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

British Columbia (BC) Influenza Surveillance Bulletin

Influenza Season 2019-20, Number 9, Week 12
March 15 to March 21, 2020

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Clinical indicators of febrile respiratory illness remain elevated; proportion due to influenza virus continue to decrease

Clinical indicators of febrile respiratory illness in BC remain above the historic average in week 12. These trends may reflect overlapping influenza and COVID-19 epidemics and/or surveillance artefact associated with changes in health-care seeking behaviours.

Clinical indicators such as the BC Children's Hospital Emergency Room ILI and the BC Sentinel ILI detections have remained elevated. The Medical Service Plan claims remain higher than the historical averages but with recent decreasing trend.

Both the absolute number of influenza detections and the proportion of respiratory specimens that tested positive for influenza virus decreased in week 12. In week 12, 7% of respiratory specimens tested positive for influenza overall: 5% for influenza A and 2% for influenza B. Since week 40, 71 laboratory-confirmed influenza outbreaks have been reported from long term care facilities, similar to the same period during the 2018-19 influenza season (70) but lower than 2017-18 (169).

Provincial and national observations related to the COVID-19 epidemic, as of March 26th, are provided on page 10.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

Report Disseminated: March 26, 2020

Provincial Health Services Authority
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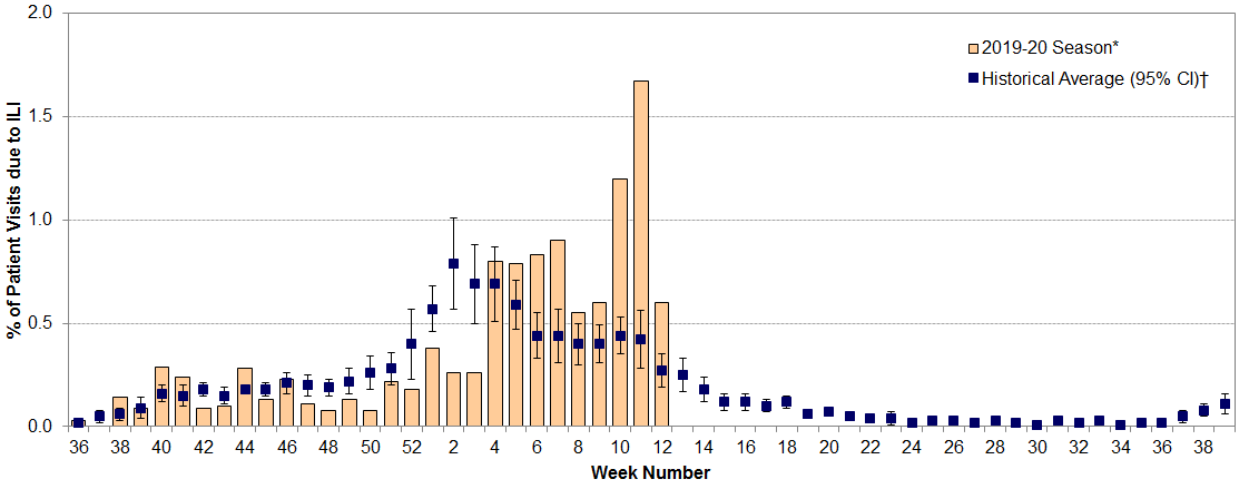
British Columbia

Sentinel Physicians

In week 12, clinical influenza-like illness (ILI) rates among patients presenting to sentinel sites decreased but remains above the 10-year historical average for this time of the year (**Figure 1**). Ten out of 19 (53%) sentinel ILI monitoring sites have reported data for week 12. Rates may change as reporting becomes more complete.

Figure 1: Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2019-2020

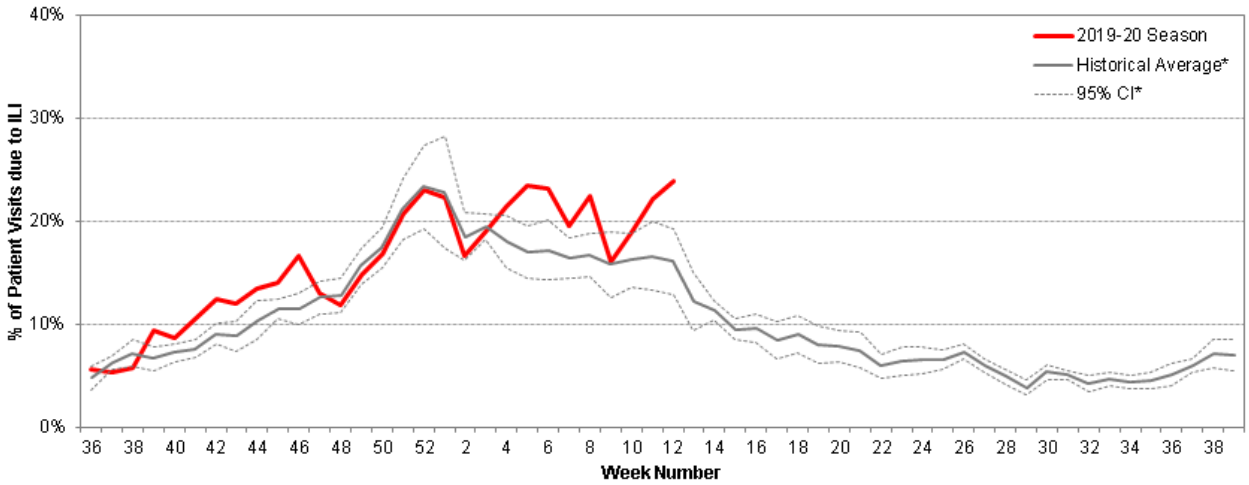


* Data are subject to change as reporting becomes more complete.
† 10-year historical average for 2019-20 season based on 2006-07 to 2018-2019 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

In week 12, the proportion of visits to BC Children's Hospital Emergency Room (BCCH ER) attributed to ILI remained above the 5-year historical average for a second week in a row (24%) (**Figure 2**). Exceptional seasonal patterns may reflect real pandemic-related events or changes in health care behaviours. Of note, the proportionate ILI attribution is greater while the overall number of ER registrations at BCCH is substantially lower than the similar period last year.

Figure 2: Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2019-2020



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 2019-20 season based on 2014-15 to 2018-19 seasons; CI=confidence interval.

Medical Services Plan

BC Medical Services Plan (MSP) general practitioner claims for influenza illness as a proportion of all submitted MSP claims[§] remain above historical averages, but with a decreasing trend in recent weeks in BC overall and in all 5 health regions (**Figure 3 and 4**).

Figure 3: Service claims submitted to MSP for influenza illness as a proportion of all submitted general practitioner service claims[§], British Columbia, 2019-2020 season

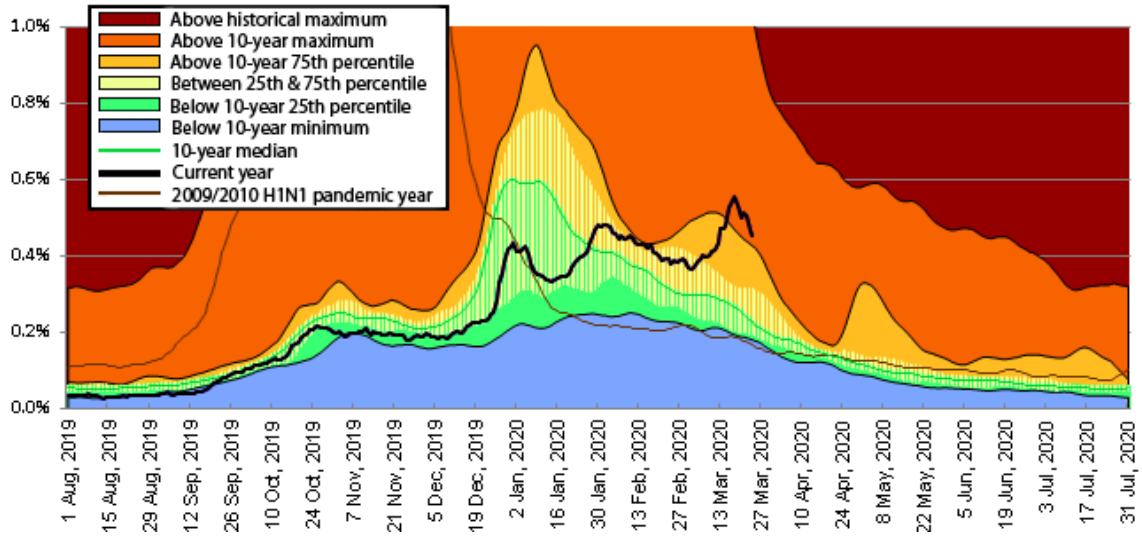
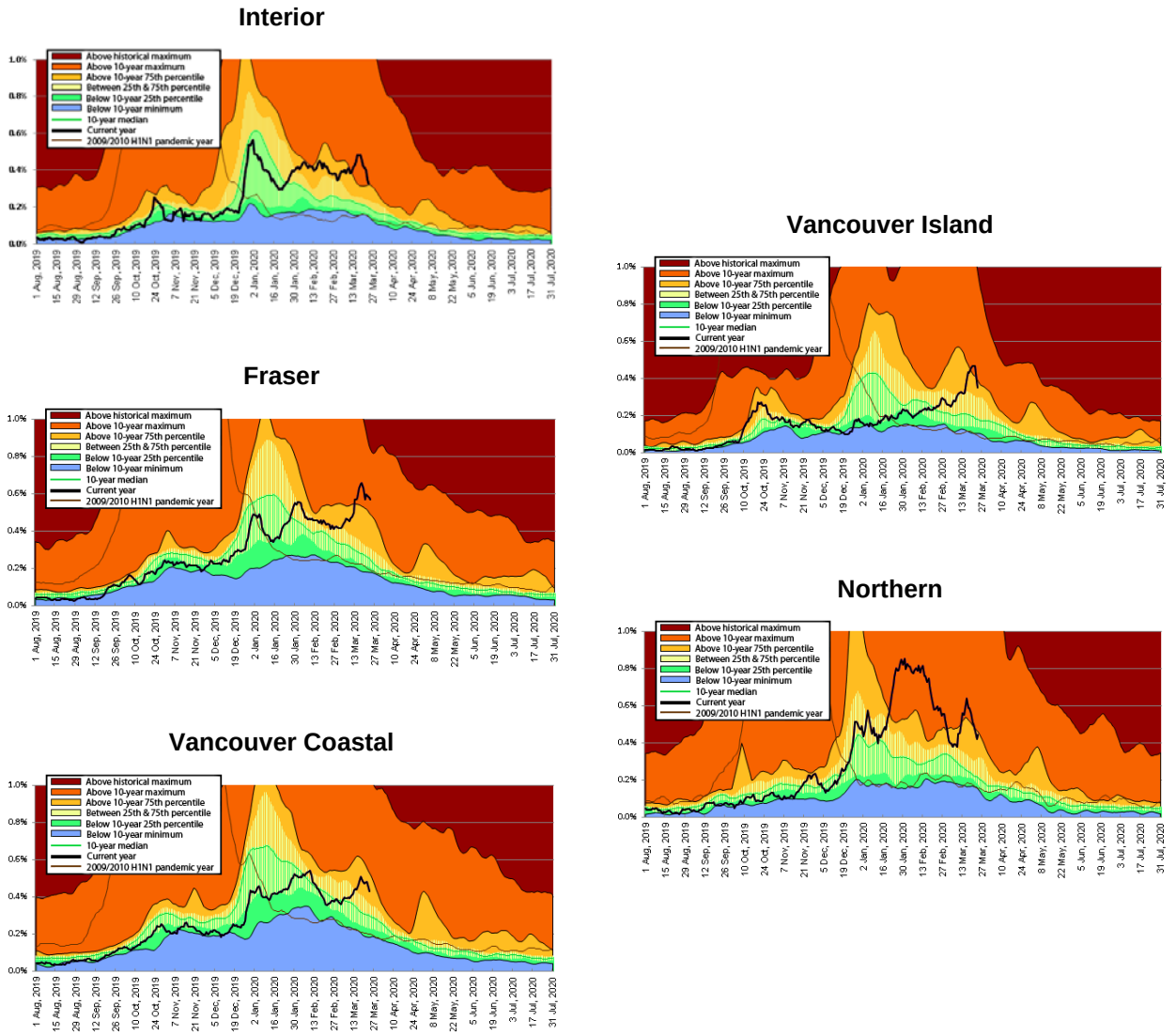


Figure 4



§ Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services. Influenza illness (II) 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, 2019 corresponds to sentinel ILI week 31; data are current to March 24, 2020.

British Columbia Laboratory Reports

Changes in testing recommendations and practices for febrile respiratory illness over time in relation to the SARS-CoV-2 epidemic may be influencing influenza detection and trends, requiring cautious interpretation.

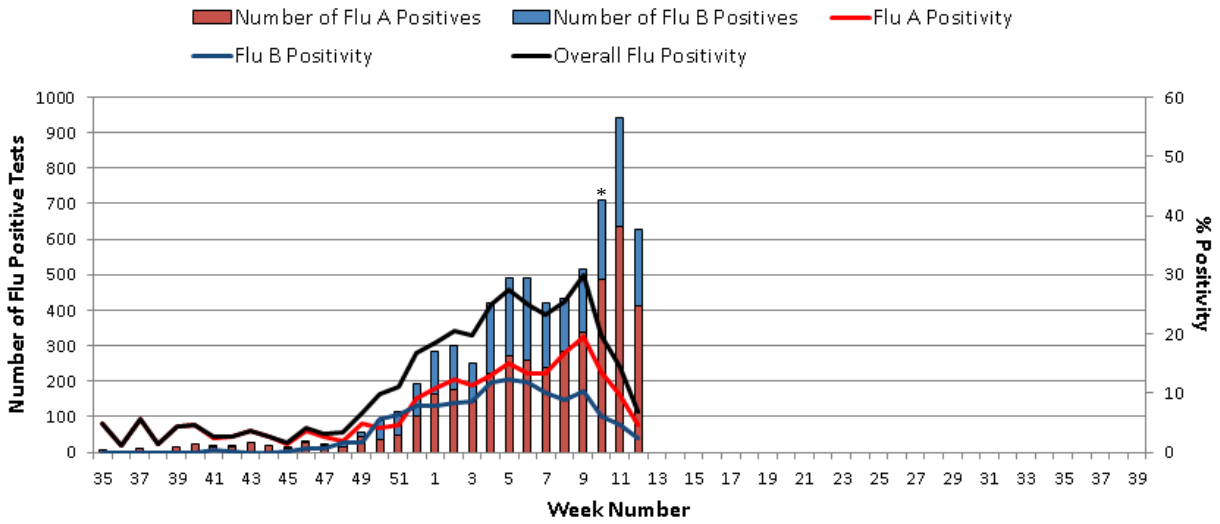
Influenza virus test-positivity

In week 12, 7% (628/9141) of specimens tested for influenza at laboratories across BC[1] were positive, of which 5% (411) were influenza A and 2% (217) were influenza B. Similar to the past 4 weeks, influenza detections comprised of more influenza A viruses (65%; 411/628) than influenza B viruses (35%; 217/628).

Notwithstanding the high absolute number of influenza detections compared to earlier weeks in the season and the same time in the previous season, both the absolute number and the proportion of respiratory specimens that were test-positive for influenza virus have decreased compared to the previous week. After week 9, when overall influenza positivity reached 30%, positivity rates for influenza have continued to decrease overall, and for influenza A, and influenza B (**Figure 5**). This indicates a decrease in the contribution of influenza viruses to flu-like illness overall in the province.

Cumulatively since week 40 (starting September 29, 2019), of the 44,360 specimens tested for influenza at laboratories across BC, 4,033 (9%) tested positive for influenza A and 2,501 (6%) tested positive for influenza B. Throughout the season, influenza A has comprised 62% and influenza B has comprised 38% of total influenza virus detections.

Figure 5: Influenza virus positivity among respiratory specimens tested by participating laboratories[1] across BC, 2019-2020 season[2, **]



[1] The percentage influenza positivity is presented by influenza type based on primary specimens submitted for influenza testing at the BCCDC Public Health Laboratory (PHL) and other external sites that share complete testing data with the BCCDC PHL. From week 40, reporting sites include: BC Children's and Women's Hospital, Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Powell River Hospital , St. Paul's Hospital , Vancouver General Hospital, Victoria General Hospital, Victoria Coastal Health, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.
[2] Rates are subject to change with subsequent data reconciliation. Findings support trend analysis but note data for week 35-39 do not include all testing sites in BC. Data from week 35-38 were derived manually from weekly FluWatch's Respiratory Virus Detection Surveillance System (RVDSS) report data and the Flu Data Mart. Influenza positivity data for week 39 came exclusively from the FluWatch's RVDSS Week 39 Report.
Source: Summary provided by the BCCDC Public Health Laboratory.
* Starting week 10, influenza testing has been applied to all samples submitted for COVID-19 testing at the BCCDC PHL.
** Week of sample based on the sample collection date.

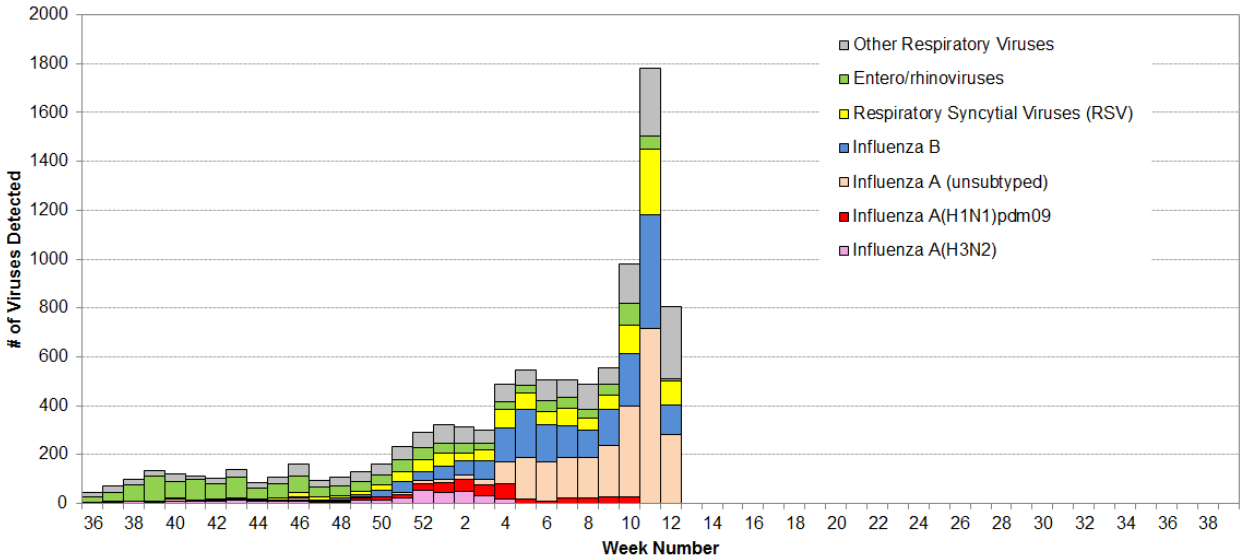
Influenza virus type/subtype characterization

Due to the high volume of respiratory testing related to COVID-19, the BCCDC PHL has temporarily suspended influenza A subtyping. As a result, starting week 4 the influenza and other virus detection graph **(Figure 6)** has an increased number of influenza A(subtype unknown). Starting week 10, all respiratory-related samples sent to the PHL were dually tested for SARS-CoV-2 and influenza viruses. This may explain the large increase in the number of influenza viruses being detected after week 10. This laboratory protocol, however, may be subject to further change.

In week 12, among influenza viruses subjected to further characterization*, 62% (194/314) were influenza A and 39% (122/314) were influenza B. No subtyping of influenza A viruses were done for week 12. Since week 40, 46% (2369/5099) from the BCCDC PHL remain influenza A(subtype unknown).

The BCCDC PHL also conducts testing for other respiratory viruses (ORV) among specimens from select sites across the province. Other external sites perform their own ORV testing and this report does not include data from all sites across the province. Among ORV testing at the BCCDC PHL during week 12, coronavirus group (n=289), inclusive of COVID-19 (n=279), was most commonly detected followed by RSV (n=98).

Figure 6: Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2019-2020†,**

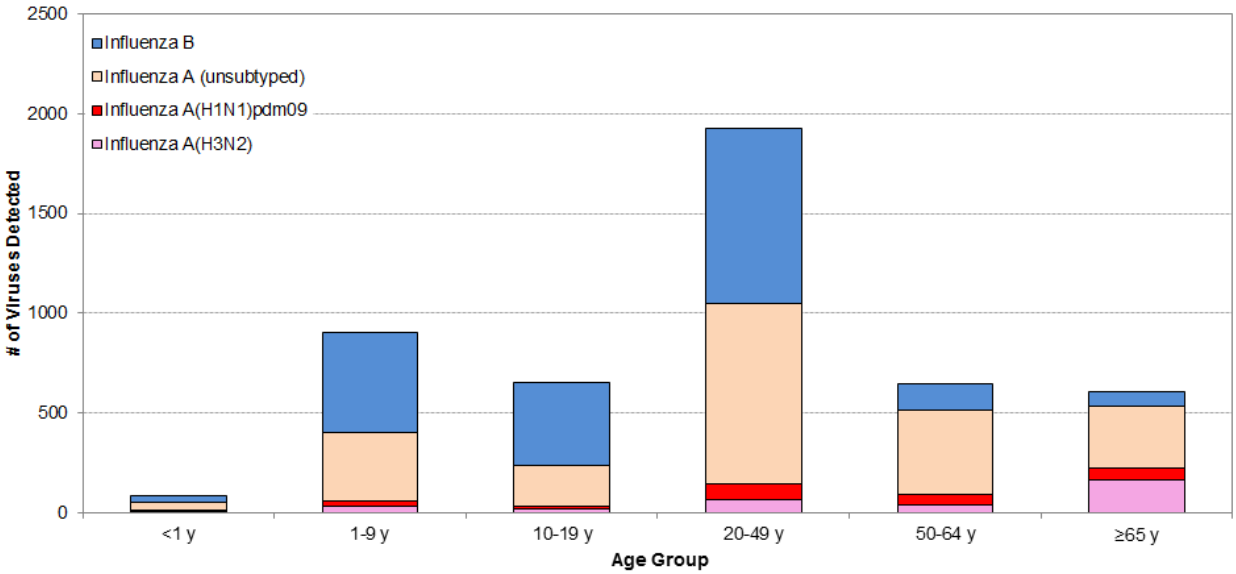


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 26th, 2020.

† The BCCDC Public Health Laboratory (PHL) conducts the majority of influenza subtype characterization for the province, including for primary specimens submitted directly to the BCCDC PHL for influenza diagnosis, as well as for specimens that have tested positive for influenza at other external sites and for which secondary subtyping was requested. Influenza A(H1N1)pdm09 and influenza A(subtype unknown) weekly case counts as directly typed/subtyped on primary specimens by Island Health Authority are also incorporated into the influenza counts in the graph and narrative summary above.
* Other respiratory viruses detected include adenovirus, coronoavirus (inclusive of COVID-19), human bocavirus, human metapneumovirus, and parainfluenza.
** Week of sample based on the sample collection date.

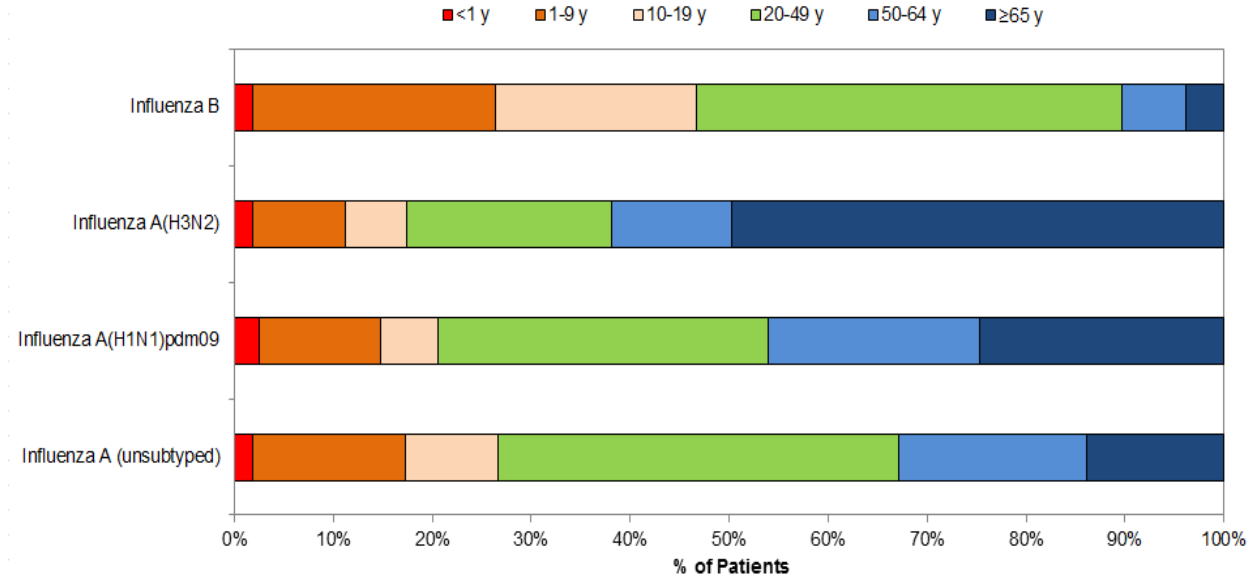
Among typed/subtyped viruses with age information since week 40, median age of A(H1N1)pdm09 cases was 46 years and of A(H3N2) detections was 64 years. Median age was substantially younger for influenza B at 22 years **(Figures 7 and 8**). Overall, 945/2026 (47%) influenza B detections have been children <20 years of age whereas that age group comprises <20% of the population of British Columbia (source: PEOPLE 2019 Population Projections).

Figure 7: Cumulative number (since week 40) of influenza detections by type, subtype, and age group, BCCDC Public Health Laboratory, 2019-2020*



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 26th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-12.
*Influenza A(H1N1)pdm09 and influenza A(subtype unknown) weekly case counts as directly typed/subtyped on primary specimens by Island Health Authority, are not incorporated into Figure 7 and 8 because age information is not available.

Figure 8: Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2019-2020*

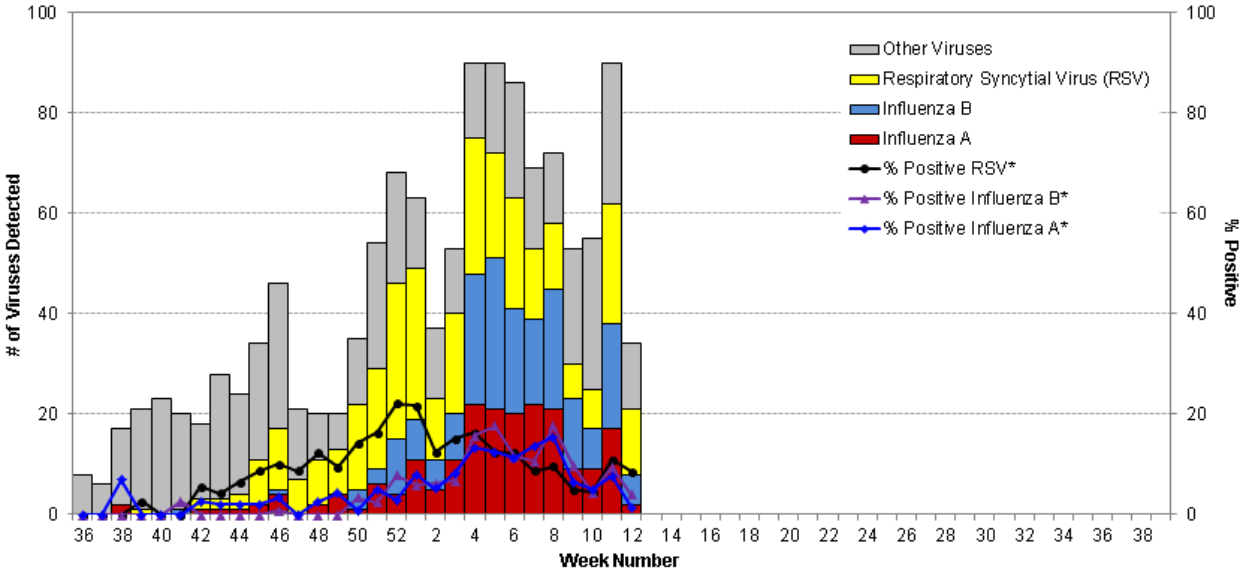


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 26th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-12.
*Influenza A(H1N1)pdm09 and influenza A(subtype unknown) weekly case counts as directly typed/subtyped on primary specimens by Island Health Authority, are not incorporated into Figure 7 and 8 because age information is not available.

BC Children's and Women's Health Centre Laboratory

In week 12, among 151 specimens tested for influenza at the BC Children's and Women's Health Centre laboratory, 2 (1%) were positive for influenza A (not subtyped), 6 (4%) were positive for influenza B, and 13 (9%) were positive for RSV (**Figure 9**).

Figure 9: Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2019-2020*, **



* 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.
** Week of sample based on the sample collection date.

Influenza-like Illness (ILI) Outbreaks

In week 12, 1 laboratory-confirmed influenza outbreak (1 influenza A(subtype pending)) was reported from long-term care facilities (LTCF). No school ILI outbreaks were reported **(Figures 10 and 11)**.

Since week 40, a total of 71 laboratory-confirmed LTCF influenza outbreaks have been reported. This tally of LTCF outbreaks for the 2019-2020 season from week 40 to date (n=71) is similar to the tally reported to the BCCDC for the same period during the 2018-19 season (n=70) but substantially lower than across the same period during the predominant A(H3N2) epidemics in 2017-18 (n=169) and 2016-17 (n=192).

Figure 10: Number of influenza-like illness (ILI) outbreaks reported, British Columbia 2019-20

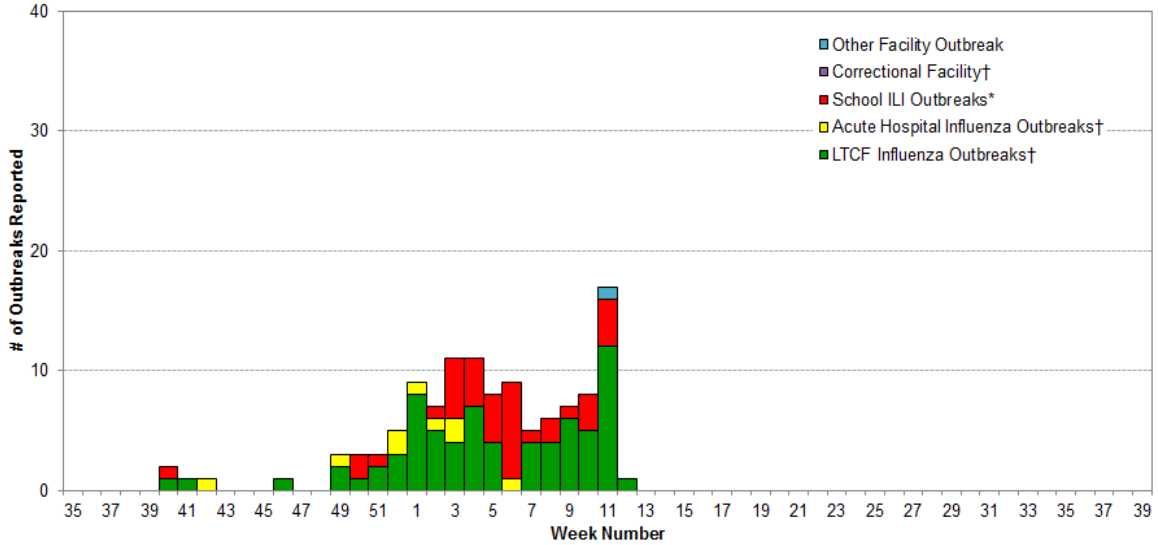
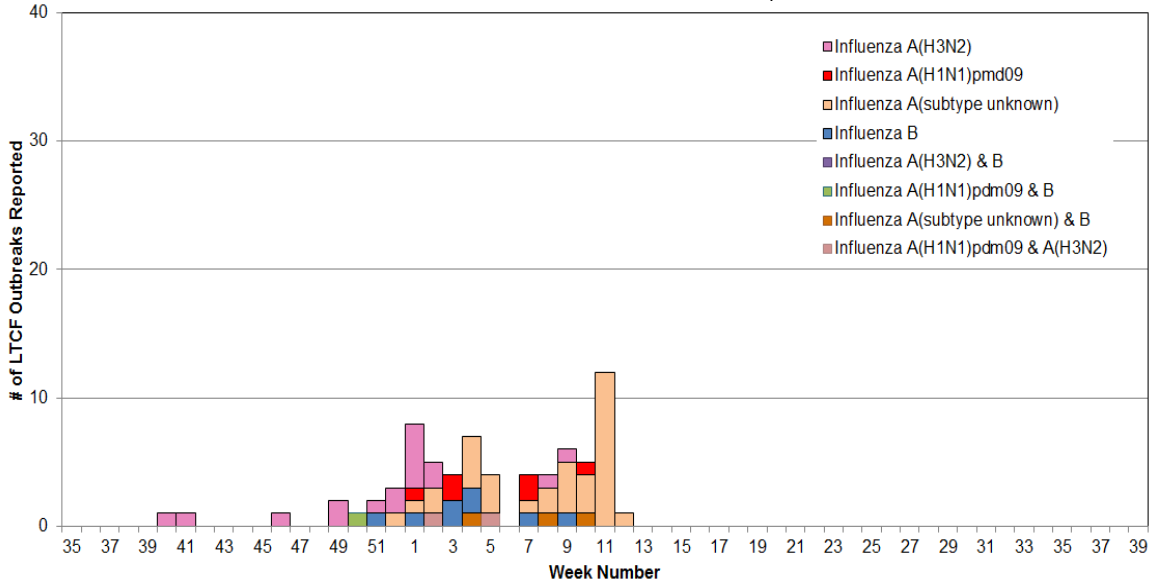


Figure 11: Number of influenza outbreaks by type/subtype in long-term care facilities (LTCF),



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

Emerging Respiratory Viruses: 2019 Novel Coronavirus, "COVID-19"

As of today, March 26, 2020, 11:00 AM PT, there have been 510,644 confirmed COVID-19 cases reported globally, of which the three countries with the most cases report similar absolute and proportionate shares of global cases including: mainland China (n= 81,285; 16%), Italy (n=80,539; 16%), and the United States (n= 75,665; 15%) although with quite different rates per capita of 56, 1,332 and 229 per million population. European countries follow in case count including Spain (n=56,197; 11%), Germany (n=43,646; 9%), and France (n=25,233; 5%). Iran also continues to be amongst countries reporting the highest number of cases (n=29,406; 6%). Differences in surveillance (e.g. testing and reporting) practices should be taken into account in these country comparisons.

Associated deaths globally have reached 23,028 (5% of all reported cases). Italy now reports the highest number and proportionate share of global deaths, notably twice that reported in China (35%; 8,165 versus 14%; 3,287, respectively). Spain has also surpassed China's death tallies (18%; n= 4,145).

In Canada, there has been more than a four-fold increase in laboratory-confirmed COVID-19 cases since last week with now nearly 4000 cases reported (n=3,929 cases) to date at the national level, including 37 associated deaths (**Figure 12**).

In BC, 725 confirmed cases have been reported as of March 26, with 14 (2%) deaths. Of these, 55% were female, median age was 52 years. There have been nine long term care facility outbreaks reported to date involving 135 (19%) confirmed cases among staff or residents, and 12 associated resident deaths.

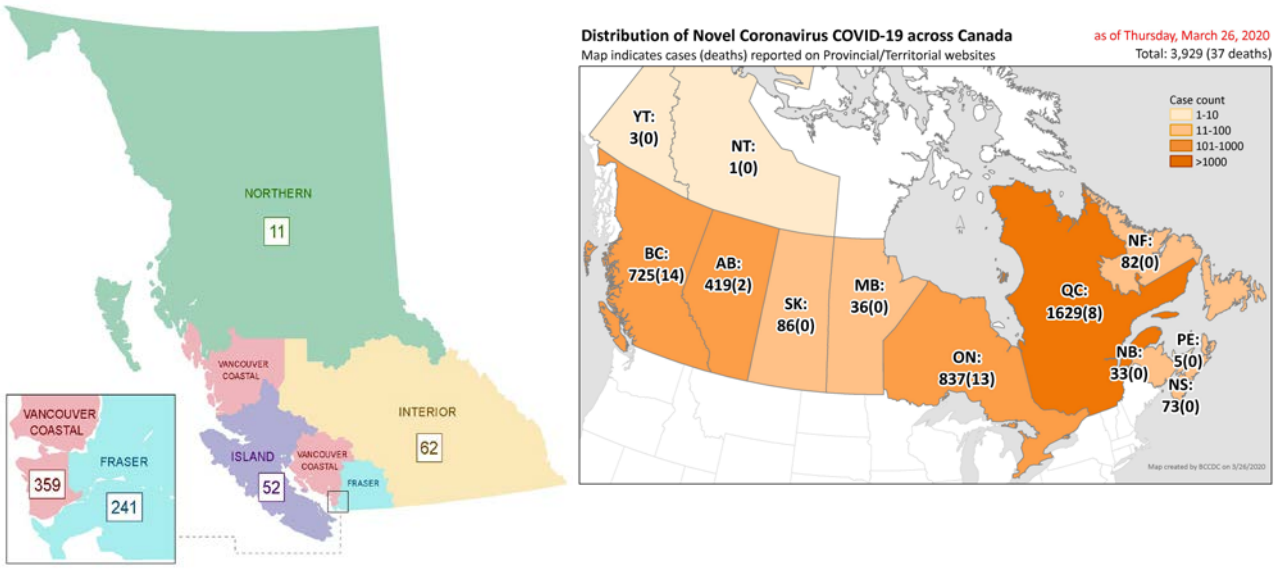
Canadian travel health notices have been updated to Level 3 (avoid non-essential travel) advisories now applied to all countries: https://travel.gc.ca/travelling/health-safety/travel-health-notices

Check the BCCDC website http://www.bccdc.ca/about/news-stories/stories/2020/information-on-novel-coronavirus and/or the Public Health Agency of Canada for periodic updates https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html.

Daily situation reports and technical guidance (public health and infection control measures) are also available on the WHO website at www.who.int/emergencies/diseases/novel-coronavirus-2019/.

The latest global tallies, including deaths and recoveries, are also available on other useful websites, such as: https://www.worldometers.info/coronavirus/ or https://coronavirus.jhu.edu/map.html or https://bnonews.com/index.php/2020/03/the-latest-coronavirus-cases/

Figure 12: Geographic distribution of novel coronavirus, COVID-19, March 26, BC and Canada



National

FluWatch (week 11, March 8 to 14, 2020)

In week 11, influenza activity was reported in all regions of Canada. Reported ILI activity increased but the percentage of laboratory tests positive for influenza decreased for a third week in a row, to 14%. Percent positivity for influenza A and B was 10% and 4%, respectively. 69% of detections this week was influenza A and among subtyped influenza A detections, influenza A(H1N1) accounted for 86% of detections. Since week 35, a total of 52,526 laboratory detections of influenza were reported, of which 59% (30,951) were influenza A. Among subtyped influenza A detections (6,975), A(H1N1) is the predominant subtype this season (68%) and among cases with age information (3,512), 26% were 20-44 years old, 26% were 45-64 years old and 28% were 65 years of age and older. The largest proportion of influenza A(H3N2) cases was in adults 65 years of age and older (46%) and cases of influenza B were primarily in younger age groups with 57% of cases under 19 years of age and 30% between 20 and 44 years of age. The highest cumulative hospitalization rates are among children under 5 years of age (69/100,000 population) and adults 65 years of age and older (71/100,000 population).

Full report is available at: https://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 to March 12, 2020, the NML has characterized 1224 influenza viruses [177 A(H3N2), 474 A(H1N1) and 573 influenza B] that were received from Canadian laboratories.

Influenza A(H3N2): Eleven influenza A(H3N2) viruses were antigenically characterized as A/Kansas/14/2017-like, whereas 44 viruses showed reduced titer with ferret antisera raised against egg-propagated A/Kansas/14/2017. Three influenza A (H3N2) viruses characterized belonged to clade 3C.3a and 28 viruses belonged to genetic subclade 3C.2a1b. Sequencing is pending for the remaining isolates.

Influenza A(H1N1)pdm09: 251 A(H1N1) viruses characterized were antigenically similar to A/Brisbane/02/2018. 223 viruses showed reduced titer with ferret antisera raised against egg-propagated A/Brisbane/02/2018.

Influenza B: 19 viruses characterized were antigenically similar to B/Colorado/06/2017, whereas 161 viruses showed reduced titer with ferret antisera raised against cell culture-propagated B/Colorado/06/2017. Sequence analysis showed that 151 of the reduced viruses had a three amino acid deletion (162-164) in the HA gene. Two viruses characterized were antigenically similar to B/Phuket/3073/2013.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2019, to March 12, 2020, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: High levels of resistance to amantadine persist among influenza A(H1N1) and influenza A(H3N2) viruses. Resistance results not presented.

Oseltamivir: Of the 669 influenza viruses [155 H3N2, 251 H1N1 and 263 B] tested against oseltamivir. All 155 H3N2 and 263 B viruses were sensitive to oseltamivir. Of the 251 H1N1 viruses tested, 250 were sensitive to oseltamivir and one virus was resistant to oseltamivir with H275Y mutation.

Zanamivir: Of the 669 influenza viruses [155 H3N2, 251 H1N1 and 263 B] tested against zanamivir, all were sensitive.

Updated Antiviral Guidelines

The Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) have released updated guidance on the use of antiviral for the 2019-2020 influenza season. These guidelines are available at: https://www.ammi.ca/Content/AC- %20Guidance%20of%20Antiviral%20Agents%2019-20.pdf.

International

USA (week 11, March 8 to 14, 2020)

In week 11, laboratory confirmed influenza activity as reported by clinical laboratories continued to decrease; however, reported ILI activity increased. The proportion of outpatient visits for ILI increased from 5.2% last week to 5.8% and all regions are above the national baseline at 2.4%. The proportion of deaths attributed to pneumonia and influenza (7.1%) was slightly below the epidemic threshold of 7.3%.

The overall cumulative hospitalization rate was 65.1 per 100,000 population, which was higher than all recent seasons at this time of year except for the 2017-18 season. Rates in children 0-4 years old and adults 18-49 years old were the highest US CDC has on record for these age groups, surpassing the rate reported during the 2009 H1N1 pandemic. Hospitalization rates for school-aged children (5-17 years) were higher than any recent regular season but remain lower than rates during the pandemic.

A total of 149 influenza-associated pediatric deaths were reported so far this season, 5 of which were reported this week. This total exceeds historical records at the same time in prior seasons since reporting began in 2004-05, except during the 2009 pandemic.

In week 11, a total of 45,167 specimens were tested for influenza in the US and of the positive specimens (15%), 77% (5,297) were influenza A and 24% (1,630) were influenza B viruses. Among influenza specimens with subtype and lineage information, 93% were A(H1N1)pdm09 and all were of Victoria lineage in week 10. Since week 40, 21% (231,654) of all tested specimens in the US were positive for influenza, of which 52% (121,002) were influenza A and 48% (110,652) were influenza B. Among influenza specimens with subtype and lineage information since week 40, 92% were A(H1N1)pdm09 and almost all were Victoria (98%)

Full report is available at: https://www.cdc.gov/flu/weekly/index.htm.

WHO (March 16, 2020, based on data up to March 1, 2020)

In the temperate zone of the northern hemisphere, respiratory illness indicators and influenza activity appeared to decrease overall.

From February 17 to March 1, 2020, the WHO GISRS laboratories tested more than 233,445 specimens. Of these, 62,423 were positive for influenza viruses, of which 67% were typed as influenza A and 33% as influenza B. Of subtyped influenza A viruses, 7,348 (75%) were influenza A(H1N1)pdm09 and 2,516 (25%) were influenza A(H3N2). Of the characterized B viruses, 18 (1%) belonged to the B(Yamagata) lineage and 1,574 (99%) to the B(Victoria) lineage.

In countries in the temperate zone of the southern hemisphere, influenza activity remains at inter-seasonal levels.

In countries in the tropical zone, a mixture of influenza activity was reported. In the tropical countries of South America, low influenza activity was reported overall. In Western Africa, influenza detections were low also across reporting countries but increased ILI levels were reported in Mali and Togo. In tropical countries of Asia, influenza activity was reported in some countries including Afghanistan, where ILI and SARI activity remained elevated. In Bhutan, Lao People's Democratic Republic and Thailand, detections of all seasonal influenza subtypes were reported. In Nepal, Malaysia and Singapore, influenza activity of predominantly influenza A(H1N1)pdm09 decreased.

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

WHO Recommendations for Influenza Vaccines

WHO Recommendations for 2019-2020 Northern Hemisphere Influenza Vaccine

On February 21, 2019, the WHO announced the recommended strain components for the 2019-2020 northern hemisphere trivalent influenza vaccine (TIV)*:

- an A/Brisbane/02/2018 (H1N1)pdm09-like virus [a clade 6B.1A1 virus]; †
- an A/Kansas/14/2017 (H3N2)-like virus [a clade 3C.3a virus]; ‡
- a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage) [a clade V1A.1, Δ2 virus].

It is recommended that quadrivalent influenza vaccines (QIV) for the 2019-2020 northern hemisphere season contain the above three viruses and a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage) [a clade 3 virus].

* Recommended strains represent a change for two of the three components used for the 2018-19 northern hemisphere TIV
† Recommended strain represents a change from the 2018-19 season vaccine which contained an A/Michigan/45/2015 (H1N1)pdm09-like virus [a clade 6B.1 virus]
‡ Recommended strain represents a change from the 2018-19 season vaccine which contained an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus [a clade 3C.2a1 virus]

For further details: https://www.who.int/influenza/vaccines/virus/recommendations/2019_20_north/en/

WHO Recommendations for the 2020-21 Northern Hemisphere Influenza Vaccine

On February 28, 2020, the WHO announced recommended strain components for the 2020-21 northern hemisphere trivalent influenza vaccine (TIV):*

- an A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus [a clade 6B.1A5 virus]; †
- an A/Hong Kong/2671/2019 (H3N2)-like virus [a clade 3C.2a1b/T135K virus];‡
- a B/Washington/02/2019-like (B/Victoria lineage) virus [a clade V1A.3, Δ3 virus].§

It is recommended that quadrivalent influenza vaccines (QIV) for the 2020-21 northern hemisphere season contain the above three viruses and a B/Phuket/3073/2013-like virus (B/Yamagata lineage) [a clade 3 virus], unchanged from 2019-2020.

* Recommended strains represent a change for three of the three components used for the 2019-2020 northern hemisphere TIV.
† Note for cell-based vaccine, the WHO recommends A/Hawaii/70/2019 (H1N1)pdm09-like representative virus [also clade 6B.1A5] for the 2020-21 season. Recommended strains represents a change from the 2019-2020 season vaccine which contained an A/Brisbane/02/2018 (H1N1)pdm09-like virus [a clade 6B.1A1 virus].
‡ Recommended strain represents a change from the 2019-2020 season vaccine which contained an A/Kansas/14/2017 (H3N2)-like virus [a clade 3C.3a virus]
§ Recommended strain represents a change from the 2019-2020 season vaccine which contained a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage) [a clade V1A.1, Δ2 virus]

For further details: https://www.who.int/influenza/vaccines/virus/recommendations/2020-21_north/en/

Additional Information

Explanatory Note:

The surveillance period for the 2019-20 influenza season is defined starting in week 40. Weeks 36-39 of the 2018-19 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): 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 Diseases & Immunization Service (CDIS)
BC Centre for Disease Control
655 West 12th Ave, Vancouver BC V5Z 4R4

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

Link to fillable Facility Outbreak Report Form: http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Forms/Epid/Influenza%20and%20Respiratory/OutbreakReportForm_2018.pdf

Communicable Diseases & Immunization Service
655 W. 12th Ave. Vancouver BC V5Z 4R4
Phone: (604) 707-2510; Fax: (604) 707-2516

Reset Form

Submit By Email

Version: 30 Jul 2018

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

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)*
☐ Outbreak Over *(complete section **C** and section **D** below)*

Report Date (dd/mm/yyyy):

B — First Notification

Type of facility*: ☐ Long Term Care Facilities, Nursing Homes ☐ Acute Care Facility
☐ Other Setting:

If ward or wing, please specify name/number:

Date of onset of first case of ILI (dd/mm/yyyy):
Date outbreak declared (dd/mm/yyyy):

***Long Term Care Facilities, Nursing Homes:** Facilities that provide living accommodation for people who require on-site delivery of 24 hour, 7 days a week supervised care, including professional health services, personal care and services such as meals, laundry and housekeeping or other residential care facilities where provincial/territorial public health is responsible for outbreak management under provincial legislation; **Acute Care Facility:** Publicly funded facilities providing medical and/or surgical treatment and acute nursing care for sick or injured people, through inpatient services. (i.e. hospitals including inpatient rehabilitation and mental facilities); **Other Setting:** Any locations not otherwise specified here in which outbreaks of influenza or ILI may occur (e.g. retirement homes, assisted living or hospice settings, private hospitals/clinics, correctional facilities, colleges/universities, adult education centres, shelters, group homes, and workplaces).

C — Outbreak Declared Over

Date of onset for last case of ILI (dd/mm/yyyy):
Date outbreak declared over (dd/mm/yyyy):

Numbers to date	Residents
Total	
With ILI	
Hospitalized*	
Died*	

*suspected to be linked to case of ILI

D — Laboratory Information

Specimen(s) submitted? ☐ Yes (location:) ☐ No ☐ Don't know
If yes, organism identified? ☐ Yes ☐ No ☐ Don't know

Please specify organism/subtype: ☐ Influenza A (subtype:) ☐ Influenza B
☐ Parainfluenza ☐ Entero/rhinovirus ☐ Coronavirus ☐ RSV
☐ HMPV ☐ Adenovirus ☐ Other: