BC Centre for Disease Control
An agency of the Provincial Health Services Authority

British Columbia Influenza Surveillance Bulletin

Influenza Season 2016-17, Number 15, Weeks 7-8
February 12 to 25, 2017

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Declining Influenza A(H3N2) Activity in BC

During weeks 7-8 (February 12 to 25, 2017), influenza A(H3N2) activity continued to decline in BC, while an increasing proportion of influenza B viruses have been detected in recent weeks.

At the BCCDC Public Health Laboratory, influenza positivity decreased from 27% in week 7 to 22% in week 8. In weeks 7-8, influenza B viruses comprised about one-third of all influenza detections.

Since our last bulletin two weeks ago, 12 new influenza outbreaks were reported, including 11 with influenza A and one with influenza B detected. Cumulatively, 178 influenza outbreaks have been reported to date this season.

Also, in this report:

1. A substantial fifth wave of avian influenza A(H7N9) continues in China since October 2016, now comprising more than one-third of all human cases due to A(H7N9) detected since this virus first emerged in 2013, and with recent virological changes warranting ongoing monitoring.

2. On March 2, 2017, the World Health Organization announced its recommended components for the 2017-18 northern hemisphere influenza vaccines, changing only the recommended influenza A(H1N1)pdm09 strain from the current 2016-17 season's vaccine.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

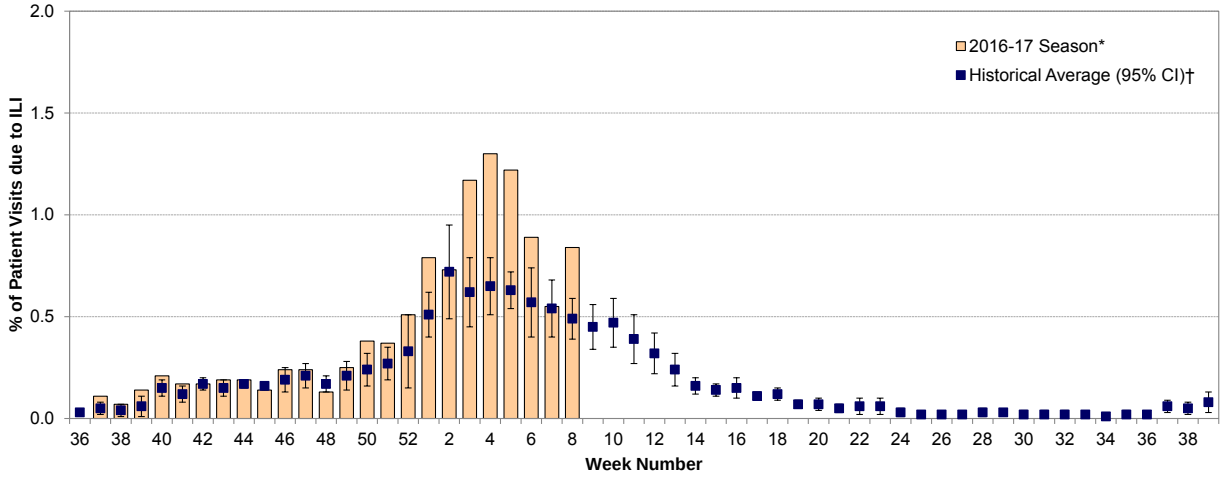
Report Disseminated: March 2, 2017

British Columbia

Sentinel Physicians

The proportion of patients with influenza-like illness (ILI) among those presenting to sentinel sites was within the 10-year historical average for this time of year at 0.55% in week 7, but increased to significantly above the historical average at 0.84% in week 8. So far, 59% and 38% of sites have reported data for weeks 7 and 8, respectively; rates are subject to change as reporting becomes more complete.

Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2016-17

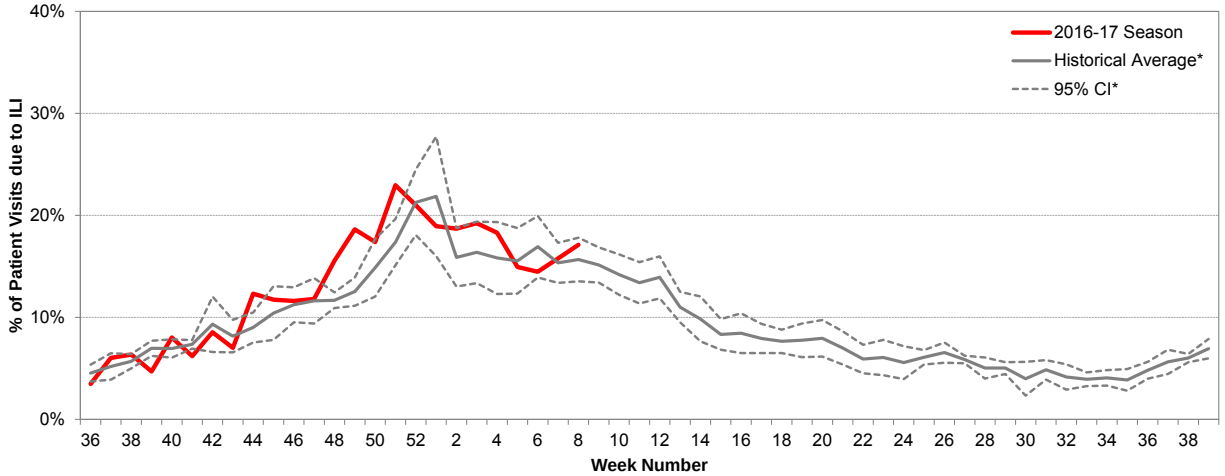


* Data are subject to change as reporting becomes more complete. One hospital ER site that reported ILI rates ≥5% was excluded from the graph.
† 10-year historical average for 2016-17 season based on 2004-05 to 2015-2016 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

In weeks 7-8, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI increased slightly to 17% but remained within the 5-year historical average for this time of year.

Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2016-17

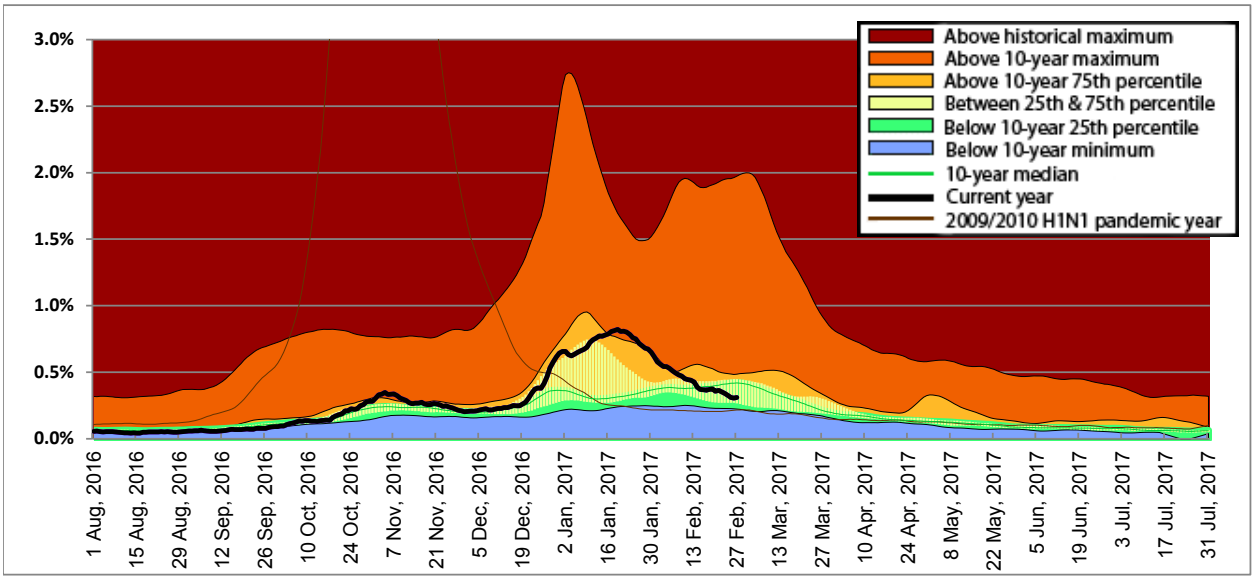


Source: BCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."
* 5-year historical average for 2016-17 season based on 2011-12 to 2015-16 seasons; CI=confidence interval.

Medical Services Plan

In weeks 7-8, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims, continued to decline and was within median levels in all regions of the province, except in NHA where rates increased slightly and were above the 10-year 75th percentile.

Service claims submitted to MSP for influenza illness (II)* as a proportion of all submitted general practitioner service claims, British Columbia, 2016-17

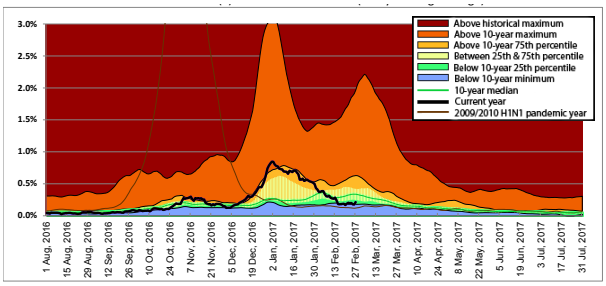


* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

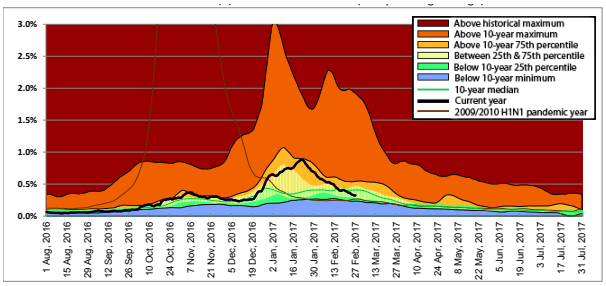
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP week beginning August 1, 2016 corresponds to sentinel ILI week 31; data are current to February 27, 2017.

Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services.

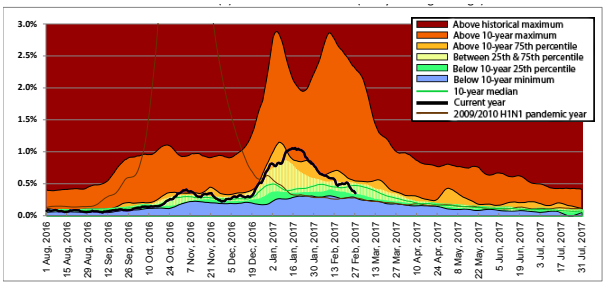
Interior



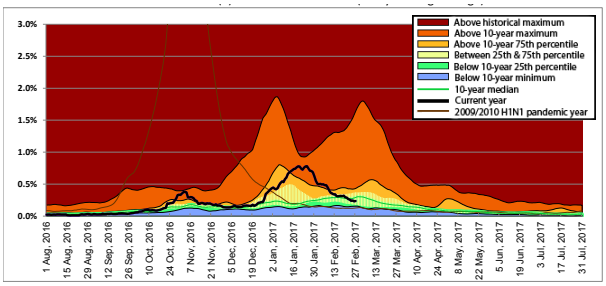
Fraser



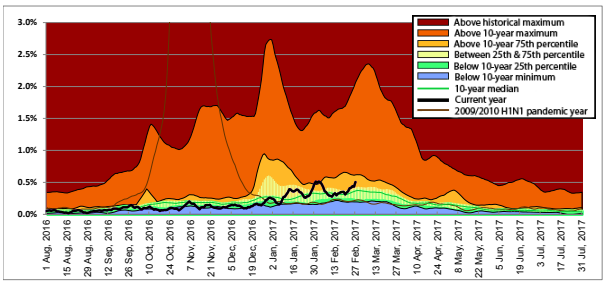
Vancouver Coastal



Vancouver Island



Northern



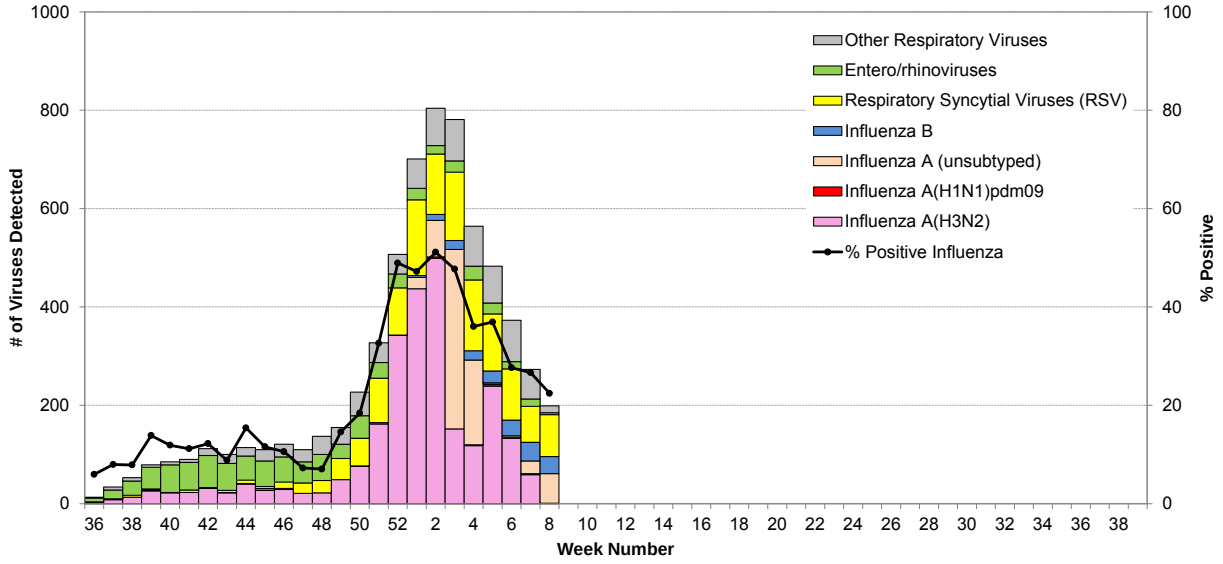
Laboratory Reports

BCCDC Public Health Laboratory

In weeks 7-8, 887 patients were tested for respiratory viruses at the BCCDC Public Health Laboratory (PHL). Of these, 220 (25%) tested positive for influenza, including 147 (67%) with influenza A [60 A(H3N2), 2 A(H1N1)pdm09 and 85 with subtype pending] and 73 (33%) with influenza B. Overall influenza positivity continued to decline from 27% in week 7 to 22% in week 8; however, influenza B viruses have comprised an increasing proportion of influenza detections in recent weeks. In weeks 7-8, about one-third of all influenza detections were influenza B.

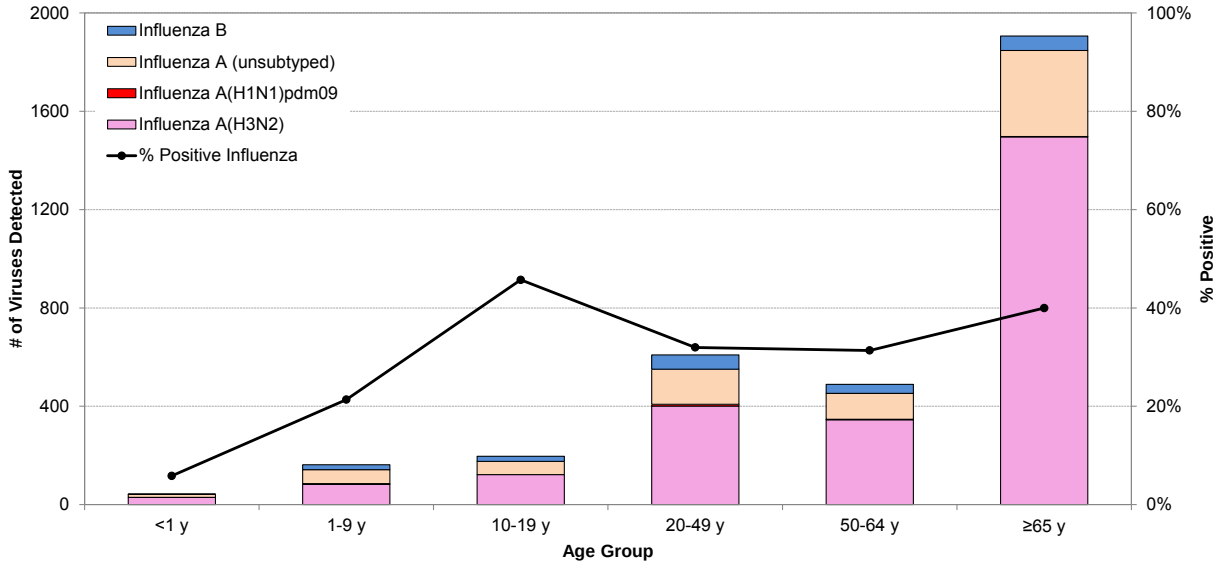
Cumulatively since week 40 (starting October 2, 2016), 3390 (33%) patients tested positive for influenza at the BCCDC PHL, including 3195 (94%) with influenza A [2475 A(H3N2), 13 A(H1N1)pdm09 and 707 subtype pending], 192 (6%) with influenza B and three patients who had both influenza A and B detected during the season. So far during the 2016-17 season, influenza A(H3N2) remains the dominant subtype among influenza detections. Elderly adults ≥65 years old are disproportionately represented among influenza detections, although younger age groups are also affected.

Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2016-17



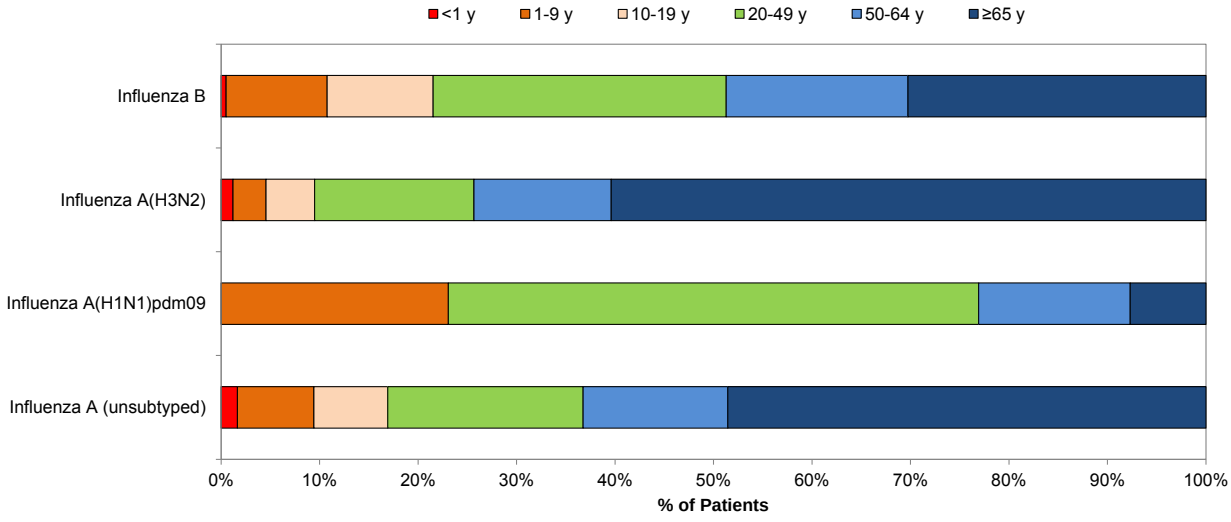
Data are current to March 1, 2017.

Cumulative number (since week 40) of influenza detections by type/subtype and age group, BCCDC Public Health Laboratory, 2016-17



Data are current to March 1, 2017; figure includes cumulative influenza detections for specimens collected from weeks 40-8.

Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2016-17

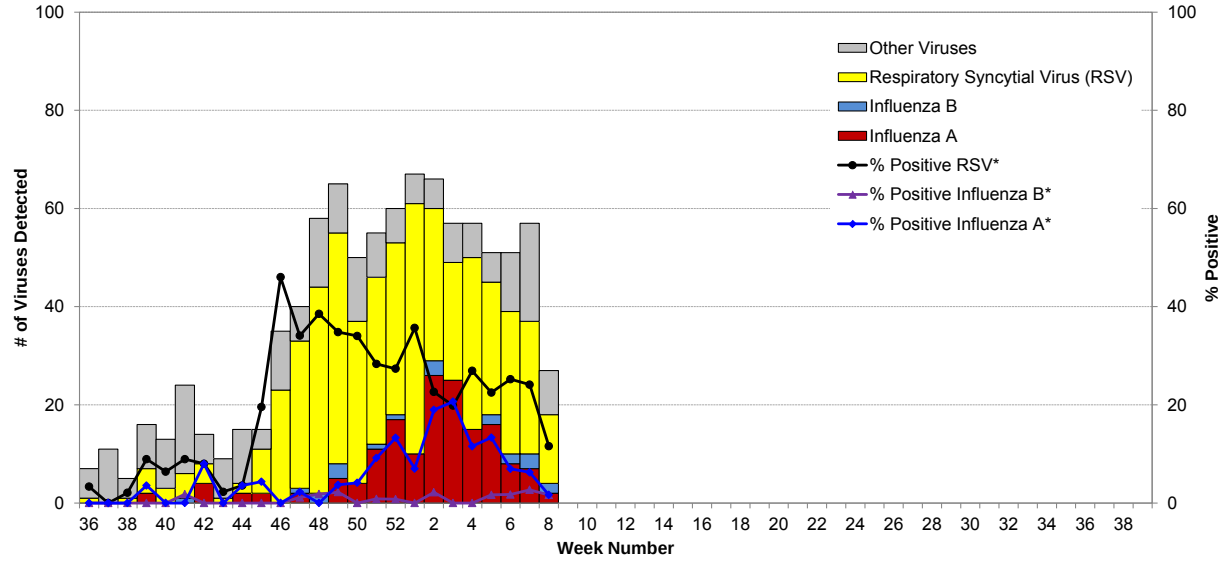


Data are current to March 1, 2017; figure includes cumulative influenza detections for specimens collected from weeks 40-8.

BC Children's and Women's Health Centre Laboratory

In weeks 7-8, the proportion of tests positive for influenza A and respiratory syncytial virus (RSV) decreased at the BC Children's and Women's Health Centre Laboratory. Of the 233 tests conducted in weeks 7-8, 9 (4%) were positive for influenza A and 41 (18%) were positive for RSV; five (2%) were positive for influenza B.

Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2016-17



* Positive rates were calculated using aggregate data. The denominators for each rate represent the total number of tests; multiple tests may be performed for a single specimen and/or patient.

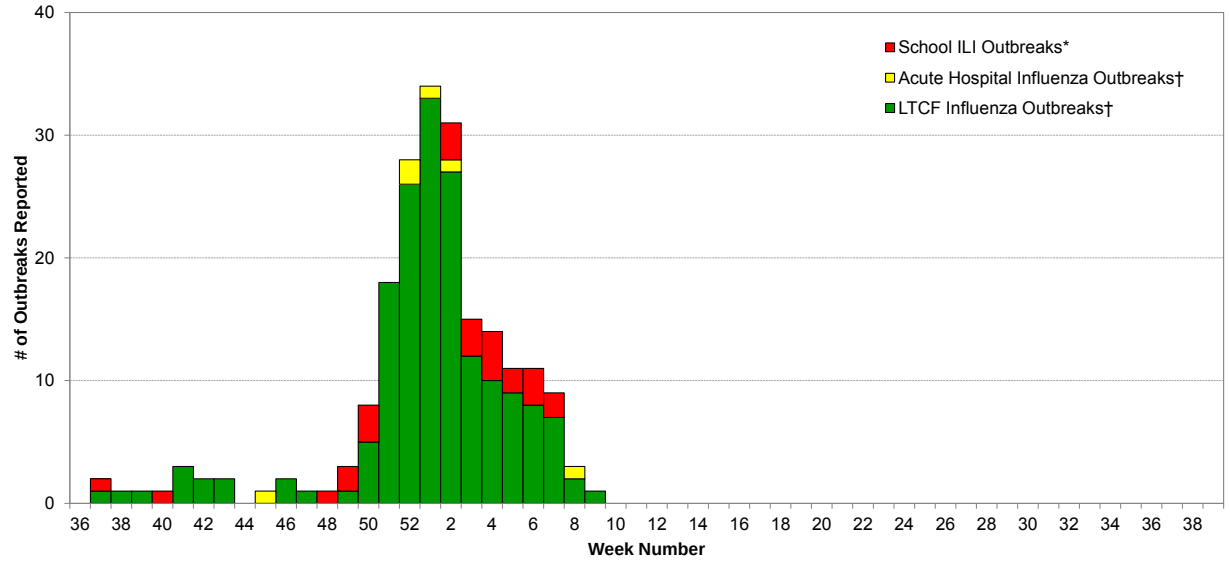
Influenza-like Illness (ILI) Outbreaks

Since our last bulletin two weeks ago, 12 new influenza outbreaks were reported, including 11 from long-term care facilities (LTCFs) and one from an acute care setting. Of the 12 newly reported outbreaks, three were reported from FHA, three from VCHA, three from VIHA, two from IHA and one from NHA. Onset dates ranged from weeks 5-9. Eleven had influenza A (subtype pending) detected and one had influenza B detected. Three new school ILI outbreaks were reported this week from IHA: one in week 6 and two in week 7.

Cumulatively during the 2016-17 season (since week 37, starting September 11, 2016), a total of 178 influenza outbreaks have been reported as of March 2, 2017, including 169 in LTCFs, six in acute care settings, and three from other facility types. All of the influenza A outbreaks with subtype information available had influenza A(H3N2) detected; five outbreaks with influenza B detected and one outbreak with both influenza A and B detected were additionally reported.

A total of 25 school ILI outbreaks have also been reported so far during the 2016-17 season but without etiologic agent identified.

Number of influenza-like illness (ILI) outbreaks reported, compared to current sentinel ILI rate and historical average sentinel ILI rate, British Columbia 2016-17



* School-based ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.
† Facility-based influenza outbreaks defined as 2 or more ILI cases within 7-day period, with at least one laboratory-confirmed case of influenza.

National

FluWatch (week 7, February 12 to 18, 2017)

Many influenza indicators such as laboratory detections, outbreaks and hospitalizations have been stable for the past five weeks. Widespread or localized influenza activity was reported in 30 regions (out of 46 regions reporting) across eight provinces. For a third week in a row, the percentage of tests positive for influenza increased from 23% in week 4 to 25% in week 7. In week 7, 53 laboratory confirmed outbreaks were reported (down from 67 in the previous week); the majority were in long-term care facilities and due to influenza A. In week 7, the number of hospitalizations reported by participating provinces and territories decreased. Influenza A(H3N2) continues to be the most common subtype of influenza affecting Canadians. The majority of laboratory detections, hospitalizations and deaths have been among adults aged ≥65 years. Details are available at: healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/fluwatch-reports-rapports-surveillance-influenza-eng.php.

National Microbiology Laboratory (NML): Strain Characterization

From September 1, 2016 to March 2, 2017, the National Microbiology Laboratory (NML) received 971 influenza viruses [887 A(H3N2), 20 A(H1N1)pdm09 and 64 B] from Canadian laboratories for antigenic characterization.

Influenza A(H3N2): Of the 887 influenza A(H3N2) viruses, only 265 (30%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 265 viruses characterized by HI assay, all were considered antigenically similar to A/Hong Kong/4801/2014, the WHO-recommended A(H3N2) component for the 2016-17 northern hemisphere influenza vaccine. Of the 262 out of 265 viruses antigenically characterized with available sequencing information, 224 (85%) belonged to genetic group 3C.2a and 38 (15%) belonged to genetic group 3C.3a. Genetic characterization was performed to infer antigenic properties on the remaining 622 viruses that did not grow to sufficient haemagglutination titre for HI assay. Of the 622 viruses genetically characterized, all were reported to belong to genetic group 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain.

Influenza A(H1N1)pdm09: The 20 A(H1N1)pdm09 viruses characterized were antigenically similar to A/California/7/2009, the WHO-recommended A(H1N1) component for the 2016-17 northern hemisphere influenza vaccine.

Influenza B: Of the 64 influenza B viruses characterized, 27 (42%) were antigenically similar to a B/Brisbane/60/2008(Victoria lineage)-like virus, the WHO-recommended influenza B component for the 2016-17 northern hemisphere trivalent influenza vaccine. The remaining 37 (58%) viruses were characterized as a B/Phuket/3073/2013(Yamagata lineage)-like virus, the other WHO-recommended influenza B component for the 2016-17 northern hemisphere quadrivalent influenza vaccine containing two influenza B components.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2016 to March 2, 2017, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: Of the 157 influenza A viruses [140 A(H3N2) and 17 A(H1N1)pdm09] tested against amantadine, all were resistant.

Oseltamivir: Of the 561 influenza viruses [489 A(H3N2), 18 A(H1N1)pdm09 and 54 B] tested against oseltamivir, all were sensitive.

Zanamivir: Of the 561 influenza viruses [489 A(H3N2), 17 A(H1N1)pdm09 and 55 B] tested against zanamivir, all were sensitive.

Mid-season Estimates of 2016-17 Influenza Vaccine Effectiveness, North America

Canada

On February 9, 2017, researchers from the Canadian Sentinel Practitioner Surveillance Network (SPSN) published the first mid-season estimates of influenza vaccine effectiveness (VE) for the 2016-17 season. They found VE of 42% (95% confidence interval (CI): 18-59%) against outpatient medically attended, laboratory-confirmed A(H3N2) illness, which has been the dominant subtype so far this season. This finding indicates that, compared to unvaccinated people, the risk of A(H3N2) illness in vaccinated people was reduced by about 40%. This VE estimate is consistent with vaccine protection typically expected for A(H3N2)-dominant seasons, but is considerably higher than in the last A(H3N2)-dominant 2014-15 season when no vaccine protection was found.

The full report is available at: www.eurosurveillance.org/ViewArticle.aspx?ArticleId=22714.

United States

On February 17, 2017, the U.S. Flu VE Network published mid-season estimates of 2016-17 influenza VE, reporting an adjusted VE of 43% (95% CI: 29-54%) for A(H3N2). These findings are consistent with Canadian mid-season estimates published last week, suggesting VE of around 40% against outpatient, medically attended A(H3N2) illness, which has been the dominant influenza strain so far during the 2016-17 season. Both the Canadian and U.S. studies used a test-negative design to derive influenza VE.

For details see: www.cdc.gov/mmwr/volumes/66/wr/mm6606a3.htm?s_cid=mm6606a3_w.

International

USA (week 7, February 12 to 18, 2017)

During week 7, influenza activity decreased slightly but remained elevated in the United States. The most frequently identified influenza virus subtype reported by public health laboratories during week 7 was influenza A(H3N2). The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased slightly but remained elevated. Of the 698 A(H3N2) viruses genetically characterized by the US CDC during the 2016-17 season, 96% belonged to genetic group 3C.2a, including the newly emerging subgroup 3C.2a1, and 4% to group 3C.3a based on analysis of HA gene segments. The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold. Five influenza-associated pediatric deaths were reported. A cumulative rate for the season of 33.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for ILI was 4.8%, which is above the national baseline of 2.2%. The geographic spread of influenza in Puerto Rico and 44 states was reported as widespread; Guam and four states reported regional activity; the District of Columbia and one state reported local activity; one state reported sporadic activity; and the U.S. Virgin Islands reported no activity. Details are available at: www.cdc.gov/flu/weekly/.

WHO (February 20, 2017)

Influenza activity in the temperate zone of the northern hemisphere continued to be elevated. Many countries especially in East Asia and Europe appeared to have already peaked and were reporting decreasing trends. Worldwide, influenza A(H3N2) virus was predominant. The majority of influenza viruses characterized so far were similar antigenically to the reference viruses contained in vaccines for use in the 2016-17 northern hemisphere influenza season. Nearly all tested viruses collected recently for antiviral sensitivity were susceptible to the neuraminidase inhibitor antiviral medications.

- In North America, influenza activity with A(H3N2) virus predominating increased in the United States of America and Mexico, whereas in Canada influenza activity continued to decrease.
- In Europe, influenza activity remained elevated with influenza A(H3N2) virus being the most prominent subtype. Most of the countries reported stable or decreasing trends compared with previous weeks. Persons aged ≥65 years were most frequently associated with severe disease from influenza infection.
- In East Asia, influenza activity appeared to be decreasing with influenza A(H3N2) virus predominant.
- In Western Asia, influenza activity was decreasing with influenza A(H3N2) predominant in the region. Low levels of influenza B viruses were also detected.
- In Southern Asia, influenza activity sharply increased in India and Sri Lanka, with mainly influenza A(H1N1)pdm09 reported followed by influenza B and A(H3N2).
- In South East Asia, influenza activity remained low.
- In Northern Africa, influenza activity seemed to have peaked; influenza A(H3N2) and influenza B virus detections were reported.
- In West Africa, influenza B continued to be detected in Ghana.
- In the Caribbean countries and Central America, influenza and other respiratory virus activity remained low in general, except in Puerto Rico where influenza activity remained above the seasonal threshold with influenza A(H3N2) predominating.
- In tropical South America, influenza and other respiratory virus activity remained low, although RSV activity remained elevated in Colombia.
- In the temperate zone of the Southern Hemisphere, influenza activity was at inter-seasonal levels.
- From January 23 to February 5, 2017, the WHO GISRS laboratories tested more than 154,949 specimens, of which 40,292 were positive for influenza viruses: 36,922 (92%) were typed as influenza A and 3370 (8%) as influenza B. Of the subtyped influenza A viruses, 418 (3%) were influenza A(H1N1)pdm09 and 14024 (97%) were influenza A(H3N2). Of the characterized B viruses, 332 (63%) belonged to the B/Yamagata lineage and 197 (37%) to the B/Victoria lineage.

Details are available at: www.who.int/influenza/surveillance_monitoring/updates/en/.

Emerging Respiratory Pathogens

Avian Influenza A(H7N9), China

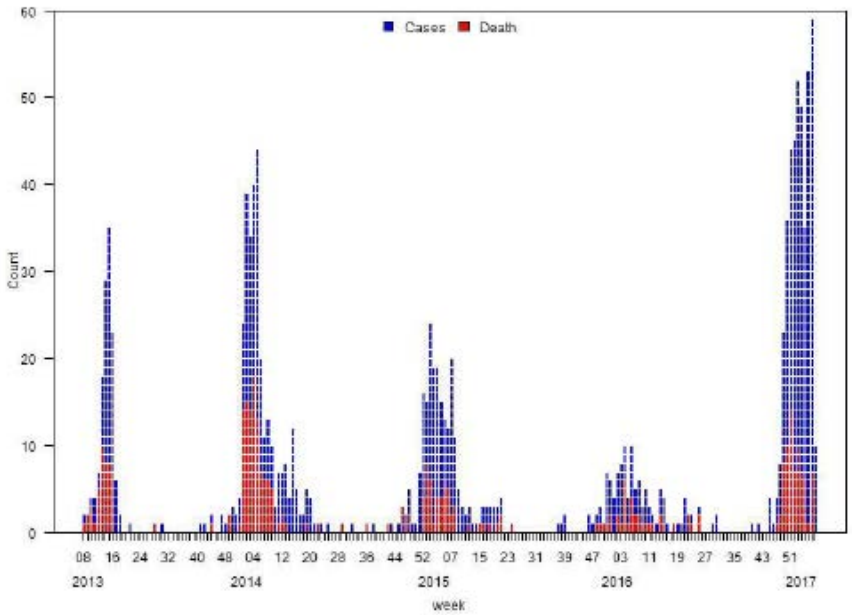
An upsurge of human cases due to avian influenza A(H7N9) has been observed in China in recent months. Since October 2016, human A(H7N9) cases in China have increased dramatically and have now surpassed the number of cases reported in each of the prior four waves since this virus was first identified in February 2013. As of March 1, 2017, a total of 1,258 lab-confirmed human infections with avian influenza A(H7N9) and at least 328 deaths have been reported to the WHO since 2013. Of these, more than one-third has been reported since October 2016.

Based on their latest risk assessment (as of March 1, 2017), 460 lab-confirmed human cases of A(H7N9) associated with the fifth seasonal wave have been reported to the WHO. As in prior waves, the majority of cases continue to be reported in older, adult males, with at least one-third of cases fatal. Most cases have reported recent exposure to infected poultry or contaminated environments, including live poultry markets. A few clusters have occurred for which limited human-to-human transmission cannot be ruled out.

Avian influenza A(H7N9) has previously been considered a low-pathogenic avian influenza (LPAI) virus, meaning that it causes little or no disease in poultry. However, on February 18, the World Health Organization was notified of two previously reported human A(H7N9) cases that had been infected with a highly pathogenic avian influenza (HPAI) virus. HPAI A(H7N9) viruses were also detected at live poultry markets in China from birds sampled in January 2017. Of note, LPAI and HPAI designations refer to severity in poultry but are not predictive of severity in humans.

Genetic sequencing also revealed that these viruses had acquired mutations conferring resistance to neuraminidase inhibitors, although both patients had received oseltamivir treatment before specimens were collected. To date, there has been no evidence of increased pathogenicity in transmission between humans associated with these genetic changes, although ongoing monitoring is warranted.

Number of confirmed human A(H7N9) cases and deaths reported to the WHO by week of onset, China, February 2013 to February 2017



Data are current to February 14, 2017. *Source:* World Health Organization. Influenza at the human-animal interface. Summary and risk assessment, 17 January to 14 February 2017. Geneva: WHO; 2017. Available from: www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/.

WHO Recommendations for Influenza Vaccines

WHO Recommendations for 2016-17 Northern Hemisphere Influenza Vaccine

On February 25, 2016, the WHO announced recommended strain components for the 2016-17 northern hemisphere trivalent influenza vaccine (TIV):*

- an A/California/7/2009 (H1N1)pdm09-like virus;†
- an A/Hong Kong/4801/2014 (H3N2)-like virus;‡
- a B/Brisbane/60/2008 (Victoria-lineage)-like virus.§

It is recommended that quadrivalent influenza vaccines (QIV) containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013 (Yamagata-lineage)-like virus.

These recommended components are the same as those recommended for the 2016 Southern Hemisphere vaccine.

* Recommended strains represent a change for two of the three components used for the 2015-16 northern hemisphere vaccines.

† Recommended strain has been retained as the A(H1N1) component since the 2009 pandemic and has been included in the northern hemisphere vaccine since 2010-11.

‡ Recommended strain for the A(H3N2) component represents a phylogenetic clade-level change from a clade 3C.3a virus to a clade 3C.2a virus.

§ Recommended strain for the influenza B component represents a lineage-level change from a B/Yamagata-lineage virus to a B/Victoria-lineage virus.

For further details: http://www.who.int/influenza/vaccines/virus/recommendations/2016_17_north/en/.

WHO Recommendations for 2017-18 Northern Hemisphere Influenza Vaccine

On March 2, 2017, the WHO announced the recommended strain components for the 2017-18 northern hemisphere trivalent influenza vaccine (TIV):*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Hong Kong/4801/2014 (H3N2)-like virus;
- a B/Brisbane/60/2008 (Victoria-lineage)-like virus.

It is recommended that quadrivalent influenza vaccines (QIV) containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013 (Yamagata-lineage)-like virus.

* These recommended strains are the same as those recommended for the 2017 southern hemisphere TIV and represent a change for one of the three components used for the 2016-17 northern hemisphere TIV and 2016 southern hemisphere TIV.

† Recommended strain represents a change from an A/California/7/2009-like virus, which had been retained as the A(H1N1)pdm09 component since the 2009 pandemic, to an A/Michigan/45/2015-like virus belonging to the emerging phylogenetic subclade 6B.1.

For further details: www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/.

Additional Information

Explanatory Note:

The surveillance period for the 2016-17 influenza season is defined starting in week 40. Weeks 36-39 of the 2015-16 season are shown on graphs for comparison purposes.

List of Acronyms:

ACF: Acute Care Facility
AI: Avian influenza
FHA: Fraser Health Authority
HBoV: Human bocavirus
HMPV: Human metapneumovirus
HSDA: Health Service Delivery Area
IHA: Interior Health Authority
ILI: Influenza-Like Illness
LTCF: Long-Term Care Facility
MSP: BC Medical Services Plan
NHA: Northern Health Authority
NML: National Microbiological Laboratory
A(H1N1)pdm09: Pandemic H1N1 influenza (2009)
RSV: Respiratory syncytial virus
VCHA: Vancouver Coastal Health Authority
VIHA: Vancouver Island Health Authority
WHO: World Health Organization

Current AMMI Canada Guidelines on the Use of Antiviral Drugs for Influenza:
www.ammi.ca/?ID=122&Language=ENG

Web Sites:

BCCDC Emerging Respiratory Pathogen Updates:
www.bccdc.ca/health-professionals/data-reports/emerging-respiratory-virus-updates

Influenza Web Sites

Canada – Influenza surveillance (FluWatch): healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/index-eng.php
Washington State Flu Updates: http://www.doh.wa.gov/portals/1/documents/5100/420-100-fluupdate.pdf
USA Weekly Surveillance Reports: www.cdc.gov/flu/weekly/
Joint ECDC – WHO/Europe weekly influenza update (Flu News Europe): flunewseurope.org
WHO – Weekly Epidemiological Record: www.who.int/wer/en/
WHO Collaborating Centre for Reference and Research on Influenza (Australia):
www.influenzacentre.org/
Australian Influenza Report:
www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm
New Zealand Influenza Surveillance Reports: www.surv.esr.cri.nz/virology/influenza_weekly_update.php

Avian Influenza Web Sites

WHO – Influenza at the Human-Animal Interface: www.who.int/csr/disease/avian_influenza/en/
World Organization for Animal Health: www.oie.int/eng/en_index.htm

Contact Us:

Tel: (604) 707-2510
Fax: (604) 707-2516
Email: InfluenzaFieldEpi@bccdc.ca

Communicable Disease Prevention and Control Services (CDPACS)
BC Centre for Disease Control
655 West 12th Ave, Vancouver BC V5Z 4R4

Online: www.bccdc.ca/health-professionals/data-reports/influenza-surveillance-reports

version: 26 Oct 2011

Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to ilioutbreak@bccdc.ca

Note: This form is for provincial surveillance purposes.
Please notify your local health unit per local guidelines/requirements.

ILI: Acute onset of respiratory illness with fever and cough and with one or more of the following: sore throat, arthralgia, myalgia, or prostration which *could* be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Schools and work site outbreak: greater than 10% absenteeism on any day, most likely due to ILI.

Residential institutions (facilities) outbreak: two or more cases of ILI within a seven-day period.

A — Reporting Information

Health unit/medical health officer notified? ☐ *Yes* ☐ *No*

Person Reporting: _____ Title: _____

Contact Phone: _____ Email: _____

Health Authority: _____ HSDA: _____

Full Facility Name: _____

Is this report:

☐ First Notification *(complete section **B** below; Section **D** if available)*

☐ Update *(complete section **C** below; Section **D** if available)*

☐ Outbreak Over *(complete section **C** below; Section **D** if available)*

B — First Notification

Type of facility: ☐ LTCF ☐ Acute Care Hospital ☐ Senior's Residence

(if ward or wing, please specify name/number: _____)

☐ Workplace ☐ School (grades:) ☐ Other (_____)

Date of onset of first case of ILI (dd/mm/yyyy): DD / MMM / YYYY

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

C — Update AND Outbreak Declared Over

Date of onset for most recent case of ILI (dd/mm/yyyy): DD / MMM / YYYY

If over, date outbreak declared over (dd/mm/yyyy): DD / MMM / YYYY

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

D — Laboratory Information

Specimen(s) submitted? ☐ Yes (location: _____) ☐ No ☐ Don't know

If yes, organism identified? ☐ Yes (specify: _____) ☐ No ☐ Don't know

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