

2019-2020 Will County Influenza Like Illness (ILI) Activity Report (Hospitals & Urgent Care Center Visits Surveillance), For Week Ending 12/31/2019

- Influenza activity is high nationally with outpatient visits for ILI and the percentage of respiratory
 specimens testing positive for influenza at levels similar to what have been seen at the peak of
 recent seasons. However, this week's data may in part be influenced by changes in healthcare
 seeking behavior that can occur during the holidays.
- Influenza B/Victoria viruses are predominant nationally, which is unusual for this time of year. A(H1N1)pdm09 viruses are the next most common. A(H3N2) and B/Yamagata viruses are circulating at very low levels.
- CDC estimates that so far this season there have been at least 6.4 million flu illnesses, 55,000 hospitalizations and 2,900 deaths from flu.
- It's not too late to get vaccinated. Flu vaccination is always the best way to prevent flu and its potentially serious complications.
- Antiviral medications are an important adjunct to flu vaccine in the control of influenza. Almost all (>99%) of the influenza viruses tested this season are susceptible to the four FDA-approved influenza antiviral medications recommended for use in the U.S. this season.

CDC **antigenically characterizes** a subset of influenza viruses by <u>hemagglutination inhibition (HI)</u> or neutralization based Focus Reduction assays (FRA). Antigenic drift is evaluated by comparing antigenic properties of cell-propagated reference viruses representing currently recommended vaccine components with those of cell-propagated circulating viruses. CDC antigenically characterized 167 influenza viruses collected in the United States from September 29, 2019, to December 28, 2019.

Influenza A Viruses

- A (H1N1)pdm09: 66 A(H1N1)pdm09 viruses were antigenically characterized by HI with ferret antisera, and all were antigenically similar (reacting at titers that were within 4-fold of the homologous virus titer) to cell-propagated A/Brisbane/02/2018-like reference viruses representing the A(H1N1)pdm09 component for the 2019-20 Northern Hemisphere influenza vaccines.
- **A (H3N2):** 41 A(H3N2) viruses were antigenically characterized by FRA with ferret antisera, and 14 (34.1%) were antigenically similar to cell-propagated A/Kansas/14/2017-like reference viruses representing the A(H3N2) component for the 2019-20 Northern Hemisphere influenza vaccines.

Influenza B Viruses

- **B/Victoria:** 50 B/Victoria lineage viruses, including viruses from both co-circulating sub-clades, were antigenically characterized by HI with ferret antisera, and 29 (58%) were antigenically similar to cell-propagated B/Colorado/06/2017-like reference viruses representing the B/Victoria component for the 2019-20 Northern Hemisphere influenza vaccines.
- **B/Yamagata:** 10 B/Yamagata lineage viruses were antigenically characterized by HI with ferret antisera, and all 10 (100%) were antigenically similar to cell-propagated B/Phuket/3073/2013-like reference viruses representing the B/Yamagata component for the 2019-20 Northern Hemisphere influenza vaccines.