

# British Columbia Influenza Surveillance Bulletin

## Influenza Season 2016-17, Number 20, Weeks 14-15

### April 2 to 15, 2017

#### Table of Contents:

##### British Columbia:

Sentinel Physicians	<a href="#">Page 2</a>
Children's Hospital ER	<a href="#">Page 2</a>
Medical Services Plan	<a href="#">Page 3</a>
Laboratory Surveillance	<a href="#">Page 5</a>
ILI Outbreaks	<a href="#">Page 8</a>

##### Canada:

FluWatch Activity levels	<a href="#">Page 9</a>
NML Strain Characterization	<a href="#">Page 9</a>
NML Antiviral Resistance	<a href="#">Page 9</a>
2016-17 Mid-season VE	<a href="#">Page 10</a>

##### International:

USA (CDC) Surveillance	<a href="#">Page 11</a>
WHO	<a href="#">Page 11</a>

##### Emerging Respiratory Pathogens:

Avian Influenza A(H7N9), China	<a href="#">Page 12</a>
--------------------------------	-------------------------

##### Influenza Vaccine Components (WHO Recommendations)

2016-17 Northern Hemisphere	<a href="#">Page 13</a>
2017-18 Northern Hemisphere	<a href="#">Page 13</a>

##### Additional Information:

Explanatory note	<a href="#">Page 14</a>
List of Acronyms	<a href="#">Page 14</a>
Web Sites	<a href="#">Page 14</a>
Outbreak Report Form	<a href="#">Page 15</a>

#### Low-level Influenza B Activity in BC

During weeks 14-15 (April 2 to 15, 2017), low-level influenza B activity continued in BC with most surveillance indicators at expected seasonal levels.

At the BCCDC Public Health Laboratory, overall influenza positivity continued to decline falling to below 10% in week 15. Influenza B viruses comprised the majority (~90%) of all influenza detections during this period.

Since last week's bulletin, three new influenza B outbreaks were reported from long-term care facilities (LTCF). The cumulative tally of LTCF influenza outbreaks reported to date this season (n=196) exceeds the prior full-season historic record in 2014-15 (n=165, weeks 40-17). In both seasons, most reported outbreaks were associated with influenza A(H3N2).

Medical Services Plan (MSP) claims for influenza illness were at expected levels for this period, and sentinel influenza-like illness rates were consistent with the 10-year historical average.

Human cases of avian influenza A(H7N9) continue to be reported in China as part of the seasonal fifth wave of infections, although activity has begun to decline from a peak in January 2017. To date, 595 cases have been reported as part of the fifth wave since October 2016, exceeding the number reported in any prior wave by almost double. As of April 20, 2017, a total of 1393 cases and at least 534 deaths have been reported to the WHO since 2013.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

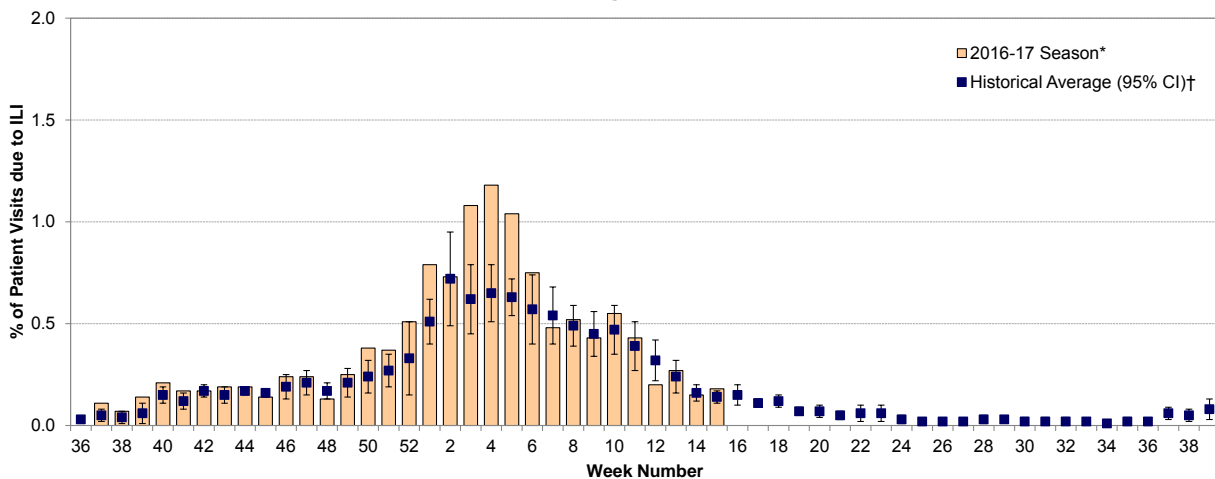
Report Disseminated: April 21, 2017

## British Columbia

### Sentinel Physicians

In weeks 14-15, the proportion of patients with influenza-like illness (ILI) among those presenting to sentinel sites decreased to below 0.20% and was consistent with the 10-year historical average for this period. So far, 69% and 48% of sites have reported data for weeks 14 and 15, respectively; rates are subject to change as reporting becomes more complete.

**Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2016-17**

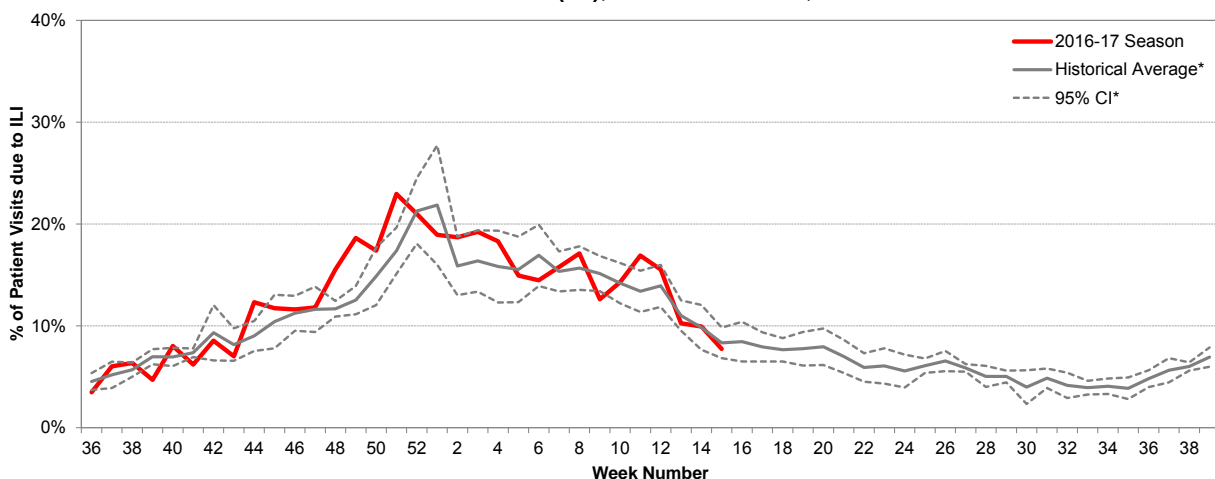


\* Data are subject to change as reporting becomes more complete. One hospital ER site that reported ILI rates  $\geq 5\%$  was excluded from the graph.  
† 10-year historical average for 2016-17 season based on 2004-05 to 2015-2016 seasons, excluding 2008-09 and 2009-10 due to atypical seasonality; CI=confidence interval.

### BC Children's Hospital Emergency Room

In weeks 14-15, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI continued to decline and was, in both weeks,  $<10\%$  and consistent with the 5-year historical average.

**Percent of patients presenting to BC Children's Hospital ER attributed to influenza-like illness (ILI), British Columbia, 2016-17**

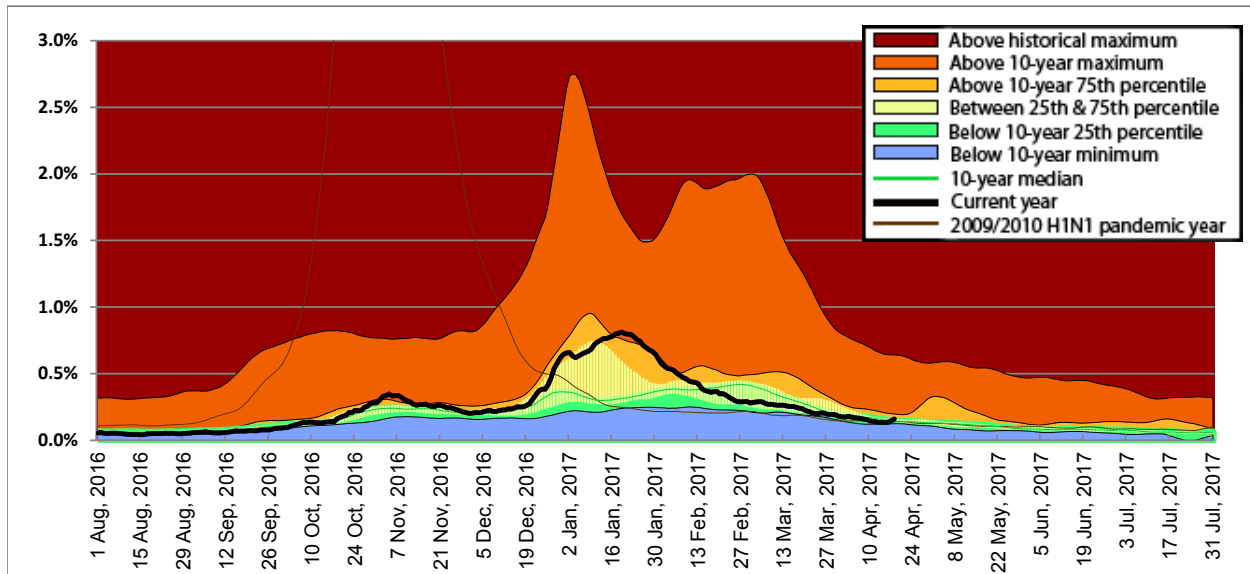


Source: BCCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."  
\* 5-year historical average for 2016-17 season based on 2011-12 to 2015-16 seasons; CI=confidence interval.

**Medical Services Plan**

In weeks 14-15, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims, were consistent with expected levels for this period for the provincial overall; some variability is expected given reporting delays associated with the Easter holiday.

**Service claims submitted to MSP for influenza illness (II)\* as a proportion of all submitted general practitioner service claims, British Columbia, 2016-17**

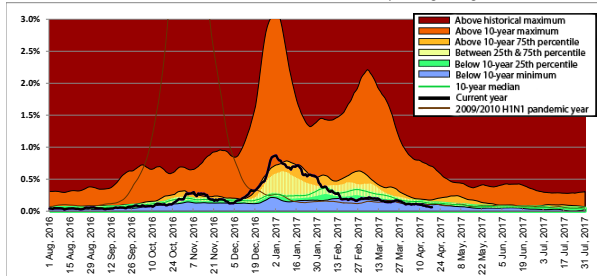


\* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

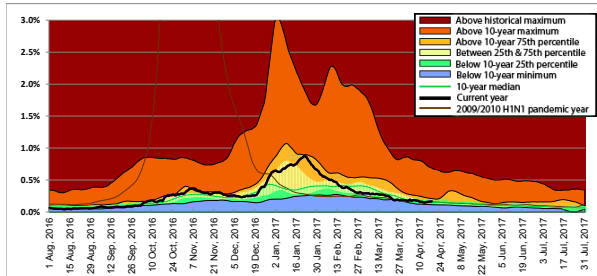
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP week beginning August 1, 2016 corresponds to sentinel ILI week 31; data are current to April 18, 2017.

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

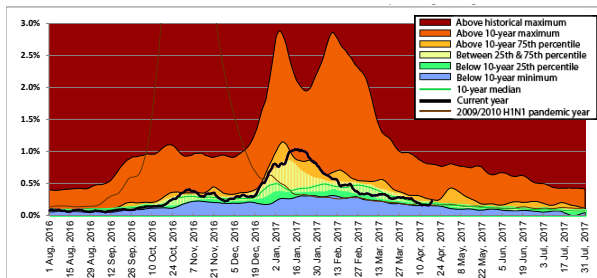
### Interior



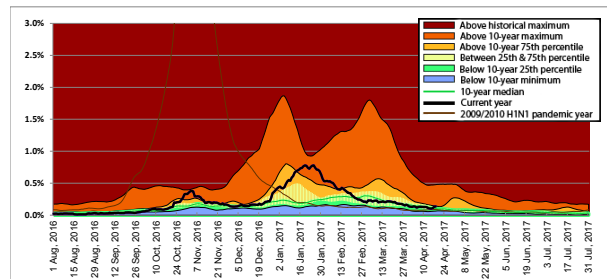
### Fraser



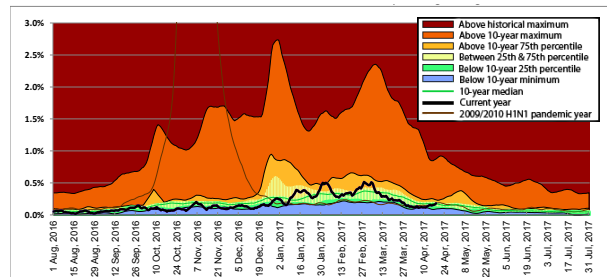
### Vancouver Coastal



### Vancouver Island



### Northern

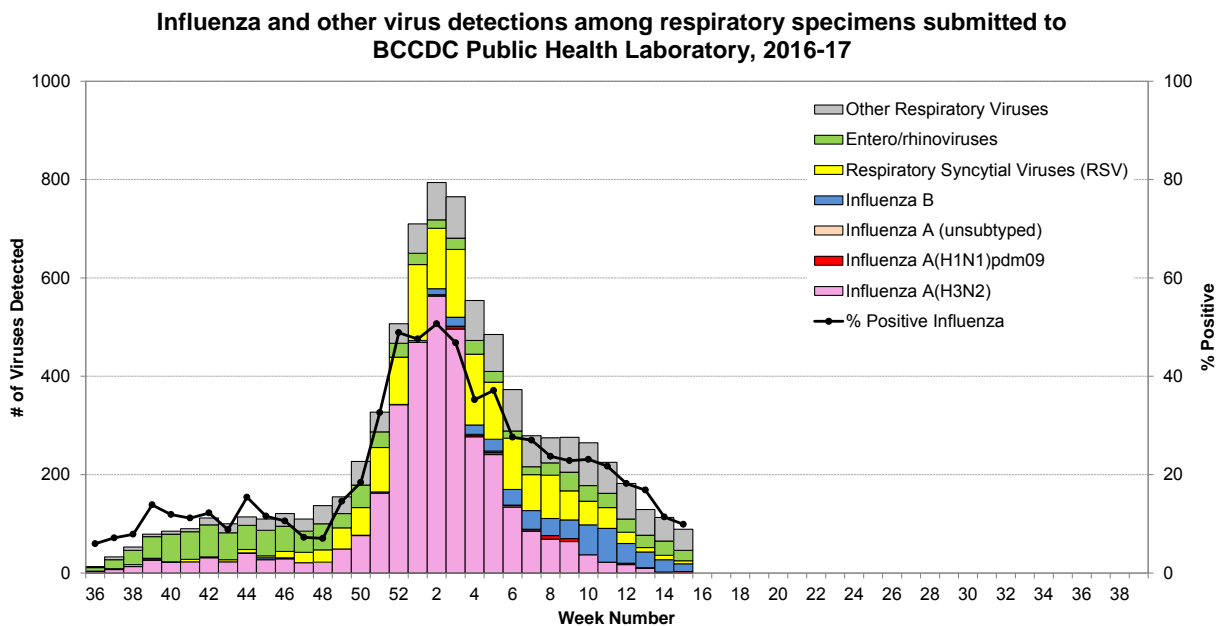


## Laboratory Reports

### BCCDC Public Health Laboratory

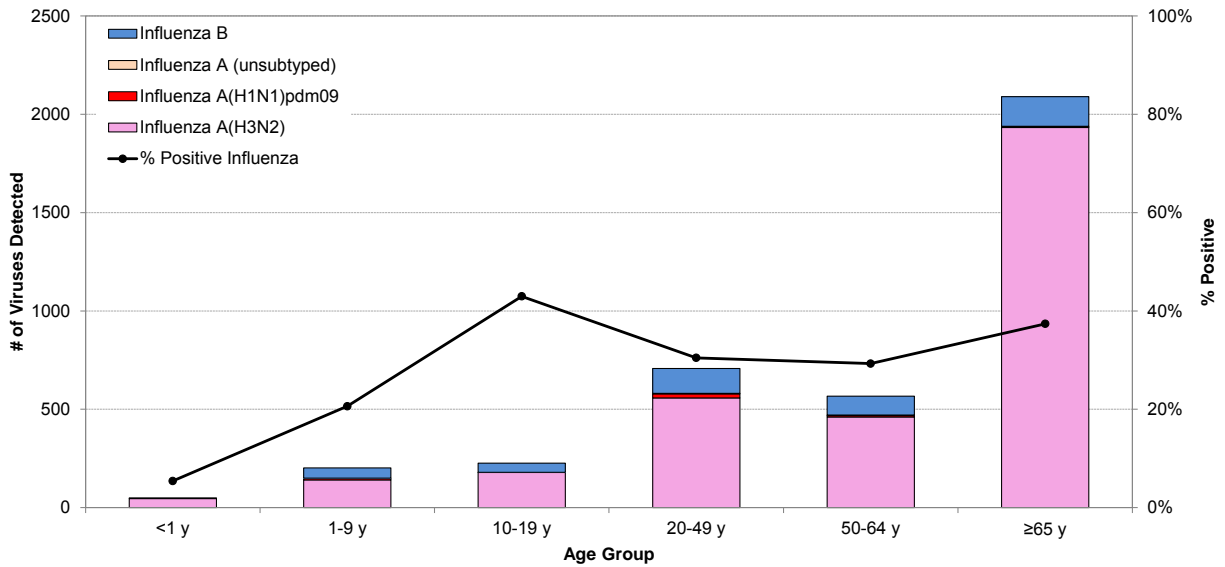
In weeks 14-15, 423 patients were tested for respiratory viruses at the BCCDC Public Health Laboratory (PHL). Of these, 46 (11%) tested positive for influenza including 5 (11%) with influenza A [1 A(H3N2) and 4 A(H1N1)pdm09] and 41 (89%) with influenza B. Overall influenza positivity continued to decline, falling to below 10% in week 15. Influenza B viruses comprised the majority of influenza detections at the BCCDC PHL during this period, representing approximately 90% of all influenza detections.

Cumulatively since week 40 (starting October 2, 2016), 3832 (31%) patients tested positive for influenza at the BCCDC PHL including 3358 (88%) with influenza A [3316 A(H3N2), 40 A(H1N1)pdm09 and 2 subtype pending], 471 (12%) with influenza B and 3 patients who had both influenza A and B detected during the season. Elderly adults  $\geq 65$  years old are disproportionately represented among influenza A(H3N2) detections, although younger age groups are also affected; whereas, adults 20-64 years old comprise a larger proportion of influenza B detections.



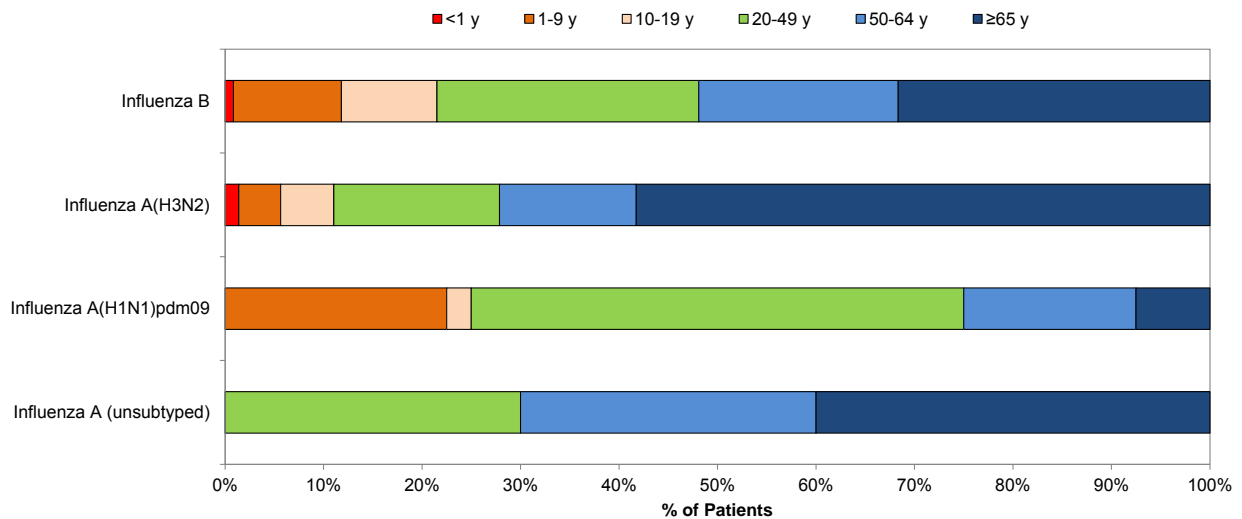
Data are current to April 19, 2017.

**Cumulative number (since week 40) of influenza detections by type/subtype and age group, BCCDC Public Health Laboratory, 2016-17**



Data are current to April 19, 2017; figure includes cumulative influenza detections for specimens collected from weeks 40-15.

**Age distribution of influenza detections (cumulative since week 40), BCCDC Public Health Laboratory, 2016-17**

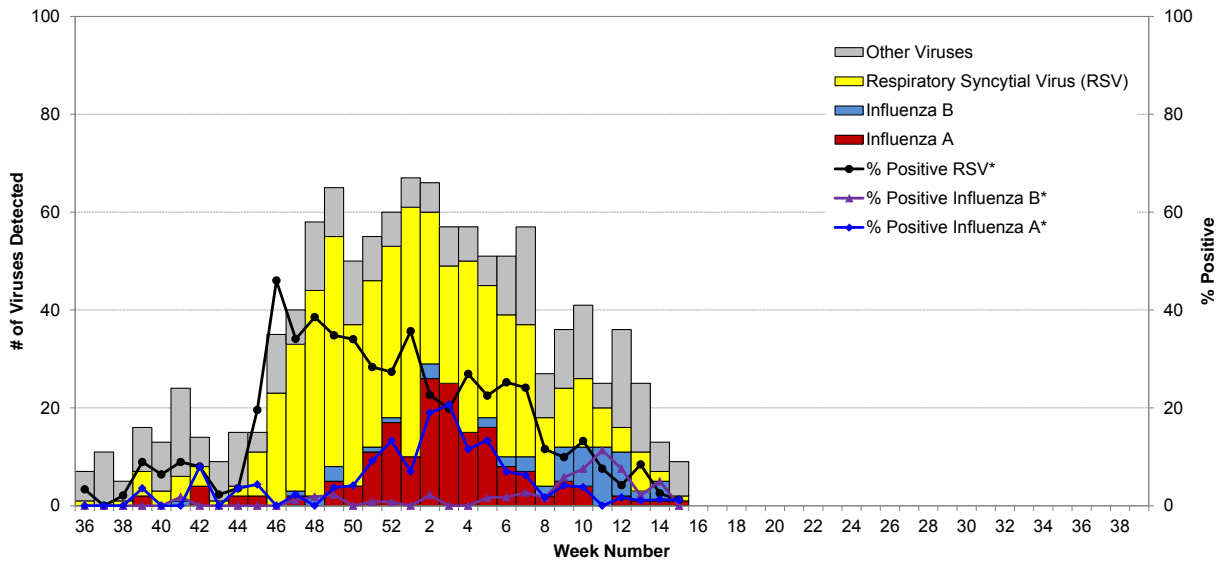


Data are current to April 19, 2017; figure includes cumulative influenza detections for specimens collected from weeks 40-15.

BC Children's and Women's Health Centre Laboratory

In weeks 14-15, 165 tests for respiratory viruses were conducted at the BC Children's and Women's Health Centre Laboratory. Of these, 4 (2%) were positive for influenza B and 2 (1%) were positive for influenza A; 3 (2%) were positive for respiratory syncytial virus (RSV).

**Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2016-17**



\* 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

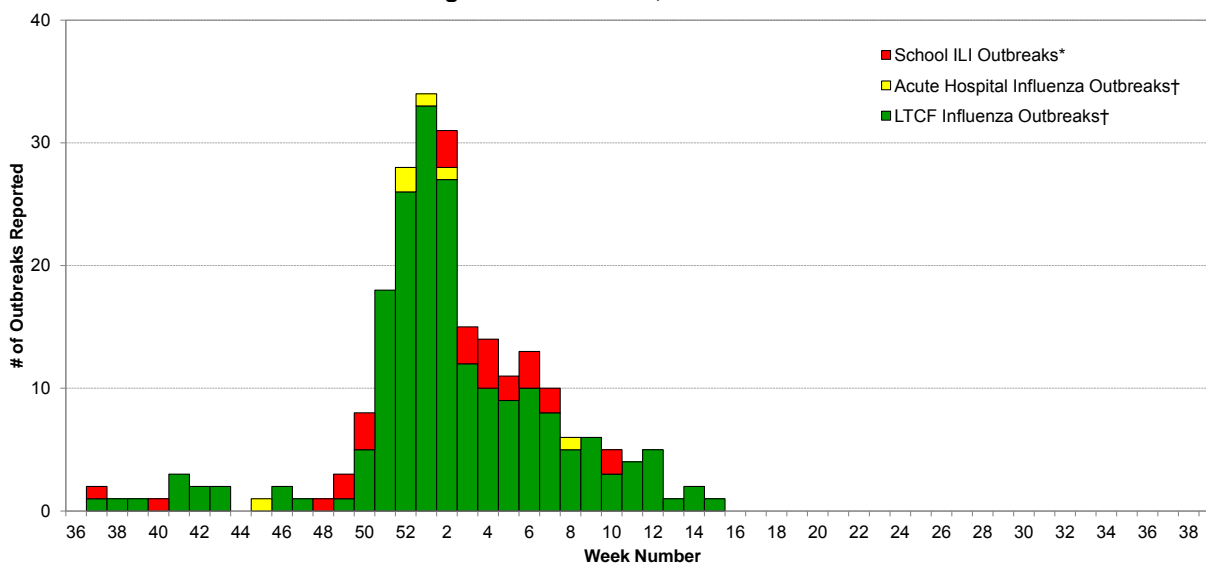
Since our last bulletin two weeks ago, three new influenza B outbreaks were reported from long-term care facilities (LTCFs) in VCHA; two with onset in week 14 and one with onset in week 15.

Cumulatively during the 2016-17 season (since week 37, starting September 11, 2016), a total of 206 influenza outbreaks have been reported as of April 20, 2017, including 196 in LTCFs, six in acute care settings, and four from other facility types. This cumulative tally of LTCF outbreaks for the 2016-17 season (n=196) already exceeds the total number of LTCF outbreaks reported during the last A(H3N2)-dominant season in 2014-15 (n=165 from week 40 to week 17), which had previously been associated with the highest number of LTCF outbreaks recorded in the past decade.

The majority (184/206, 89%) of facility outbreaks reported this season had influenza A detected [all A(H3N2) where subtype information is available]; however in recent weeks, an increasing number of outbreaks with influenza B detected have been reported. In total this season, 21 influenza B outbreaks were reported. One outbreak with both influenza A and B detected was additionally reported.

A total of 27 school ILI outbreaks have also been reported so far during the 2016-17 season but without etiologic agent identified.

**Number of influenza-like illness (ILI) outbreaks reported, compared to current sentinel ILI rate and historical average sentinel ILI rate, British Columbia 2016-17**



\* 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.



## National

### **FluWatch (week 14, April 2 to 8, 2017)**

Overall, influenza activity is slowly declining in Canada. In week 14, influenza B accounted for a greater proportion of influenza laboratory detections, hospitalizations and outbreaks compared to the previous week. Influenza activity due to influenza B is slowly increasing but is low compared to the same time period in the previous two seasons. Influenza A activity is decreasing; however, influenza A continues to be the most common type of influenza affecting Canadians. The majority of laboratory detections, hospitalizations and deaths have been among adults aged  $\geq 65$  years. Details are available at: [healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/fluwatch-reports-rapports-surveillance-influenza-eng.php](http://healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/flu-grippe/surveillance/fluwatch-reports-rapports-surveillance-influenza-eng.php).

### **National Microbiology Laboratory (NML): Strain Characterization**

From September 1, 2016 to April 20, 2017, the National Microbiology Laboratory (NML) received 1667 influenza viruses [1430 A(H3N2), 36 A(H1N1)pdm09 and 201 B] from Canadian laboratories for antigenic characterization.

Influenza A(H3N2): Of the 1430 influenza A(H3N2) viruses, only 348 (24%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 348 viruses characterized by HI assay, all were considered antigenically similar to A/Hong Kong/4801/2014, the WHO-recommended A(H3N2) component for the 2016-17 northern hemisphere influenza vaccine. Of the 348 viruses that were antigenically characterized with available sequencing information, 287 (82%) belonged to genetic group 3C.2a and 61 (18%) belonged to genetic group 3C.3a. Genetic characterization was performed to infer antigenic properties on the remaining 1082 viruses that did not grow to sufficient haemagglutination titre for HI assay. Of the 1082 viruses genetically characterized, all were reported to belong to genetic group 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain.

Influenza A(H1N1)pdm09: All of the 36 A(H1N1)pdm09 viruses characterized were antigenically similar to A/California/7/2009, the WHO-recommended influenza A(H1N1) component for the 2016-17 northern hemisphere influenza vaccine.

Influenza B: Of the 201 influenza B viruses characterized, 46 (23%) were antigenically similar to a B/Brisbane/60/2008(Victoria lineage)-like virus, the WHO-recommended influenza B component for the 2016-17 northern hemisphere trivalent influenza vaccine. The remaining 156 (78%) viruses were characterized as a B/Phuket/3073/2013(Yamagata lineage)-like virus, the other WHO-recommended influenza B component for the 2016-17 northern hemisphere quadrivalent influenza vaccine containing two influenza B components.

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

From September 1, 2016 to April 20, 2017, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

Amantadine: Of the 207 influenza A viruses [178 A(H3N2) and 29 A(H1N1)pdm09] tested against amantadine, all were resistant.

Oseltamivir: Of the 931 influenza viruses [717 A(H3N2), 35 A(H1N1)pdm09 and 179 B] tested against oseltamivir, 929 out of 931 were sensitive; two A(H3N2) viruses were resistant to oseltamivir.

Zanamivir: Of the 883 influenza viruses [697 A(H3N2), 33 A(H1N1)pdm09 and 153 B] tested against zanamivir, all were sensitive.

## **Mid-season Estimates of 2016-17 Influenza Vaccine Effectiveness, North America**

### Canada

On February 9, 2017, researchers from the Canadian Sentinel Practitioner Surveillance Network (SPSN) published the first mid-season estimates of influenza vaccine effectiveness (VE) for the 2016-17 season. They found VE of 42% (95% confidence interval (CI): 18-59%) against outpatient medically attended, laboratory-confirmed A(H3N2) illness, which has been the dominant subtype so far this season. This finding indicates that, compared to unvaccinated people, the risk of A(H3N2) illness in vaccinated people was reduced by about 40%. This VE estimate is consistent with vaccine protection typically expected for A(H3N2)-dominant seasons, but is considerably higher than in the last A(H3N2)-dominant 2014-15 season when no vaccine protection was found.

The full report is available at: [www.eurosurveillance.org/ViewArticle.aspx?ArticleId=22714](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=22714).

### United States

On February 17, 2017, the U.S. Flu VE Network published mid-season estimates of 2016-17 influenza VE, reporting an adjusted VE of 43% (95% CI: 29-54%) for A(H3N2). These findings are consistent with Canadian mid-season estimates published last week, suggesting VE of around 40% against outpatient, medically attended A(H3N2) illness, which has been the dominant influenza strain so far during the 2016-17 season. Both the Canadian and U.S. studies used a test-negative design to derive influenza VE.

For details see: [www.cdc.gov/mmwr/volumes/66/wr/mm6606a3.htm?s\\_cid=mm6606a3\\_w](http://www.cdc.gov/mmwr/volumes/66/wr/mm6606a3.htm?s_cid=mm6606a3_w).

## International

### **USA (week 14, April 2 to 8, 2017)**

During week 14, influenza activity decreased but remained elevated in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 14 was influenza B. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased. Of the 1054 A(H3N2) viruses genetically characterized by the US CDC during the 2016-17 season, 95% belonged to genetic group 3C.2a, including the newly emerging subgroup 3C.2a1, and 5% to group 3C.3a based on analysis of HA gene segments. The proportion of deaths attributed to pneumonia and influenza was below the system-specific epidemic threshold. Five influenza-associated pediatric deaths were reported, four that occurred during the 2016-2017 season and one that occurred during the 2010-2011 season. A cumulative rate for the season of 59.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for ILI 2.6%, which is above the national baseline of 2.2%. The geographic spread of influenza in 18 states was reported as widespread; Guam, Puerto Rico, and 18 states reported regional activity; the District of Columbia and 12 states reported local activity; two states reported sporadic activity; and the U.S. Virgin Islands reported no activity. Details are available at: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/).

### **WHO (April 17, 2017)**

Influenza activity in the temperate zone of the northern hemisphere continued to decrease. Influenza activity remained low in the temperate zone of the southern hemisphere. Worldwide, influenza A(H3N2) and B viruses were predominant, with an increased proportion of influenza B viruses detected in recent weeks.

- In North America, influenza activity decreased slightly in Canada and the United States; influenza A(H3N2) viruses predominated with slight increases in influenza B virus detections. In Mexico, influenza activity decreased with all seasonal influenza subtypes detected.
- In Europe, influenza activity continued to decrease to low levels, with detections of predominantly influenza B viruses in Northern and Eastern Europe. ILI and severe acute respiratory infection (SARI) indicators were generally low or below baseline.
- In Central Asia, ILI and SARI activities decreased but an update on influenza virus detections was not available.
- In East Asia, influenza activity continued to be reported with all seasonal influenza subtypes detected.
- In Western Asia, influenza activity continued to decrease with influenza B viruses predominant.
- In Southern Asia, influenza activity continued to be reported although it appeared to be decreasing. In Bhutan, ILI levels and influenza activity increased in recent weeks, with influenza A(H3N2) and B viruses circulating.
- In South East Asia, influenza activity remained low.
- In Northern Africa, low influenza activity was reported in Tunisia, with influenza A(H3N2) and B viruses predominant.
- In East and West Africa, low influenza activity was reported in recent weeks, with influenza A(H1N1)pdm09, A(H3N2) and B viruses co-circulating.
- In the Caribbean and Central America countries, respiratory virus activity remained low.
- In tropical South America, influenza and other respiratory virus activities remained low. RSV activity remained elevated in Colombia.
- In the temperate zone of the Southern Hemisphere, influenza activity was at inter-seasonal levels. In Chile, ILI activity increased to seasonal threshold in recent weeks, consistent with past seasonal trends.
- From March 20 to April 2, 2017, the WHO GISRS laboratories tested more than 118,962 specimens during that time period. 19,667 were positive for influenza viruses, of which 9791 (50%) were typed as influenza A and 9876 (50%) as influenza B. Of the subtyped influenza A viruses, 924 (26%) were influenza A(H1N1)pdm09 and 2609 (74%) were influenza A(H3N2). Of the characterized B viruses, 784 (65%) belonged to the B/Yamagata lineage and 423 (35%) to the B/Victoria lineage.

Previous updates are available at: [www.who.int/influenza/surveillance\\_monitoring/updates/en/](http://www.who.int/influenza/surveillance_monitoring/updates/en/).

## Emerging Respiratory Pathogens

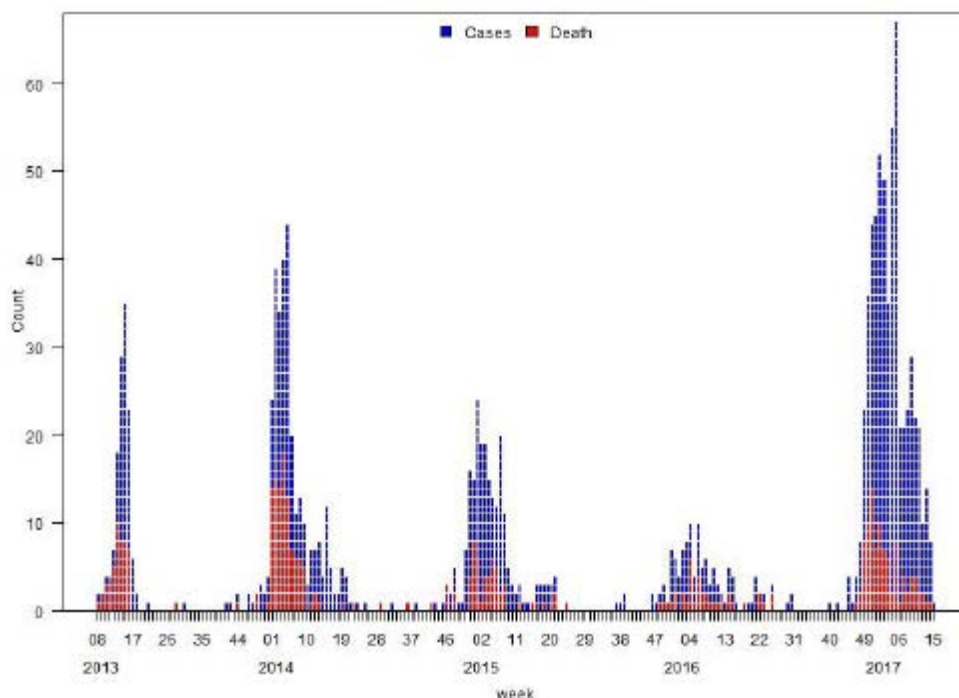
### Avian Influenza A(H7N9), China

Human infections with avian influenza A(H7N9) continue to be reported in China. Since March 2017, 135 additional cases and at least 18 deaths have been reported as part of the seasonal fifth wave of infections. The number of cases associated with the fifth wave (since October 2016) now exceeds the number reported in any prior wave by almost double. However, case reports from China have begun to decline following a peak in January 2017 (**Figure**).

Of the newly reported 135 cases, onset dates ranged from February 10 to April 11, 2017. Cases ranged in age from 10 to 81 years, with a median age >50 years; 31 (23%) were female. These newly reported cases included one travel-associated case reported from Hong Kong SAR, as well as the first cases to be reported from the Tibet Autonomous Region (n=2) and Gansu province (n=1) and the first cases reported as part of the fifth wave in Chongqing and Tianjin provinces. Three clusters were identified as part of these newly reported cases for which limited human-to-human transmission could not be ruled out. These included two family clusters each with two cases and one occupational cluster involving two cases (reported from Tibet) who both worked at the same live poultry market stall.

As of April 20, 2017, a total of 1393 lab-confirmed human infections with avian influenza A(H7N9) and at least 534 deaths have been reported to the WHO since 2013. Of these, 595 have been reported as part of the fifth wave since October 2016. As in prior waves, the majority of cases continue to be reported in older, adult males, with at least one-third of cases fatal. Most cases have reported recent exposure to infected poultry or contaminated environments, including live poultry markets.

### Number of confirmed human A(H7N9) cases and deaths reported to WHO by week of onset, China, February 2013 to April 2017



Data are current to April 20, 2017. *Source:* World Health Organization. Influenza at the human-animal interface, summary and assessment, 16 March to 20 April 2017. Geneva: WHO; 2017. Available from: [http://www.who.int/influenza/human\\_animal\\_interface/HAI\\_Risk\\_Assessment/en/](http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/).

## **WHO Recommendations for Influenza Vaccines**

### **WHO Recommendations for 2016-17 Northern Hemisphere Influenza Vaccine**

On February 25, 2016, the WHO announced recommended strain components for the 2016-17 northern hemisphere trivalent influenza vaccine (TIV):\*

- an A/California/7/2009 (H1N1)pdm09-like virus;†
- an A/Hong Kong/4801/2014 (H3N2)-like virus;‡
- a B/Brisbane/60/2008 (Victoria-lineage)-like virus.§

It is recommended that quadrivalent influenza vaccines (QIV) containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013 (Yamagata-lineage)-like virus.

These recommended components are the same as those recommended for the 2016 Southern Hemisphere vaccine.

\* Recommended strains represent a change for two of the three components used for the 2015-16 northern hemisphere vaccines.

† Recommended strain has been retained as the A(H1N1) component since the 2009 pandemic and has been included in the northern hemisphere vaccine since 2010-11.

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

§ Recommended strain for the influenza B component represents a lineage-level change from a B/Yamagata-lineage virus to a B/Victoria-lineage virus.

For further details: [http://www.who.int/influenza/vaccines/virus/recommendations/2016\\_17\\_north/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2016_17_north/en/).

### **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 trivalent influenza vaccine (TIV):\*

- 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.

It is recommended that quadrivalent influenza vaccines (QIV) containing two influenza B viruses contain the above three viruses and a B/Phuket/3073/2013 (Yamagata-lineage)-like virus.

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

† 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 emerging phylogenetic subclade 6B.1.

For further details: [www.who.int/influenza/vaccines/virus/recommendations/2017\\_18\\_north/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2017_18_north/en/).

## Additional Information

### **Explanatory Note:**

The surveillance period for the 2016-17 influenza season is defined starting in week 40. Weeks 36-39 of the 2015-16 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): [healthycanadians.gc.ca/diseases-conditions-maladies-affectations/disease-maladie/flu-grippe/surveillance/index-eng.php](http://healthycanadians.gc.ca/diseases-conditions-maladies-affectations/disease-maladie/flu-grippe/surveillance/index-eng.php)

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 Disease Prevention and Control Services (CDPACS)

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)

# 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.

A	<b><u>Reporting Information</u></b> <span style="float: right;">Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</span>
	Person Reporting: _____ Title: _____
	Contact Phone: _____ Email: _____
	Health Authority: _____ HSDA: _____
	Full Facility Name: _____
	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> )

B	<b><u>First Notification</u></b>
	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>
	<input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)
	Date of onset of first case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>

Numbers to date	Residents/Students	Staff
<b>Total</b>		
<b>With ILI</b>		
<b>Hospitalized</b>		
<b>Died</b>		

C	<b><u>Update AND Outbreak Declared Over</u></b>
	Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD / MMM / YYYY</u>
	If over, date outbreak declared over (dd/mm/yyyy): <u>DD / MMM / YYYY</u>

Numbers to date	Residents/Students	Staff
<b>Total</b>		
<b>With ILI</b>		
<b>Hospitalized</b>		
<b>Died</b>		

D	<b><u>Laboratory Information</u></b>
	Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know