

British Columbia Influenza Surveillance Bulletin

Influenza Season 2017-18, Number 14, Week 7

February 11 to 17, 2018

Table of Contents:

British Columbia:

Sentinel Physicians	Page 2
Children's Hospital ER	Page 2
Medical Services Plan	Page 3
Laboratory Surveillance	Page 5
ILI Outbreaks	Page 8
Antiviral Guidelines	Page 9

Canada:

FluWatch Activity levels	Page 10
NML Strain Characterization	Page 10
NML Antiviral Resistance	Page 10
Mid-season VE Estimates	Page 11

International:

USA (CDC)	Page 12
WHO	Page 12

Influenza Vaccine Components (WHO Recommendations)

2017-18 Northern Hemisphere	Page 13
2018-19 Northern Hemisphere	Page 13

Additional Information:

Explanatory note	Page 14
List of Acronyms	Page 14
Web Sites	Page 14
Outbreak Report Form	Page 15

Influenza Activity Continues to Decline

During week 7 (February 11 to 17, 2018), most influenza surveillance indicators continued to decline. Influenza activity returned to seasonal levels in most regions following several weeks of above expected rates.

Influenza positivity at the BCCDC Public Health Laboratory continued to decline, falling to below 30% in week 7 from a peak of more than 50% in week 52, driven by declining A(H3N2) activity. Influenza B has predominated among influenza detections (63%) this week with type B positivity remaining stable around 20%.

Since our last bulletin, 4 new lab-confirmed outbreaks were reported, all from long-term care facilities (LTCFs). Of the 4 outbreaks, 1 had influenza B detected, 2 had influenza A detected, and 1 had influenza A and B detected. Additionally, 1 school ILI outbreak, with unknown etiology, was reported during week 7.

On February 22, the WHO announced recommended strain components for the 2018-19 northern hemisphere influenza vaccine. The recommended strains are A/Michigan/45/2015 (H1N1)pdm09-like virus, A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, B/Colorado/06/2017 (Victoria-lineage)-like virus, and, for inclusion in the quadrivalent vaccine, B/Phuket/3073/2013 (Yamagata-lineage)-like virus. Details are available here: http://www.who.int/influenza/vaccines/virus/recommendations/2018_19_north/en/.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

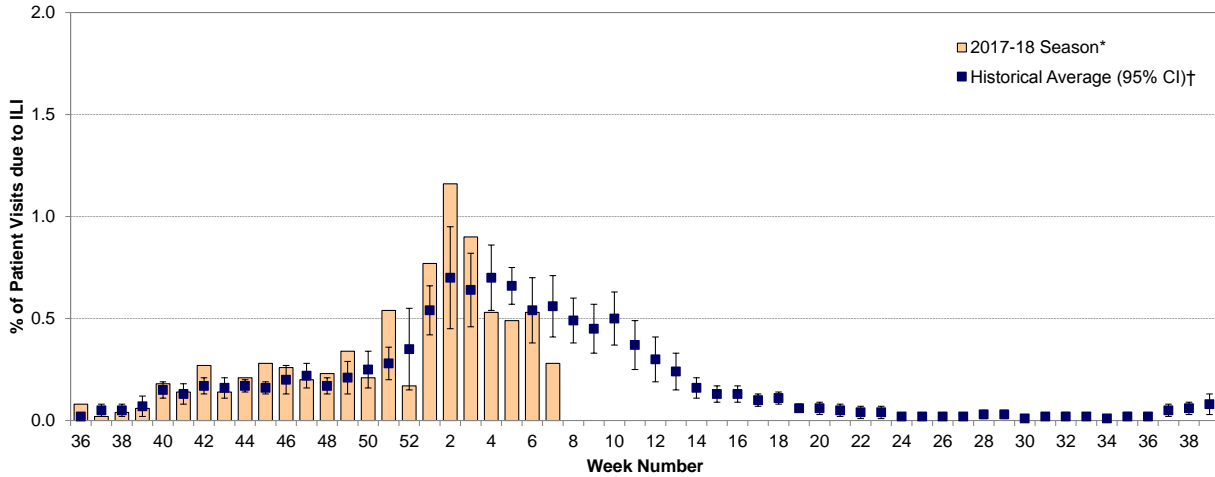
Report Disseminated: February 22, 2018

British Columbia

Sentinel Physicians

The proportion of patients with influenza-like illness (ILI), among those presenting to sentinel sites, is below average for week 7, continuing a downward trend since week 2. Rates are subject to change as reporting becomes more complete. To date, 57% of sentinel sites have reported data for week 7.

Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2017-18



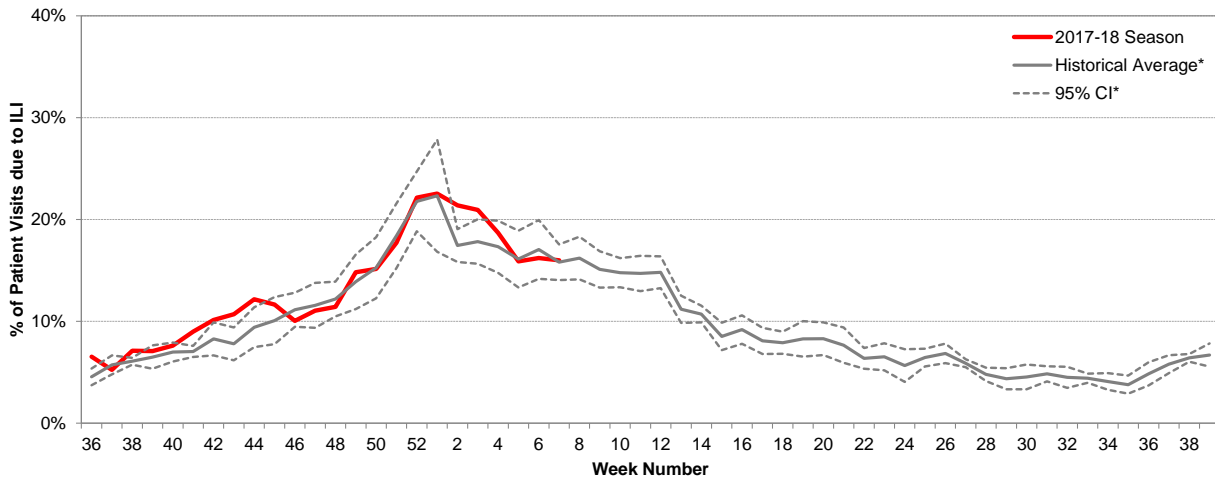
* Data are subject to change as reporting becomes more complete.

† 10-year historical average for 2017-18 season based on 2005-06 to 2016-2017 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

BC Children's Hospital Emergency Room

In week 7, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI remained within expected levels for this period.

Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2017-18



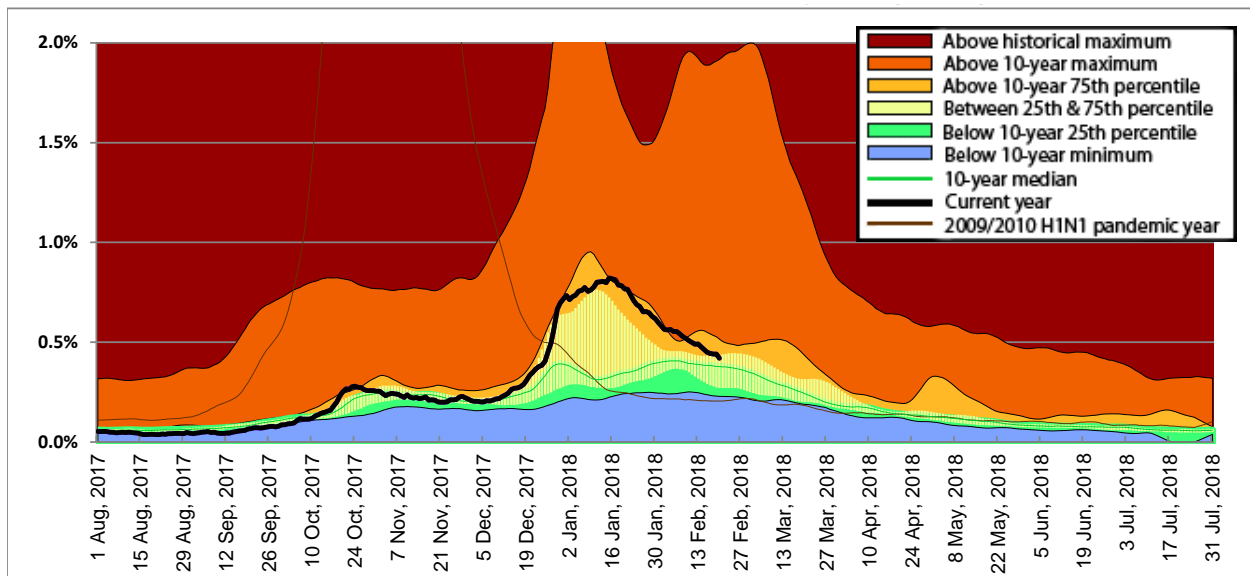
Source: BCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."

* 5-year historical average for 2017-18 season based on 2012-13 to 2016-17 seasons; CI=confidence interval.

Medical Services Plan

In week 7, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims continued to decline and returned to expected seasonal levels in most regions of the province following several weeks of elevated activity. In week 7, rates for the province overall and IHA, VIHA and NHA were at expected levels for this time of year, while rates in FHA and VCHA were above the 10-year 75th percentile.

Service claims submitted to MSP for influenza illness (II)* as a proportion of all submitted general practitioner service claims, British Columbia, 2017-18

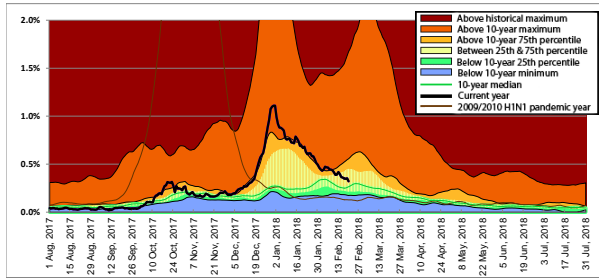


* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

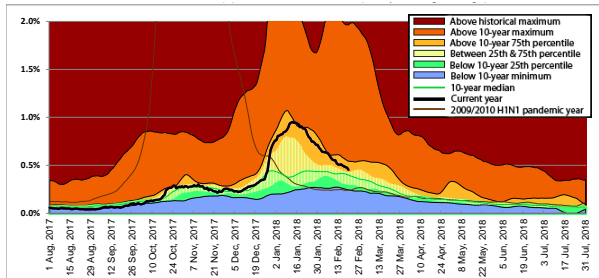
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP data beginning August 1, 2017 corresponds to sentinel ILI week 31; data are current to February 20, 2018.

Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services.

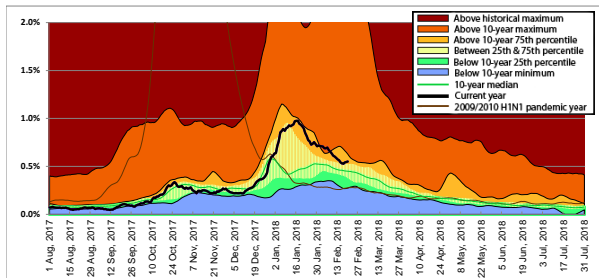
Interior



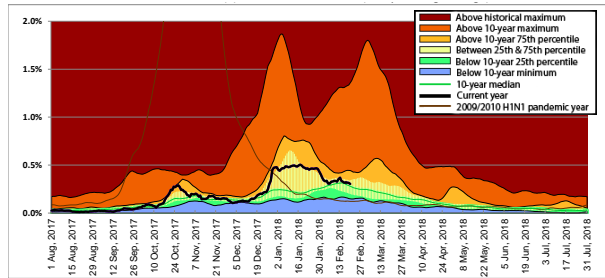
Fraser



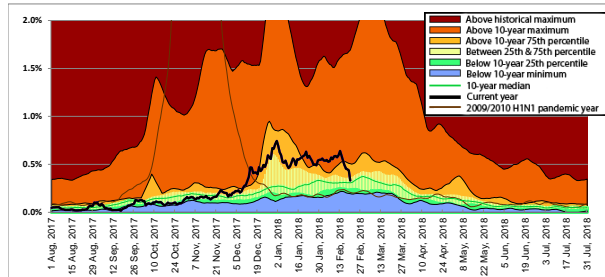
Vancouver Coastal



Vancouver Island



Northern



Laboratory Reports

BCCDC Public Health Laboratory

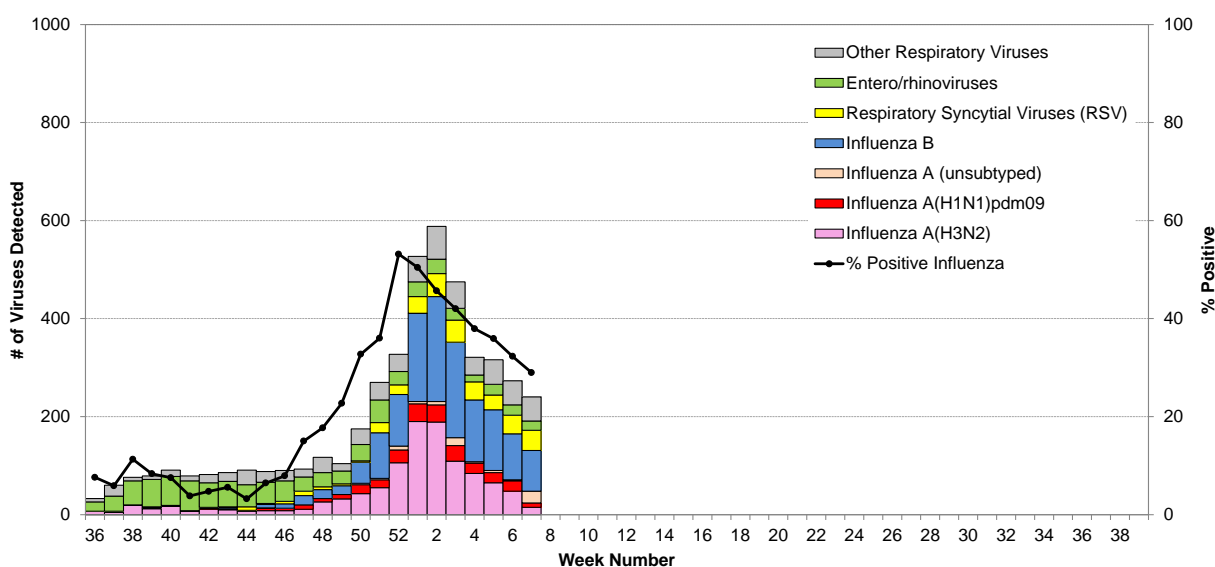
In week 7, 452 patients were tested for respiratory viruses at the BCCDC Public Health Laboratory (PHL). Of these, 131 (29%) tested positive for influenza; 48 (37%) had influenza A detected [15 A(H3N2), 9 A(H1N1)pdm09 and 24 subtype pending] and 83 (63%) had influenza B detected. Influenza positivity at the BCCDC PHL declined to below 30% in week 7 from a peak of more than 50% in week 52, driven by declining detection of A(H3N2), the dominant influenza A subtype this season. Influenza B comprised about two-thirds of all influenza detections in week 7 with influenza B positivity rates remaining stable around 20%. Based on national surveillance reports, B(Yamagata) is the predominant influenza B lineage circulating in BC and elsewhere in Canada this season.

Cumulatively during the 2017-18 season (since week 40, starting October 1, 2017), 2685 (32%) patients tested positive for influenza at the BCCDC PHL, including 1364 (51%) with influenza A [1022 A(H3N2), 269 A(H1N1)pdm09, 73 subtype pending], 1310 (49%) with influenza B and 11 patients with both influenza A [nine with A(H3N2) and two with A(H1N1)pdm09] and B detected.

More than half (59%) of A(H3N2) cases have been detected among elderly adults ≥ 65 years old, with 8% <20 years old, 17% 20-49 years old, and 16% 50-64 years old. Conversely, 40% of influenza B cases have been detected among elderly adults ≥ 65 years old, with 16% <20 years old, 25% 20-49 years old, and 19% 50-64 years old. Among A(H1N1)pdm09 cases, only 15% have been detected among elderly adults ≥ 65 years old, with 30% <20 years old, 38% 20-49 years old, and 17% 50-64 years old.

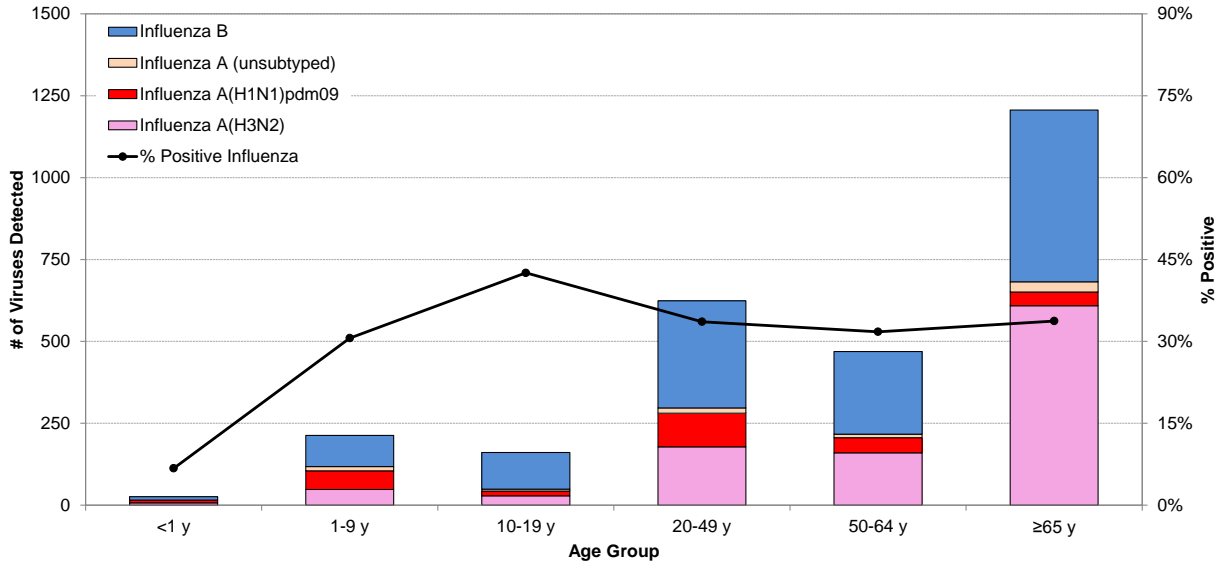
RSV was the most commonly detected non-influenza respiratory virus during this period. RSV detections have been less frequent than in the 2016-17 season; 9% of patients tested positive for RSV in week 7 this season compared to 16% in the 2016-17 season during the same period.

Influenza and other virus detections among respiratory specimens submitted to BCCDC Public Health Laboratory, 2017-18



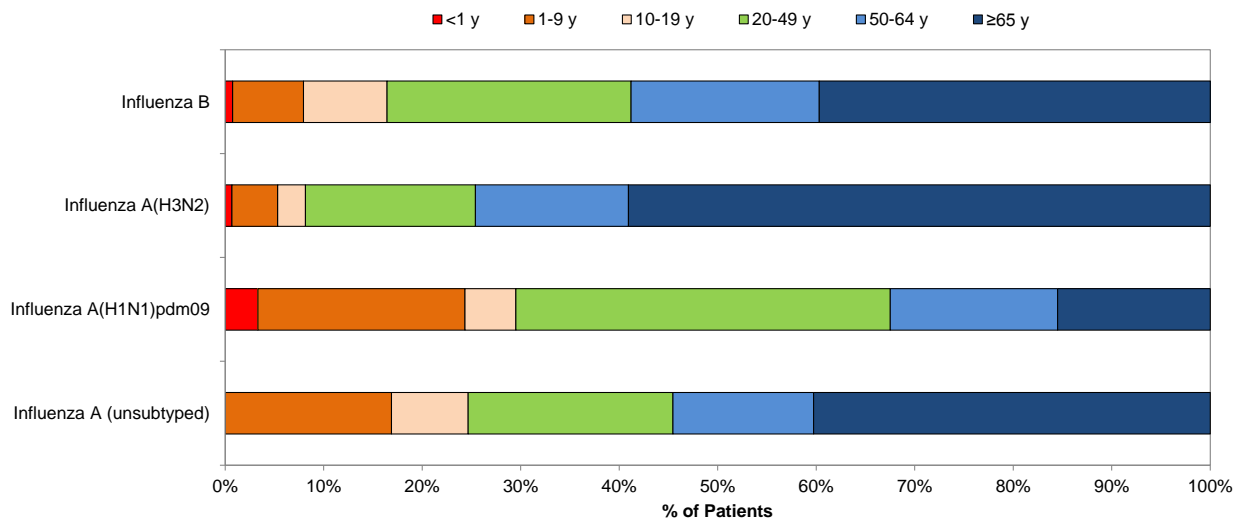
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 21, 2018.

Cumulative number (since week 40) of influenza detections by type subtype and age group, BCCDC Public Health Laboratory, 2017-18



Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 21, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-7.

Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2017-18

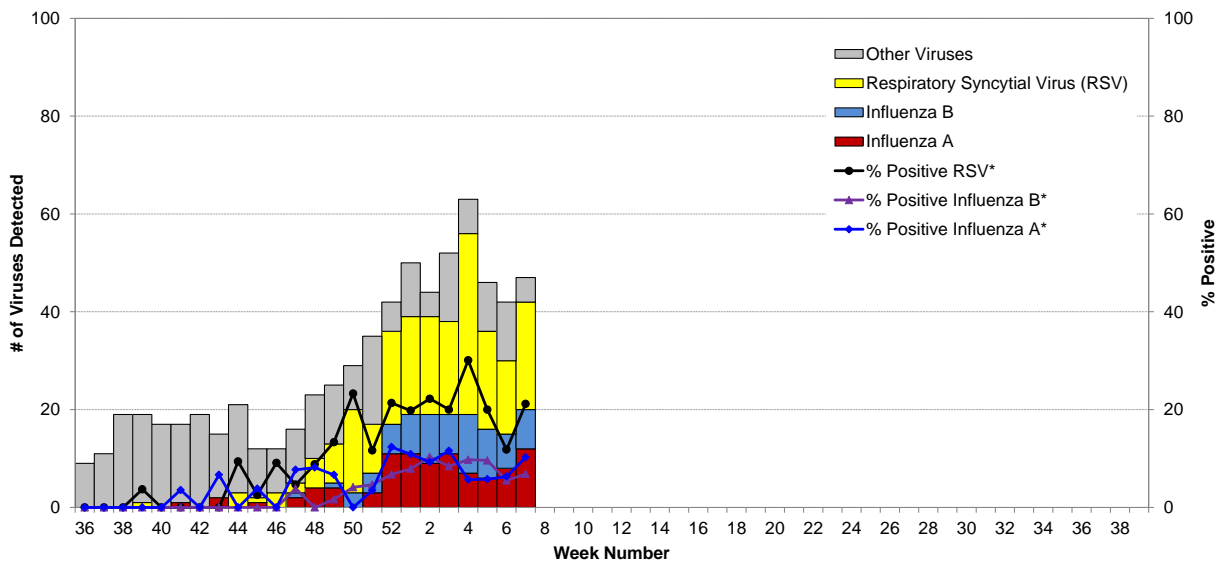


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 21, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-7.

BC Children's and Women's Health Centre Laboratory

In week 7, 117 tests for influenza viruses were conducted at the BC Children's and Women's Health Centre (CWHC) laboratory. Of these, 12 (10%) were positive for influenza A and 8 (7%) were positive for influenza B. Respiratory syncytial virus (RSV) was the most commonly detected respiratory viruses during this period, with 21% positivity in week 7. In contrast to observations from the BCCDC PHL, RSV positivity from this week was comparable to week 7 in the 2016-17 season where RSV positivity was 24%.

Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2017-18



* 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

Since our last bulletin, 4 new lab-confirmed outbreaks were reported; all were from long-term care facilities (LTCFs). Of the 4 newly reported outbreaks, 1 had onset in week 5 in VIHA, 1 had onset in week 6 in IHA, and 2 had onset in week 7 (1 in IHA, 1 in VIHA). Of the 4 outbreaks, 1 had influenza B detected, 2 had influenza A detected, and 1 had influenza A and B detected; none of the influenza A outbreaks had subtype information available at the time of report.

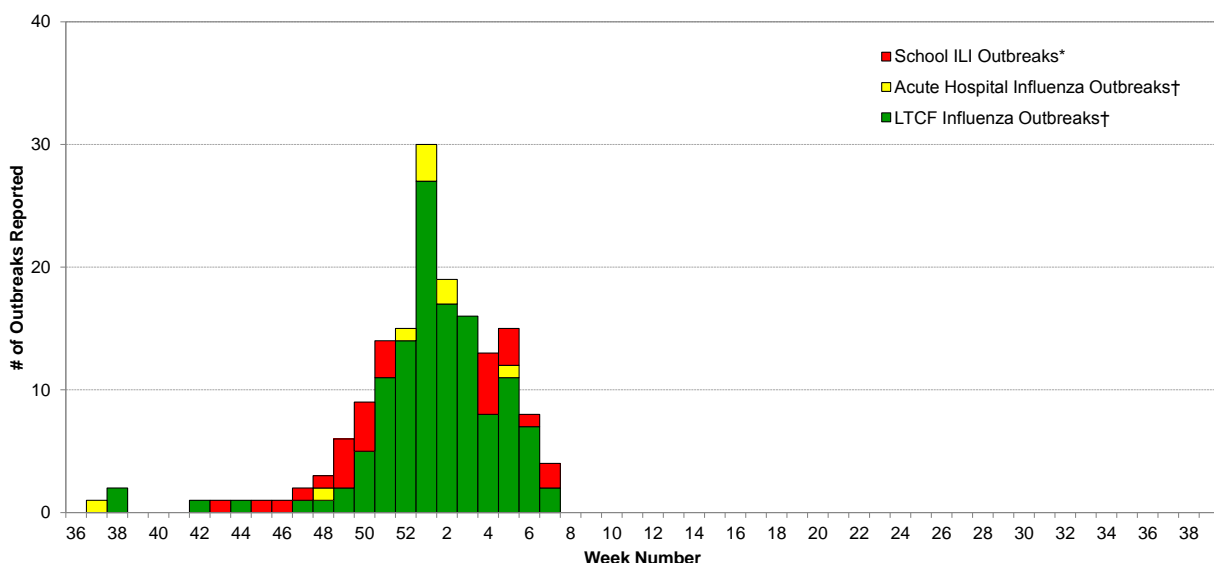
Additionally, 1 school ILI outbreak, with unknown etiology, was reported during week 7. This outbreak occurred in IHA, currently the only health authority routinely reporting school ILI outbreaks to BCCDC.

Influenza outbreak reports appear to have declined in frequency following a peak in week 1; this likely reflects declining influenza activity in the province but could also be attributed to delayed reporting. The majority of outbreaks reported in recent weeks have been due to influenza B.

Cumulatively during the 2017-18 season (since week 37, starting September 10, 2017), 135 lab-confirmed influenza outbreaks have been reported, including 46 with influenza A detected [23 A(H3N2) and 23 subtype unknown], 78 with influenza B, 3 with influenza A (H3N2) and influenza B, and 8 with influenza A (unspecified subtype) and influenza B; of these, 126 were reported in LTCFs and 9 were reported from an acute care facility. No influenza A outbreaks have been subtyped as A(H1N1)pdm09 so far this season. Additionally, 27 school ILI outbreaks have occurred without etiologic agent identified.

So far during this season of mixed A(H3N2) and influenza B co-circulation, the number of long term care facility outbreaks reported since week 40 (n=124) is lower than the tally for the same period during recent A(H3N2) dominant epidemics in 2014-15 (n=152) and 2016-17 (n=163) but higher than during recent A(H1N1)pdm09 dominant epidemics in 2013-14 (n=6) and 2015-16 (n=17), bearing in mind variation in the timing of seasonal epidemics that may influence final end-of-season comparisons.

Number of influenza-like illness (ILI) outbreaks reported, British Columbia 2017-18



* School-based ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.

† Facility-based influenza outbreaks defined as 2 or more ILI cases within 7-day period, with at least one laboratory-confirmed case of influenza.

Updated Antiviral Guidelines

The Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada) have released updated guidance on the use of antiviral drugs given potential low vaccine effectiveness for the 2017-18 influenza season. These guidelines are available at: <https://www.ammi.ca/Update/79.ENG.pdf>.

National

FluWatch (week 6, February 4 to 10, 2018)

Overall, influenza activity in Canada remains at peak levels. Activity is starting to slow down in some parts of the country, but at the national level, several indicators of influenza circulation increased in week 6. In week 6, the number of laboratory detections of influenza A and B were similar. Detections of influenza A are within expected levels for this time of year, however, circulation of influenza B is greater than observed during the past seven seasons. To date this season, the majority of laboratory-confirmed cases, hospitalizations and deaths with influenza have been among adults 65 years of age and older. Details are available at: 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, 2017 to February 22, 2018, the National Microbiology Laboratory (NML) received 1,701 influenza viruses from Canadian laboratories for antigenic characterization.

Influenza A(H3N2): Of the 895 influenza A(H3N2) viruses, only 184 (21%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 184 viruses characterized by HI assay, 166 (90%) were considered antigenically similar to a cell culture-propagated A/Hong Kong/4801/2014-like virus, the WHO-recommended A(H3N2) component for the 2017-18 northern hemisphere influenza vaccine, while 18 (10%) viruses (all belonging to genetic clade 3C.3a) showed reduced titre with ferret antisera raised against cell culture-propagated A/Hong Kong/4801/2014. Of the 178 out of 184 viruses that were antigenically characterized with available sequencing information, 144 belonged to genetic clade 3C.2a, 16 belonged to subclade 3C.2a1 and 18 belonged to clade 3C.3a; sequencing is pending for the 6 remaining isolates. Of the 711 viruses genetically characterized, 632 (89%) were reported to belong to genetic clade 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain, while 77 (11%) belonged to subclade 3C.2a1 and 2 belonged to clade 3C.3a.

Influenza A(H1N1)pdm09: All of the 86 A(H1N1)pdm09 viruses characterized were antigenically similar to an A/Michigan/45/2015-like virus, the WHO-recommended influenza A(H1N1) component for the 2017-18 northern hemisphere influenza vaccine.

Influenza B: Of the 720 influenza B viruses characterized, 31 (4%) belonged to the B(Victoria) lineage and 689 (96%) belonged to the B(Yamagata) lineage. Among the 31 B(Victoria) viruses, 7 (23%) were characterized as antigenically similar to a B/Brisbane/60/2008(Victoria)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere trivalent influenza vaccine, while 24 (77%) viruses showed reduced titre with ferret antisera produced against cell-propagated B/Brisbane/60/2008. Sequence analysis showed that 22 of the viruses had a two-amino acid deletion in the hemagglutinin (HA) gene; sequence is pending for the remaining 2 isolates. Among the 689 B(Yamagata) viruses, all were antigenically similar to a B/Phuket/3073/2013(Yamagata lineage)-like virus, the WHO-recommended influenza B component for the 2017-18 northern hemisphere quadrivalent influenza vaccine containing two influenza B strains.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2017 to February 22, 2018, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: Of the 986 influenza A viruses [901 A(H3N2) and 85 A(H1N1)pdm09] tested against amantadine, all were resistant.

Oseltamivir: Of the 790 influenza viruses [401 A(H3N2), 67 A(H1N1)pdm09, and 322 B] tested against oseltamivir, all were sensitive except one A(H1N1)pdm09 virus with a H275Y mutation which was resistant.

Zanamivir: Of the 786 influenza viruses [397 A(H3N2), 67 A(H1N1)pdm09, and 322 B] tested against zanamivir, all were sensitive except one B virus which was resistant.

Mid-season 2017-18 Vaccine Effectiveness Estimates

Canada

On February 1, 2018, Canadian researchers published the first estimates of mid-season influenza vaccine effectiveness (VE) for the 2017-18 season. The 2017-18 season to date in Canada has been characterized by an equal mix of influenza A (49%) and influenza B (51%) viruses, the latter being unusual so early in the season. About two-thirds of participants contributing to VE analyses were working-age adults 20–64 years old.

Adjusted VE against A(H3N2), driven by a single genetic subgroup of clade 3C.2a, was low at 17% (95%CI: -14 to 40%) overall and 10% (95%CI: -31 to 39%) in working-age adults. Higher adjusted VE was observed for influenza B at 55% (95%CI: 38 to 68%) overall and 40% (95%CI: 16 to 67) in working-age adults, despite prominent use of lineage-mismatched B(Victoria) trivalent vaccine in most regions against circulating viruses that belonged to the B(Yamagata) lineage.

The full report is available as an open-access publication from *EuroSurveillance*:
<http://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.5.18-00035>

United States

On February 15, 2018, the US CDC published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. In contrast to the mixed circulation of influenza A(H3N2) and B viruses in Canada, the 2017-18 season in the United States has been characterized by early and widespread influenza activity of predominantly influenza subtype A(H3N2).

Adjusted VE against A(H3N2) was 25% (95% CI: 13 to 36%), comparable to Canadian estimates with both suggesting low protection against the dominant circulating strain. This estimate was driven by young children (6 months–8 years) who comprised about one-quarter of US study participants and for whom adjusted VE was 51% (95% CI: 29 to 66%). Adjusted VE in working-age adults (18–49 years) comprising about one-third of participants was non-significant at 20% (95% CI: -4 to 38%) and was even lower in adults 50-64 years old at 12% (-26 to 39%). Adjusted VE against influenza B was 42% (95% CI: 25 to 56%), somewhat lower than previous Canadian findings despite the more prominent use of quadrivalent vaccines containing both the B(Yamagata) and B(Victoria) lineages in the US.

The full report is available as an open-access publication from *Morbidity and Mortality Weekly Report (MMWR)*: https://www.cdc.gov/mmwr/volumes/67/wr/mm6706a2.htm?s_cid=mm6706a2_e

Spain (Navarre)

On February 15, 2018, Spanish researchers published interim estimates of influenza vaccine effectiveness (VE) for the 2017-18 season. The 2017/18 season in Europe has been characterised by co-circulation of influenza B, A(H3N2), and A(H1N1)pdm09. Unlike the Canadian and American studies which included only primary healthcare patients, researchers included both primary healthcare patients and hospitalized patients; this may impede comparison between these studies. Findings were driven by influenza B which comprised more than three-quarters of all influenza detections. There were too few A(H3N2) cases (118 in total, 43 from the outpatient setting) to reliably compare with other studies.

Despite exclusive use of trivalent influenza vaccine containing lineage-mismatched influenza B(Victoria) antigen, the adjusted VE against influenza B that was predominantly B(Yamagata) was 52% (95% CI: 12 to 74%) in the outpatient setting. This finding suggests moderate, cross-lineage protection against influenza B, which has been observed previously for influenza B and is consistent with Canadian findings.

The full report is available as an open-access publication from *Eurosurveillance*:
<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.7.18-00057>

International

USA (week 6, February 4 to 10, 2018)

During week 6, overall influenza activity remained elevated in the United States. The most frequently identified influenza virus subtype reported by public health laboratories during week 6 was influenza A(H3N2). The percentage of respiratory specimens testing positive for influenza in clinical laboratories remained elevated. The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System. Twenty-two influenza-associated pediatric deaths were reported. A cumulative rate of 67.9 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for influenza-like illness (ILI) was 7.5%, which is above the national baseline of 2.2%. The geographic spread of influenza in Puerto Rico and 48 states was reported as widespread; one state reported regional activity; the District of Columbia, Guam and one state reported local activity; and the U.S. Virgin Islands reported no activity. Details are available at: www.cdc.gov/flu/weekly/.

WHO (February 19, 2018)

Influenza activity remained high in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity was at inter-seasonal levels. Worldwide, influenza A accounted still for the majority of influenza detections but influenza B (mostly B-Yamagata lineage) increased in recent weeks. Up to now, the majority of countries which are in the influenza season, reported influenza-like illness reaching moderate levels in comparison with previous years, with few reaching levels exceeding those of previous years. Some countries however have reported levels of hospitalization and ICU admissions reaching or exceeding peak levels of previous influenza seasons.

From January 22, 2018 to February 4, 2018, the WHO GISRS laboratories tested more than 302,596 specimens, of which 98,068 were positive for influenza viruses: 54,142 (55%) were typed as influenza A and 43,926 (45%) as influenza B. Of the subtyped influenza A viruses, 10,290 (58%) were influenza A(H1N1)pdm09 and 7,441 (42%) were influenza A(H3N2). Of the characterized B viruses, 7,553 (93%) belonged to the B(Yamagata) lineage and 615 (8%) to the B(Victoria) lineage.

Summary findings from key regions are provided below:

- Overall, influenza virus activity remained high in North America. In Canada, influenza activity remain elevated while influenza-like illness (ILI) activity continued to increase and was above the 5-year average for this time of the year. Influenza B detections increased in recent weeks reaching equal proportion as influenza A detections. In the United States of America (USA), influenza activity remained high, with influenza A (H3N2) viruses most frequently detected followed by influenza B viruses. Hospitalization cumulative rate for influenza were reported at high levels, and above levels observed during the same period over the previous seven seasons. In both Canada and the USA, adults aged 65 years and older accounted for the majority of influenza cases and influenza-related hospitalizations. In Mexico, influenza activity decreased slightly, with influenza A(H3N2) virus predominantly detected.
- In Europe, influenza activity remained high in most countries. All seasonal influenza subtypes co-circulated across the region, but influenza B virus predominated in most countries. ILI and influenza detections increased further in most countries in Eastern and Northern Europe, and appeared to have peaked in few countries in Southwestern Europe. Influenza B detections increased in Denmark, Estonia, Norway, and Sweden. Influenza illness indicators appeared to decrease in Ireland and the United Kingdom, but influenza-related hospitalizations remain high in England.
- In East Asia, influenza activity remained high across the region. ILI activity appeared to decrease in Northern and Southern China but influenza detections remained elevated, with influenza B-Yamagata lineage and influenza A(H1N1)pdm09 viruses predominating. ILI consultation rates remained high in Hong Kong SAR, China, with influenza B most frequently detected.

Fuller global surveillance findings are available at: www.who.int/influenza/surveillance_monitoring/updates/en/.

WHO Recommendations for Influenza Vaccines

WHO Recommendations for 2017-18 Northern Hemisphere Influenza Vaccine

On March 2, 2017, the WHO announced the recommended strain components for the 2017-18 northern hemisphere influenza vaccine:*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Hong Kong/4801/2014 (H3N2)-like virus;
- a B/Brisbane/60/2008 (Victoria-lineage)-like virus;
- a B/Phuket/3073/2013 (Yamagata-lineage)-like virus (quadrivalent vaccines only).

* These recommended strains are the same as those recommended for the 2017 southern hemisphere vaccine and represent a change for one of the four components used for the 2016-17 northern hemisphere vaccine.

† Recommended strain represents a change from an A/California/7/2009-like virus, which had been retained as the A(H1N1)pdm09 component since the 2009 pandemic, to an A/Michigan/45/2015-like virus belonging to the phylogenetic subclade 6B.1.

For further details: www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/.

WHO Recommendations for the 2018-19 Northern Hemisphere Influenza Vaccine

On February 22, 2018, the WHO announced recommended strain components for the 2018-19 northern hemisphere influenza vaccine:*

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;†
- an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus;‡
- a B/Colorado/06/2017-like (Victoria-lineage)virus.§
- a B/Phuket/3073/2013-like (Yamagata-lineage)virus (quadrivalent vaccines only).§

* Recommended strains represent a change for two of the four components used for the 2017-18 northern hemisphere vaccines. Recommended strains are similar to the 2018 southern hemisphere vaccine with the exception of the B/Colorado/06/2017-like virus which replaces the B/Brisbane/60/2008-like virus as the B(Victoria-lineage) virus component.

† Recommended strain is the same as recommended for the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines. The A/Michigan/45/2015-like virus belongs to the phylogenetic subclade 6B.1.

‡ Recommended strain for the A(H3N2) component represents a phylogenetic clade-level change from a clade 3C.2a virus to a clade 3C.2a1 virus.

§ Recommended strain for the influenza B component represents a change for the B(Victoria)-lineage component compared to the 2017-18 northern hemisphere and 2018 southern hemisphere vaccines from a B/Brisbane/60/2008-like virus, which had been retained since the 2009-10 season, to a B/Colorado/06/2017-like virus, belonging to the clade 1A antigenic drift variant with a two-amino acid deletion at positions 162-163. The B(Yamagata)-lineage component, B/Phuket/3073/2013-like virus, recommended for quadrivalent vaccine remains unchanged from the 2017-18 northern hemisphere vaccine.

For further details: http://www.who.int/influenza/vaccines/virus/recommendations/2018_19_north/en/.

Additional Information

Explanatory Note:

The surveillance period for the 2017-18 influenza season is defined starting in week 40. Weeks 36-39 of the 2016-17 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/Update/79.ENG.pdf

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 Disease Prevention and Control Services (CDPACS)

BC Centre for Disease Control

655 West 12th Ave, Vancouver BC V5Z 4R4

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

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> Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Person Reporting: _____ Title: _____</p> <p>Contact Phone: _____ Email: _____</p> <p>Health Authority: _____ HSDA: _____</p> <p>Full Facility Name: _____</p> <p>Is this report: <input type="checkbox"/> First Notification (<i>complete section B below; Section D if available</i>) <input type="checkbox"/> Update (<i>complete section C below; Section D if available</i>) <input type="checkbox"/> Outbreak Over (<i>complete section C below; Section D if available</i>)</p>															
B	<p><u>First Notification</u></p> <p>Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence <i>(if ward or wing, please specify name/number: _____)</i></p> <p><input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)</p> <p>Date of onset of first case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 25%;">Numbers to date</th> <th style="width: 45%;">Residents/Students</th> <th style="width: 30%;">Staff</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td></td> <td></td> </tr> <tr> <td>With ILI</td> <td></td> <td></td> </tr> <tr> <td>Hospitalized</td> <td></td> <td></td> </tr> <tr> <td>Died</td> <td></td> <td></td> </tr> </tbody> </table>	Numbers to date	Residents/Students	Staff	Total			With ILI			Hospitalized			Died		
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C	<p><u>Update AND Outbreak Declared Over</u></p> <p>Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u></p> <p>If over, date outbreak declared over (dd/mm/yyyy): <u>DD / MMM / YYYY</u></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 25%;">Numbers to date</th> <th style="width: 45%;">Residents/Students</th> <th style="width: 30%;">Staff</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td></td> <td></td> </tr> <tr> <td>With ILI</td> <td></td> <td></td> </tr> <tr> <td>Hospitalized</td> <td></td> <td></td> </tr> <tr> <td>Died</td> <td></td> <td></td> </tr> </tbody> </table>	Numbers to date	Residents/Students	Staff	Total			With ILI			Hospitalized			Died		
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D	<p><u>Laboratory Information</u></p> <p>Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know</p> <p>If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know</p>															