Influenza (FLU) Update for Week #43
Week Ending 10-26-19

The CDC reported that seasonal flu activity is low, but had increased a little from the previous week. These levels are expected for this time of year. Influenza-like illness (ILI) is defined as a temperature of at/above100° F [37.8° C] and cough and/or sore throat without a known cause other than flu). Diagnosed Flu and ILI are expected to increase in the next few weeks and months. It is recommended by public health officials and health care providers that for all those 6 months or older, flu vaccinations should be completed by late October, so ASAP, unless they have a valid medical contraindication. Most will receive a vaccination that covers 4 strains of influenza.
See this link for more details, including charts, graphs, and maps:
https://www.cdc.gov/flu/weekly/index.htm

FirstWatch RIN (Reginal Influenza Network) Alerts occurred occasionally.

For the most recently reported week ending October 26, 2019, the CDC reported:

--ILI visits to clinics and other non-hospital facilities was at 1.9%, a little higher than last week's 1.7%; and below the baseline of 2.4%. All 10 Regions reported that outpatient visits for ILI were below their own Regional baselines for Week #43 and ranged between 1.1% and 3.3%. Louisiana and Puerto Rico reported high ILI activity.

--Flu cases (documented by positive Flu tests) remained low. Clinical lab testing for influenza was positive for Flu in 2.4% of the total tests (the same as the previous week).

--In an interesting turn of events in these early weeks of flu reporting, determining the **most common circulating flu strain(s)**, is dependent on whether the data is from clinical labs that test a lot more specimens (17,720 for Week #43) or from public health labs which may provide more specific testing, but a significantly fewer number of specimens (550 for Week #43). This difference is consistent with last week and is indicative of just a few weeks of data and it being too early to name a dominant strain. **The CDC considers the public health lab results to better represent the correct breakdown with H3N2 being the dominant flu type at this time in the season.**

Using the clinical lab results, Influenza B was dominant with 67.1% and Influenza A at 32.9%.
Conversely, **using the public health lab data, Influenza A was predominant with 63.2% and Influenza B at 36.8%**. Further breakdown by the public health labs, revealed that H3N2 is the dominant A with 66.7% and H1N1 at 33.3%; Influenza B showed 100% Victoria lineage and 0.0% Yamagata.

--Vaccine Coverage: will be determined later in the season when enough data has been collected.

The CDC provides an interactive U.S. map that will link to each state's public health authorities, ILI and Flu information and processes, as well as other diseases and public health topics. This site includes a tremendous amount of information at the State, and even Local, level.
Find it at this site: https://www.cdc.gov/flu/weekly/usmap.htm

--For Influenza-Like Illness (ILI)
High ILI Activity (Puerto Rico & 1 state): Louisiana
Moderate ILI Activity (0):
Low Activity (7 states): Alabama, Connecticut, Georgia, Missouri, South Carolina, Texas, & Virginia
Minimal Activity (Washington D.C., New York City, & 42 states): Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming
Data Insufficient to Calculate: **U.S. Virgin Islands**

--For Flu (positive Flu tests)
Widespread Activity (0):
Regional Activity (1 state): Louisiana
Local Activity (10 states): Arizona, Georgia, Hawaii, Idaho, Indiana, Kentucky, Mississippi, Nevada, Tennessee, and Texas
Sporadic Activity (Puerto Rico, U.S. Virgin Islands, Washington D.C., & 38 states): Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming
No Activity: (1 state): Rhode Island
No Report: Guam

--Other Data:
Hospitalizations from Flu: will be determined later in the flu season when enough data has been collected.
Death rates for pneumonia & influenza in adults were at 5.1% which is below the epidemic threshold of 5.8% for Week #42, week ending 10/19/19. Note: death reports often aren't submitted for data purposes in the same time frame as Flu and ILI cases are, so they lag behind most other Flu reporting.
Two (2) pediatric deaths associated with influenza have been reported for the 2019/20 Flu Season, both of them from week #42. Note: Four (4) pediatric deaths were reported during week #42 but were all from the 2018-19 Flu Season; two each (2) during weeks #11 and #13, for an increased total in that season of 142**.**

International:

Canada:

Flu in Canada for Week #41 (10/6-10/12, 2019):
According to the Public Health Agency of Canada (PHAC), influenza activity remained at interseasonal levels nationally. The number of Canadian regions reporting Flu increased for this week. Influenza A(H3N2) was the most common flu virus circulating.

Sporadic Activity: in 26 Regions – Newfoundland & Labrador (1), Quebec (4), Ontario (4), Manitoba (3), Saskatchewan (3), Alberta (4), British Columbia (5), Yukon Territory (1), Northwest Territory (1)

PHAC Flu Watch Summary & Influenza/ILI Activity Map for Week #43 see:
https://www.canada.ca/en/public-health/services/publications/diseases-conditions/fluwatch/2019-2020/week-43-october-20-26-2019.html

PHAC Home Page for Surveillance on Flu: http://www.phac-aspc.gc.ca/fluwatch/

Public Health Agency of Canada (PHAC) Home Page for Information on Flu:
https://www.canada.ca/en/public-health/services/diseases/flu-influenza.html

PHAC Provides Flu Watch Summary & Link to Full Influenza Reports Past & Present:
https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html

PHAC Interactive Map for Flu Activity Across Canada:
https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/map-activity-levels.html

PHAC Site that Explains How to Become a Canadian Flu Watcher:
https://www.canada.ca/en/public-health/services/diseases/flu-influenza/fluwatcher.html

Europe:

European Center for Disease Prevention & Control - Flu for Week #43 (Oct 21-27, 2019):
Influenza activity was low throughout Europe. Flu viruses, both A & B, were found sporadically in specimens from those with respiratory illness seeking medical care. Data from 23 countries/regions reported mortality from all causes are at expected levels for this time of year. **For more info see: http://flunewseurope.org/**

Global:

World Health Organization (WHO) Weekly Flu Summary (FluNet):
http://www.who.int/influenza/gisrs_laboratory/flunet/en/

WHO Global Flu Overview with Map and Text:
https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Global Epidemiology Reports:
WHO Collaborating Centers for Flu in Australia, Japan, & the **United Kingdom**

First Responder Specific Information

There are many websites that may be helpful in planning and managing seasonal flu within First Responder organizations. A few of those websites are included here:
NIOSH on Flu for Employers/Employees:
https://www.cdc.gov/niosh/topics/flu/

Protection from Flu:
https://www.cdc.gov/flu/protect/habits/index.htm

World Map Showing Flu & Other Infectious Diseases:
http://www.healthmap.org/en/

- First Responders should be vaccinated for Flu each season to prevent getting flu themselves, taking it home to family members or transmitting it to patients in their care. Family members and patients may be at increased risk of complications from flu.

- Perform proper hand hygiene including frequent handwashing with soap and water, and the use of hand sanitizers in general, and particularly when providing patient care or after touching surfaces.

- Masks (N95 or 100) should be used in the presence of patients with cough and/or fever. Procedure or surgical masks can also be used but may not provide the same level of protection.

- Care should be taken to avoid touching their own face and mucous membranes (eyes, mouth, nose) since the flu virus is frequently found on surfaces such as door knobs, cot and equipment handles, phones, as well as clothing, bed clothes, etc. Once picked up on the hands from touching inanimate objects or from the secretions of a patient, it can transmit the flu (or any respiratory infection virus) via the mucous membranes of the face and head.

- Report signs/symptoms of flu to your physician or other appropriate provider for early assessment and care. Signs & symptoms suggest a period of contagiousness and out your patients and co-workers at risk.

- Cough and sneeze into your sleeve, if a tissue is not available, and not onto your hands.

- Stay away from others if you are sick.

- Be aware of your exposure risk and history. Take extra precautions or avoid those with immunocompromise, when possible, if you have a known or likely exposure.

- Antivirals may be indicated for the treatment of flu, particularly for those in high risk groups, those who are hospitalized or have severe, complicated or progressing flu. Those that present with 48 hours of the onset of symptoms may also be given antivirals, based on PCP judgement but make sure the practitioner is aware of their Frist Responder Role. See **https://www.cdc.gov/flu/antivirals/whatyoushould.htm**

- Flu is much more worrisome for the very young and the very old. Signs of ILI in this group requires careful assessment to rule out complications and these groups are much more likely to need to be transported to assure adequate care. Young children and those over 65 are typically at greater risk for complications, hospitalization, and even death. Hospitalization rates may also be elevated in those aged 50-64. Consideration should perhaps be given to monitoring these groups more closely, with inclination for more comprehensive assessment and transport for further evaluation, when presented with possible flu and any signs of complications.

  Complications of flu, sometimes requiring hospitalization and even leading to death, tend to occur after the person has begun to get better from the flu and then appears to relapse. EMS personnel may want to look more closely at those patients when the call is not about the initial signs and symptoms of flu, but about increasing or different signs that have appeared.

- A study was published by the Institute for Clinical Evaluative Sciences in *NEJM:*

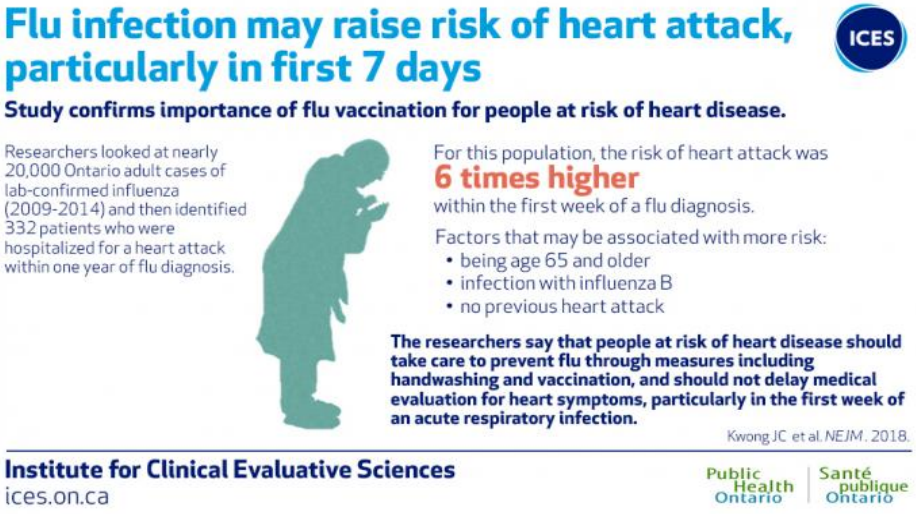

Image courtesy of ICES/PHO "The researchers add that patients should not delay medical evaluation for heart symptoms particularly within the first week of an acute respiratory infection." (Lisa Schnirring, News Editor: *CIDRAP News*; Jan 25, 2018)

For more information on the Influenza and Heart Attack Study, please see the link below.
https://www.eurekalert.org/pub_releases/2018-01/pho-rcl011818.php

Every Record. In Real Time. Automatically.

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