

# British Columbia (BC) Influenza Surveillance Bulletin

Influenza Season 2019-20, Number 4, Week 5

January 26 to February 1, 2020

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## Influenza detection remains elevated in BC; mix of influenza A and B viruses

In recent weeks, clinical and laboratory indicators of influenza illness have increased. However, cautious interpretation is required. Recent concerns related to the 2019 novel coronavirus (2019-nCoV) may be influencing influenza and other respiratory virus surveillance owing to increased awareness and testing of patients with febrile respiratory illness.

In week 5, 27% of specimens in BC tested positive for influenza virus of which 55% were influenza A and 45% were influenza B. Early season influenza B contribution continues to disproportionately affect children, with 52% of influenza B viruses typed at the BCCDC being from patients under 20 years of age, whereas they comprise <20% of the BC population.

Since week 40, 38 laboratory-confirmed influenza outbreaks have been reported from long term care facilities, higher than for the same period during the 2018-19 season (n=22) but lower than for the same period of 2017-18 (n=114) and 2016-17 (n=143).

An updated situation report related to 2019-nCoV epidemic spread is provided on [page 9](#). As of this morning, there have been 28,365 confirmed cases globally with 563 deaths. Outside of mainland China (n=28,088 with 561 deaths), Hong Kong SAR (n=24, with 1 death), Macau SAR (n=10) and Taiwan (n=16), confirmed cases have been reported from 24 other countries (n=227, with 1 death from the Philippines).

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

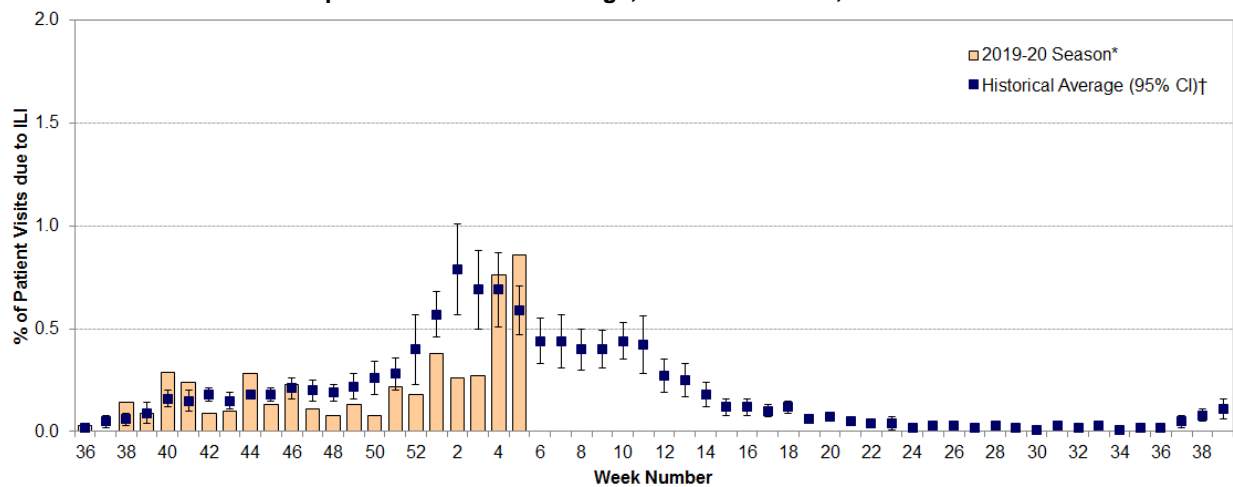
Report Disseminated: February 6, 2020

## British Columbia

### Sentinel Physicians

In weeks 4 and 5, clinical influenza-like illness (ILI) rates among patients presenting to sentinel sites increased considerably compared to prior weeks, both weeks trending above the 10-year historical average rates (**Figure 1**). Twelve sentinel (63%) sites have reported data for week 5. Trends in febrile respiratory illness monitoring may require cautious interpretation following broad public messaging around the 2019 novel coronavirus. Rates may also 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**



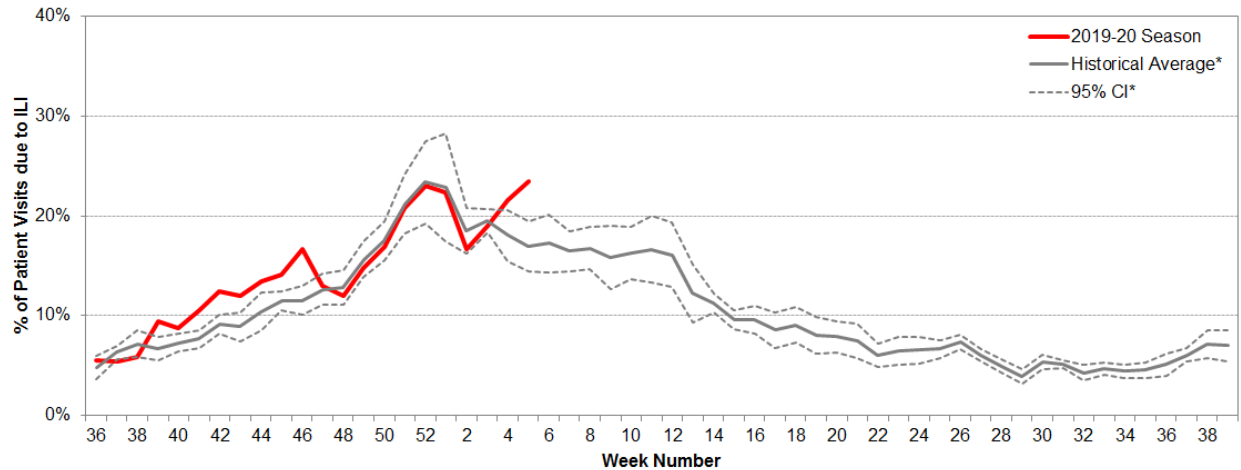
\* Data are subject to change as reporting becomes more complete.

† 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 5, the proportion of visits to BC Children’s Hospital Emergency Room (ER) attributed to influenza-like illness (ILI) reached 23%, which is above the 5-year historical average level (17%) for this time of the year (**Figure 2**). Similar to the ILI sentinel physician reporting (**Figure 1**), trends in febrile respiratory illness monitoring may require cautious interpretation following broad public messaging around the 2019 novel coronavirus.

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



Source: BCCCH 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

The BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II) graph is unavailable this week due to data generation issues.

### British Columbia Laboratory Reports

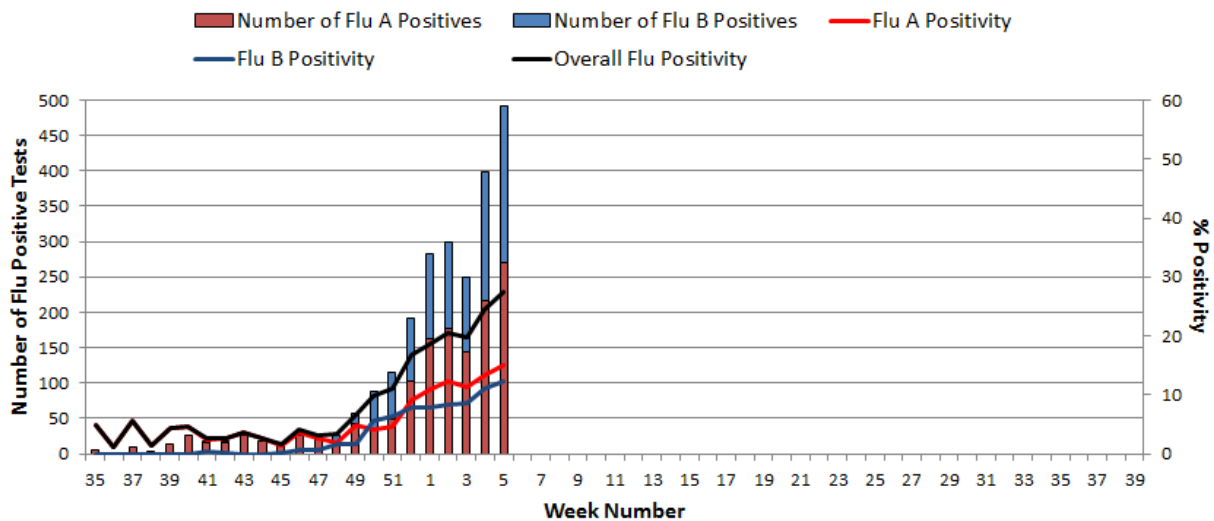
Increased testing of patients with febrile respiratory illness following emergence of the 2019 novel coronavirus (2019-nCoV) may be influencing recent influenza trend analysis, requiring cautious interpretation.

#### Influenza virus test-positivity

For the current reporting week 5 of 2020, 492/1799 (27%) of specimens tested at laboratories across BC<sup>1</sup> were positive for influenza virus, including 271/1799 (15%) positive for influenza A and 221/1799 (12%) positive for influenza B. Accordingly, influenza A viruses comprised 55% (i.e. 271/492) and influenza B viruses comprised 45% (i.e. 221/492) of influenza virus detections in week 5. Since week 50 of 2019, both influenza A and B positivity have been steadily increasing (**Figure 5**).

Cumulatively since week 40 (starting September 29, 2019), of the 17,814 specimens tested for influenza at laboratories across BC, 1373 (7.7%) tested positive for influenza A and 997 (5.6%) tested positive for influenza B. Throughout the season, influenza A has comprised 58% and influenza B has comprised 42% of total influenza virus detections.

**Figure 5: Influenza virus positivity among respiratory specimens tested by participating laboratories<sup>1</sup> across BC, 2019-2020 season\*<sup>2</sup>**



<sup>1</sup> 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.

<sup>2</sup> 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.

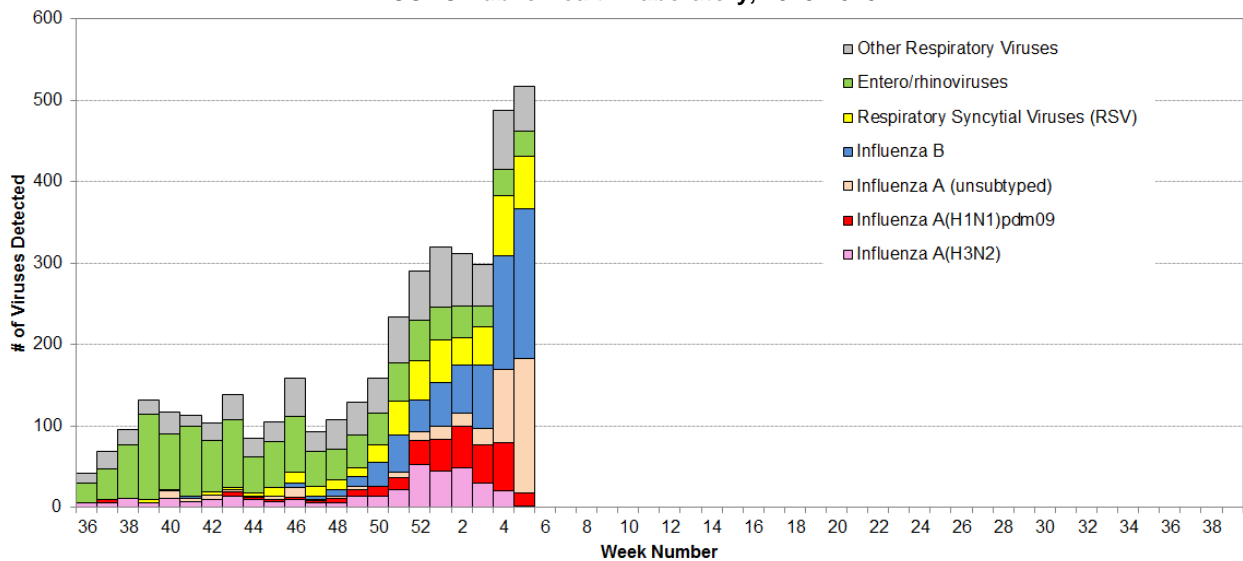
Influenza virus type/subtype characterization

Due to the high volume of respiratory testing and workload involved around 2019 novel coronavirus requests, the BCCDC PHL has temporarily halted influenza A subtyping for the time being. As a result, the influenza and other virus detection graph (**Figure 6**) will have an increase in the number of influenza A(subtype unknown) samples, starting week 4 and 5.

In week 5, among influenza viruses subjected to further characterization\*, 50% (183/366) were influenza A and 50% (183/366) were influenza B and of those that underwent further subtype characterization\*, 8% (15/183) were A(H1N1)pdm09, 1% (2/183) were A(H3N2), and 91% (166/183) remained subtype unknown. Since week 40, 19% (277/1487) 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 5, RSV (n=65) was the most commonly detected virus, followed by entero/rhinoviruses viruses (n=31).

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

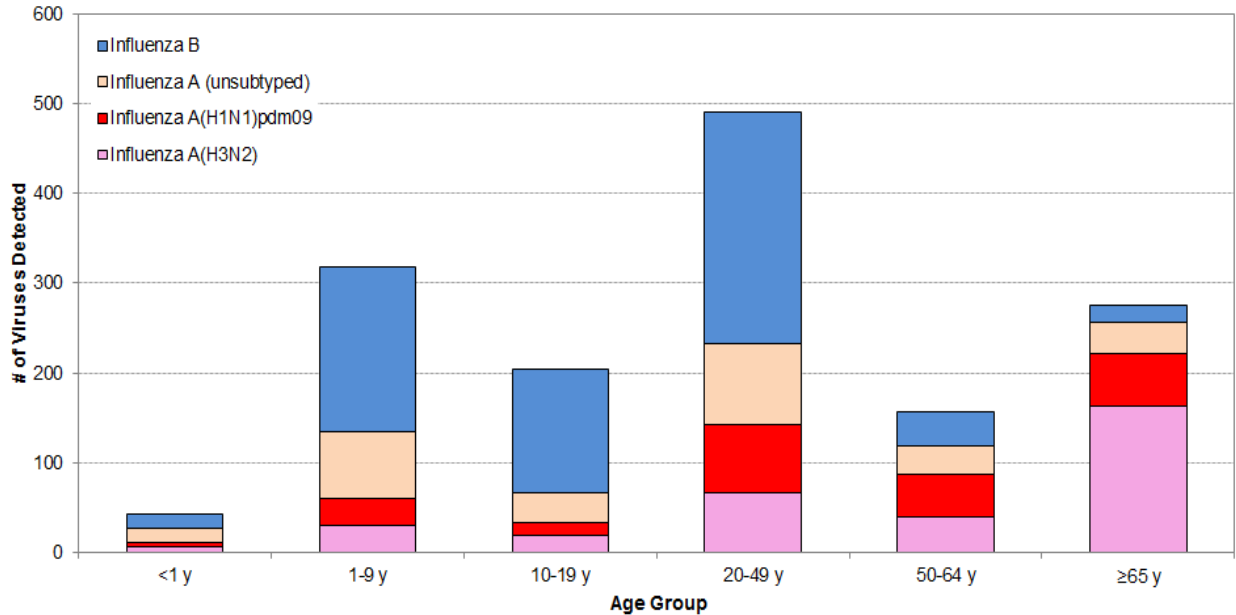


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 6, 2020.

\* 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.

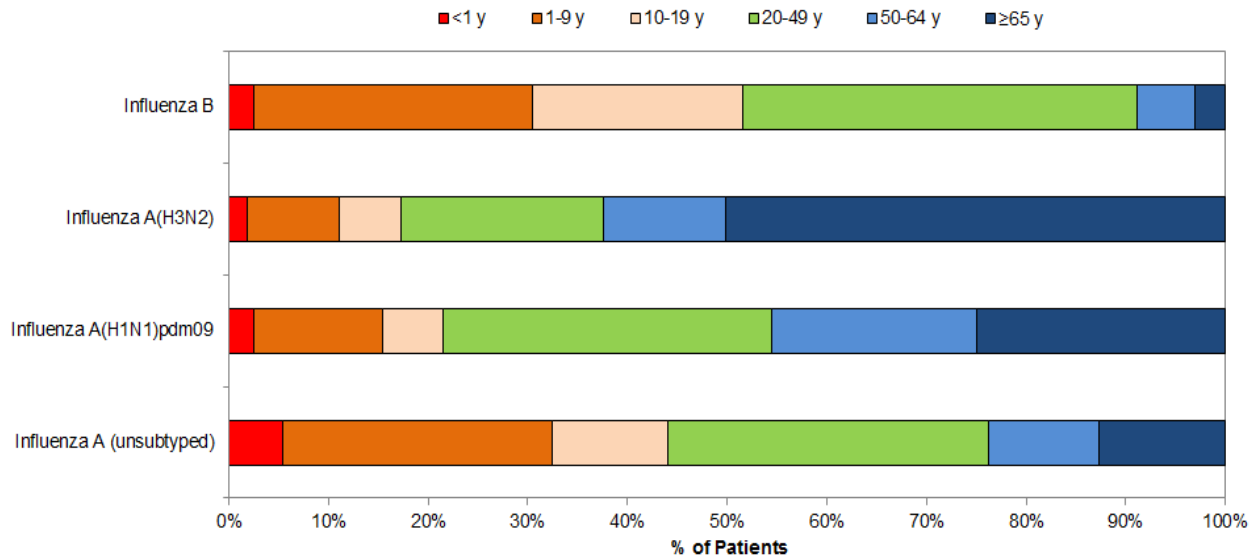
Among typed/subtyped viruses with age information since week 40, 106/233 (45%) A(H1N1)pdm09 and 203/325 (62%) A(H3N2) detections have been adults over the age of 50 years, including 163/325 (50%) of A(H3N2) detections that were over the age of 65 years. In contrast, only 58/653 (9%) influenza B detections have been adults over the age of 50 years (**Figures 7 and 8**). Conversely, 337/653 (52%) 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 February 6, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-1. \*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\***

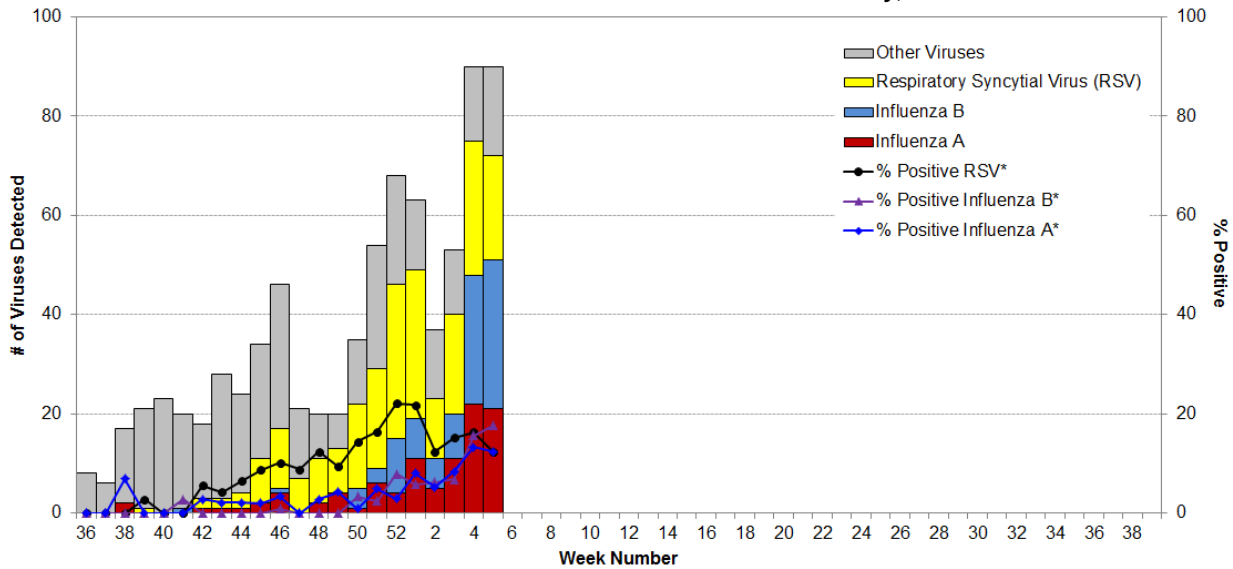


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 6, 2020; figure includes cumulative influenza detections for specimens collected from weeks 40-1. \*Influenza A(H1N1)pdm09 and influenza A(subtype unknown) weekly case counts as directly typed/subtyped on primary specimens by 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 5 of 2020, among 170 specimens tested at the BC Children’s and Women’s Health Centre laboratory, 21 (12%) were positive for influenza A (not subtyped), 30 (18%) were positive for influenza B, and 21 (12%) were positive for RSV (**Figure 9**). Similar caution in the interpretation of influenza trends given increased attention to febrile respiratory illness in relation to emergence of the 2019 novel coronavirus (2019-nCoV) apply as for other indicators.

**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 5, 3 laboratory-confirmed influenza outbreaks (3 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. These two outbreaks occurred in IHA, currently the only health authority routinely reporting school ILI outbreaks to BCCDC. No acute care facility outbreaks were reported to the BCCDC in week 5 (Figures 10 and 11).

Since week 40, a total of 38 laboratory-confirmed LTCF influenza outbreaks have been reported. This tally of LTCF outbreaks for the 2019-2020 season from week 40 to date (n=38) is higher than the tally reported to the BCCDC for the same period during the 2018-19 season (n=22) but substantially lower than across the same period during the predominant A(H3N2) epidemics in 2017-18 (n=114) and 2016-17 (n=143).

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

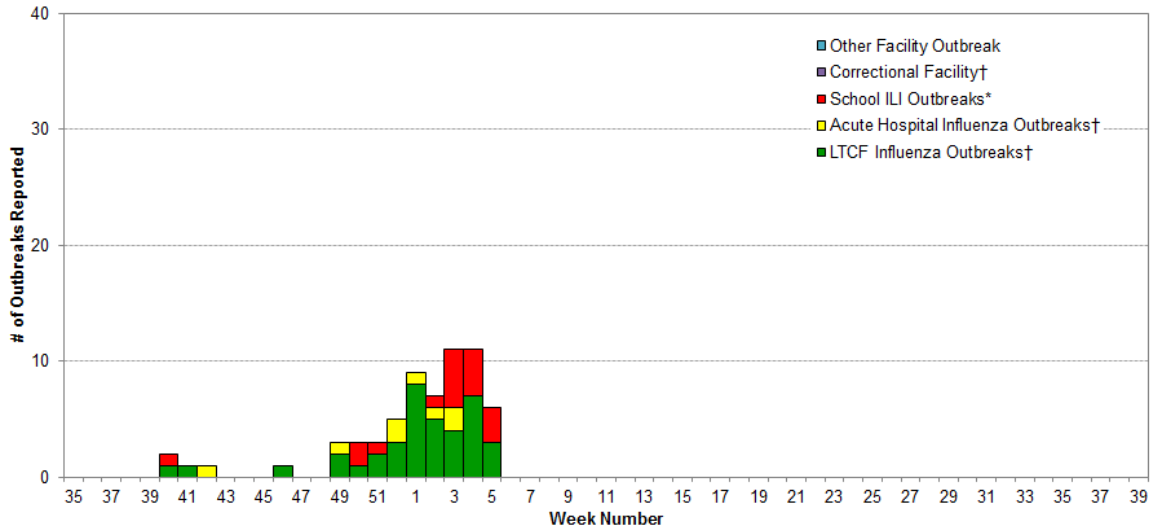
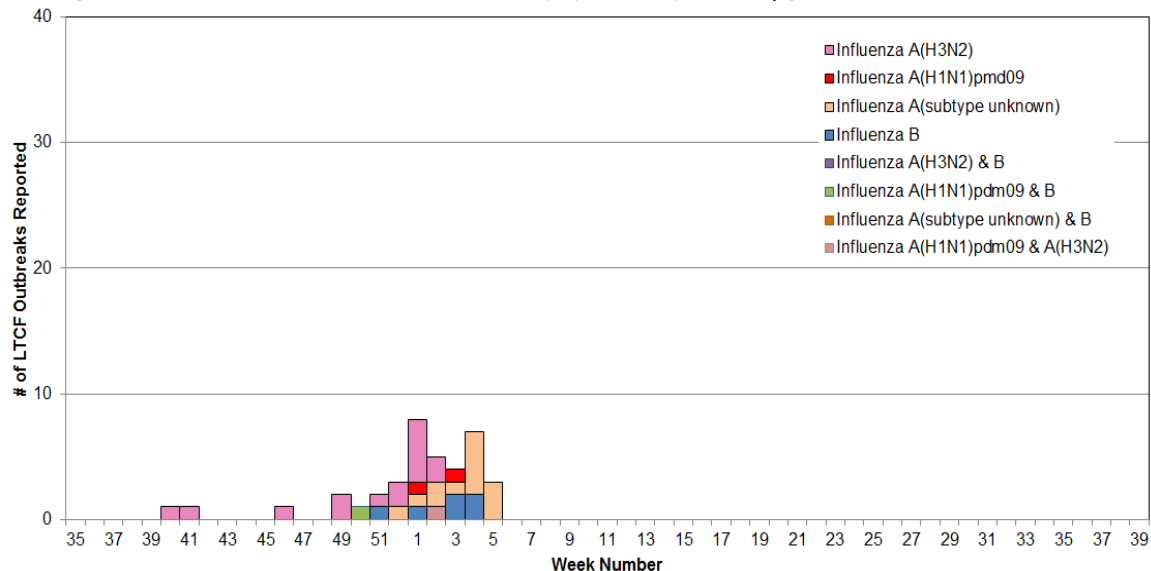


Figure 11: Number of influenza outbreaks by type/subtype in long-term care facilities (LTCF),



\* 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, “2019-nCoV”**

### **SITUATION UPDATE**

On January 30, 2020, the World Health Organization (WHO) declared that the 2019 novel coronavirus (2019-nCoV) epidemic constitutes a Public Health Emergency of International Concern (PHEIC). In the one month since the world first became aware of a cluster of atypical pneumonia centred around Wuhan City, Hubei Province, China, on December 31, 2019, the number of confirmed cases has grown substantially to 28,365 cases worldwide with 563 deaths, as of this morning (**Figure 12**). The vast majority (99%) of cases and deaths globally have been from mainland China (n= 28,088 and 561 deaths), and of these, most have been from Hubei Province (n=19,665 and 549 deaths), which includes Wuhan City (n=10,117 and 414 deaths). Population quarantine of Wuhan and neighboring cities have been in place since January 23<sup>rd</sup> and confirmed cases outside of mainland China and Hong Kong SAR (n=24), Macau SAR (n=10) and Taiwan (n=16), have included 227 confirmed cases in 24 other countries with 2 deaths (one each in the Philippines and Hong Kong SAR) (**Figures 12 and 13**).

The first seven confirmed cases of 2019-nCoV in Canada (2 confirmed and 2 presumptively confirmed in British Columbia and 3 in Ontario) had direct or indirect epidemiological link with Wuhan City. Presumptive confirmed cases are pending confirmation by the National Microbiology Lab in Winnipeg.

Check the [BCCDC website](#) and/or the [Public Health Agency of Canada](#) for periodic updates.

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

**Figure 12: Geographic distribution of novel coronavirus, 2019-nCoV (World)**

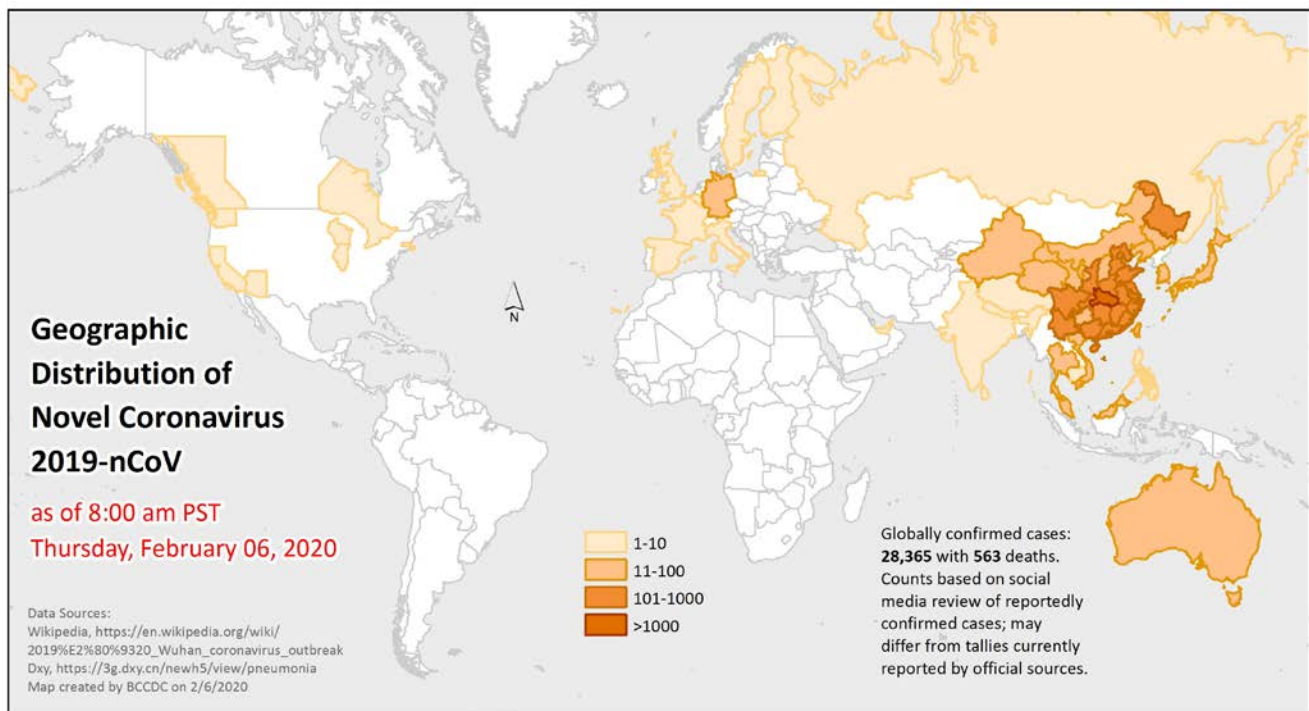
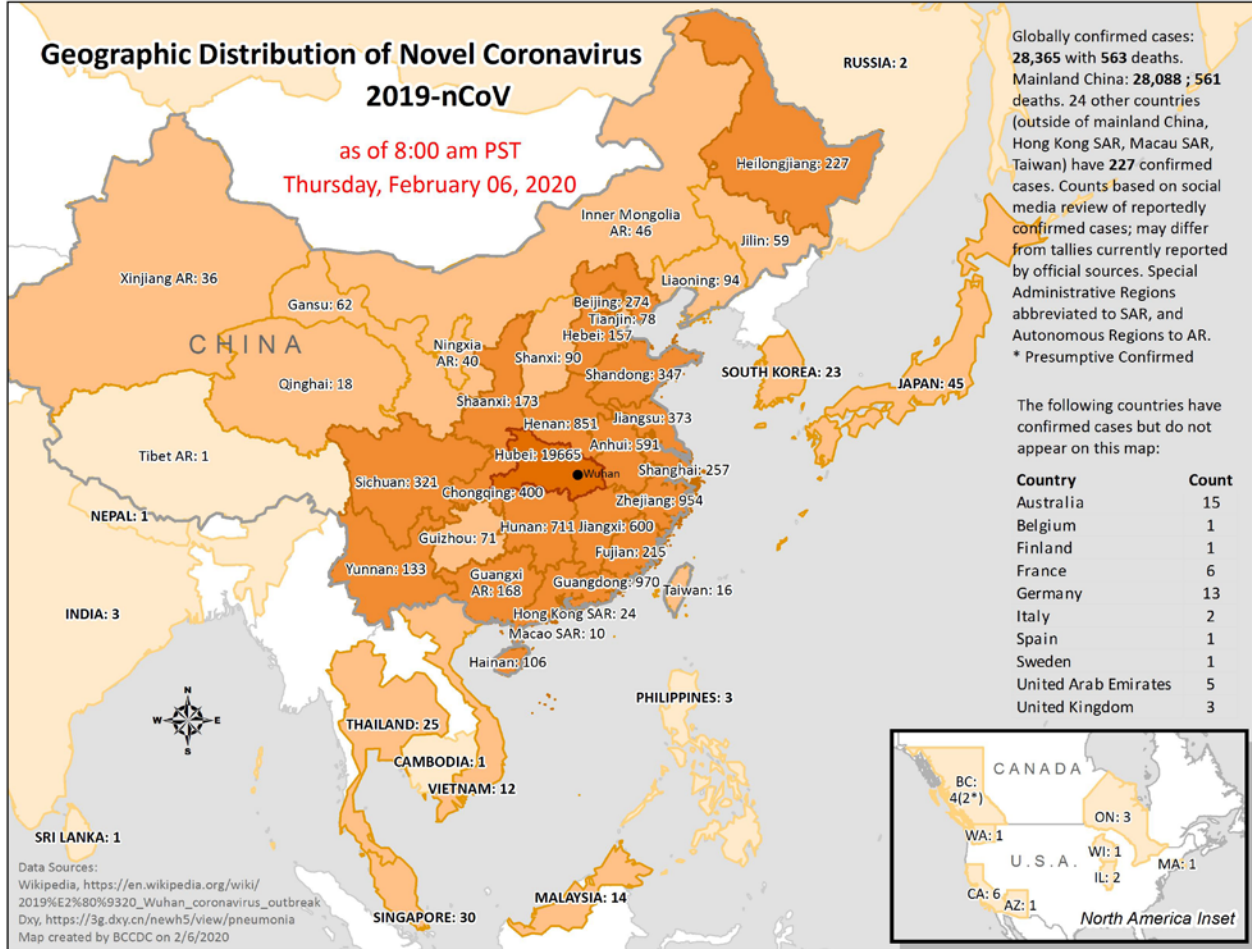


Figure 13: Geographic distribution of novel coronavirus, 2019-nCoV (Asia)



## National

### **FluWatch (weeks 4, January 19 to January 25, 2020)**

Influenza A and B continue to co-circulate in week 4. In recent weeks, the proportion of test positives for influenza A remained stable, while the proportion for influenza B increased. Among the regions that reported influenza activity in week 4, around half reported localized (53%) activity and the remaining reported sporadic (45%) or widespread (2%) activity. As of week 3, influenza A(H1N1) became the predominant influenza A circulating in Canada. Influenza A(H1N1) represents approximately 75% of subtyped influenza A specimens in week 4. Overall influenza positivity in week 4 is around 28%, which is similar to what was observed in the past 3 weeks (around 26%) but slightly higher than the 5-year historical average (23%) for this time of the year. Influenza A and B positivity at week 4 are 15% and 13% respectively. Since week 35, a total of 24,448 laboratory detections of influenza were reported, of which 59% (14,344) were influenza A. Among subtyped influenza A detections from sentinel laboratories, influenza A(H1N1) accounted for 59% of the samples.

FluWatch report (week 4) 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 February 6, 2020, the National Microbiology Laboratory (NML) has characterized 555 influenza viruses [145 A(H3N2), 235 A(H1N1) and 175 influenza B] that were received from Canadian laboratories.

Influenza A(H3N2): Six influenza A(H3N2) viruses were antigenically characterized as A/Kansas/14/2017-like by HI testing using antiserum raised against egg-propagated A/Kansas/14/2017. 35 viruses showed reduced titer with ferret antisera raised against egg-propagated A/Kansas/14/2017. A/ Kansas/14/2017 (clade 3C.3a) is the influenza A/H3N2 component of the 2019-2020 Northern Hemisphere influenza vaccine. 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: 145 A(H1N1) viruses characterized were antigenically similar to A/Brisbane/02/2018. 90 viruses showed reduced titer with ferret antisera raised against egg-propagated A/Brisbane/02/2018. A/Brisbane/02/2018 is the WHO-recommended influenza A(H1N1) component of the 2019-2020 northern hemisphere influenza vaccine

Influenza B: 16 viruses characterized were antigenically similar to B/Colorado/06/2017, whereas 157 viruses showed reduced titer with ferret antisera raised against cell culture-propagated B/Colorado/06/2017. Sequence analysis showed that 105 of the reduced viruses had a three amino acid deletion (162-164) in the HA gene. B/Colorado/06/2017 belongs to the B(Victoria) lineage, recommended by the WHO as the influenza B component for the 2019-2020 Northern Hemisphere *trivalent* influenza vaccine. Two virus characterized was antigenically similar to B/Phuket/3073/2013 which is the WHO recommended influenza B component of the *quadrivalent* vaccine belonging to the B(Yamagata) lineage.

### **National Microbiology Laboratory (NML): Antiviral Resistance**

From September 1, 2019, to February 6, 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 371 influenza viruses [132 H3N2, 117 H1N1 and 122 B] tested against oseltamivir. All 132 H3N2 and 122 B viruses were sensitive to oseltamivir. Of the 117 H1N1 viruses tested, 116 were sensitive to oseltamivir and one virus was resistant to oseltamivir with H275Y mutation.

Zanamivir: Of the 371 influenza viruses [132 H3N2, 117 H1N1 and 122 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](https://www.ammi.ca/Content/AC-_%20Guidance%20of%20Antiviral%20Agents%2019-20.pdf).

## International

### **USA (week 4, January 19 to January 25, 2020)**

After decreasing in week 1 and 2, influenza key indicators continue to increase in the past 2 weeks. Currently, influenza B/Victoria and A(H1N1)pdm09 are the most frequently reported influenza viruses in the US. Since week 40, a total of 41,527 specimens were tested for influenza by public health laboratories nationwide. Out of the 21,184 (51%) positive specimens, 9,738 (46%) influenza A and 11,445 (54%) influenza B viruses were detected. From the 9,738 positive influenza A specimens, 8,261 (88%) were A(H1N1)pdm09, 1,175 (12%) were A(H3N2), and 302 remain A(unsupported). From the 11,445 positive influenza B specimens, 154 (2%) belonged to the Yamagata lineage, 8,539 (98%) to the Victoria lineage, and 2,752 were not characterized as to lineage. Since September 29, 2019, the US CDC genetically characterized 354 influenza A(H1N1)pdm09 viruses and 231 influenza A(H3N2) viruses. From the influenza (H1N1)pdm09 viruses, 100% belonged to the 6B.1A clade and among the influenza A(H3N2) viruses, 97% belonged to the 3C.2a1 subclade.

The proportion of deaths attributed to pneumonia and influenza (P&I) during week 3 (6.7%) was below the epidemic threshold (7.2%) for this time of the year. Since the beginning of the 2019-2020 season, 68 influenza-associated pediatric deaths were reported to the CDC. Out of the 68 deaths, 23 and 45 were associated with influenza A and B respectively. The proportion of outpatient visits for ILI in week 1 was 5.7%, which is above the national baseline of 2.4%. The US CDC estimated that so far this season, there have been at least 19 million flu illnesses, 180,000 hospitalizations, and 10,000 deaths due to influenza. 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 (February 3, 2020, based on data up to January 19, 2020)**

***In the temperate zone of the northern hemisphere***, influenza activity remains elevated or continues to increase in majority of the regions (North America, Europe, Central Asia, Western Asia, and East Asia). Influenza activity in Northern Africa appears to be decreasing. With the exception of some Northern European countries, influenza activity in Europe remains elevated with predominate detection of influenza A in most countries (eg. France, Italy, Spain). Influenza B predominates in the region of Central Asia and co-circulates with influenza A in multiple countries in the Western Asia region. In East Asia, influenza A(H3N2) and B/Victoria predominate in mainland China and Mongolia, while influenza (H1N1)pdm09 predominates in Hong Kong, Taiwan, and Republic of Korea.

From January 6, 2020 to January 19, 2020, the WHO GISRS laboratories tested more than 130,830 specimens. Of these, 33,190 were positive for influenza viruses including 23,283 (70.2%) typed as influenza A and 9,907 (29.8%) as influenza B. Of the subtyped influenza A viruses, 7,834 (58.8%) were influenza A(H1N1)pdm09 and 5,478 (41.2%) were influenza A(H3N2). Of the characterized B viruses, 42 (1.4%) belonged to the B(Yamagata) lineage and 2,925 (98.6%) 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***, majority reported low influenza activity. Some exceptions include Mexico and Afghanistan, where increase in influenza A(H1N1)pdm09 detections were reported. Lao People's Democratic Republic and Peru also reported co-circulation of influenza A and B.

Details are available at:

[https://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](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 Δ2, 162-163 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/](https://www.who.int/influenza/vaccines/virus/recommendations/2019_20_north/en/)

### **WHO Recommendations for the 2020 Southern Hemisphere Influenza Vaccine**

On September 27, 2019, the WHO announced recommended strain components for the 2020 southern hemisphere trivalent influenza vaccine (TIV):\*

- an A/Brisbane/02/2018 (H1N1)pdm09-like virus [a clade 6B.1A1 virus]; †
- an A/South Australia/34/2019 (H3N2)-like virus [a clade 3C.2a1b virus]; ‡
- a B/Washington/02/2019-like (B/Victoria lineage) virus [a Δ3, 162-164 virus].§

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

\* Recommended strains represent a change for three of the three components used for the 2019 southern hemisphere TIV.

† Recommended strain represents a change from the 2019 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 2019 season vaccine which contained an A/Switzerland/8060/2017 (H3N2)-like virus [a clade 3C.2a2 virus]

§ Recommended strain represents a change from the 2019 season vaccine which contained a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage) [a Δ2, 162-163 virus]

For further details: [http://www.who.int/influenza/vaccines/virus/recommendations/2020\\_south/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2020_south/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](http://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](http://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/](http://www.cdc.gov/flu/weekly/)

Joint ECDC – WHO/Europe weekly influenza update (Flu News Europe): [flunewseurope.org](http://flunewseurope.org)

WHO – Weekly Epidemiological Record: [www.who.int/wer/en/](http://www.who.int/wer/en/)

WHO Collaborating Centre for Reference and Research on Influenza

(Australia): [www.influenzacentre.org/](http://www.influenzacentre.org/)

Australian Influenza Report:

[www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm](http://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](http://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/](http://www.who.int/csr/disease/avian_influenza/en/)

World Organization for Animal Health: [www.oie.int/eng/en\\_index.htm](http://www.oie.int/eng/en_index.htm)

### **Contact Us:**

Tel: (604) 707-2510

Fax: (604) 707-2516

Email: [InfluenzaFieldEpi@bccdc.ca](mailto:InfluenzaFieldEpi@bccdc.ca)

Communicable Diseases & Immunization Service (CDIS)

BC Centre for Disease Control

655 West 12<sup>th</sup> Ave, Vancouver BC V5Z 4R4

Online: [www.bccdc.ca/health-professionals/data-reports/influenza-surveillance-reports](http://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](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](mailto: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.

<b>A</b>	<b><u>Reporting Information</u></b>	
	Person Reporting:	Title:
	Contact Phone:	Email:
	Health Authority:	HSDA:
	Full Facility Name:	
	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> )
	Report Date (dd/mm/yyyy):	

<b>B</b>	<b><u>First Notification</u></b>	
	Type of facility*:	Long Term Care Facilities, Nursing Homes      Acute Care Facility Other Setting:
	<i>If ward or wing, please specify name/number:</i>	
	Date of onset of first case of ILI (dd/mm/yyyy):	
	Date outbreak declared (dd/mm/yyyy):	
	<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; <b>Acute Care Facility:</b> 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); <b>Other Setting:</b> 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>	

<b>C</b>	<b><u>Outbreak Declared Over</u></b>										
	Date of onset for last case of ILI (dd/mm/yyyy):										
	Date outbreak declared over (dd/mm/yyyy):										
	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 50%;">Numbers to date</th> <th style="width: 50%;">Residents</th> </tr> </thead> <tbody> <tr> <td><b>Total</b></td> <td></td> </tr> <tr> <td><b>With ILI</b></td> <td></td> </tr> <tr> <td><b>Hospitalized*</b></td> <td></td> </tr> <tr> <td><b>Died*</b></td> <td></td> </tr> </tbody> </table>		Numbers to date	Residents	<b>Total</b>		<b>With ILI</b>		<b>Hospitalized*</b>		<b>Died*</b>
Numbers to date	Residents										
<b>Total</b>											
<b>With ILI</b>											
<b>Hospitalized*</b>											
<b>Died*</b>											
<small>*suspected to be linked to case of ILI</small>											

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