% (1).

Laboratory testing by the U.S. World Health Organization (WHO) and the National Respiratory and Enteric Virus Surveillance System (NREVSS) has identified influenza A from 80.9% of positive influenza specimens. Among influenza A specimens that were subtyped, 96.3% were influenza A (H1) and 3.7% were influenza A (H3) (Chart 1). In addition, the Centers for Disease Control and Prevention, has antigenically characterized 98 influenza viruses collected by U.S. Laboratories since October 1, 2006. Ninety percent of the influenza A (H1) were similar to A/New Caledonia/20/99 which is the influenza A (H1) component of the 2006-7 influenza vaccine. Two influenza A (H3) were characterized as A/Wisconsin/67/2005-like which is the influenza A (H3) component of the 2006-7 influenza vaccine. Of the influenza B antigenically characterized, 59% belonged to the Victoria lineage and 41% belonged to the Yamagata lineage (1).

Approximately 50% of all confirmed cases of influenza in Clark County are influenza A, the remaining 50% of confirmed cases were tested using rapid antigen tests which could not distinguish between influenza A and B. Antigenic characterization of the first laboratory confirmed influenza case (December 21, 2006) is not yet available.

Analysis

Both nationally and locally in Clark County, influenza activity has decreased in the past week. This may have been influenced by decreased visits to health care providers during the holiday season as it has been seen in the past seasons (1). Typically, a decrease in influenza is seen in January, followed by increases throughout February, with the season ending in late April or early May.

Regionally, the southeastern states are experiencing widespread activity, with western states reporting local and sporadic activity, except for Nevada which is reporting regional activity (Chart 2).