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

British Columbia (BC) Influenza Surveillance Bulletin

Influenza Season 2019-20, Number 10, Week 14
March 29 to April 4, 2020

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Laboratory and clinical indicators of influenza illness have plummeted in British Columbia

In week 14, laboratory and clinical indicators of influenza-like illness in BC have decreased substantially. Most clinical indicators are close to historic averages for this time of the year. Changes in health-care seeking behaviours and diagnostic testing practices during the COVID-19 pandemic should be taken into account in interpreting these indicators.

Previously elevated clinical indicators such as the BC Children's Hospital Emergency Room, MSP claims, and sentinel practitioner reports of ILI have steadily decreased. Of note, social distancing measures and switch to offsite telehealth approaches may be influencing these health care indicators.

Both the absolute number of detections and the proportion of respiratory specimens testing positive for influenza virus have decreased. In week 14, <1% of specimens were positive for influenza: 0.14% for influenza A and 0.24% for influenza B. Since week 40, 73 laboratory-confirmed influenza outbreaks have been reported from long term care facilities, similar to the same period during the 2018-19 influenza season (88) but lower than 2017-18 (176).

Provincial and national observations related to the COVID-19 epidemic, as of April 9th, are provided on page 10.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

Report Disseminated: April 9, 2020

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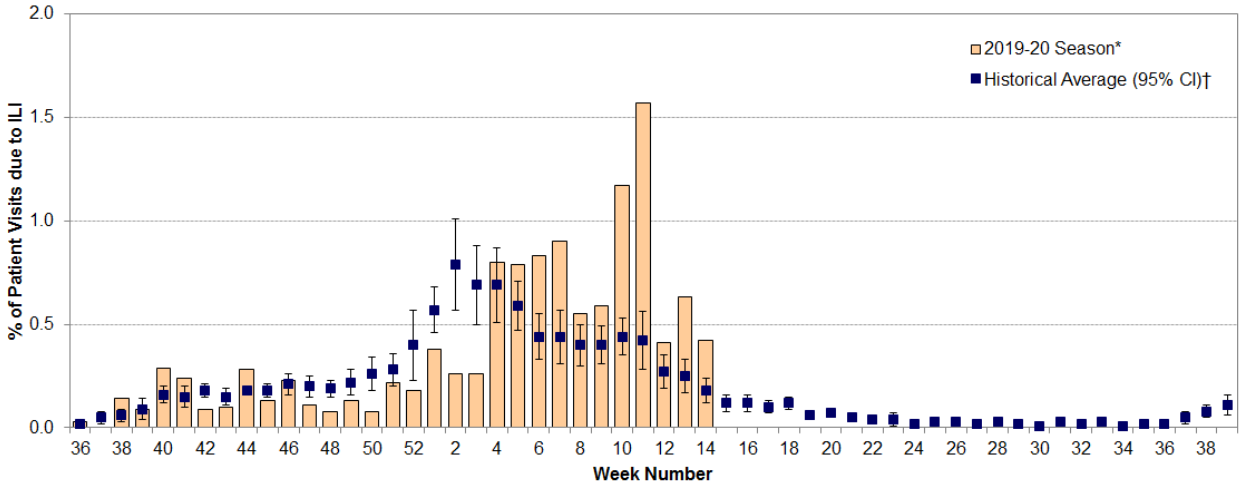
British Columbia

Sentinel Physicians

In week 14, clinical influenza-like illness (ILI) rates among patients presenting to sentinel sites is below 0.5%; this is still above the 10-year historical average for this time of the year (**Figure 1**). Despite move by some sites to telehealth approaches, nine out of 19 (47%) sentinel ILI monitoring sites have reported data for week 14.

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

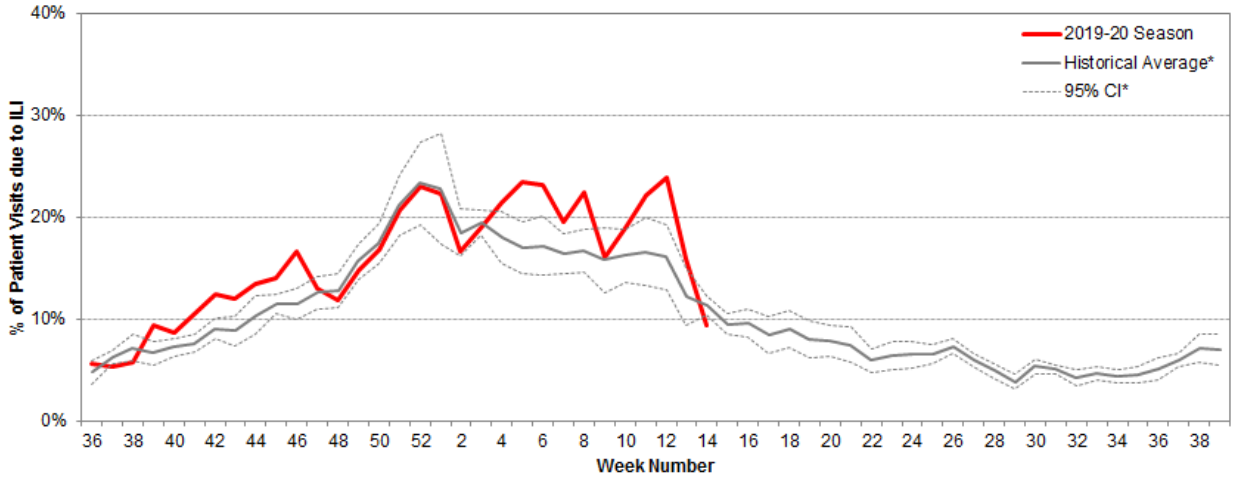


* Data are subject to change as reporting becomes more complete.
† 10-year historical average for 2019-20 season based on 2006-07 to 2018-2019 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

In week 14, the proportion of visits to BC Children's Hospital Emergency Room (BCCH ER) attributed to ILI substantially decreased to below the 5-year historical average (9%) (**Figure 2**). Of note, 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[§] trends around or below the 10-year historical median for this time of the year in BC overall and in 4 of 5 health regions (**Figure 3 and 4**). Of important note, claims for influenza made through telehealth are not incorporated in these figures.

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

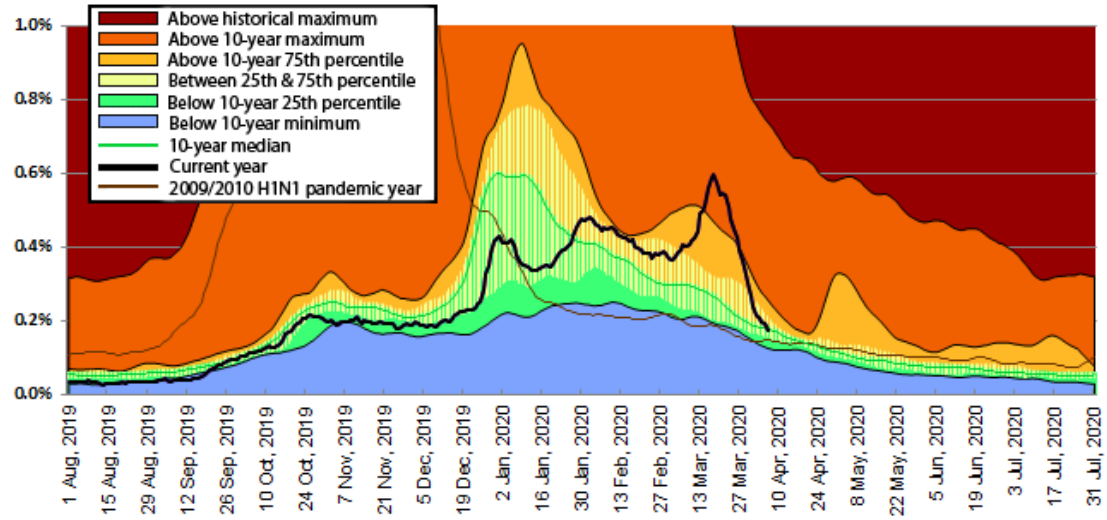
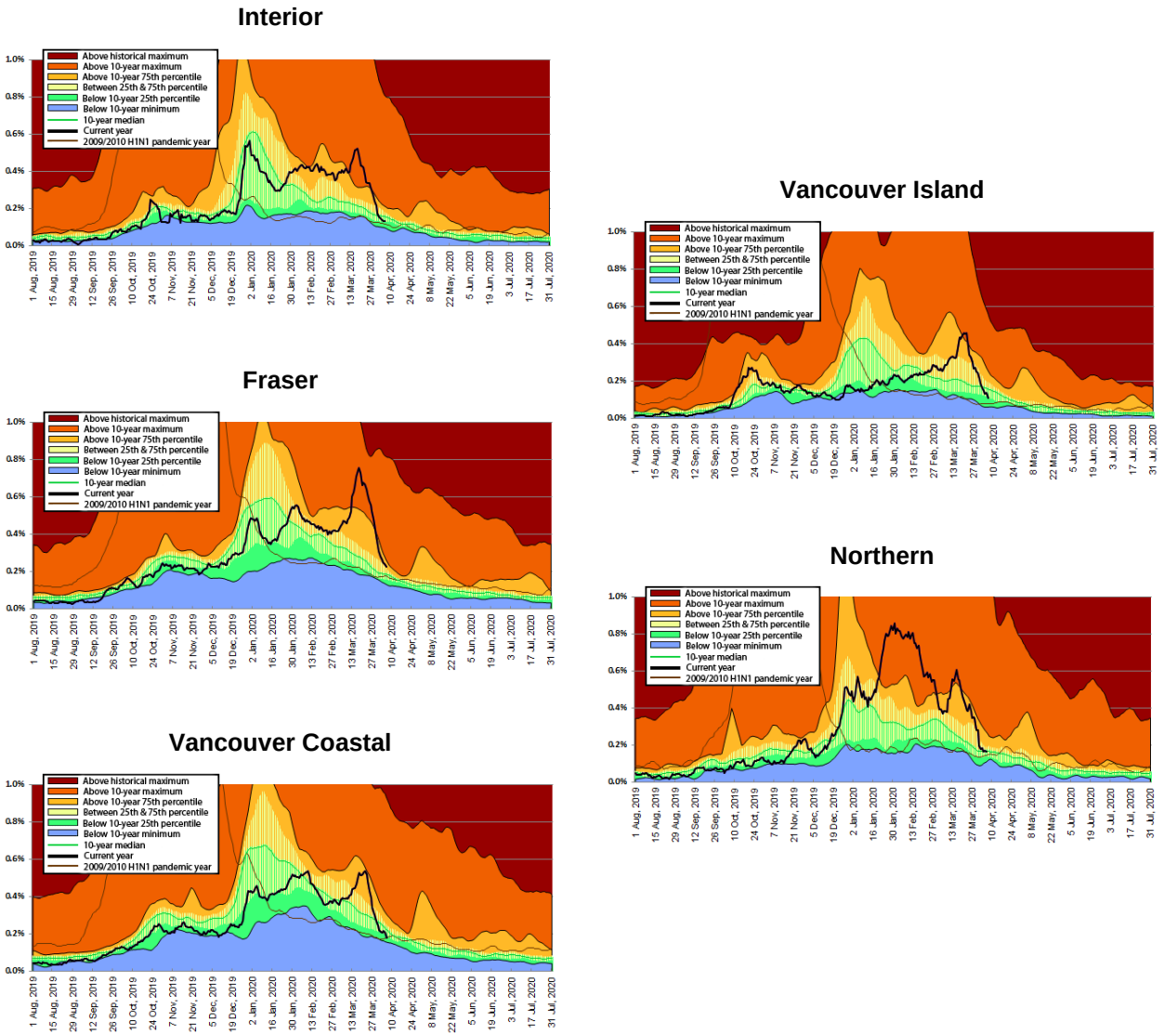


Figure 4



§ 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 April 7, 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.

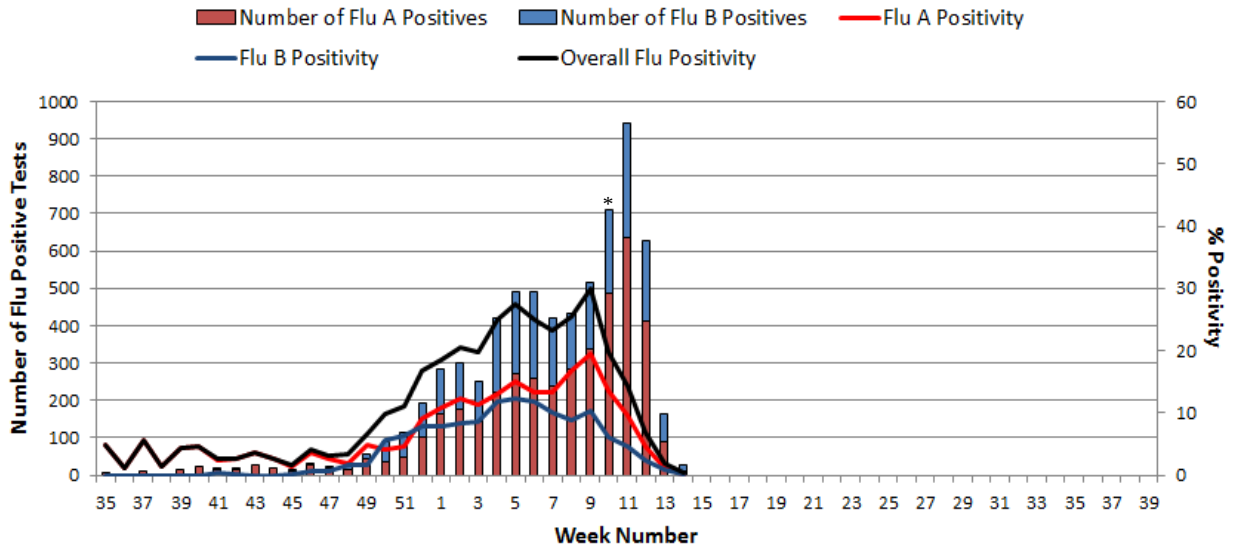
Influenza virus test-positivity

In week 14, 0.4% (27/7031) of specimens tested for influenza at laboratories across BC[1] was positive, of which 0.14% (10) were influenza A and 0.24% (17) were influenza B.

Both the absolute number and the proportion of respiratory specimens that were test-positive for influenza virus have continued to decrease and are now at very low levels. After week 9, when overall influenza positivity reached 30%, positivity rates for influenza decreased precipitously overall, and for influenza A, and influenza B (**Figure 5**).

Cumulatively since week 40 (starting September 29, 2019), of the 59,599 specimens tested for influenza at laboratories across BC, 4,132 (7%) tested positive for influenza A and 2,592 (4%) tested positive for influenza B. Throughout the season, influenza A has comprised 61% and influenza B has comprised 39% 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.

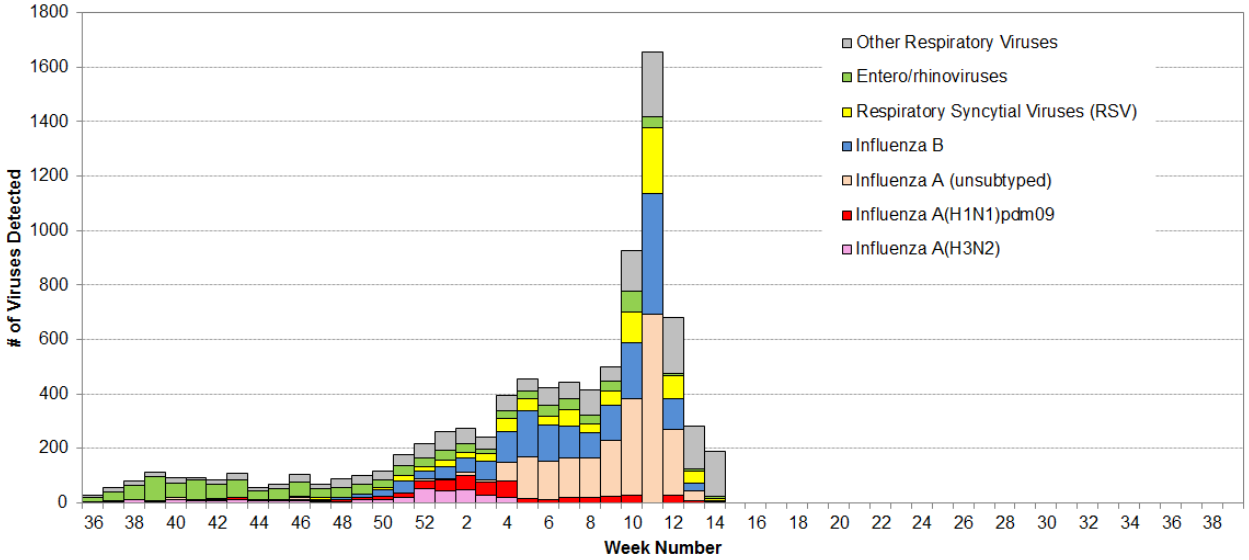
Influenza virus type/subtype characterization

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 detected shortly thereafter. Further changes to this laboratory protocol, however, including recent return to more typical influenza testing practices currently show very low levels of influenza detection.

In week 14, among influenza viruses subjected to further characterization*, 43% (3/7) were influenza A and 57% (4/7) were influenza B. No subtyping of influenza A viruses were done for week 14. Compared to prior weeks, the number of positive influenza detections has significantly declined. In week 13, 48% (29/60) were influenza A and 52% (31/60) were influenza B.

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 14, coronavirus group (n=147), inclusive of COVID-19 (n=144), was most commonly detected. Detection of other respiratory viruses, excluding influenza and coronavirus group, all remain low (n < 10).

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

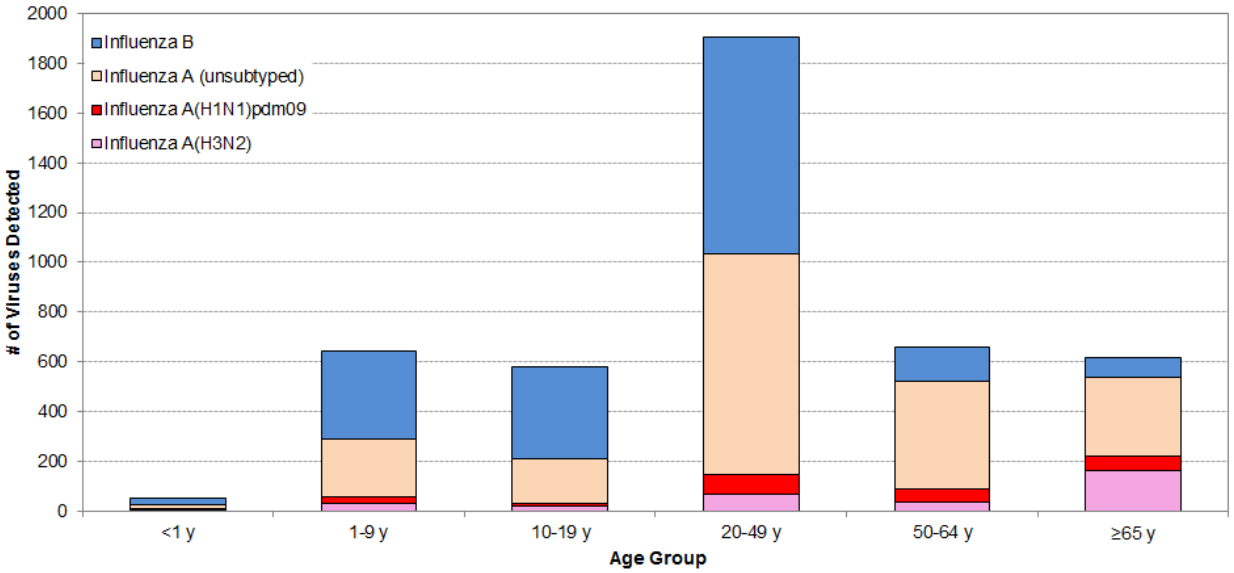


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to April 9th, 2020.

† 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.

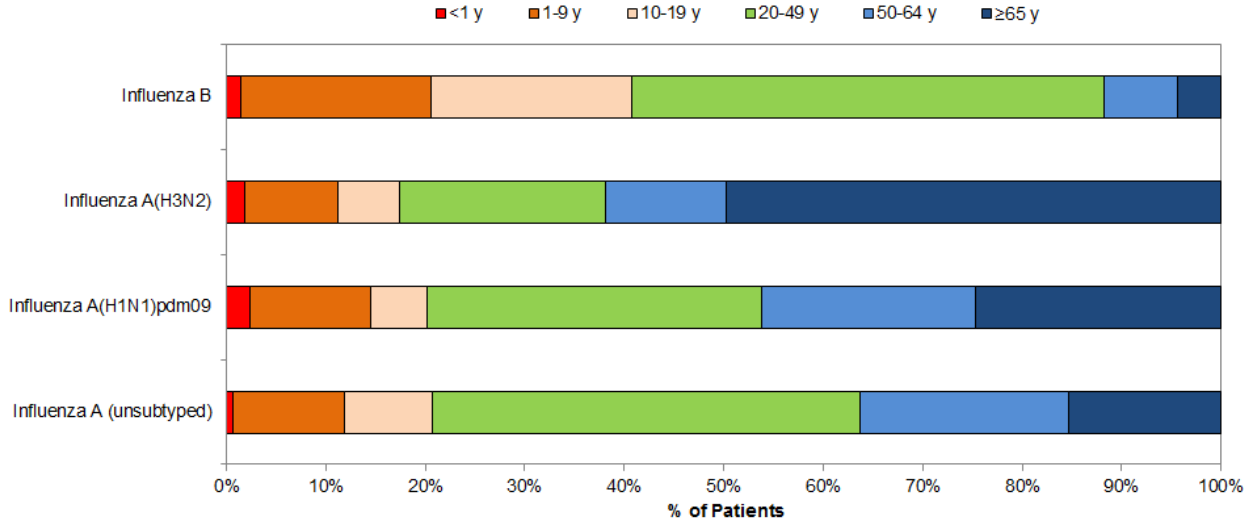
Among typed/subtyped viruses with age information since week 40, median age of A(H1N1)pdm09 cases was 46 years and of A(H3N2) detections was 64 years. Median age was substantially younger for influenza B at 25 years **(Figures 7 and 8**). Overall, 747/1832 (41%) influenza B detections have been children <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 April 9th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-14.
*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*

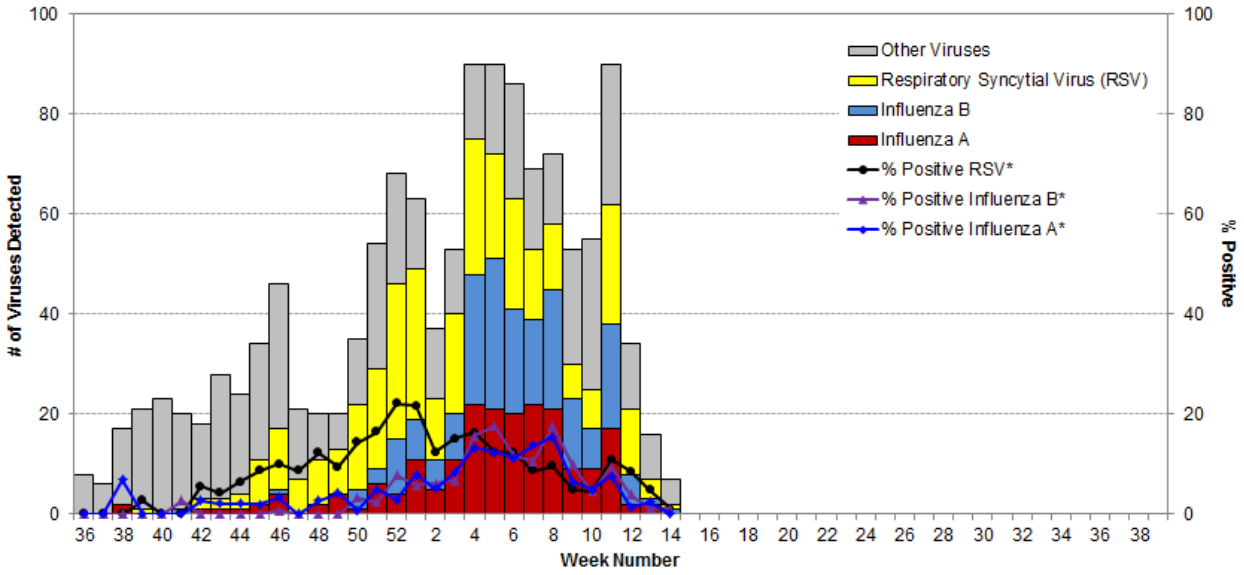


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to April 9th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-14.
*Influenza A(H1N1)pdm09 and influenza A(subtype unknown) weekly case counts as directly typed/subtyped on primary specimens by 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 14, among 92 specimens tested for influenza at the BC Children's and Women's Health Centre laboratory, 0 were positive for influenza A, 1 (1%) were positive for influenza B, and 1 (1%) were positive for RSV (**Figure 9**). The drastic decrease in the number of viruses detected in recent weeks may reflect variation in health care seeking behaviours and diagnostic testing recommendations in response to the COVID-19 epidemic.

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 14, 1 laboratory-confirmed influenza outbreak (1 influenza B) was reported from long-term care facilities (LTCF). No school ILI outbreaks were reported **(Figures 10 and 11)**.

Since week 40, a total of 73 laboratory-confirmed LTCF influenza outbreaks have been reported. This tally of LTCF outbreaks for the 2019-2020 season from week 40 to date (n=73) is lower than the tally reported to the BCCDC for the same period during the 2018-19 season (n=88) but it is substantially lower than across the same period during the predominant A(H3N2) epidemics in 2017-18 (n=176) and 2016-17 (n=195).

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

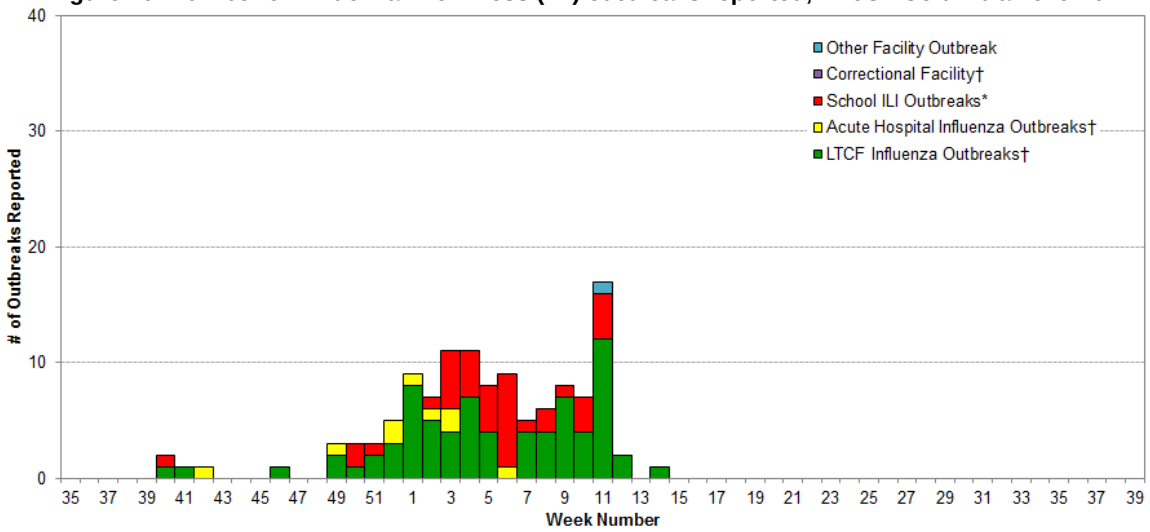
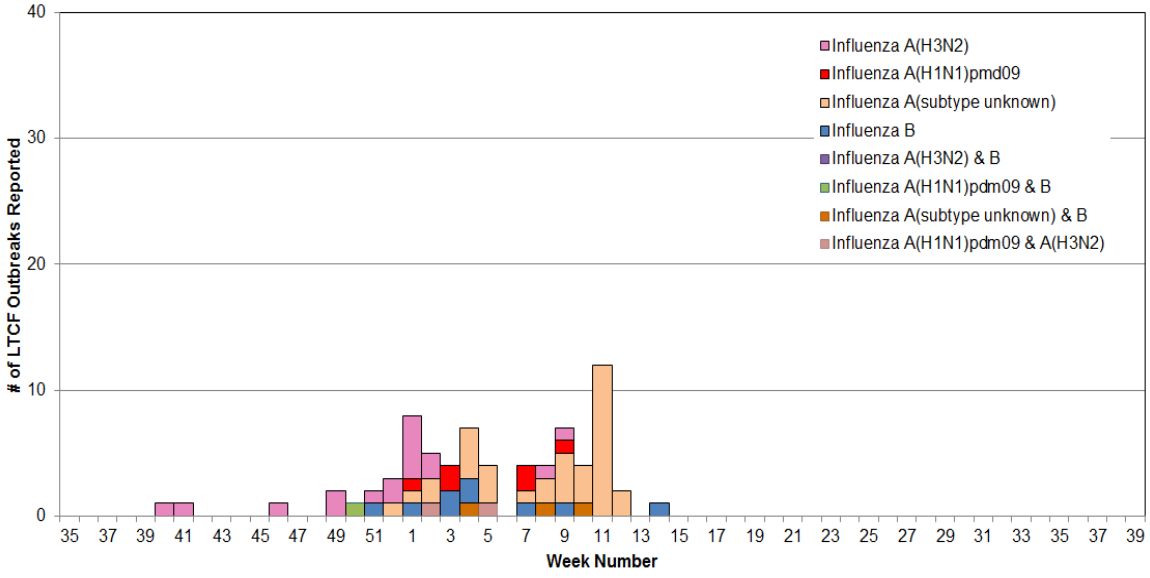


Figure 11: Number of influenza outbreaks by type/subtype in long-term care facilities (LTCF), British Columbia 2019-20†



* 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"

Since the last influenza surveillance bulletin two weeks ago, the number of confirmed COVID-19 cases has tripled globally, now exceeding 1.5 million, and deaths have quadrupled now approaching 100,000.

As of April 9, 2020, 10:00 AM PT, there have been 1,541,603 cases reported, of which 28% (n= 436,969) are from the United States, and among them 35% (n= 151,171) are from the state of New York. Outside of the United States, European countries have reported the most cases, including Spain (n= 152,446), Italy (n= 139,422), Germany (n= 114,257), and France (n= 112,950). On a per capita basis, Spain (3,261 cases per million), Italy (2,306 cases per million), and France (1,730 cases per million) report the highest global rates.

To date, 90,087 COVID-19 associated deaths have been reported (6% of reported cases). Six countries have surpassed China's death tallies (4%; n= 3,335) including Italy, with the highest deaths (20%; n= 17,669), followed by Spain (17%; n= 15,238), the United States (17%; n= 14,909), France (12%; n= 10,869), the United Kingdom (8%; n= 7,097), and Iran (5%; n= 4,110).

In Canada, 20,724 confirmed cases have been reported, with 505 (2%) associated deaths **(Figure 12).** In BC, 1,370 confirmed cases have been reported, with 50 (4%) deaths. Differences in reported per case fatalities will in part reflect the extent to which testing and case detection overall are oriented toward those with more severe presentations. Of the cases in BC, 55% were female, median age was 54 years. Overall, 24 long term care facilities, assisted living, and independent living residences have been affected by COVID-19 in one or more resident or staff, with a total of 239 confirmed cases (17% of total confirmed BC COVID-19 cases), and 30 associated resident deaths (60% of total BC COVID-19 associated deaths).

More detailed situation reports on COVID-19 for BC are now available Monday through Friday on the BCCDC website:
http://www.bccdc.ca/health-info/diseases-conditions/covid-19/case-counts-press-statements.

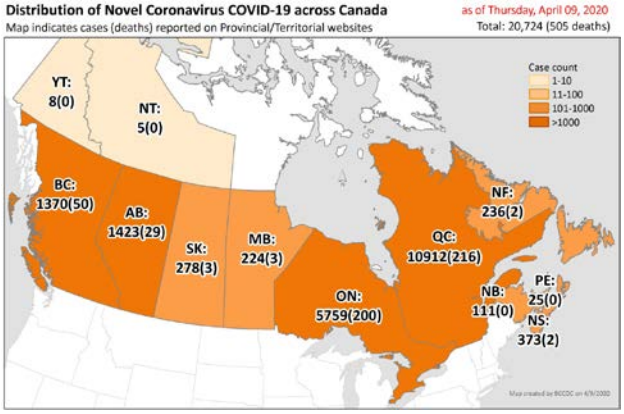
Daily national updates are also now provided by the Public Health Agency of Canada here: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html.

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

Daily global situation reports and technical guidance (public health and infection control measures) are 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, April 09, BC and Canada



National

FluWatch (week 13, March 22 to 28, 2020)

In week 13, the percentage of tests positive for influenza fell below the seasonal threshold of 5% (2.5%), suggesting that Canada is nearing the end of the 2019-2020 influenza season at the national level. Testing for influenza and other respiratory viruses may be influenced by the current COVID-19 pandemic. Data should be interpreted with caution. Among 21,299 respiratory specimens tested in week 13, 1% (273) tested positive for influenza A and 1% (266) tested positive for influenza B. Since week 35, a total of 55,033 laboratory detections of influenza were reported, of which 59% (32,547) were influenza A. Among subtyped influenza A detections (7,288), A(H1N1) is the predominant subtype this season (68%) and among cases with age information (3,729), 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 55% of cases under 19 years of age and 31% between 20 and 44 years of age. The highest cumulative hospitalization rates are among children under 5 years of age (73/100,000 population) and adults 65 years of age and older (77/100,000 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 April 9, 2020, the NML has characterized 1484 influenza viruses [208 A(H3N2), 614 A(H1N1) and 662 influenza B] that were received from Canadian laboratories.

Influenza A(H3N2): Nineteen influenza A(H3N2) viruses were antigenically characterized as A/Kansas/14/2017-like, whereas 67 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 35 viruses belonged to genetic subclade 3C.2a1b. Sequencing is pending for the remaining isolates.

Influenza A(H1N1)pdm09: 304 A(H1N1) viruses characterized were antigenically similar to A/Brisbane/02/2018. 310 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 162 viruses showed reduced titer with ferret antisera raised against cell culture-propagated B/Colorado/06/2017. Genetic characterization was also performed on 481 B/Victoria lineage virus. All these viruses had a three amino acid deletion (162-164) in the HA gene and belong to the genetic subclade V1A-3Del. Two viruses characterized were antigenically similar to B/Phuket/3073/2013.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2019, to April 9, 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 733 influenza viruses [164 H3N2, 283 H1N1 and 286 B] tested against oseltamivir. All 164 H3N2 and 286 B viruses were sensitive to oseltamivir. Of the 283 H1N1 viruses tested, 282 were sensitive to oseltamivir and one virus was resistant to oseltamivir with H275Y mutation.

Zanamivir: Of the 733 influenza viruses [164 H3N2, 283 H1N1 and 286 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 13, March 22 to 28, 2020)

In week 13, laboratory confirmed influenza activity as reported by clinical laboratories continued to decrease sharply and is now low. However, reported ILI activity is still elevated this week at 5.4% and all regions are above the national baseline of 2.4%. The proportion of deaths attributed to pneumonia and influenza is 8.2%, above the epidemic threshold of 7.3%. The increase is due to an increase in pneumonia deaths rather than influenza deaths and may be associated with COVID-19.

The overall cumulative hospitalization rate was 67.9 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 162 influenza-associated pediatric deaths were reported so far this season, 7 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 13, a total of 30,656 specimens were tested for influenza in the US and of the positive specimens (2%), 72% (457) were influenza A and 28% (176) were influenza B viruses. Among influenza specimens with subtype or lineage information, 92% (44) were A(H1N1)pdm09 and 80% (8) were of Victoria lineage. Since week 40, 19% (246,842) of all tested specimens in the US were positive for influenza, of which 53% (131,861) were influenza A and 47% (114,981) were influenza B. Among influenza specimens with subtype or lineage information since week 40, 93% 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 30, 2020, based on data up to March 15, 2020)

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

From March 2 to March 15, 2020, the WHO GISRS laboratories tested more than 213,931 specimens. Of these, 35,618 were positive for influenza viruses, of which 72% were typed as influenza A and 28% as influenza B. Of subtyped influenza A viruses, 3,777 (78%) were influenza A(H1N1)pdm09 and 1,082 (22%) were influenza A(H3N2). Of the characterized B viruses, 14 (2%) belonged to the B(Yamagata) lineage and 732 (98%) 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 Caribbean and Central American countries, influenza activity was reported in some countries. In tropical South American countries, influenza activity decreased from the previous reporting period. In tropical Africa, influenza detections were low in most reporting countries. In Southern Asia, increased ILI activity was reported in Bhutan. In South East Asia, influenza activity decreased across reporting countries.

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: