

British Columbia (BC) Influenza Surveillance Bulletin

Influenza Season 2019-20, Number 8, Week 11

March 8 to March 14, 2020

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Clinical indicators of febrile respiratory illness elevated; proportion due to influenza virus decreasing

Clinical indicators of febrile respiratory illness in BC remain above the historic average, including Medical Service Plan claims which have shown further increase in recent weeks. These trends may reflect overlapping influenza and COVID-19 epidemics and/or surveillance artefact associated with changes in health-care seeking behaviours.

The absolute number of influenza detections increased in weeks 10 and 11, whereas the proportion of respiratory specimens that tested positive for influenza virus decreased. These observations reflect the high volume of respiratory specimens that have been submitted in response to the COVID-19 epidemic. They also signal decreasing contribution to flu-like illness by influenza virus overall in the province.

In week 11, 14% of respiratory specimens tested positive for influenza overall: 10% for influenza A and 5% for influenza B. Since week 40, 69 laboratory-confirmed influenza outbreaks have been reported from long term care facilities, higher than for the same period during the 2018-19 season (60) but lower than 2017-18 (159).

Provincial and national observations related to the COVID-19 epidemic, as of March 19, are provided on [page 10](#).

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

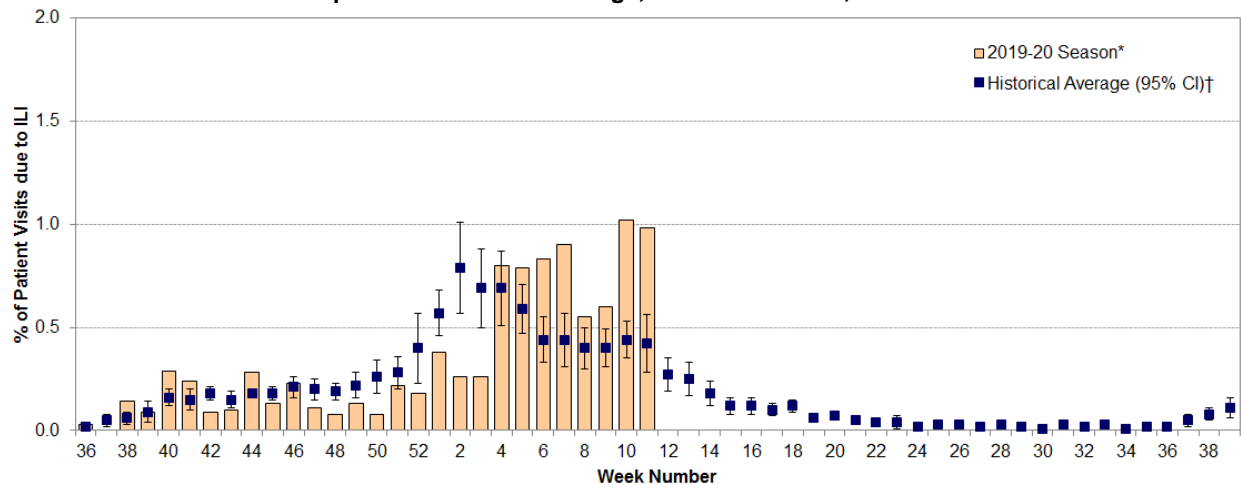
Report Disseminated: March 19, 2020

British Columbia

Sentinel Physicians

In week 11, clinical influenza-like illness (ILI) rates among patients presenting to sentinel sites is approximately 1%, substantially exceeding the 10-year historical average for this time of the year (**Figure 1**). Eight out of 19 (42%) sentinel ILI monitoring sites have reported data for week 11. 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



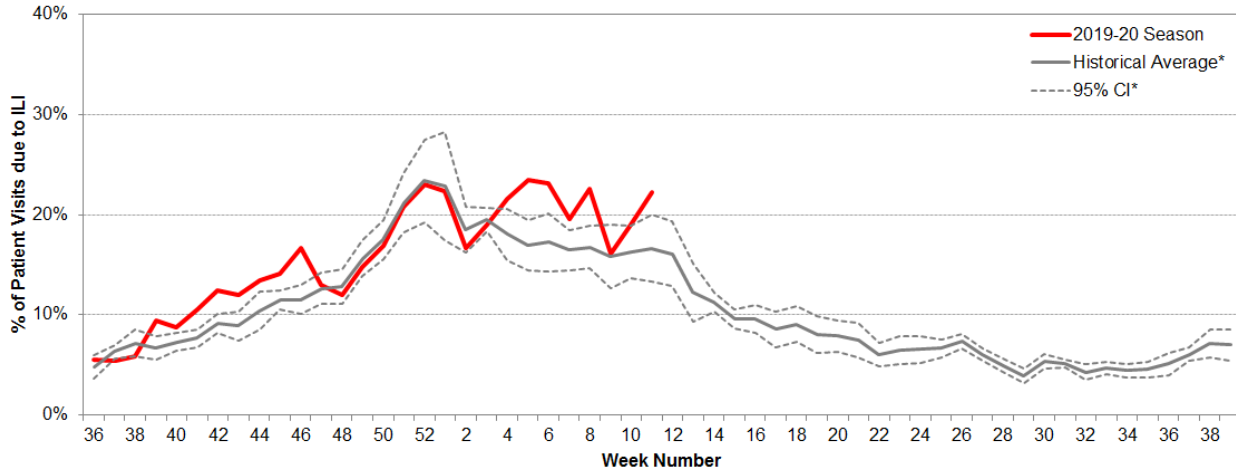
* Data are subject to change as reporting becomes more complete.

† 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

After a slight dip in week 9, the proportion of visits to BC Children’s Hospital Emergency Room (ER) attributed to ILI increased again above the 5-year historical average in week 11 (22%) (Figure 2).

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, with further increasing 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

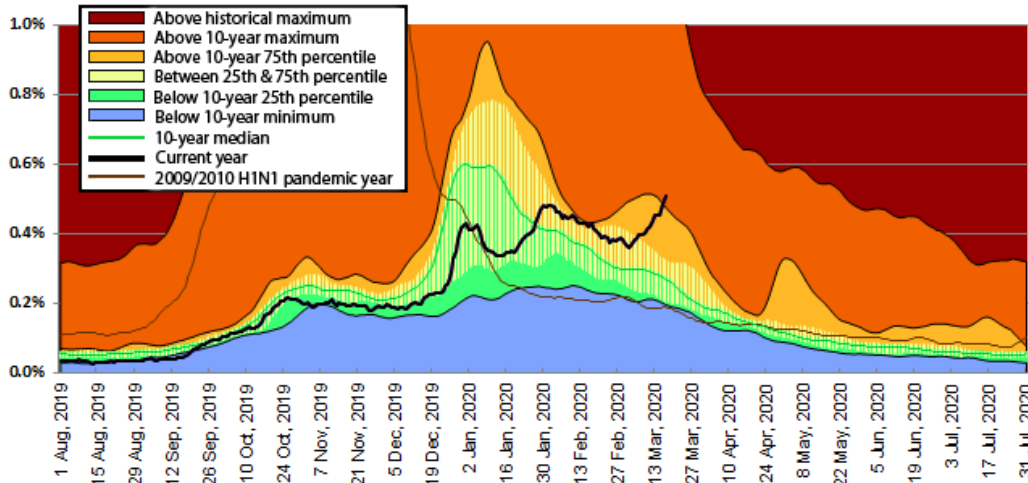
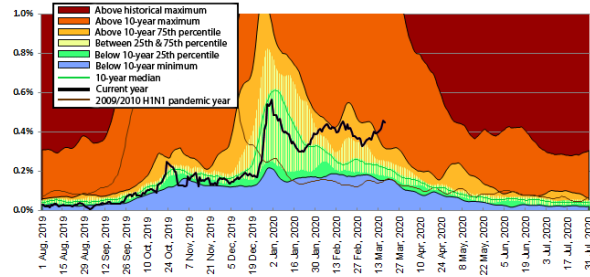
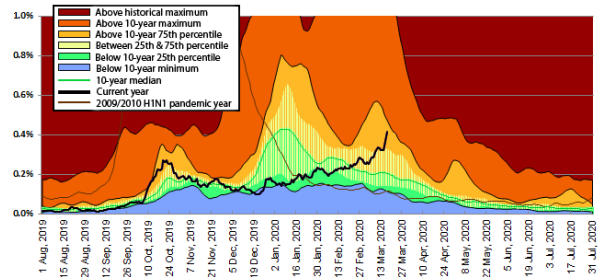


Figure 4

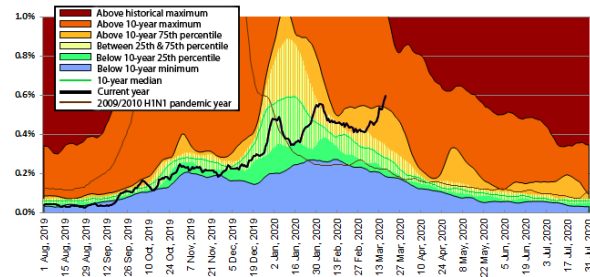
Interior



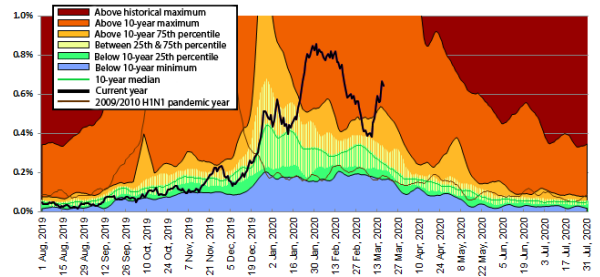
Vancouver Island



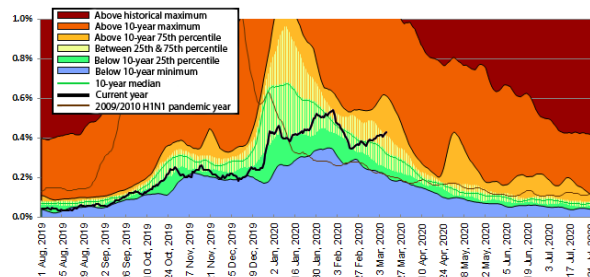
Fraser



Northern



Vancouver Coastal



^S 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 17, 2020.

British Columbia Laboratory Reports

Increased testing of patients with febrile respiratory illness more generally following emergence of SARS-CoV-2 may be influencing influenza detection and trends, requiring cautious interpretation.

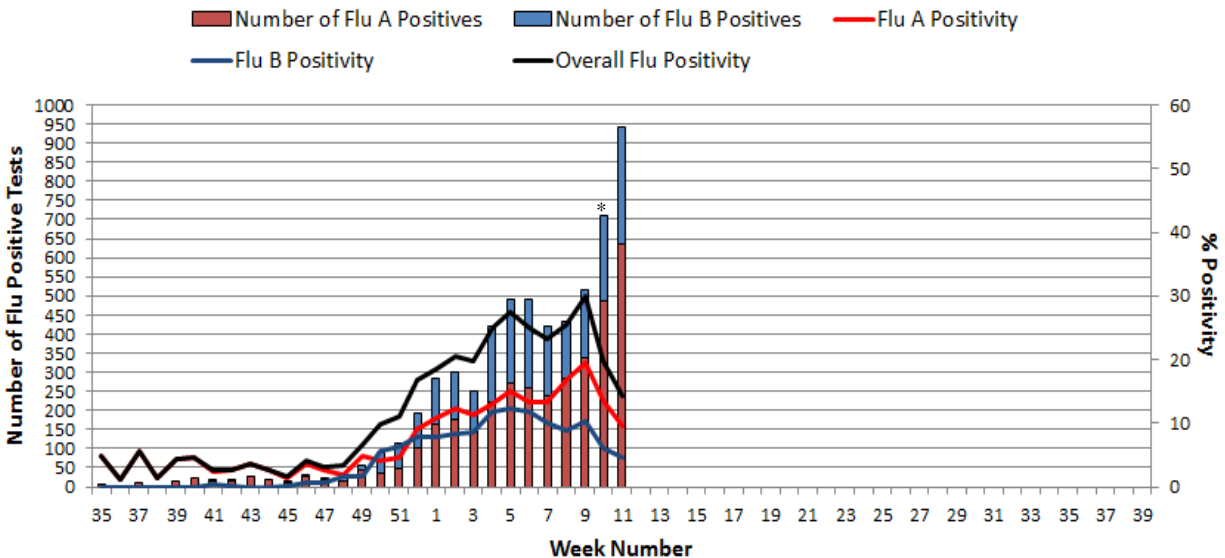
Influenza virus test-positivity

For the current reporting week 11 of 2020, 944/6577 (14%) of specimens tested for influenza at laboratories across BC¹ were positive, including 636/6577 (10%) positive for influenza A and 308/6577 (5%) positive for influenza B. Similar to the last bulletin (week 9), influenza A viruses comprised 67% (i.e. 636/944) and influenza B viruses comprised 33% (i.e. 308/6577) of detections in week 11.

Notwithstanding increase in the absolute number of influenza detections, the proportion of respiratory specimens that were test-positive for influenza virus has decreased. These observations likely reflect the high volume of respiratory specimens that have been submitted in response to the COVID-19 epidemic and tested in parallel for influenza virus. After week 9, when overall influenza positivity reached 30%, positivity rates for influenza decreased for overall, for influenza A, and influenza B (**Figure 5**). This signals 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 35,219 specimens tested for influenza at laboratories across BC, 3622 (10%) tested positive for influenza A and 2284 (6%) 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 laboratories¹ across BC, 2019-2020 season²



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.

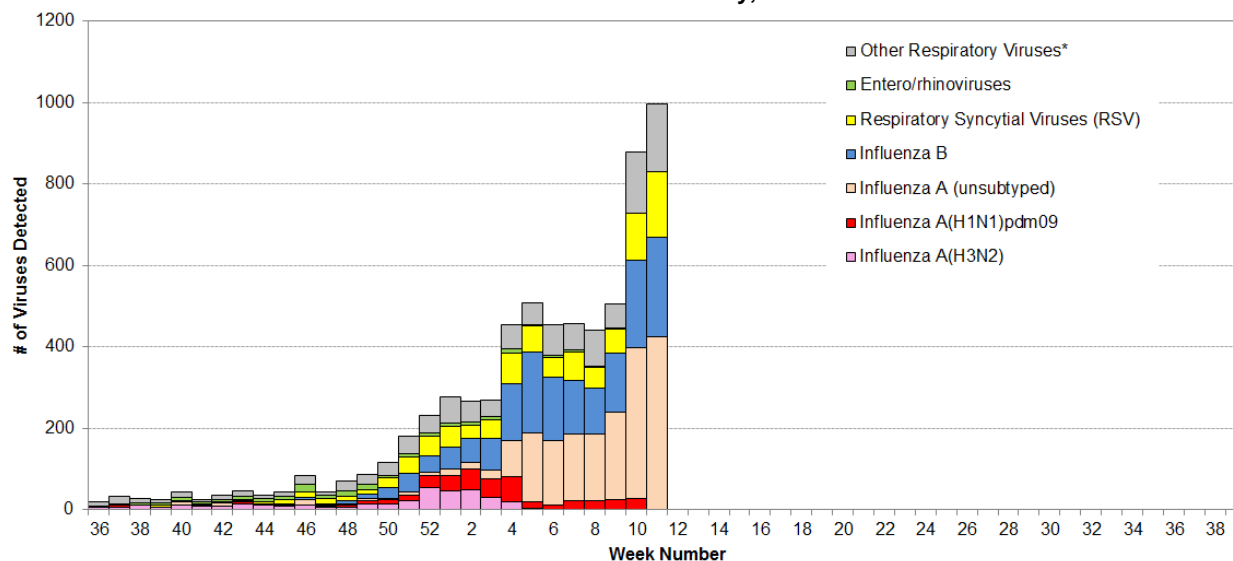
Influenza virus type/subtype characterization

Due to the high volume of respiratory testing related to COVID-19, the BCCDC PHL has temporarily suspended influenza A subtyping. As a result, the influenza and other virus detection graph (**Figure 6**) has an increased number of influenza A(subtype unknown), starting week 4. Starting week 10, all respiratory-related samples sent to the PHL have been dually tested for SARS-CoV-2 and influenza viruses. This may explain the large increase in the number of influenza viruses being detected in weeks 10 and 11.

In week 11, among influenza viruses subjected to further characterization*, 63% (353/563) were influenza A and 37% (212/563) were influenza B. No subtyping of influenza A viruses were done for week 11. Since week 40, 43% (1795/4156) 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 11, RSV (n=167) was most commonly detected followed by the coronavirus group, inclusive of COVID-19 (n=145).

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



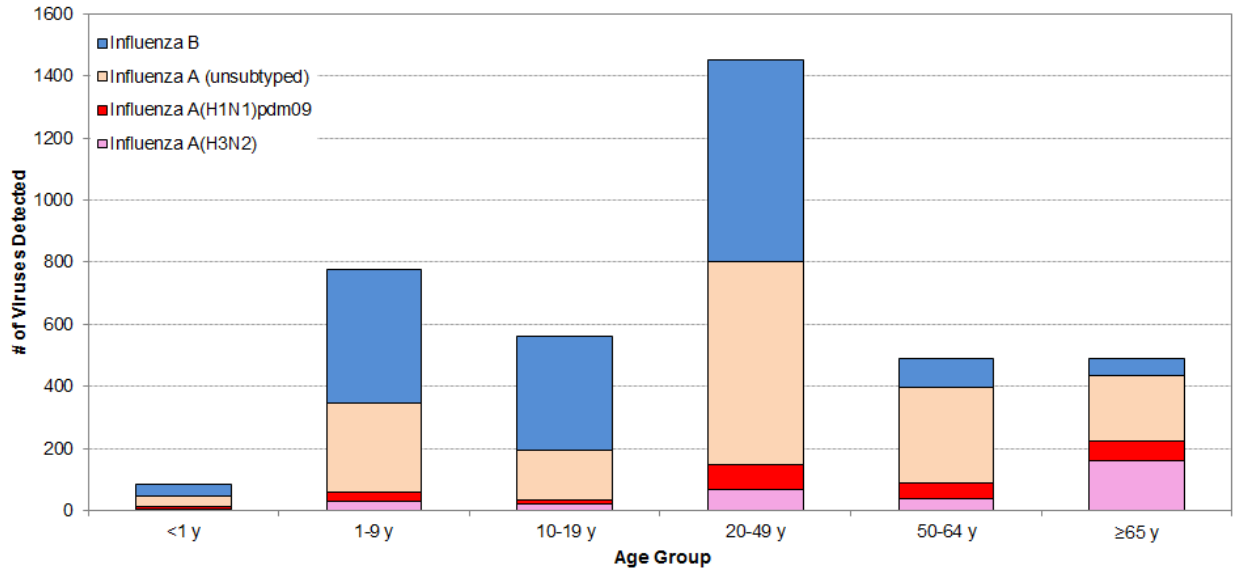
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 19th, 2020.

† 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, coronavirus (inclusive of COVID-19), human bocavirus, human metapneumovirus, and parainfluenza.

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 19 years (**Figures 7 and 8**). Overall, 830/1628 (51%) 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).

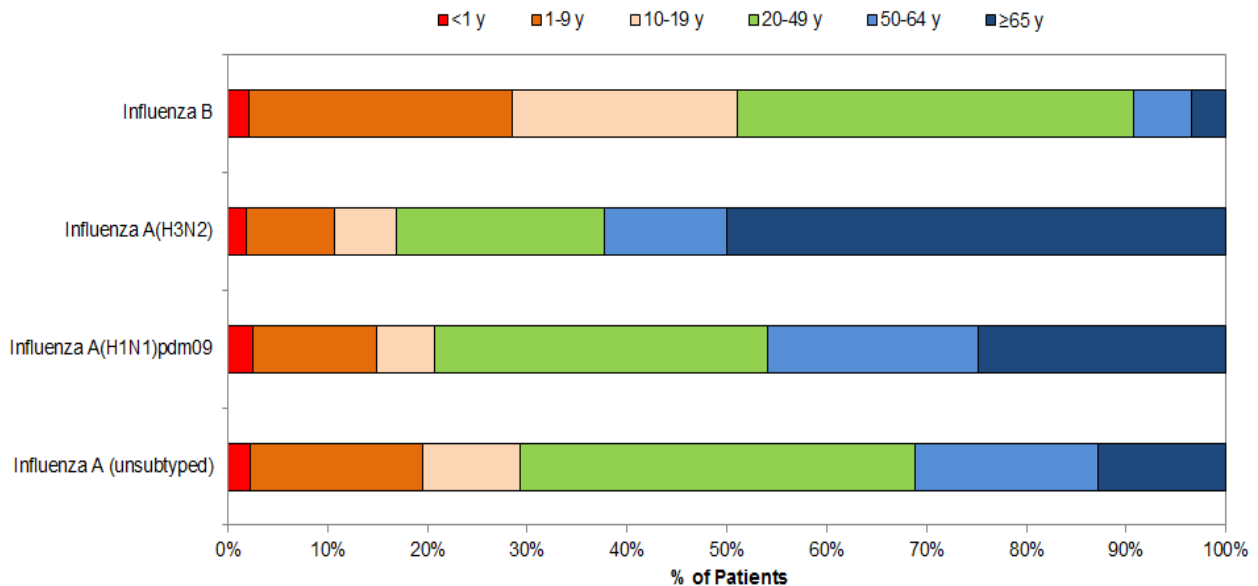
Figure 7: Cumulative number (since week 40) of influenza detections by type, subtype, and age group, BCCDC Public Health Laboratory, 2019-2020*



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 19th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-11

*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*



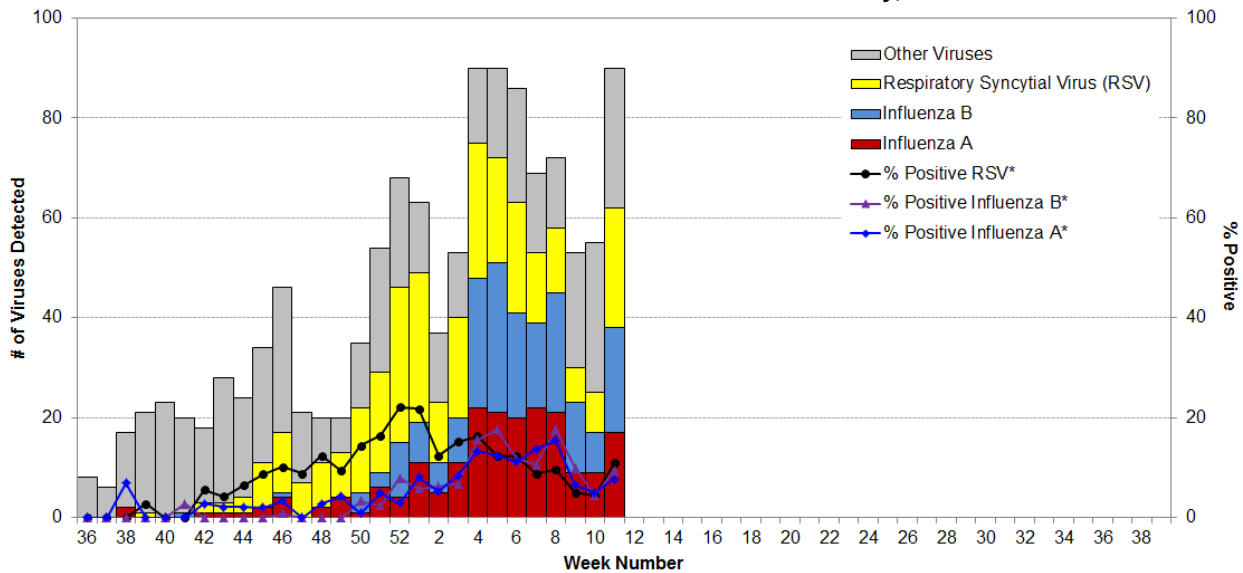
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to March 19th, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-11.

*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 11, among 221 specimens tested for influenza at the BC Children’s and Women’s Health Centre laboratory, 17 (8%) were positive for influenza A (not subtyped), 21 (10%) were positive for influenza B, and 24 (17%) 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.

Influenza-like Illness (ILI) Outbreaks

In week 11, 11 laboratory-confirmed influenza outbreaks (11 influenza A(subtype pending)) were reported from long-term care facilities (LTCF). Three school ILI outbreaks, with unknown etiology, were also reported for this period. The outbreaks occurred in IHA, currently the only health authority routinely reporting school ILI outbreaks to BCCDC. One “other” facility (i.e. not long term care or acute care) outbreak was reported to the BCCDC in week 11 (**Figures 10 and 11**).

Since week 40, a total of 69 laboratory-confirmed LTCF influenza outbreaks have been reported. This tally of LTCF outbreaks for the 2019-2020 season from week 40 to date (n=69) is higher than the tally reported to the BCCDC for the same period during the 2018-19 season (n=60) but substantially lower than across the same period during the predominant A(H3N2) epidemics in 2017-18 (n=159) and 2016-17 (n=187).

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

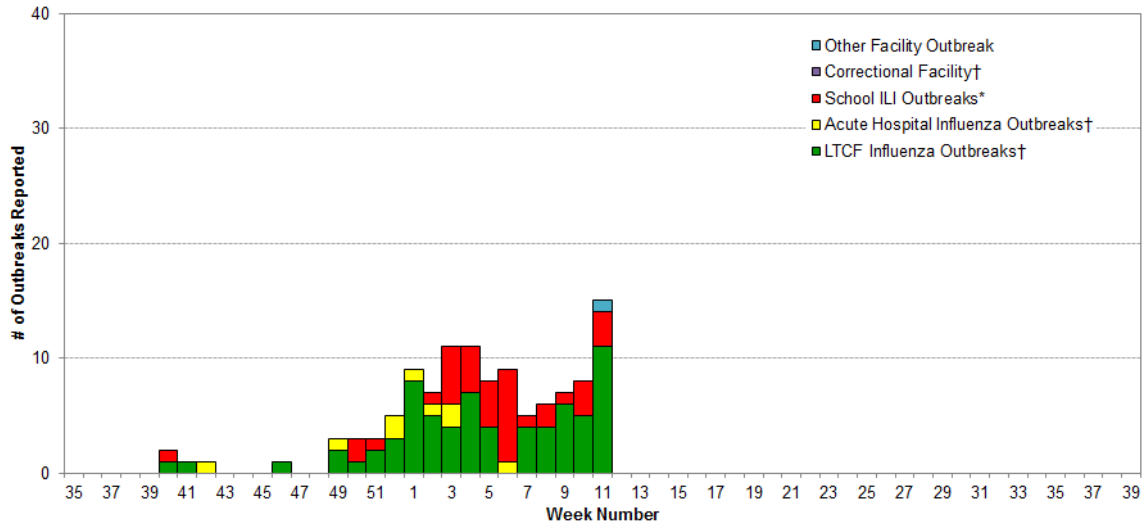
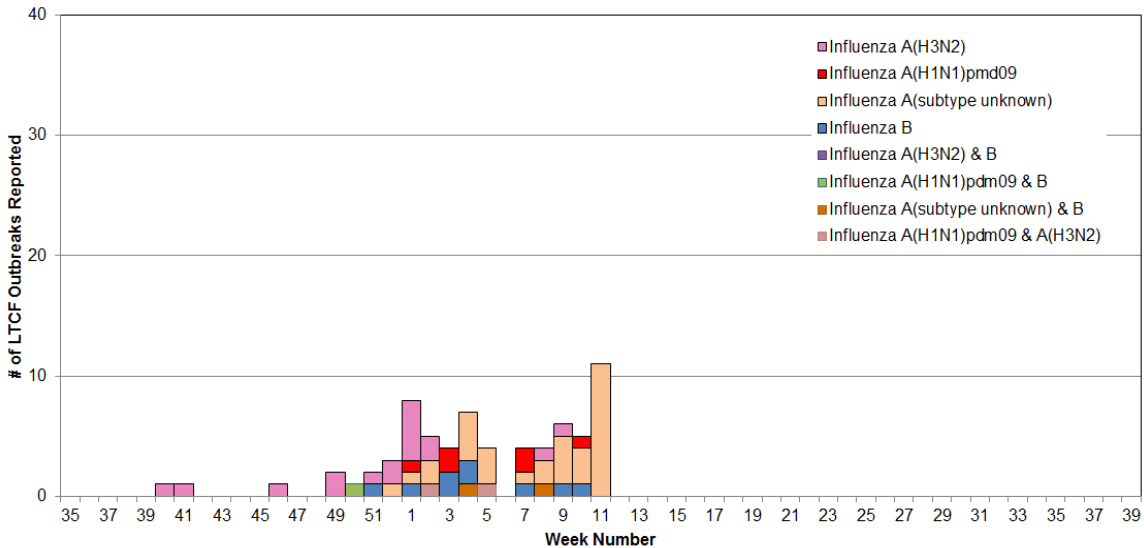


Figure 11: Number of influenza outbreaks by type/subtype in long-term care facilities (LTCF), British Columbia 2019-20†



* 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”

As of today, March 19, 2020, 1:30 PM PT, there have been 241,933 confirmed COVID-19 cases reported globally, of which 33% (n= 80,928) are from mainland China, 17% (n= 41,035) are from Italy, and 8% (n= 18,407) are from Iran. Other European countries have also been heavily affected including Spain (n=17,963), Germany (n=15,320), and France (n=10,995). Associated deaths globally have reached 9,989 with Italy (34%; n= 3,405) having topped China (32%; n= 3,245) in reported death tallies.

In Canada, 829 laboratory-confirmed COVID-19 cases have been reported at the national level to date with 11 associated deaths (**Figure 12**). Among 337 completed case report forms submitted to the Public Health Agency of Canada as of March 19, 2020, 46% (n=155) were female and the median age of cases was 52 years old. In BC, 271 confirmed cases have been reported as of March 19, with 8 (3%) deaths. Of these, 55% were female, median age was 55 years. There have been three long term care facility outbreaks reported to date involving 32 confirmed cases and seven associated deaths, all of the latter associated with a single care facility.

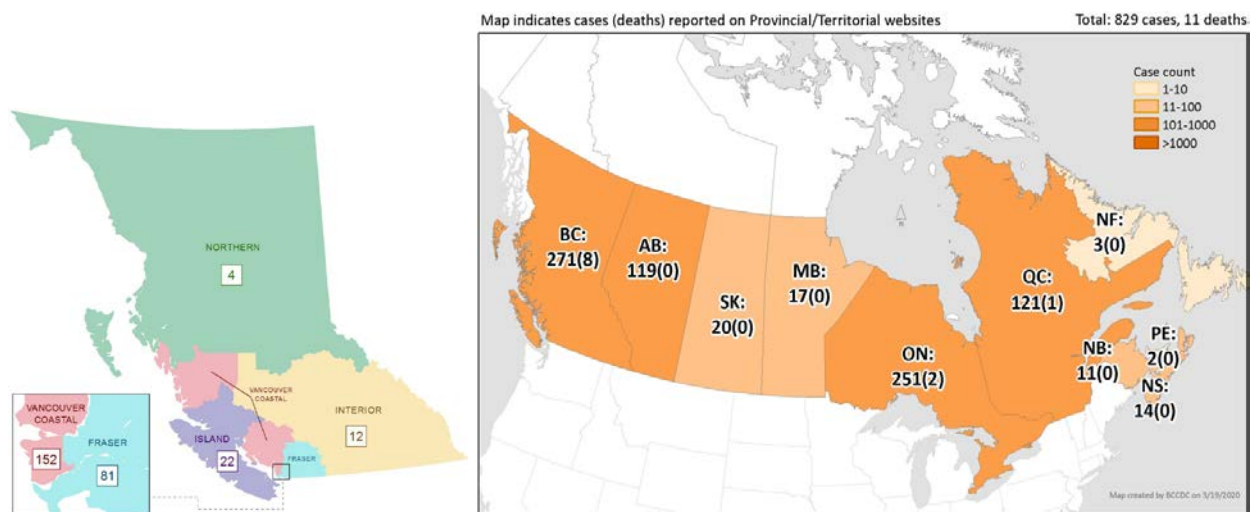
Canadian travel health notices have been updated where Level 3 (avoid non-essential travel) advisories now apply to all countries: <https://travel.gc.ca/travelling/health-safety/travel-health-notice>

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>

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



National

FluWatch (week 10, March 1 to 7, 2020)

In week 10, influenza activity remained high in Canada but several indicators of influenza activity decreased compared to the previous week. Influenza A and B continued to co-circulate but the percentage of laboratory tests positive for influenza decreased for the second week in a row, to 20%. The percent positivity for influenza A in week 10 was 14%, which represents a decrease after a plateau over the previous eight weeks. The percent positivity of influenza B decreased to 6%, which is average for this time of the year. Since week 35, a total of 49,501 laboratory detections of influenza were reported, of which 58% (28,871) were influenza A. Among subtyped influenza A detections (6,576), A(H1N1) remained the predominant subtype this season (67%) and also represented majority of subtyped influenza A specimens in week 10 (83%). When assessing influenza detections by age group, among influenza A(H1N1) cases, 29% of cases were in adults 65 years of age and older, with approximately equal proportions in adults 20-44 years and 45-64 years of age (~25%). Among cases of influenza A(H3N2), the largest proportion 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.

FluWatch report (week 10) 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 10, March 1 to 7, 2020)

In week 10, influenza activity remained high in the US but decreased for the fourth week in a row. The proportion of outpatient visits for ILI remained similar to last week at 5.2% but all regions remained above the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza during week 10 (7.1%) was slightly below the epidemic threshold of 7.3%. A total of 144 influenza-associated pediatric deaths were reported to the US CDC in the current influenza season, 8 of which were reported this week.

In week 10, a total of 43,868 specimens were tested for influenza in the US and of the 22% (9,413) positive specimens, 78% (7,294) were influenza A and 23% (2,119) 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. There has been a decrease in overall influenza positivity since week 6. Since week 40, 21% (225,552) of all tested specimens in the US were positive for influenza, of which 51% (114,029) were influenza A and 49% (108,523) 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%)

The US CDC has posted a summary of influenza activity in the United States and elsewhere, 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

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	<p><u>Reporting Information</u></p> <p>Person Reporting: _____ Title: _____ Contact Phone: _____ Email: _____ Health Authority: _____ HSDA: _____ Full Facility Name: _____</p> <p>Is this report: First Notification (<i>complete section B below; section D if available</i>) Outbreak Over (<i>complete section C and section D below</i>)</p> <p>Report Date (dd/mm/yyyy): _____</p>
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B	<p><u>First Notification</u></p> <p>Type of facility*: Long Term Care Facilities, Nursing Homes Acute Care Facility Other Setting: _____</p> <p><i>If ward or wing, please specify name/number:</i> _____</p> <p>Date of onset of first case of ILI (dd/mm/yyyy): _____ Date outbreak declared (dd/mm/yyyy): _____</p> <p><small>*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).</small></p>
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C	<p><u>Outbreak Declared Over</u></p> <p>Date of onset for last case of ILI (dd/mm/yyyy): _____ Date outbreak declared over (dd/mm/yyyy): _____</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Numbers to date</th> <th style="padding: 5px;">Residents</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Total</td> <td style="padding: 5px;"> </td> </tr> <tr> <td style="padding: 5px;">With ILI</td> <td style="padding: 5px;"> </td> </tr> <tr> <td style="padding: 5px;">Hospitalized*</td> <td style="padding: 5px;"> </td> </tr> <tr> <td style="padding: 5px;">Died*</td> <td style="padding: 5px;"> </td> </tr> </tbody> </table> <p style="text-align: center; font-size: small;">*suspected to be linked to case of ILI</p>	Numbers to date	Residents	Total		With ILI		Hospitalized*		Died*	
Numbers to date	Residents										
Total											
With ILI											
Hospitalized*											
Died*											

D	<p><u>Laboratory Information</u></p> <p>Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) No <input type="checkbox"/> Don't know</p> <p>If yes, organism identified? Yes No Don't know</p> <p>Please specify organism/subtype: Influenza A (subtype: _____) Influenza B</p> <p> Parainfluenza Entero/rhinovirus Coronavirus RSV</p> <p> HMPV Adenovirus Other: _____</p>
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