

British Columbia Influenza Surveillance Bulletin

Influenza Season 2017-18, Number 16, Week 9

February 25 to March 3, 2018

Table of Contents:

British Columbia:

Sentinel Physicians	Page 2
Children's Hospital ER	Page 2
Medical Services Plan	Page 3
Laboratory Surveillance	Page 5
ILI Outbreaks	Page 8

Canada:

FluWatch Activity levels	Page 9
NML Strain Characterization	Page 9
NML Antiviral Resistance	Page 9
Mid-season VE Estimates	Page 10
Antiviral Guidelines	Page 11

International:

USA (CDC)	Page 12
WHO	Page 12

Influenza Vaccine Components (WHO Recommendations)

2017-18 Northern Hemisphere	Page 13
2018-19 Northern Hemisphere	Page 13

Additional Information:

Explanatory note	Page 14
List of Acronyms	Page 14
Web Sites	Page 14
Outbreak Report Form	Page 15

Prolonged Influenza Activity in BC, but Passed Epidemic Peak

During week 9 (February 25 to March 3, 2018), influenza activity persisted at above seasonal levels in most regions, despite a declining trend for the past few weeks following the epidemic peak in early-to-mid January 2018.

Influenza positivity at the BCCDC PHL was 37% in week 9 after declining for the preceding two-month period. Influenza B comprised more than half of all influenza detections in week 9 with influenza B positivity rates exceeding 20%. Influenza A(H3N2) remains the dominant subtype among influenza A detections but with co-detection of A(H1N1)pdm09.

Since our last bulletin, 12 new lab-confirmed outbreaks were reported, all from long-term care facilities (LTCFs). Of these, 7 had influenza B detected, 4 had influenza A detected and 1 had influenza A and B detected; of the 2 influenza A outbreaks that had subtype information available, both were A(H3N2). Additionally, 3 school ILI outbreaks, with unknown etiology, were reported during week 10.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

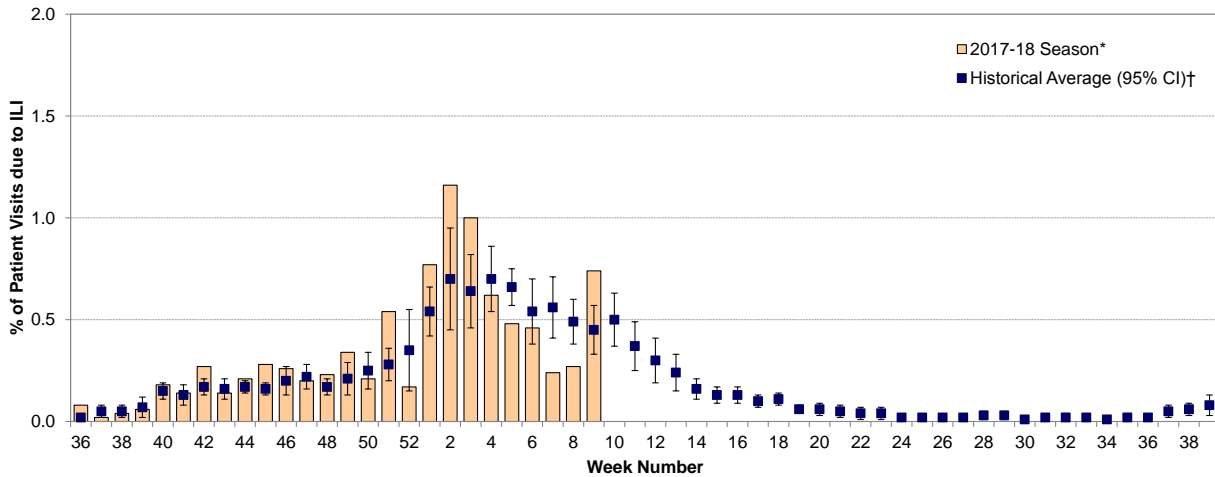
Report Disseminated: March 8, 2018

British Columbia

Sentinel Physicians

The proportion of patients with influenza-like illness (ILI), among those presenting to sentinel sites, was above the historical average for week 9, following multiple weeks of below average rates. Rates are subject to change as reporting becomes more complete. To date, 69% of sentinel sites have reported data for week 9.

Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2017-18



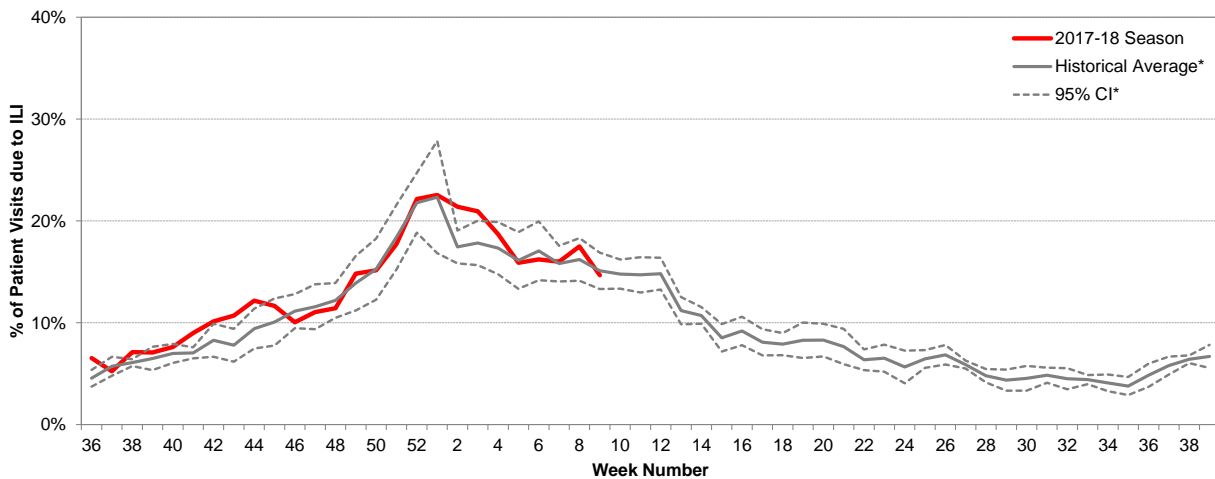
* Data are subject to change as reporting becomes more complete.

† 10-year historical average for 2017-18 season based on 2005-06 to 2016-2017 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

In week 9, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI remained within expected levels for this period.

Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2017-18



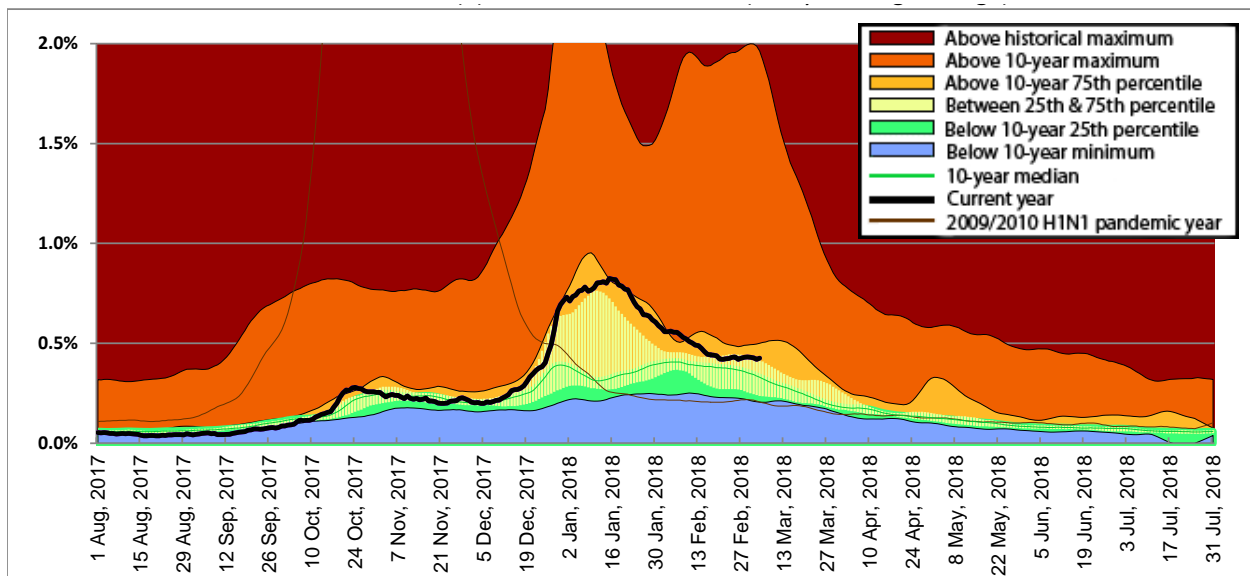
Source: BCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."

* 5-year historical average for 2017-18 season based on 2012-13 to 2016-17 seasons; CI=confidence interval.

Medical Services Plan

In week 9, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims plateaued in the province overall with varying trends across the regional health authorities. In week 9, rates for the province overall, FHA and VIHA were above the 10-year 75th percentile, while rates in VCHA were above the 10-year maximum and rates in IHA and NHA were at expected levels for this time of year.

Service claims submitted to MSP for influenza illness (II)* as a proportion of all submitted general practitioner service claims, British Columbia, 2017-18

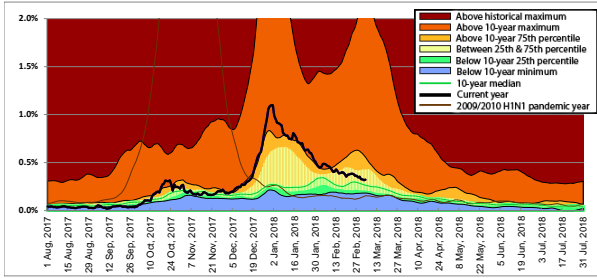


* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

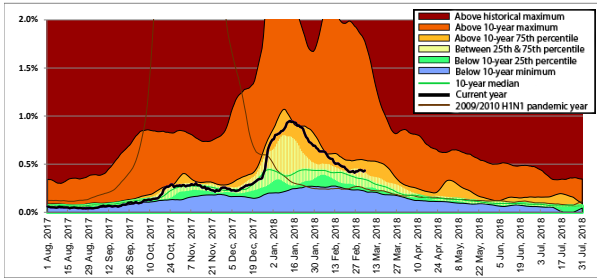
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP data beginning August 1, 2017 corresponds to sentinel ILI week 31; data are current to March 5, 2018.

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

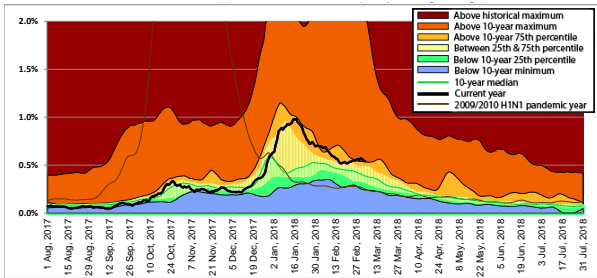
Interior



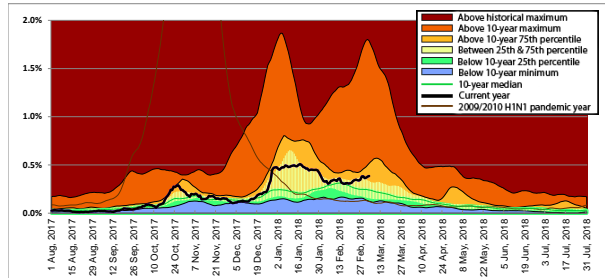
Fraser



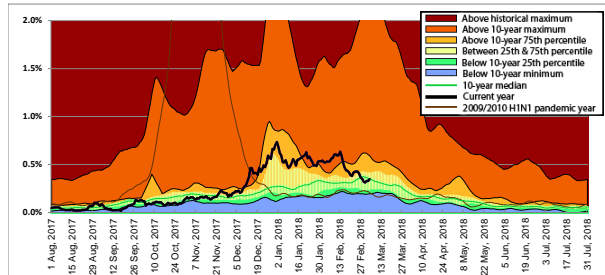
Vancouver Coastal



Vancouver Island



Northern



Laboratory Reports

BCCDC Public Health Laboratory

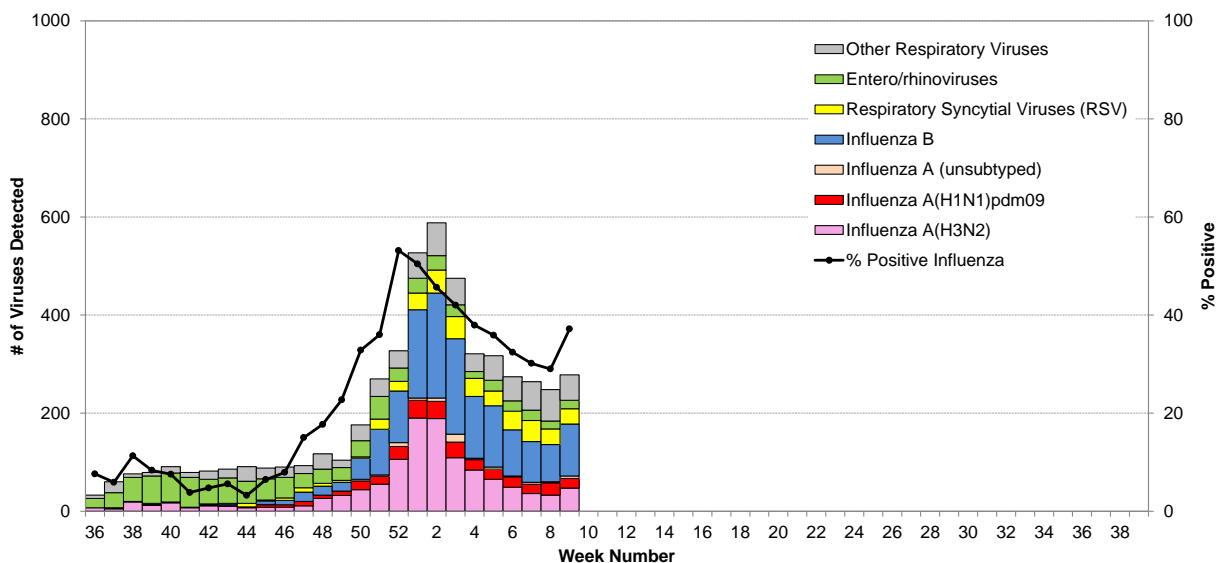
In week 9, 479 patients were tested for respiratory viruses at the BCCDC Public Health Laboratory (PHL). Of these, 178 (37%) tested positive for influenza; 72 (40%) had influenza A detected [47 A(H3N2), 20 A(H1N1)pdm09 and 5 subtype pending] and 106 (60%) had influenza B detected. Influenza positivity at the BCCDC PHL rose to 37% in week 9, after declining for the preceding two-month period, driven mainly by increased detections of influenza B in week 9. As with most recent weeks, influenza B comprised more than half of all influenza detections in week 9 with influenza B positivity rates exceeding 20%. Based on national surveillance reports, B(Yamagata) is the predominant influenza B lineage circulating in BC and elsewhere in Canada this season. Influenza A(H3N2) remains the dominant subtype among influenza A detections but with co-detection of A(H1N1)pdm09.

Cumulatively during the 2017-18 season (since week 40, starting October 1, 2017), 3013 (33%) patients tested positive for influenza at the BCCDC PHL, including 1509 (50%) with influenza A [1125 A(H3N2), 324 A(H1N1)pdm09, 60 subtype pending], 1493 (50%) with influenza B and 11 patients with both influenza A [nine with A(H3N2) and two with A(H1N1)pdm09] and B detected.

More than half (58%) of A(H3N2) cases have been detected among elderly adults ≥ 65 years old, with 9% <20 years old, 18% 20-49 years old, and 15% 50-64 years old. Conversely, 39% of influenza B cases have been detected among elderly adults ≥ 65 years old, with 17% <20 years old, 25% 20-49 years old, and 20% 50-64 years old. Among A(H1N1)pdm09 cases, only 16% have been detected among elderly adults ≥ 65 years old, with 29% <20 years old, 38% 20-49 years old, and 16% 50-64 years old.

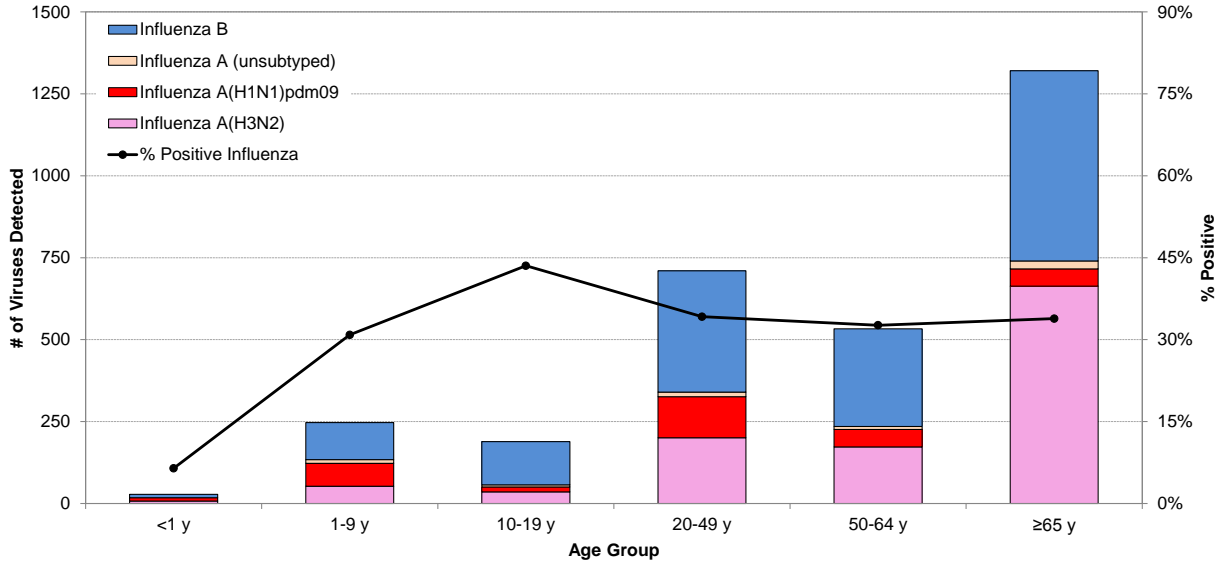
RSV was the most commonly detected non-influenza respiratory virus during this period. RSV detections have been less frequent than in the 2016-17 season, including overall RSV detection tallies for the season to date (417 vs. 1,366, respectively, between weeks 40 and 9) as well as the number and proportion of specimens testing positive in the most recent week 9 (31 (7%) vs. 59 (12%)).

Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2017-18



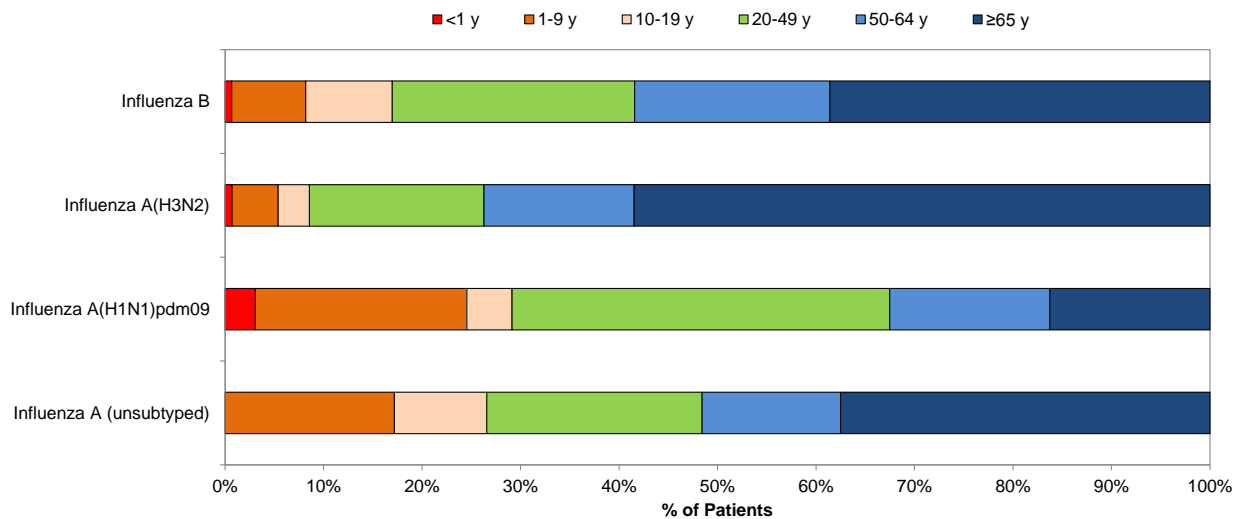
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 7, 2018.

Cumulative number (since week 40) of influenza detections by type subtype and age group, BCCDC Public Health Laboratory, 2017-18



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 7, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-9.

Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2017-18

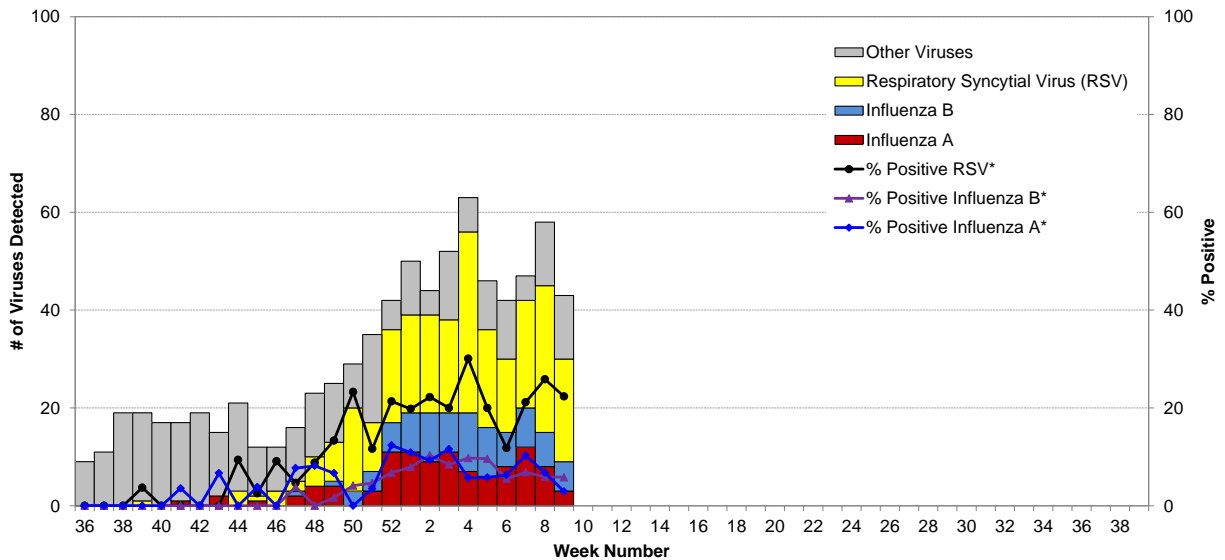


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 7, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-9.

BC Children's and Women's Health Centre Laboratory

In week 9, 103 tests for influenza viruses were conducted at the BC Children's and Women's Health Centre (CWHC) laboratory. Of these, 3 (3%) were positive for influenza A and 6 (6%) were positive for influenza B. Respiratory syncytial virus (RSV) was the most commonly detected respiratory viruses during this period. In contrast to observations from the BCCDC PHL, RSV positivity among CWHC specimens in week 9 of the current season (22%) is higher than week 9 of the 2016-17 season (10%).

Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2017-18



* 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, 12 new lab-confirmed outbreaks were reported; all were from long-term care facilities (LTCFs). Of the 12 newly reported outbreaks, 1 had onset in week 4 in VIHA, 2 had onset in week 7 in VCHA, 3 had onset in week 8 (1 in IHA, 1 in VCHA, 1 in VIHA) and 6 had onset in week 9 (2 in FHA, 2 in VCHA, 2 in VIHA). Of the 12 outbreaks, 7 had influenza B detected, 4 had influenza A detected and 1 had influenza A and B detected; of the 2 influenza A outbreaks that had subtype information available, both were A(H3N2).

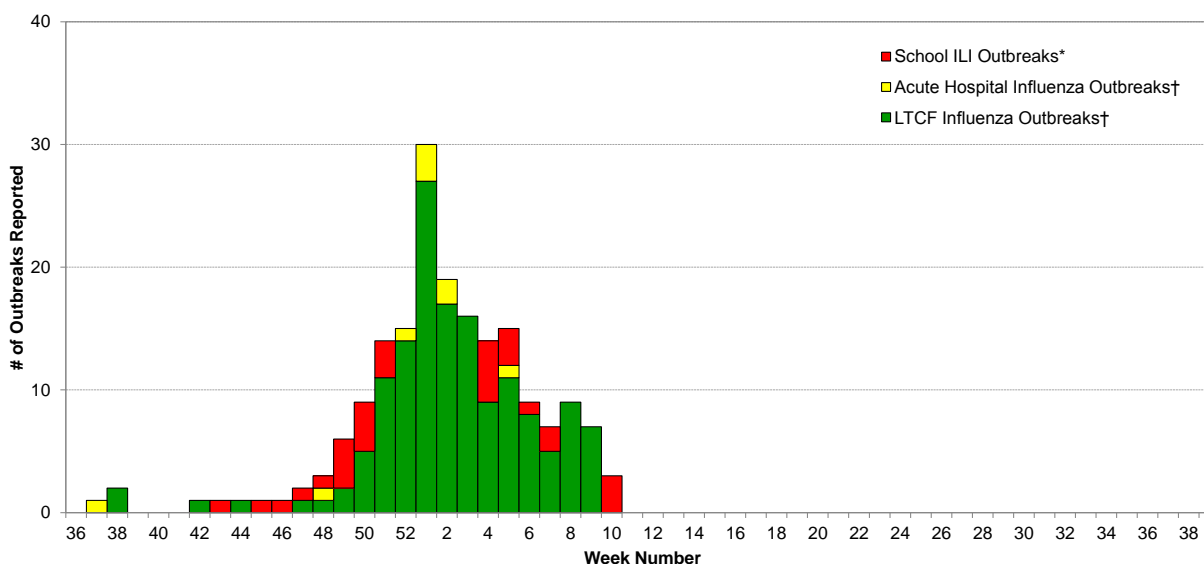
Additionally, 3 school ILI outbreaks, with unknown etiology, were reported during week 10. These outbreaks occurred in IHA, currently the only health authority routinely reporting school ILI outbreaks to BCCDC.

Consistent with other surveillance indicators, the number of influenza outbreak reports per week has declined following a peak in week 1; it has remained steady around 5-10 outbreak reports per week in recent weeks. Some delay in reporting should be taken into account when interpreting these trends. The majority of outbreaks reported in recent weeks have been due to influenza B.

Cumulatively during the 2017-18 season (since week 37, starting September 10, 2017), 156 lab-confirmed influenza outbreaks have been reported, including 53 with influenza A detected [27 A(H3N2) and 26 subtype unknown], 91 with influenza B, 3 with influenza A (H3N2) and influenza B, and 9 with influenza A (unspecified subtype) and influenza B; of these, 147 were reported in LTCFs and 9 were reported from an acute care facility. No influenza A outbreaks have been subtyped as A(H1N1)pdm09 so far this season. Additionally, 30 school ILI outbreaks have occurred without etiologic agent identified.

So far during this season of mixed A(H3N2) and influenza B co-circulation, the number of long term care facility outbreaks reported since week 40 (n=145) is lower than the tally for the same period during recent A(H3N2) dominant epidemics in 2014-15 (n=157) and 2016-17 (n=175) but higher than during recent A(H1N1)pdm09 dominant epidemics in 2013-14 (n=7) and 2015-16 (n=21), bearing in mind variation in the timing of seasonal epidemics that may influence final end-of-season comparisons.

Number of influenza-like illness (ILI) outbreaks reported, British Columbia 2017-18



* 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 8, February 18 to 24, 2018)

Overall, influenza activity in Canada remains at peak levels. Influenza activity is slowly decreasing in many parts of the country. In week 8, detections of influenza B were greater than those of influenza A. To date this season, the majority of laboratory-confirmed cases, hospitalizations and deaths with influenza have been among adults 65 years of age and older. Details are available at: www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html.

National Microbiology Laboratory (NML): Strain Characterization

From September 1, 2017 to March 8, 2018, the National Microbiology Laboratory (NML) received 2,085 influenza viruses from Canadian laboratories for antigenic characterization.

Influenza A(H3N2): Of the 1040 influenza A(H3N2) viruses, only 237 (23%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 237 viruses characterized by HI assay, 207 (87%) were considered antigenically similar to a cell culture-propagated A/Hong Kong/4801/2014-like virus, the WHO-recommended A(H3N2) component for the 2017-18 northern hemisphere influenza vaccine, while 30 (13%) viruses (all belonging to genetic clade 3C.3a) showed reduced titre with ferret antisera raised against cell culture-propagated A/Hong Kong/4801/2014. Of the 227 out of 237 viruses that were antigenically characterized with available sequencing information, 176 belonged to genetic clade 3C.2a, 21 belonged to subclade 3C.2a1 and 30 belonged to clade 3C.3a; sequencing is pending for the 10 remaining isolates. Of the 803 viruses genetically characterized, 719 (90%) were reported to belong to genetic clade 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain, while 82 (10%) belonged to subclade 3C.2a1 and 2 belonged to clade 3C.3a.

Influenza A(H1N1)pdm09: All of the 123 A(H1N1)pdm09 viruses characterized were antigenically similar to an A/Michigan/45/2015-like virus, the WHO-recommended influenza A(H1N1) component for the 2017-18 northern hemisphere influenza vaccine.

Influenza B: Of the 922 influenza B viruses characterized, 44 (5%) belonged to the B(Victoria) lineage and 878 (95%) belonged to the B(Yamagata) lineage. Among the 44 B(Victoria) viruses, 8 (18%) were characterized as antigenically similar to a B/Brisbane/60/2008(Victoria)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere trivalent influenza vaccine, while 36 (82%) viruses showed reduced titre with ferret antisera produced against cell-propagated B/Brisbane/60/2008. Sequence analysis showed that the 28 viruses that showed reduced titre had a two-amino acid deletion in the hemagglutinin (HA) gene; sequence is pending for the remaining 8 isolates. Among the 878 B(Yamagata) viruses, all were antigenically similar to a B/Phuket/3073/2013(Yamagata lineage)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere quadrivalent influenza vaccine containing two influenza B strains.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2017 to March 8, 2018, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: Of the 1137 influenza A viruses [1036 A(H3N2) and 101 A(H1N1)pdm09] tested against amantadine, all were resistant except two A(H3N2) viruses which were sensitive.

Oseltamivir: Of the 913 influenza viruses [435 A(H3N2), 89 A(H1N1)pdm09, and 389 B] tested against oseltamivir, all were sensitive except one A(H1N1)pdm09 virus with a H275Y mutation which was resistant.

Zanamivir: Of the 909 influenza viruses [431 A(H3N2), 89 A(H1N1)pdm09, and 389 B] tested against zanamivir, all were sensitive except one B virus which was resistant.

Mid-season 2017-18 Vaccine Effectiveness Estimates

Canada

On February 1, 2018, Canadian researchers published the first estimates of mid-season influenza vaccine effectiveness (VE) for the 2017-18 season. Adjusted VE against A(H3N2) was low at 17% (95%CI: -14 to 40%). Higher adjusted VE was observed for influenza B at 55% (95%CI: 38 to 68%), despite prominent use of lineage-mismatched B(Victoria) trivalent vaccine in most regions. The full report is available as an open-access publication from *EuroSurveillance*:

<http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.5.18-00035>

United States

On February 15, 2018, the US CDC published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. Adjusted VE against A(H3N2) was 25% (95% CI: 13 to 36%), comparable to Canadian estimates with both suggesting low protection against the dominant circulating strain. Adjusted VE against influenza B was 42% (95% CI: 25 to 56%), somewhat lower than previous Canadian findings despite the more prominent use of quadrivalent vaccines. The full report is available from *Morbidity and Mortality Weekly Report (MMWR)*:

https://www.cdc.gov/mmwr/volumes/67/wr/mm6706a2.htm?s_cid=mm6706a2_e

Spain (Navarre)

On February 15, 2018, Spanish researchers published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. The adjusted VE against influenza B, predominantly B(Yamagata), was 52% (95% CI: 12 to 74%) in the outpatient setting. This finding suggests moderate, cross-lineage protection against influenza B. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.7.18-00057>

Hong Kong

On February 22, 2018, Hong Kong researchers published interim estimates of influenza vaccine effectiveness (VE) among hospitalized children for the 2017-18 season. The 2017-18 season in Hong Kong has been characterized by influenza B(Yamagata) activity. VE among children aged 6 months to 17 years of age was 65% (95% CI: 40 to 80) for influenza B. Differences in study design, patient populations and other epidemiological factors, as well as the use of predominantly quadrivalent influenza vaccine, which includes the B(Yamagata) lineage virus, should be taken into account in comparing these findings to other studies. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.8.18-00062>

Europe (I-MOVE Group)

On March 1, 2018, European researchers from the I-MOVE multicentre case-control study published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. The 2017-18 season in I-MOVE countries has been characterised by predominant circulation of influenza B, with a greater proportion of A(H1N1)pdm09 than A(H3N2) among influenza A detections.

Adjusted VE against A(H3N2) was -16% (95% CI: -96 to 31) for all ages suggesting no protection, and consistent with Canadian findings of low VE. Despite predominant use of trivalent influenza vaccine containing lineage-mismatched influenza B(Victoria) antigen, adjusted VE against influenza B, that was predominantly B(Yamagata), was 39% (95% CI: 19 to 54) for all ages and 49% (95% CI: 19 to 67) when restricted to mismatched B(Yamagata) specimens. This finding suggests moderate, cross-lineage protection against influenza B, which has been observed previously for influenza B and is also consistent with Canadian findings. The full report is available from *Eurosurveillance*:

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.9.18-00086>

Updated Antiviral Guidelines

The Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) previously released guidance on the use of antiviral drugs in anticipation of the low vaccine effectiveness for the 2017-18 influenza season. These guidelines are available at: <https://www.ammi.ca/Update/79.ENG.pdf>.

International

USA (week 8, February 18 to 24, 2018)

During week 8, influenza activity decreased in the United States. While influenza A(H3N2) viruses continue to be predominant this season, during week 8 the overall proportion of influenza A viruses is declining and the proportion of influenza B viruses is increasing. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased. The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System. Seventeen influenza-associated pediatric deaths were reported. A cumulative rate of 81.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for influenza-like illness (ILI) was 5.0%, which is above the national baseline of 2.2%. The geographic spread of influenza in Puerto Rico and 45 states was reported as widespread; Guam and two states reported regional activity; the District of Columbia and three states reported local activity; and the U.S. Virgin Islands reported no activity. Details are available at: www.cdc.gov/flu/weekly/.

WHO (March 7, 2018)

Influenza activity remained high in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity was at inter-seasonal levels. Worldwide, influenza A and influenza B accounted for a similar proportion of influenza detections.

From February 5, 2018 to February 18, 2018, the WHO GISRS laboratories tested 281,243 specimens, of which 90,570 (32%) were positive for influenza viruses: 44,502 (49%) were typed as influenza A and 46,068 (51%) as influenza B. Of the subtyped influenza A viruses, 7,773 (58%) were influenza A(H1N1)pdm09 and 5,574 (42%) were influenza A(H3N2). Of the characterized B viruses, 5,835 (94%) belonged to the B(Yamagata) lineage and 346 (6%) to the B(Victoria) lineage.

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

WHO Recommendations for Influenza Vaccines

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 influenza vaccine:*

- 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;
- a B/Phuket/3073/2013 (Yamagata-lineage)-like virus (quadrivalent vaccines only).

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

† 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 phylogenetic subclade 6B.1.

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

WHO Recommendations for the 2018-19 Northern Hemisphere Influenza Vaccine

On February 22, 2018, the WHO announced recommended strain components for the 2018-19 northern hemisphere influenza vaccine:*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus;‡
- a B/Colorado/06/2017-like (Victoria-lineage)virus.§
- a B/Phuket/3073/2013-like (Yamagata-lineage)virus (quadrivalent vaccines only).§

* Recommended strains represent a change for two of the four components used for the 2017-18 northern hemisphere vaccines. Recommended strains are similar to the 2018 southern hemisphere vaccine with the exception of the B/Colorado/06/2017-like virus which replaces the B/Brisbane/60/2008-like virus as the B(Victoria-lineage) virus component.

† Recommended strain is the same as recommended for the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines. The A/Michigan/45/2015-like virus belongs to the phylogenetic subclade 6B.1.

‡ Recommended strain for the A(H3N2) component represents a phylogenetic clade-level change from a clade 3C.2a virus to a clade 3C.2a1 virus.

§ Recommended strain for the influenza B component represents a change for the B(Victoria)-lineage component compared to the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines from a B/Brisbane/60/2008-like virus, which had been retained since the 2009-10 season, to a B/Colorado/06/2017-like virus, belonging to the clade 1A antigenic drift variant with a two-amino acid deletion at positions 162-163. The B(Yamagata)-lineage component, B/Phuket/3073/2013-like virus, recommended for quadrivalent vaccine remains unchanged from the 2017-18 northern hemisphere vaccine.

For further details: http://www.who.int/influenza/vaccines/virus/recommendations/2018_19_north/en/.

Additional Information

Explanatory Note:

The surveillance period for the 2017-18 influenza season is defined starting in week 40. Weeks 36-39 of the 2016-17 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/Update/79.ENG.pdf

Web Sites:

BCCDC Emerging Respiratory Pathogen Updates:

<http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/emerging-respiratory-virus-updates>

Influenza Web Sites

Canada – Influenza surveillance (FluWatch): <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance.html>

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: <http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/influenza-surveillance-reports>

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	<u>Reporting Information</u> Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Person Reporting: _____ Title: _____
	Contact Phone: _____ Email: _____
	Health Authority: _____ HSDA: _____
	Full Facility Name: _____
	Is this report: <input type="checkbox"/> First Notification (<i>complete section B below; Section D if available</i>) <input type="checkbox"/> Update (<i>complete section C below; Section D if available</i>) <input type="checkbox"/> Outbreak Over (<i>complete section C below; Section D if available</i>)

B	<u>First Notification</u>
	Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence (if ward or wing, please specify name/number: _____)
	<input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)
	Date of onset of first case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>

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

C	<u>Update AND Outbreak Declared Over</u>
	Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>
	If over, date outbreak declared over (dd/mm/yyyy): <u>DD / MMM / YYYY</u>

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

D	<u>Laboratory Information</u>
	Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know