

British Columbia (BC) Influenza Surveillance Bulletin

2021-22 Influenza Season

Week 49: December 5 to 11, 2021

Table of Contents

A. Laboratory surveillance

Laboratory findings [2](#)

B. Clinical Indicators

BC Children's Hospital Emergency Room [7](#)

Medical Service Plan [8](#)

C. Influenza outbreak reports [9](#)

D. National [10](#)

FluWatch Activity levels [10](#)

NML Strain Characterization [10](#)

NML Antiviral Resistance [10](#)

E. International

USA (CDC) [11](#)

WHO [11](#)

F. Influenza Vaccine Components (WHO Recommendations)

2019-20 Northern Hemisphere [12](#)

2021 Southern Hemisphere [12](#)

G. Additional Information

Explanatory note [13](#)

List of Acronyms [13](#)

Web Sites [13](#)

Influenza activity still remains low in BC; other non-influenza respiratory viruses (NIRV) circulating

Since our last bulletin for week 47, 65 influenza viruses were reported among 9,608 specimens tested (0.7%) in weeks 48-49. In 2021, influenza virus testing is higher but the detection rate is far lower than the 5-year (pre-COVID-19 pandemic) historical average for weeks 48-49 (113 (15%) of 772 tests on average).

During weeks 48 and 49 of 2021, most detections were non-influenza respiratory viruses (NIRVs) in children <9 years old, predominantly RSV (1,208/1,623; 74%), followed by entero-/rhinoviruses (EV/RV, 228/1,623; 14%), and parainfluenza (138/1,623; 9%). RSV positivity remains above but EV/RV positivity remains below the historical average.

BC Medical Service Plan (MSP) general practitioner claims for influenza illness (weekly counts) remain below the 10-year historical minimum. Visits to BC Children's Hospital Emergency Room for influenza-like illness (ILI) as a percentage of all visits continues to exceed the 5-year historical average, an ongoing pattern since week 33 (mid-August).

Elsewhere in Canada, influenza virus detection during weeks 48-49 was also low: Nova Scotia (n=6), New Brunswick (n=2), Quebec (n=16), Ontario (n=14) and Alberta (n=13). To week 48 of the current season, influenza A(H3N2) has accounted for most (>95%) of subtyped influenza A viruses (n=43) in Canada.

In the United States, an outbreak of influenza A(H3N2) was reported on a university campus in Michigan in October-November, see: bit.ly/MMWR7049e1

Recent influenza activity remains low but warrants ongoing monitoring alongside RSV and other NIRV.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

Report Disseminated: December 16, 2021

A. Laboratory Surveillance

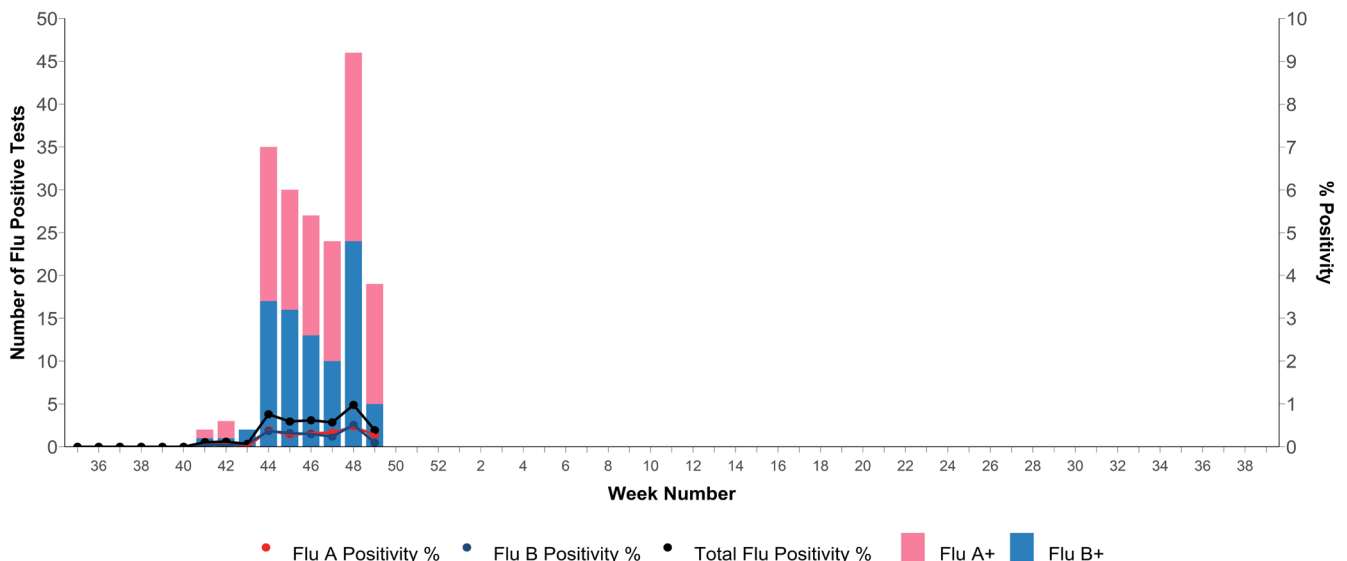
Since the beginning of the 2021-22 season, commencing October 3, 2021 (week 40), 188 (0.5%) influenza viruses have been detected among the 36,913 specimens tested in BC (Figure 1). Of these, 65 detections were reported during weeks 48 (n=46) and 49 (n=19) (spanning November 28 – December 11, 2021), representing 0.7% of the 9,608 specimens tested in weeks 48-49. These 65 detections exclude those considered by the BCCDC Public Health Laboratory (PHL) as likely to have been associated with live attenuated influenza vaccine (LAIV). Among 54 detections with known patient age information, 8 (15%) were under the age of 18 (range 2-17) and 46 (85%) were older than 20 (range 21-89).

By way of comparison for the same week 48-49 period, there were 7 influenza detections among 6,030 specimens tested in 2020 (0.1% positivity), and 72 detections among 1,594 tested in 2019 (4.5% positivity). In 2021, influenza virus testing is higher but detection is lower than the 5-year historical (pre-pandemic) average (Figure 2). In the historical seasons prior to the COVID-19 pandemic, an average of 772 influenza tests were conducted in weeks 48 and 49, with 113 (14.6%) influenza virus detections (range 30 to 249 detections) reported (source: RVDSS Report).

The BCCDC PHL and some local health authority (HA) laboratories also conduct testing for other non-influenza respiratory viruses (NIRV), including RSV and other pathogens beyond SARS-CoV-2 which is not addressed in this report. Since early in the season, RSV percent positivity has been ranging above the 5-year historical average (2014-15 to 2018-2019) and EV/RV positivity has been below average for this time of year (Figure 2).

Among specimens additionally subjected to multiplex testing in weeks 48 and 49, RSV, entero/rhinoviruses (EV/RV) and parainfluenza were the first (1,208/1,623; 74%), second (228/1,623; 14%) and third (138/1,623; 9%) most commonly detected NIRVs, respectively. In weeks 48-49, 1,208 RSV positive specimens were identified among 9,530 tested (13%) compared to 1 detection among 6,030 specimens tested (<1%) in 2020 and 64 detections out of 1,497 tested (4%) in 2019. EV/RV and parainfluenza were found in 17% (228/1,321) and 10% (216/1,353) of specimens tested, respectively. Most NIRV detections (at the BCCDC PHL) were among children under the age of 9 years. (Figures 2, 3, 4, 5; Table 1).

Figure 1. Influenza virus positivity among respiratory specimens tested^a across BC, 2021-2022^{a,b,c}

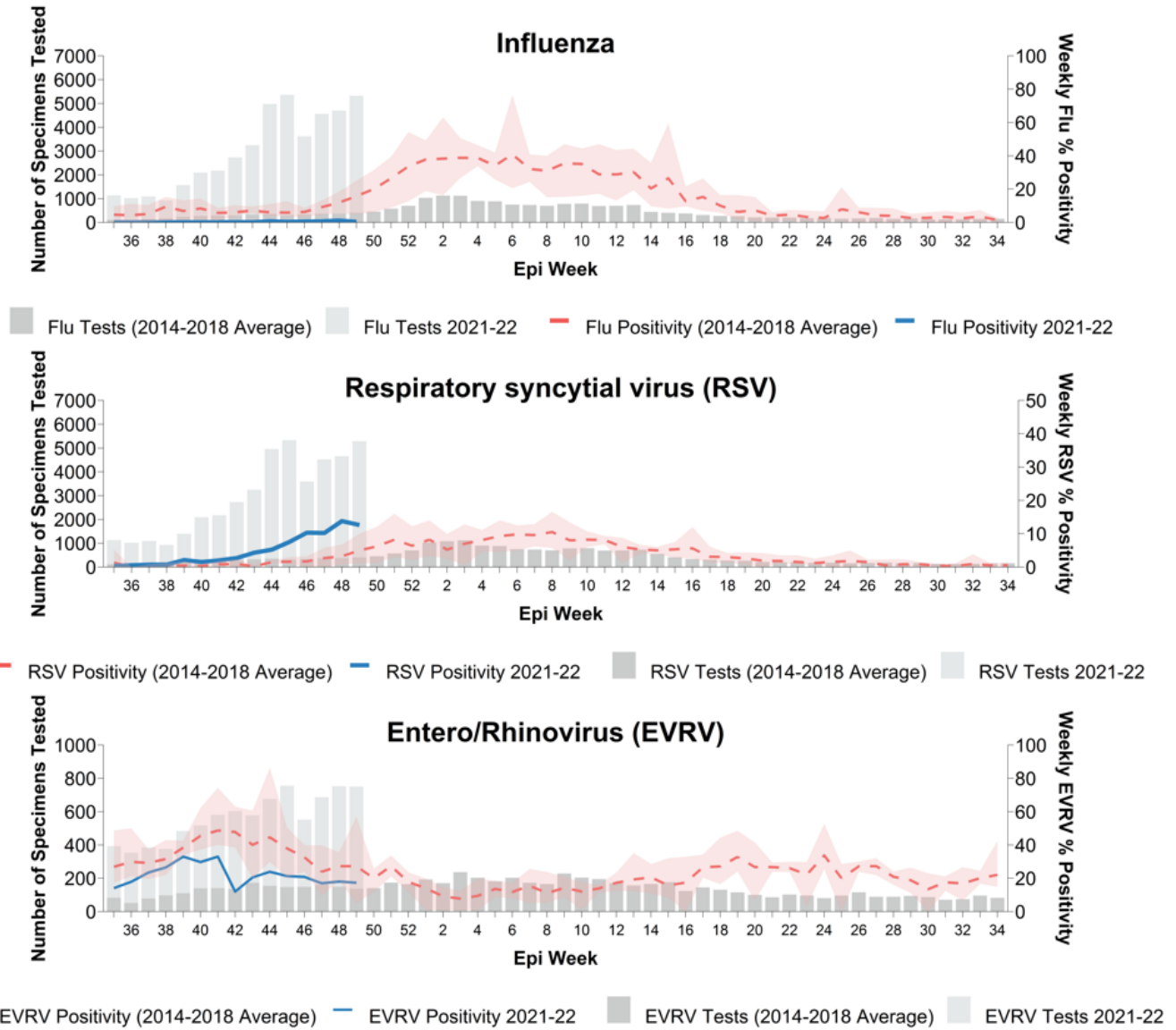


a. The percentage influenza positivity is presented by influenza type based on primary specimens submitted for influenza testing at the BCCDC Public Health Laboratory (PHL) and other external sites that share complete testing data with the BCCDC PHL. Reporting sites include: BC Children’s and Women’s 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, BCCDC PHL, Interior Health Authority sites, and Northern Health Authority.

b. Rates are subject to change with subsequent data reconciliation.

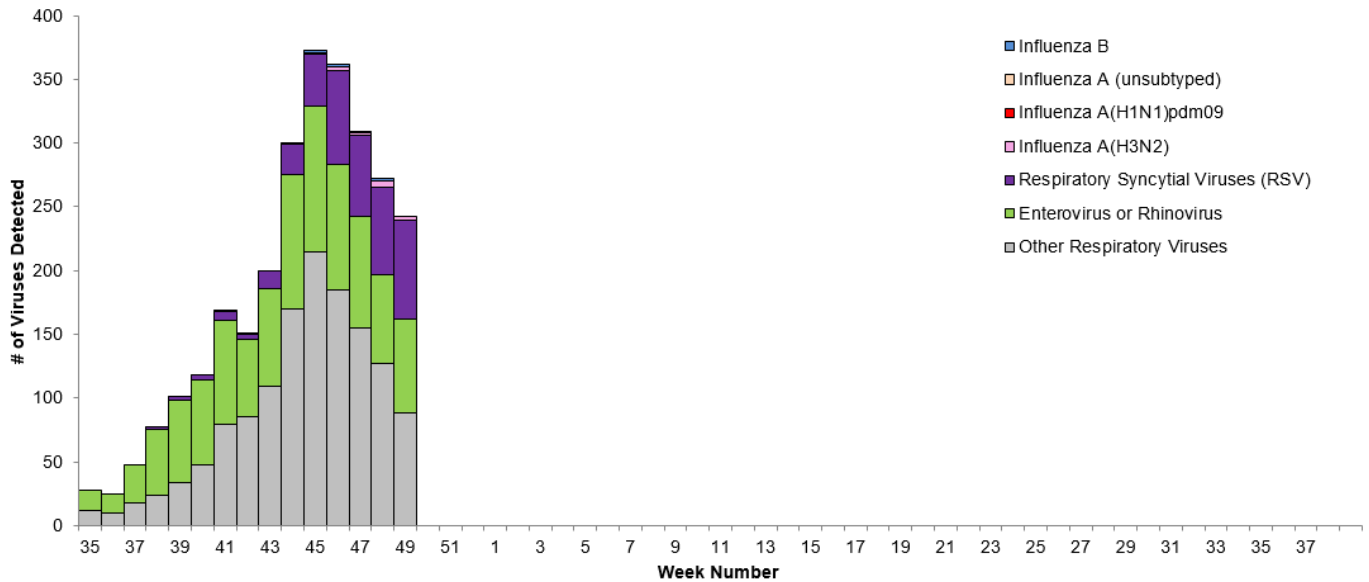
c. Week of sample based on the sample collection date.

Figure 2. Laboratory influenza and other respiratory virus detections across BC with 5-season historical data*



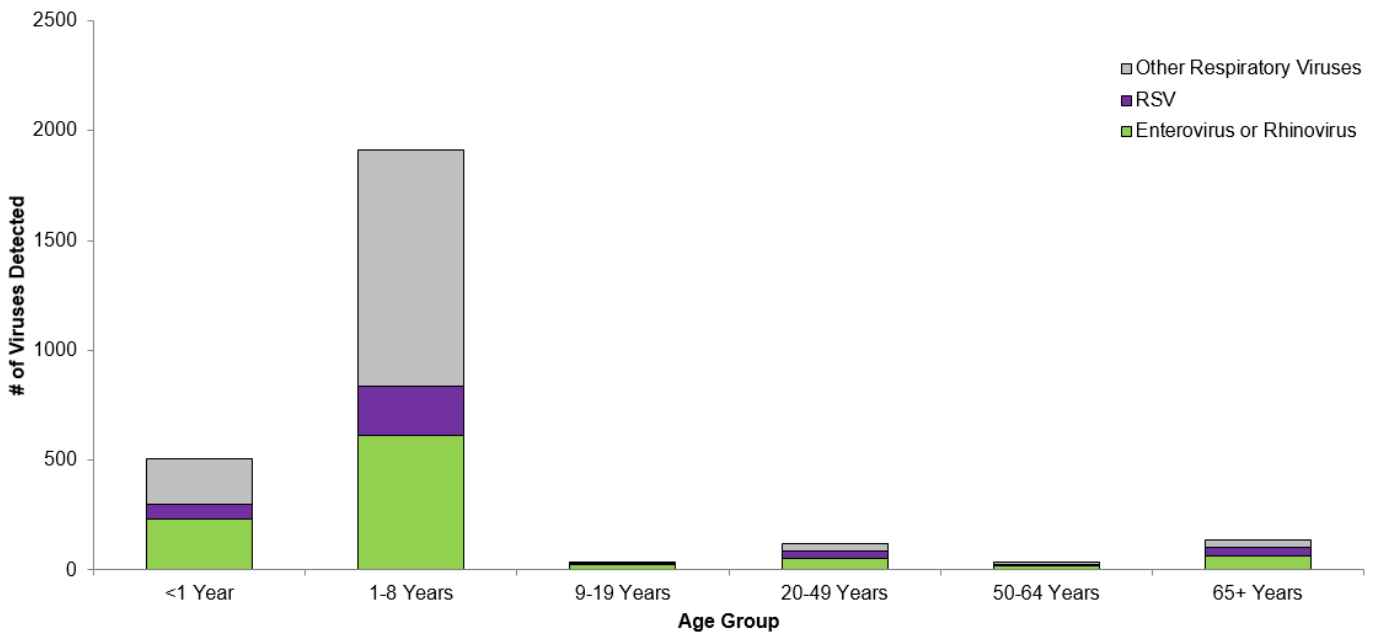
* The shaded area (red) represents the maximum and minimum percentage of influenza positivity reported by week from seasons 2014-2015 to 2018-2019.
Source: Respiratory Virus Detections Surveillance System (RVDSS) weekly report; data includes seasons 2014-2015, 2015-16, 2016-17, 2017-18, 2018-19, 2021-2022 (2019-20 & 2020-21 are excluded from the historical average calculations due to the COVID-19 pandemic).

Figure 3. Influenza and non-influenza respiratory virus (NIRV) detections among specimens submitted to BCCDC Public Health Laboratory and Island Health Laboratories, 2021-2022*



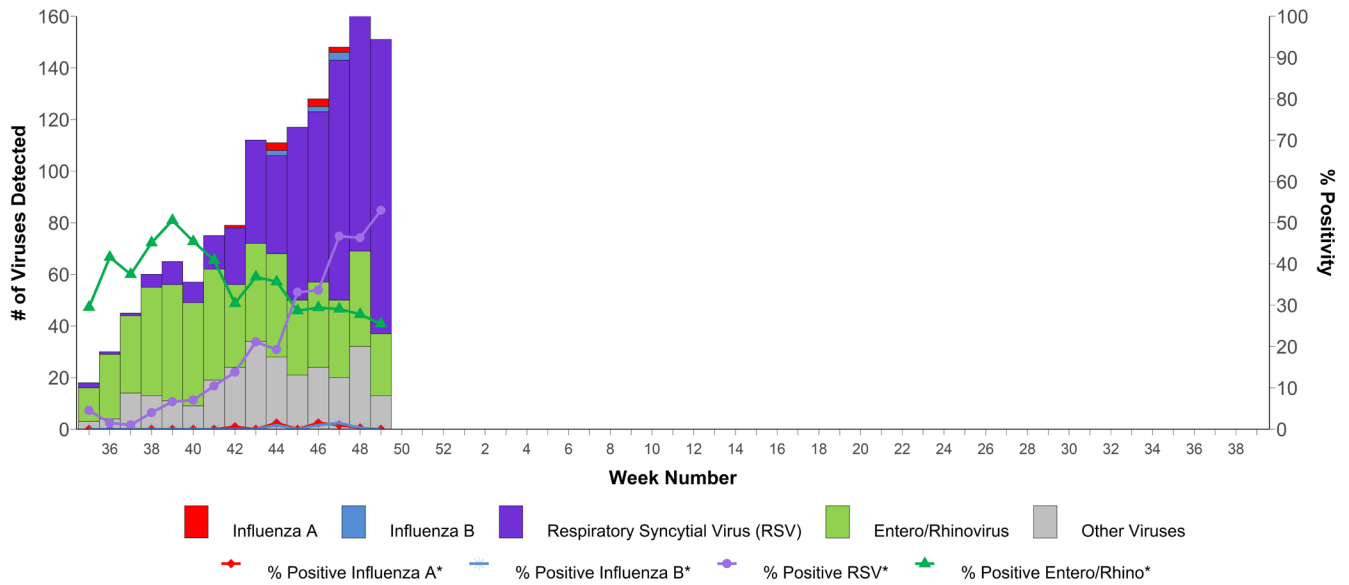
* The BCCDC Public Health Laboratory (PHL) conducts the majority of influenza subtype characterization for the province, including for primary specimens submitted directly to the BCCDC PHL for influenza diagnosis, as well as for specimens that have tested positive for influenza at other external sites 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.

Figure 4. Cumulative number (since week 35) of non-influenza respiratory virus detections (NIRV) by type and age group, BCCDC Public Health Laboratory, 2021-22



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to December 15, 2021; figure includes cumulative influenza detections for specimens collected from weeks 35-49.

Figure 5. Influenza and NIRV detections among respiratory specimens submitted to BC Children’s and Women’s Health Centre Laboratory, 2020-2021^{a,b,c}



- a. 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.
- b. Week of sample based on the sample collection date.
- c. From week 35 to week 49 (August 29 – December 11, 2021), among the 2,336 specimens submitted for influenza virus testing at the BC Children’s and Women’s Health Centre laboratory, the most common non-influenza respiratory viruses detected were RSV (607/1,377; 44%) and entero/rhinoviruses (501/1,377; 36%).

Table 1. Influenza and non-influenza respiratory viruses (NIRV) detected among primary patient specimens by health authority of test site

Count (% positive from total screened)	Health authority ^{a,b} where specimen tested ^c , BC Cases							Total
	FHA	IHA	VIHA	NHA	VCHA	BCCDC	CW	
Current report Week 49 [December 5 - 11, 2021]								
Influenza, Total ^d	2/1420 (0.1)	0/966 (0)	0/562 (0)	4/238 (1.7)	13/875 (1.5)	0/644 (0)	0/215 (0)	19/4920 (0.4)
Influenza A total	1 (0.1)	0 (0)	0 (0)	2 (0.8)	11 (1.3)	0 (0)	0 (0)	14 (0.3)
A(H3N2) ^e	1	0	0	0	2	---	---	3
A(H1N1)pdm09 ^e	0	0	0	0	0	---	---	0
Influenza B total	1 (0.1)	0 (0)	0 (0)	2 (0.8)	2 (0.2)	0 (0)	0 (0)	5 (0.1)
NIRV, Total ^c	202	110	74	8	152	90	151	787
RSV	202/1420 (14.2)	81/966 (8.4)	69/562 (12.3)	8/238 (3.4)	142/837 (17)	0/644 (0)	114/215 (53)	616/4882 (12.6)
Enterovirus/Rhinovirus	--- ^f	17/58 (29.3)	3/34 (8.8)	--- ^f	6/79 (7.6) ^g	56/348 (16.1)	24/94 (25.5)	---
Other ^h	--- ^f	12/58 (20.7)	2/34 (5.9)	--- ^f	4/96 (4.2) ^g	34/348 (9.8)	13/94 (13.8)	---
Cumulative total to date, Week 40 to 49 [October 3 – December 11, 2021]								
Influenza Total ^d	17/8604 (0.2)	5/6899 (0.1)	8/6675 (0.1)	6/1532 (0.4)	128/7858 (1.6)	6/3475 (0.2)	18/1870 (1)	188/36913 (0.5)
Influenza A total	9 (0.1)	3 (0)	3 (0)	4 (0.3)	69 (0.9)	1 (0)	10 (0.5)	99 (0.3)
A(H3N2) ^e	5	2	1	0	9	---	---	17
A(H1N1)pdm09 ^e	0	0	0	0	0	---	---	0
Influenza B total	8 (0.1)	2 (0)	5 (0.1)	2 (0.1)	59 (0.8)	5 (0.1)	8 (0.4)	89 (0.2)
NIRV, Total ^c	982	449	386	9	808	1682	1159	5475
RSV	982/8604 (11.4)	213/6899 (3.1)	311/6675 (4.7)	9/1532 (0.6)	700/7670 (9.1)	90/3475 (2.6)	589/1870 (31.5)	2894/36725 (7.9)
Enterovirus/Rhinovirus	--- ^f	124/546 (22.7)	45/445 (10.1)	--- ^f	75/770 (9.7) ^g	803/3567 (22.5)	346/1056 (32.8)	---
Other ^h	--- ^f	112/546 (20.5)	30/445 (6.7)	--- ^f	33/904 (3.7) ^g	789/3567 (22.1)	224/1056 (21.2)	---

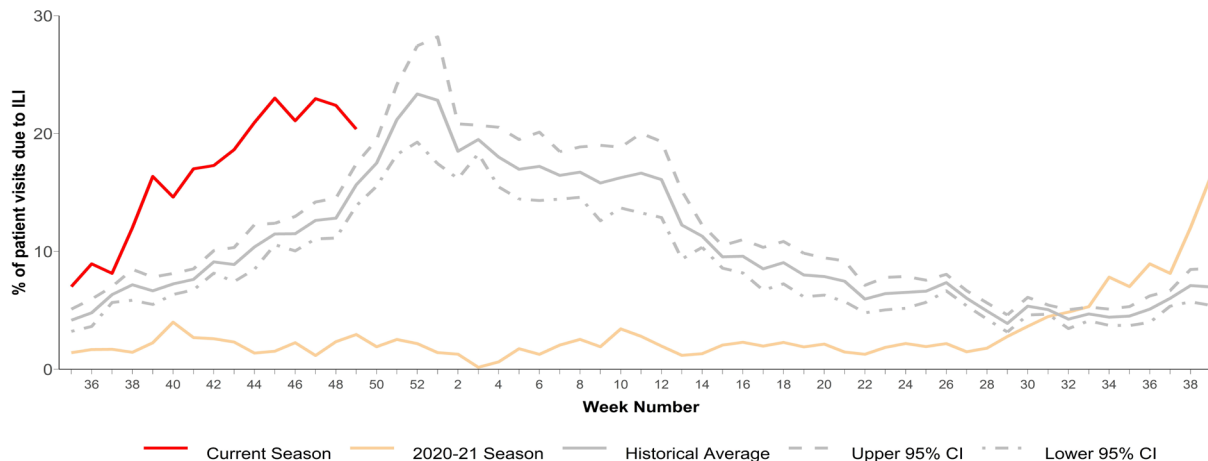
- FHA=Fraser Health Authority; IHA=Interior Health Authority; VIHA= Vancouver Island Health Authority; NHA=Northern Health Authority; VCHA=Vancouver Coastal Health Authority; BCCDC= primary patient specimens screened at BCCDC Public Health Laboratory; CW=Children's and Women's Health Centre Laboratory
- The HA associated with each subtyped sample is based on patient's health authority. If patient health authority information is missing, the ordering physician's health authority is used.
- The number of influenza A, influenza B, RSV, Enterovirus/Rhinovirus, and other non-influenza respiratory viruses (NIRV) detected are based on specimens submitted for influenza screening/testing to various labs across FHA, VCHA (including Providence Health), VIHA, IHA and NHA. Samples sent to Children's & Women's Laboratory (CW) and BCCDC Public Health Laboratory for primary diagnostic purposes are displayed separately here (i.e. excluding those already screened at another site and submitted for secondary testing or characterization).
- Influenza co-infections (influenza A and B virus positive) not accounted for in data source (PLOVER).
- The BCCDC 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(H3N2) are directly typed/subtyped on primary specimens by IHA and are also incorporated into the influenza A subtype counts above.
- Not tested by Fraser Health Microbiology Laboratories and Northern Health laboratory sites.
- Enterovirus/Rhinovirus and Coronavirus not tested by Providence Health.
- Other non-influenza respiratory viruses (NIRV) included on multiplex panels are parainfluenza, adenovirus, human metapneumovirus (HMPV), and seasonal coronaviruses (does not include SARS-CoV-2).

B. Clinical Indicators

BC Children’s Hospital Emergency Room

The proportion of visits to BC Children’s Hospital Emergency Room (ER) attributed to ILI that is trending above the 5-year historical average since beginning of the season may have plateaued in recent weeks at 20% and remains slightly above the historical average for this time of the year (Figure 6). Acknowledging the ongoing COVID-19 pandemic, changes in healthcare seeking behaviours and circulation of other respiratory viruses likely contribute (Figure 5).

Figure 6. Percent of patients presenting to BC Children’s Hospital ER

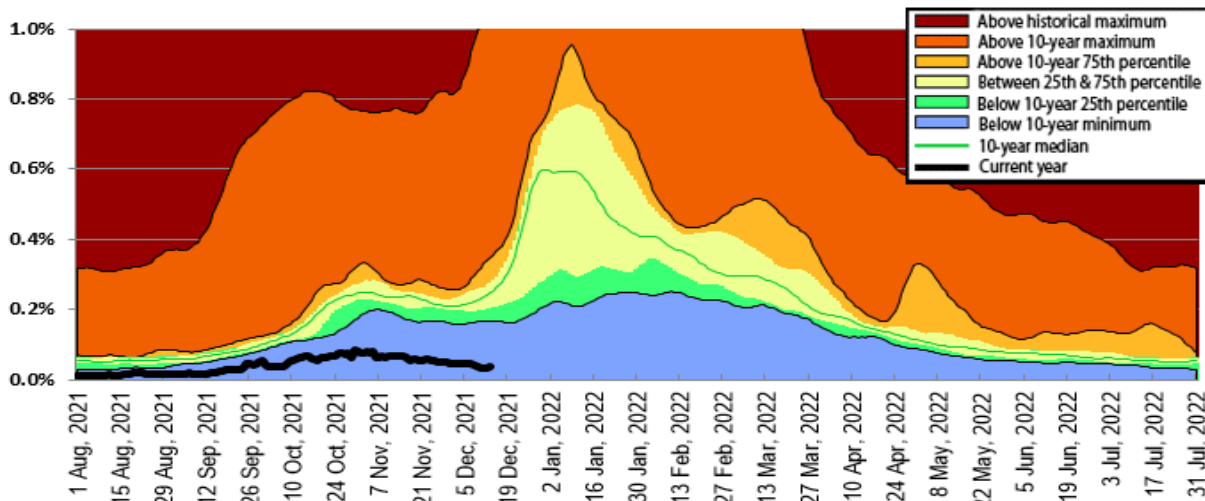


Source: BCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."
*5-year historical average for 2021-22 season based on 2014-15 to 2018-19 seasons (excluded 2019-20 & 2020-21 seasons); CI=confidence interval.

Medical Service Plan

As shown in Figure 7 and Figure 8, between weeks 48 and 49 (spanning November 28 to December 11, 2021), BC Medical Service Plan (MSP) general practitioner claims for influenza illness (weekly counts) remained below the 10-year historical minimum overall in the province and in all five health authorities.

Figure 7. Service claims submitted to MSP for influenza illness*, British Columbia, 2021-2022 season

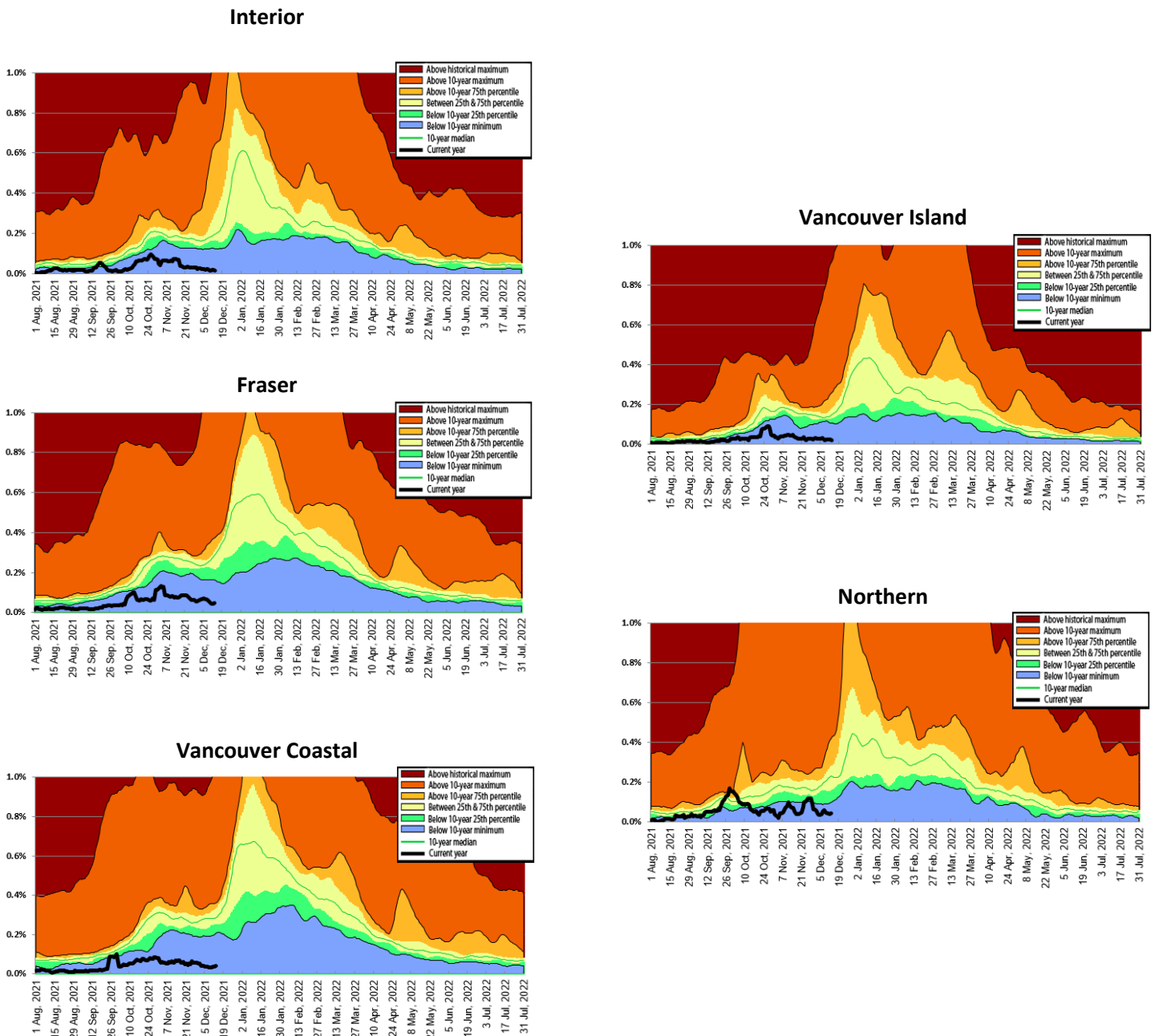


† Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services. Influenza illness (II) is tracked as the weekly count of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

* 10-year historical data was derived from the seasons 2008-09, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, and 2018-19. Seasons 2019-20 and 2020-21 were excluded due to the COVID-19 pandemic.

MSP data beginning August 1, 2021 corresponds to sentinel ILI week 31; data are current to December 13, 2021.

Figure 8.



† Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services. Influenza illness (II) is tracked as the weekly count of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

* 10-year historical data was derived from the seasons 2008-09, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, and 2018-19. Seasons 2019-20 and 2020-21 were excluded due to the COVID-19 pandemic.

MSP data beginning August 1, 2021 corresponds to sentinel ILI week 31; data are current to December 13, 2021

C. Influenza outbreak reports

The last influenza outbreak in BC was in March 2020 (week 12) with no influenza outbreaks reported to date in the 2021-22 season.

D. National

FluWatch (week 48, November 28 to December 4, 2021)

In week 48, influenza activity across Canada was low with 20% of regions reporting any influenza activity. In the past week, all influenza indicators were at low inter-seasonal levels. In week 48, 61 influenza detections (33 influenza A and 28 influenza B) were reported*. Among the 47 detections with detailed age information, 89% were individuals under the age of 65 years. Overall, the percentage of laboratory tests positive for influenza remains at exceptionally low levels, despite the elevated levels of testing. In week 48, 17,785 tests for influenza were performed at reporting laboratories and the percentage of tests positive for influenza was 0.34%. Compared to the past six pre-pandemic seasons (2014-2015 to 2019-2020), an average of 5,645 tests were performed for this time period, with an average of 10.6% of tests positive for influenza. To date this season (August 28 to December 4, 2021), 212 influenza detections (127 influenza A and 85 influenza B) have been reported, which is lower than what we have seen historically in the past six pre-pandemic seasons, where an average of 2,170 influenza detections were reported at this point in the season. Among subtyped influenza A detections (n=43), influenza A(H3N2) accounted for 96% of detections. In week 48, one ILI outbreak in a school/daycare was reported. From August 28 to December 4, 2021, 14 ILI outbreaks and no laboratory-confirmed influenza outbreaks have been reported. The most recent laboratory-confirmed influenza outbreak occurred in week 24 (week ending June 13, 2020) of the 2019-2020 season. The percentage visits for influenza-like illness (ILI) was 1% in week 48 and is within expected levels. The percentage of FluWatchers reporting fever and cough was 0.5% in week 48; it remains below expected levels and is stable.

FluWatch report (week 48) is available at:

<https://www.canada.ca/en/public-health/services/publications/diseases-conditions/fluwatch/2021-2022/week-48-november-28-december-4-2021.html>

National Microbiology Laboratory (NML) *[NML data not updated since our last bulletin for week 47]*

Strain Characterization:

Since September 1, 2021, the National Microbiology Laboratory (NML) has characterized one H1N1 influenza virus that was received from a Canadian laboratory.

Influenza A(H1N1)pdm09: The one H1N1 virus characterized was antigenically similar to A/Wisconsin/588/2019, which is the influenza A/H1N1 component of the 2021-22 Northern Hemisphere influenza vaccine.

Antiviral Resistance:

Since September 1, 2021, the NML received one H1N1 influenza virus from Canadian laboratories for drug susceptibility testing.

Oseltamivir: The H1N1 influenza virus was sensitive to oseltamivir.

Zanamivir: The H1N1 influenza virus was sensitive to zanamivir.

*From the RVDSS week 48 report, the 61 influenza detections were from Nova Scotia (n=5), Quebec (n=3), Ontario (n=6), Alberta (n=1) and BC (n=46).

E. International

USA (week 48, November 28 to December 4, 2021)

In week 48, influenza activity remained low but continued to increase in the US. The proportion of outpatient visits for ILI is at 2.5% this week, which is the national baseline. The proportion of deaths attributed to pneumonia and influenza during week 48 (12%) is above the epidemic threshold of 6%. No influenza-associated pediatric deaths were reported to CDC during week 48. Of the 58,767 samples tested for influenza from clinical laboratories across the US in week 48, 1,532 (2.6%) samples were positive for influenza. Of which, 1,489 (97%) were influenza A and 43 (3%) was influenza B positive. 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>

On December 10, 2021, CDC's collaboration with Michigan's Department of Health and Human Services and local partners to investigate an outbreak of influenza A(H3N2) on the University of Michigan's Ann Arbor campus was published on Morbidity and Mortality Weekly Report (MMWR). This outbreak represented some of the first substantial influenza activity during the COVID-19 pandemic. H3N2-predominant seasons are often associated with more severe illnesses, particularly among older adults. While only causing mild illness in the young adult population, this outbreak highlights the importance of increasing vigilance for influenza illness this winter. The full report is available at: bit.ly/MMWR7049e1

WHO (December 6, 2021, based on data up to November 21, 2021)

In the temperate zone of the northern hemisphere, influenza activity remained below baseline overall. In Europe, influenza activity remained low overall though detections appeared to be at levels similar to pre-covid-19-pandemic seasons in some countries. Detections of predominately influenza A(H3N2) viruses reported across the region. SARI rates reported at high level for this time of the year in some countries of Eastern and South-West Europe

In countries in the temperate zone of the southern hemisphere, influenza activity remained low in Oceania and temperate South America but influenza detections, although still low, further increased in South Africa. RSV activity continued to be reported at moderate but decreasing levels in Argentina and remained at increased levels in Chile.

Among the Caribbean and Central American Countries, sporadic influenza A(H3N2) and B virus detections were reported in Mexico and elevated RSV activity continued to be reported in Costa Rica, El Salvador and Mexico. The number of SARI cases were elevated in Mexico and Jamaica. ***In tropical South America***, influenza A(H3N2) was detected in Brazil and RSV activity remained elevated in Brazil and Colombia. ***In tropical Africa***, influenza A predominated with some detections of influenza B. ***In tropical Asia***, influenza detections were reported in Bangladesh, India, Iran and the Maldives. Influenza A(H3N2) predominated in the subregion, with some detections of influenza A(H1N1)pdm09 and influenza B. In South-East Asia, no new influenza detections were reported.

From November 8 to November 21, 2021, the WHO GISRS laboratories tested more than 335,864 specimens. Of these, 3,844 were positive for influenza viruses including 1,658 (43%) typed as influenza A and 2,186 (57%) as influenza B. Of subtyped influenza A viruses, 108 (11%) were influenza A(H1N1)pdm09 and 909 (89%) were influenza A(H3N2). Of the characterized B viruses, 1,984 (100%) were of B(Victoria) lineage.

Details are available at: <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update>

F. WHO Recommendations for Influenza Vaccines

WHO Recommendations for the 2021-22 Northern Hemisphere Influenza Vaccine

On February 26, 2021, the WHO announced recommended strain components for the 2021-22 northern hemisphere trivalent influenza vaccine (TIV)*:

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus [a clade 6B.1A5A virus]; †
- an A/Cambodia/e0826360/2020 (H3N2)-like virus [a clade 3C.2a1b/T131K 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 2021-22 northern hemisphere season contain the above three viruses and a B/Phuket/3073/2013-like virus (B/Yamagata lineage) [a clade 3 virus], unchanged since 2015-2016.

* Recommended strains represent a change for two of the three components used for the 2020-2021 northern hemisphere TIV.

† Note for cell-based vaccine, the WHO recommends an A/Wisconsin/588/2019 (H1N1)pdm09-like virus [a clade 6B.1A5A virus] for the 2021-22 season. Recommended strains represent a change from the 2020-2021 season vaccine which contained an A/Guangdong-Maonan/SWL1536/2019 [a clade 6B.1A5A virus] for the egg-based vaccine and an A/Hawaii/70/2019 (H1N1)pdm09-like virus [also clade 6B.1A5A] for the cell-based vaccine.

‡ Recommended strain represents a change from the 2020-2021 season vaccine which contained an A/Hong Kong/2671/2019 (H3N2)-like virus [a clade 3C.2a1b/T135K virus].

§ Recommended strain is unchanged from the 2020-2021 season vaccine.

For further details: <https://www.who.int/teams/global-influenza-programme/vaccines/who-recommendations/candidate-vaccine-viruses>

WHO Recommendations for 2022 Southern Hemisphere Influenza Vaccine

On September 24, 2021, the WHO announced the recommended strain components for the 2022 southern hemisphere trivalent influenza vaccine (TIV)*:

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus [a clade 6B.1A5A virus]; †
- an A/Darwin/9/2021 (H3N2)-like virus [a clade 3C.2a1b/T131K-A virus]; ‡
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus [a clade V1A.3, Δ3 virus]. §

It is recommended that quadrivalent influenza vaccines (QIV) for the 2022 southern hemisphere season contain the above three viruses and a B/Phuket/3073/2013-like virus (B/Yamagata lineage) [a clade 3 virus], unchanged from 2021.

* Recommended strains represent a change for two of the three components used for the 2021 southern hemisphere TIV

† Note for cell-based vaccine, the WHO recommends A/Wisconsin/588/2019 (H1N1)pdm09-like virus [also a 6B.1A5A virus] for the 2022 season. Both the cell based and egg based vaccine components have not been changed from the 2021 season vaccine.

‡ Note for cell-based vaccine, the WHO recommends an A/Darwin/6/2021 (H3N2)-like virus [also a 3C.2a1b/T131K virus] for the 2022 season. Recommended strain represents a change from the 2021 season vaccine which contained an A/Hong Kong/2671/2019 (H3N2)-like virus [a clade 3C.2a1b/T135K]

§ Note for cell-based vaccine, the WHO recommends a B/Austria/1359417/2021 (B/Victoria lineage)-like virus [a clade V1A.3, Δ3 virus] for the 2022 season. Recommended strain represents a change from the 2021 season vaccine which contained an a B/Washington/02/2019 (B/Victoria lineage)-like virus [a clade V1A.3, Δ3 virus]

For further details: <https://www.who.int/publications/m/item/recommended-composition-of-influenza-virus-vaccines-for-use-in-the-2022-southern-hemisphere-influenza-season>

G. Additional Information

Explanatory Note:

The surveillance period for the 2021-22 influenza season is defined starting in week 40. Weeks 35-39 of the 2020-21 season are shown on graphs for comparison purposes.

List of Acronyms:

ACF: Acute Care Facility	LTCF: Long-Term Care Facility
EV/RV: Enteroviruses/Rhinoviruses	MSP: BC Medical Services Plan
FHA: Fraser Health Authority	NHA: Northern Health Authority
HA: Health authority	NML: National Microbiological Laboratory
HBoV: Human bocavirus	PHL: Public Health Laboratory
HMPV: Human metapneumovirus	RSV: Respiratory syncytial virus
HSDA: Health Service Delivery Area	VCHA: Vancouver Coastal Health Authority
IHA: Interior Health Authority	VIHA: Vancouver Island Health Authority
ILI: Influenza-Like Illness	WHO: World Health Organization

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>

Canada – Human Emerging Respiratory Pathogens Bulletins: <https://www.canada.ca/en/public-health/services/surveillance/human-emerging-respiratory-pathogens-bulletin.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 – Influenza Updates: https://www.who.int/influenza/surveillance_monitoring/updates/en/

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