

# British Columbia Influenza Surveillance Bulletin

Influenza Season 2017-18, Number 12, Week 5

January 28 to February 3, 2018

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## **BC has Passed the Epidemic Peak but Influenza Activity Remains above Seasonal Levels**

During week 5 (January 28 to February 3, 2018), most influenza surveillance indicators continued to decline but influenza activity remained above seasonal levels in most regions.

Influenza positivity at the BCCDC Public Health Laboratory continued to decline, falling to below 35% in week 5 from a peak of more than 50% in week 52, driven by declining A(H3N2) activity. Influenza B has predominated among influenza detections (>60%) this week with activity levels for type B remaining stable.

Since our last bulletin, 9 new lab-confirmed outbreaks were reported, all from long-term care facilities (LTCFs); 2 school ILI outbreaks were reported. Of the 9 lab-confirmed outbreaks, 4 had influenza B detected and 5 had influenza A; the 1 influenza A outbreak that had subtype information available was A(H3N2).

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

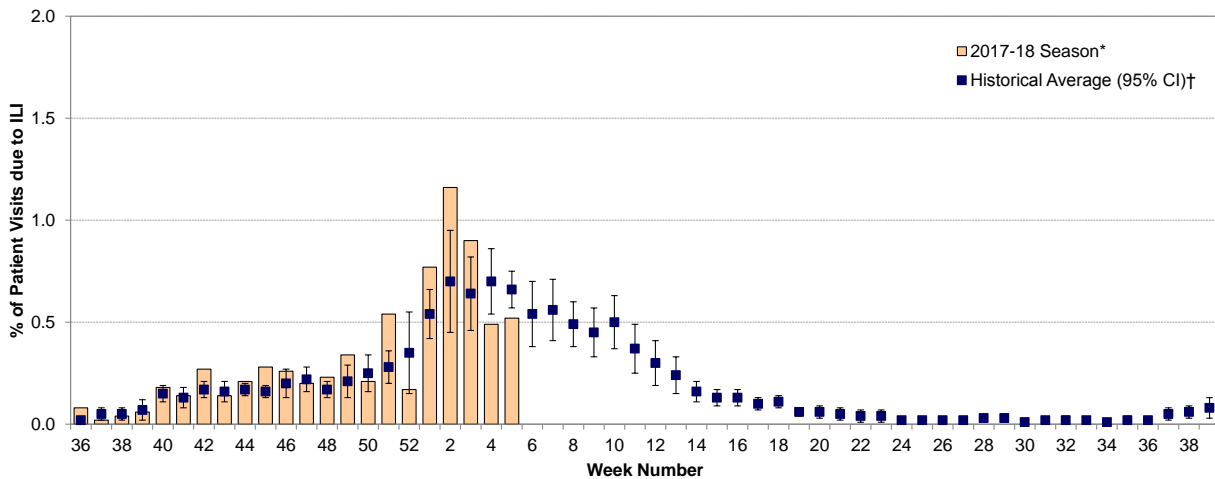
Report Disseminated: February 8, 2018

## British Columbia

### Sentinel Physicians

The proportion of patients with influenza-like illness (ILI), among those presenting to sentinel sites, has fallen below the expected range in weeks 4 and 5 after being significantly above the 10-year historical average for three consecutive weeks. Rates are subject to change as reporting becomes more complete. To date, 50% of sentinel sites have reported data for week 5.

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



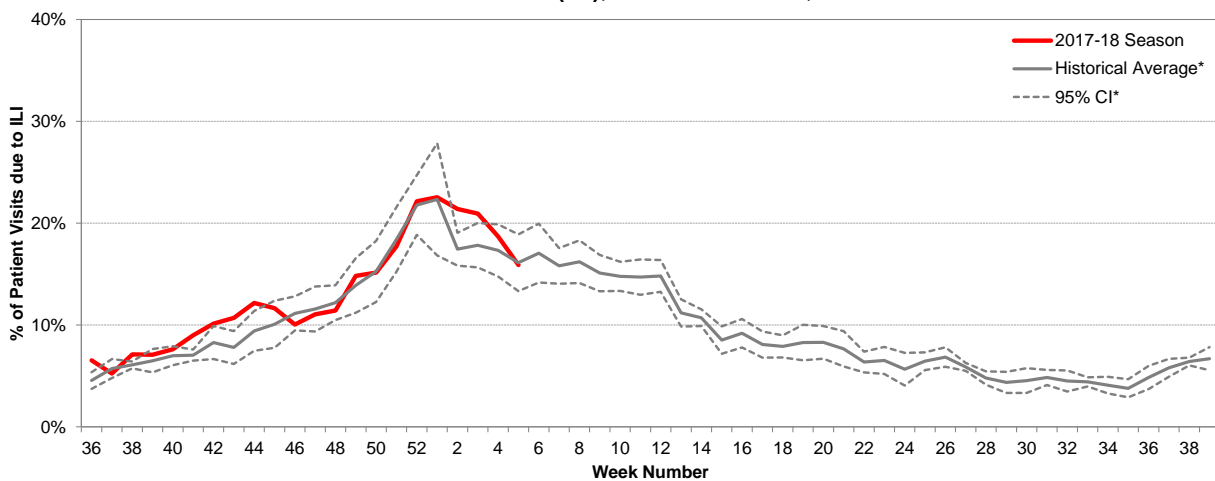
\* Data are subject to change as reporting becomes more complete.

† 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 5, the proportion of visits to BC Children's Hospital Emergency Room (ER) attributed to ILI continued to decline and was 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**



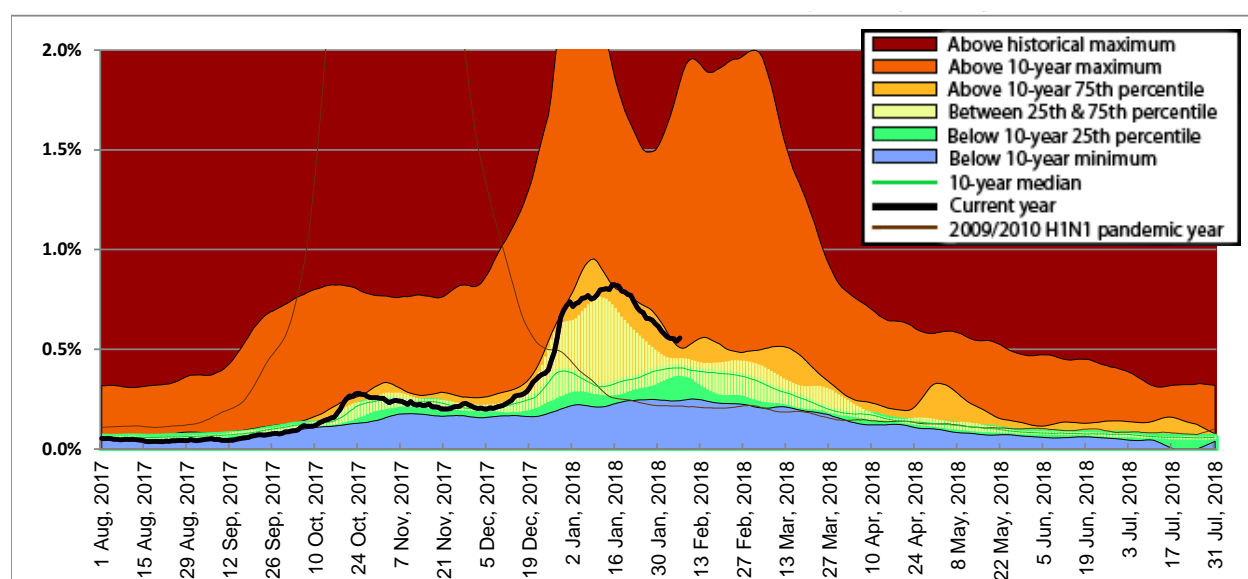
Source: BCCH Admitting, Discharge, Transfer database (ADT). Data includes records with a triage chief complaint of "flu" or "influenza" or "fever/cough."

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

### Medical Services Plan

In week 5, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims continued to decline in most regions of the province following several weeks of elevated activity overall. In week 5, rates for the province overall and FHA, VCHA and NHA were above the 10-year maximum, while rates in IHA were above the 10-year 75<sup>th</sup> percentile and rates in VIHA were at expected levels for this time of year.

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

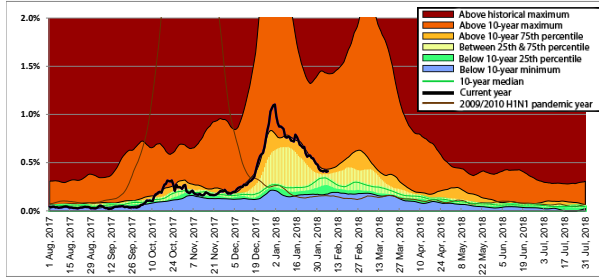


\* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza).

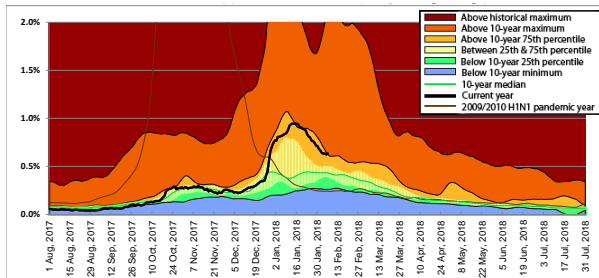
Data for the period August 1, 2009 to July 31, 2010 have been excluded from the 10-year median calculation due to atypical seasonality during the 2009/2010 H1N1 pandemic year. MSP data beginning August 1, 2017 corresponds to sentinel ILI week 31; data are current to February 6, 2018.

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

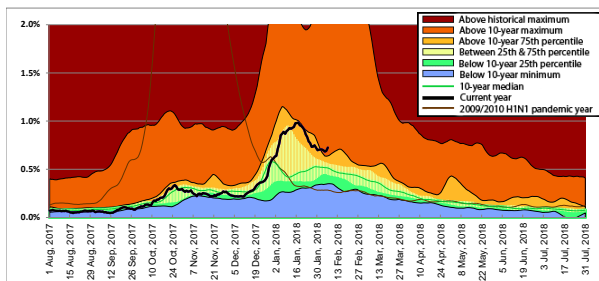
### Interior



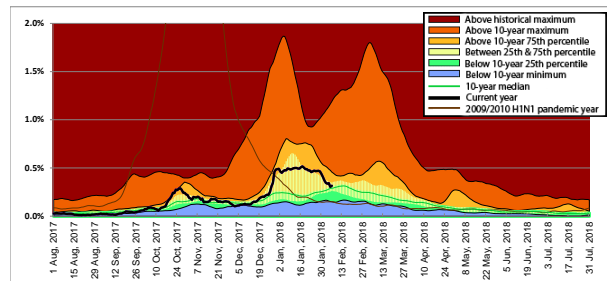
### Fraser



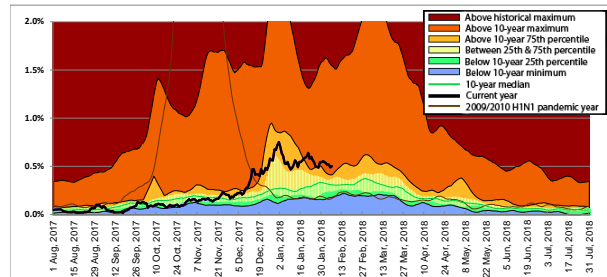
### Vancouver Coastal



### Vancouver Island



### Northern



## Laboratory Reports

### BCCDC Public Health Laboratory

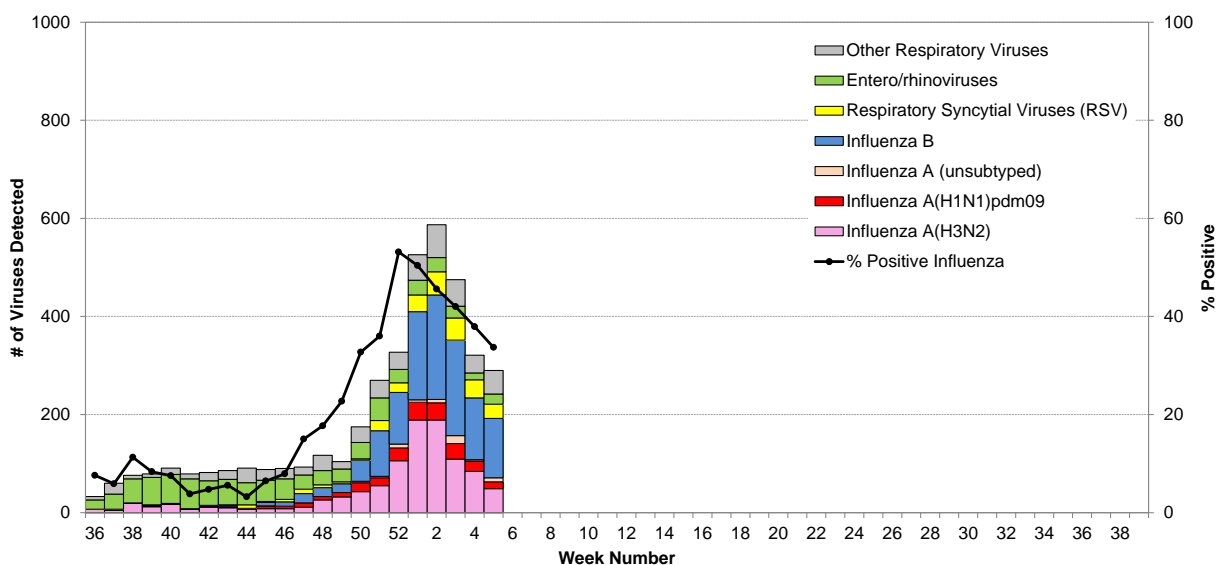
In week 5, 570 patients were tested for respiratory viruses at the BCCDC Public Health Laboratory (PHL). Of these, 192 (34%) tested positive for influenza; 71 (37%) had influenza A detected [49 A(H3N2), 14 A(H1N1)pdm09 and 8 subtype pending] and 121 (63%) had influenza B detected. Influenza positivity at the BCCDC PHL declined to 34% in week 5 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 positivity remained greater than in previous years for this period, comprising more than half of all influenza detections in week 5 and with influenza B positivity rates remaining relatively stable over recent weeks. 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), 2375 (32%) patients tested positive for influenza at the BCCDC PHL, including 1230 (52%) with influenza A [947 A(H3N2), 232 A(H1N1)pdm09, 51 subtype pending], 1137 (48%) with influenza B and eight patients with both influenza A [five with A(H3N2) and three with A(H1N1)pdm09] and B detected.

More than half (59%) of A(H3N2) cases have been detected among elderly adults  $\geq 65$  years old, with 8% <20 years old, 18% 20-49 years old, and 15% 50-64 years old. Conversely, 41% of influenza B cases have been detected among elderly adults  $\geq 65$  years old, with 16% <20 years old, 23% 20-49 years old, and 19% 50-64 years old. Among A(H1N1)pdm09 cases, only 16% have been detected among elderly adults  $\geq 65$  years old, with 29% <20 years old, 38% 20-49 years old, and 17% 50-64 years old.

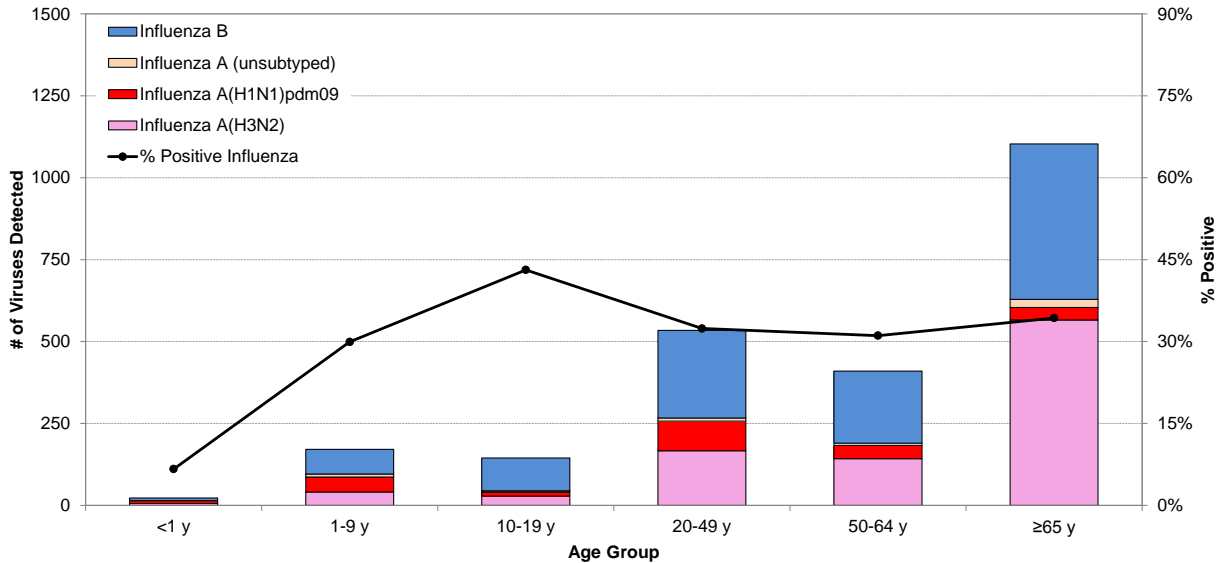
RSV was the most commonly detected non-influenza respiratory virus during this period. RSV detections have been less frequent than in the 2016-17 season; 5% of patients tested positive for RSV in week 5 this season compared to 16% in the 2016-17 season during the same period.

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



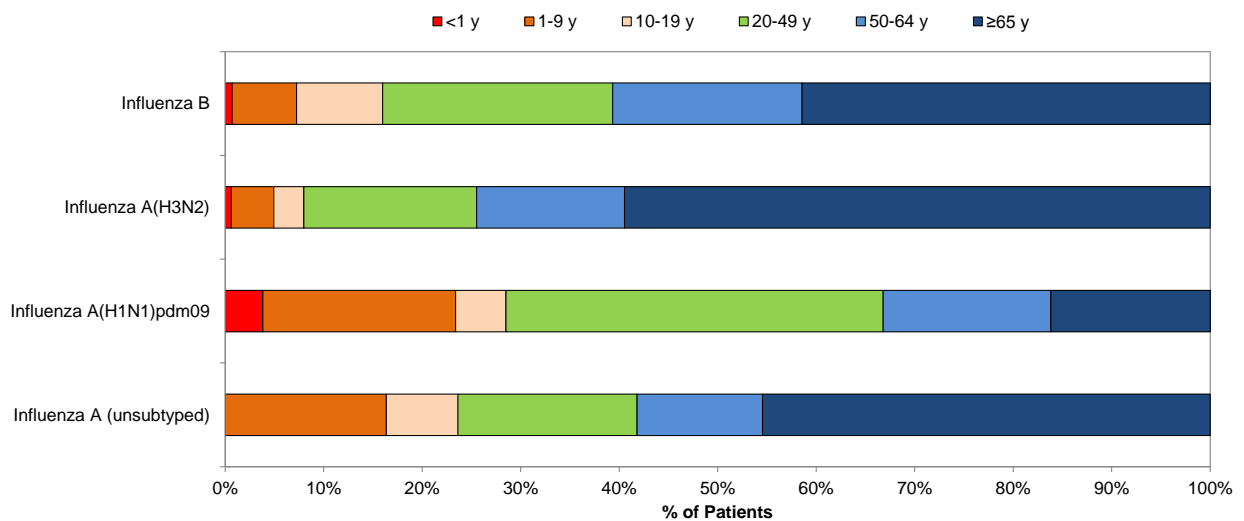
Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 7, 2018.

**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 7, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-5.

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

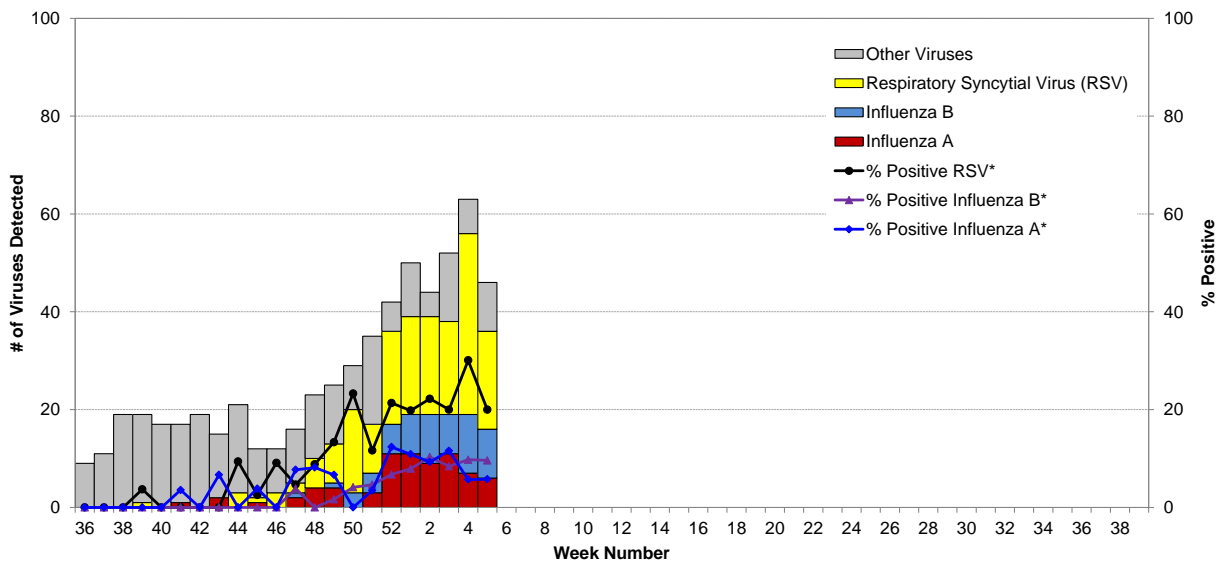


Source: BCCDC Public Health Laboratory (PHDRW); Data are current to February 7, 2018; figure includes cumulative influenza detections for specimens collected from weeks 40-5.

BC Children's and Women's Health Centre Laboratory

In week 5, 104 tests for influenza viruses were conducted at the BC Children's and Women's Health Centre (CWHC) laboratory. Of these, 6 (6%) were positive for influenza A and 10 (10%) were positive for influenza B. Respiratory syncytial virus (RSV) was the most commonly detected respiratory viruses during this period, with 20% positivity in week 5. In contrast to observations from the BCCDC PHL, RSV positivity from this week was comparable to week 5 in the 2016/17 season where RSV positivity was 23%.

**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, 9 new lab-confirmed outbreaks were reported, all from long-term care facilities (LTCFs). Of the 9 newly reported outbreaks, 1 had onset in week 3 in FHA, 2 had onset in week 4 (1 in IHA, 1 in VCHA), 4 had onset in week 5 (1 in FHA, 2 in IHA, 1 in VIHA), and 2 had onset in week 6 (1 in FHA, 1 in VCHA). Of the 9 outbreaks, 4 had influenza B detected, and 5 had influenza A detected; the 1 influenza A outbreak that had subtype information available was A(H3N2).

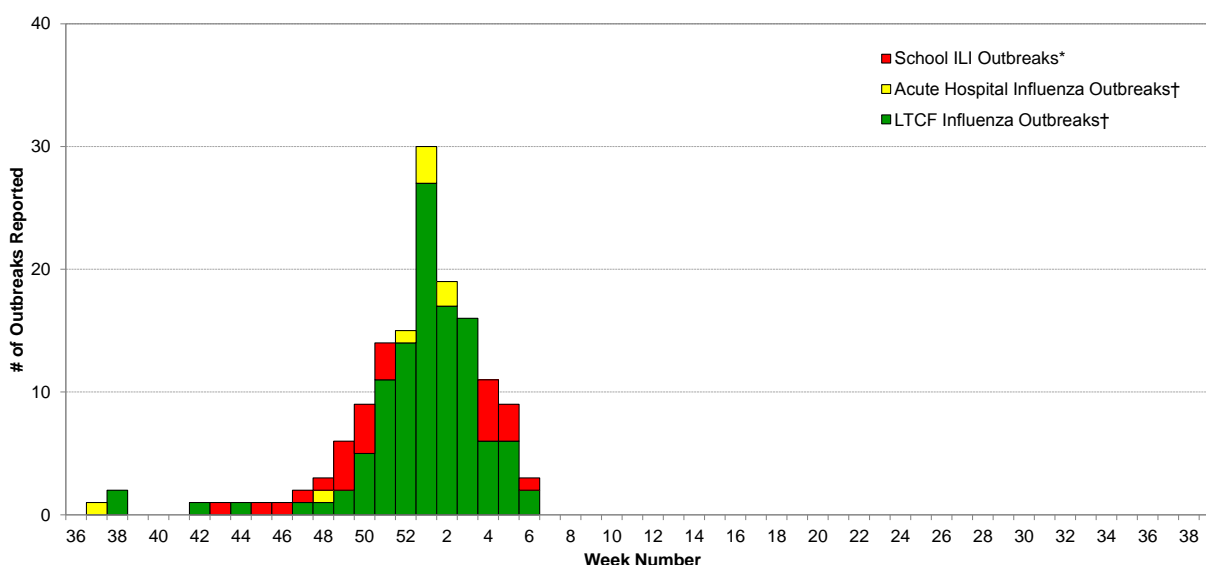
Additionally, 1 school ILI outbreak, with unknown etiology, was reported during week 5 and 1 school ILI outbreak was reported during week 6. These two outbreaks occurred in IHA, currently the only health authority routinely reporting school ILI outbreaks to BCCDC.

Influenza outbreak reports appear to have declined in frequency following a peak in week 1; this may reflect declining influenza activity in the province but could also be attributed to delayed reporting.

Cumulatively during the 2017-18 season (since week 37, starting September 10, 2017), 120 lab-confirmed influenza outbreaks have been reported, including 42 with influenza A detected [21 A(H3N2) and 21 subtype unknown], 68 with influenza B, 3 with influenza A (H3N2) and influenza B, and 7 with influenza A (unspecified subtype) and influenza B; of these, 112 were reported in LTCFs and 8 were reported from an acute care facility. No influenza A outbreaks have been subtyped as A(H1N1)pdm09 so far this season. Additionally, 25 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=110) is lower than the tally for the same period during recent A(H3N2) dominant epidemics in 2014-15 (n=147) and 2016-17 (n=143) but higher than during recent A(H1N1)pdm09 dominant epidemics in 2013-14 (n=6) and 2015-16 (n=13), 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 4, January 21 to 27, 2018)**

Overall, influenza activity in Canada remains at peak levels but there are signs that activity is starting to slow down in parts of the country. The majority of influenza detections continue to be A(H3N2), although 40% of detections were influenza B in week 4. To date this season, the majority of lab confirmations, hospitalizations and deaths 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](http://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 8, 2018, the National Microbiology Laboratory (NML) received 1,178 influenza viruses from Canadian laboratories for antigenic characterization.

**Influenza A(H3N2):** Of the 655 influenza A(H3N2) viruses, only 143 (22%) had sufficient haemagglutination titre for antigenic characterization by haemagglutination inhibition (HI) assay. Of the 143 viruses characterized by HI assay, 134 (94%) 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 9 (6%) 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 133 out of 143 viruses that were antigenically characterized with available sequencing information, 109 belonged to genetic clade 3C.2a, 15 belonged to subclade 3C.2a1 and 9 belonged to clade 3C.3a; sequencing is pending for the remaining 10 isolates. Of the 512 viruses genetically characterized, 445 (87%) were reported to belong to genetic clade 3C.2a, which includes the A/Hong Kong/4801/2014 vaccine strain, while 66 (13%) belonged to subclade 3C.2a1 and 1 belonged to clade 3C.3a.

**Influenza A(H1N1)pdm09:** All of the 58 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 465 influenza B viruses characterized, 20 (4%) belonged to the B(Victoria) lineage and 445 (96%) belonged to the B(Yamagata) lineage. Among the 20 B(Victoria) viruses, 6 (30%) 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 14 (70%) viruses showed reduced titre with ferret antisera produced against cell-propagated B/Brisbane/60/2008. Sequence analysis showed that these 14 viruses had a two-amino acid deletion in the hemagglutinin (HA) gene. Among the 445 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 8, 2018, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing.

**Amantadine:** Of the 716 influenza A viruses [657 A(H3N2) and 59 A(H1N1)pdm09] tested against amantadine, all were resistant.

**Oseltamivir:** Of the 662 influenza viruses [360 A(H3N2), 46 A(H1N1)pdm09, and 256 B] tested against oseltamivir, all were sensitive except one A(H1N1)pdm09 virus with a H275Y mutation which was resistant.

**Zanamivir:** Of the 659 influenza viruses [357 A(H3N2), 46 A(H1N1)pdm09, and 256 B] tested against zanamivir, all were sensitive except one B virus which was resistant.

### Mid-season 2017-18 Vaccine Effectiveness Estimates

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. Most (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. This estimate for A(H3N2) is similar to findings reported by Australia during their recent 2017 epidemic (10%) but is about half that reported in interim and end-of-season analyses for the prior 2016-17 season by Canada, the United States and Europe (~30-40%), despite the use of the same A(H3N2) vaccine component in these recent seasons. It is also lower than expected generally for A(H3N2) vaccines (~30%).

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. These findings suggest cross-lineage protection, which has been observed previously for influenza B.

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>

## International

### **USA (week 4, January 21 to 27, 2018)**

During week 4, overall influenza activity increased in the United States. The most frequently identified influenza virus subtype reported by public health laboratories during week 4 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. Seventeen influenza-associated pediatric deaths were reported, one of which occurred during the 2015-2016 season. A cumulative rate of 51.4 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The proportion of outpatient visits for influenza-like illness (ILI) was 7.1%, which is above the national baseline of 2.2%. The geographic spread of influenza in Puerto Rico and 48 states was reported as widespread; Guam and one state reported regional activity; the District of Columbia and one state reported local activity; and the U.S. Virgin Islands reported sporadic activity. Details are available at: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/).

### **WHO (February 5, 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 still accounted for the majority of influenza detections but influenza B (mostly from the Yamagata lineage) has 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 8, 2018 to January 21, 2018, the WHO GISRS laboratories tested more than 277,231 specimens, of which 88,612 were positive for influenza viruses: 53,213 (60%) were typed as influenza A and 35,399 (40%) as influenza B. Of the subtyped influenza A viruses, 9,745 (50%) were influenza A(H1N1)pdm09 and 9,642 (50%) were influenza A(H3N2). Of the characterized B viruses, 7,778 (91%) belonged to the B(Yamagata) lineage and 786 (9%) to the B(Victoria) lineage.

- In North America, overall influenza activity remained high, with detections of predominantly influenza A(H3N2) viruses.
- In Europe, influenza activity remained high in Northern and Southwestern Europe, and peaked in few countries but started to increase in Eastern Europe. Influenza B remained the virus most frequently detected and the subtype of the influenza A viruses detected varied depending on the country and the surveillance system.
- In Western Asia, increasing influenza activity was reported in some countries, with influenza A(H1N1)pdm09 and B viruses present in the region.
- In Central Asia, influenza activity increased slightly, although it remained low across the region.
- In East Asia, high levels of illness indicators and influenza activity were reported in most of the countries. Influenza A(H1N1)pdm09 and influenza B-Yamagata lineage viruses were predominantly detected.
- In South East Asia, low levels of influenza activity were reported.
- In Southern Asia, influenza activity continued to be high in Iran and Pakistan, with detection of all seasonal influenza subtypes.
- In Northern Africa, influenza detections remained high in Algeria, Egypt and Morocco, while decreased in Tunisia. Influenza A(H1N1)pdm09 virus and influenza B were predominantly detected in the region.
- In Western Africa, little to no influenza activity was reported across the region. In Middle Africa, there were no updates available for this reporting period. In Eastern Africa, increased influenza activity was reported in Madagascar.
- In the Caribbean and Central American countries, respiratory illness indicators and influenza activity remained low in general.
- In the tropical countries of South America, influenza activity and respiratory illness indicators were generally low, with exception of Ecuador.
- In the temperate zone of the Southern Hemisphere, influenza activity remained overall at inter-seasonal levels.

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

### **WHO Recommendations for the 2018 Southern Hemisphere Influenza Vaccine**

On September 28, 2017, the WHO announced recommended strain components for the 2018 southern hemisphere trivalent influenza vaccine (TIV):\*

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

It is recommended that quadrivalent influenza vaccines (QIV) containing two influenza B viruses contain the above three viruses and a B/Brisbane/60/2008 (Victoria-lineage)-like virus.

\* Recommended strains represent a change for two of the three components used for the 2017 southern hemisphere vaccines.

† Recommended strain is the same as recommended for the 2017 southern hemisphere and 2017-18 northern hemisphere vaccines. The A/Michigan/45/2015-like virus belongs to the emerging phylogenetic subclade 6B.1; it replaces the A/California/7/2009-like virus that had been retained as the previous A(H1N1) component since the 2009 pandemic.

‡ 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 containing the amino acid substitution N121K in the HA which is found in the majority of recent A(H3N2) viruses.

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

For further details: [http://www.who.int/influenza/vaccines/virus/recommendations/2018\\_south/en/](http://www.who.int/influenza/vaccines/virus/recommendations/2018_south/en/).

The European Centre for Disease Prevention and Control has also posted a useful summary of WHO recommendations for the 2018 southern hemisphere influenza season, including rationale, available at: <https://ecdc.europa.eu/en/news-events/who-recommendations-influenza-virus-vaccine-composition-2018-southern-hemisphere>

## 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](http://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](http://www.bccdc.ca/health-professionals/data-reports/emerging-respiratory-virus-updates)

### **Influenza Web Sites**

Canada – Influenza surveillance (FluWatch): <https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance.html>

Washington State Flu Updates: <http://www.doh.wa.gov/portals/1/documents/5100/420-100-fluupdate.pdf>

USA Weekly Surveillance Reports: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)

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

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

WHO Collaborating Centre for Reference and Research on Influenza (Australia):

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

Australian Influenza Report:

[www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm](http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm)

New Zealand Influenza Surveillance Reports: [www.surv.esr.cri.nz/virology/influenza\\_weekly\\_update.php](http://www.surv.esr.cri.nz/virology/influenza_weekly_update.php)

### **Avian Influenza Web Sites**

WHO – Influenza at the Human-Animal Interface: [www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)

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

### **Contact Us:**

Tel: (604) 707-2510

Fax: (604) 707-2516

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

Communicable 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	<p><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></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>)</p> <p style="margin-left: 20px;"><input type="checkbox"/> Update (<i>complete section C below; Section D if available</i>)</p> <p style="margin-left: 20px;"><input type="checkbox"/> Outbreak Over (<i>complete section C below; Section D if available</i>)</p>															
B	<p><b><u>First Notification</u></b></p> <p>Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence (if ward or wing, please specify name/number: _____)</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><b>Total</b></td> <td></td> <td></td> </tr> <tr> <td><b>With ILI</b></td> <td></td> <td></td> </tr> <tr> <td><b>Hospitalized</b></td> <td></td> <td></td> </tr> <tr> <td><b>Died</b></td> <td></td> <td></td> </tr> </tbody> </table>	Numbers to date	Residents/Students	Staff	<b>Total</b>			<b>With ILI</b>			<b>Hospitalized</b>			<b>Died</b>		
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C	<p><b><u>Update AND Outbreak Declared Over</u></b></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><b>Total</b></td> <td></td> <td></td> </tr> <tr> <td><b>With ILI</b></td> <td></td> <td></td> </tr> <tr> <td><b>Hospitalized</b></td> <td></td> <td></td> </tr> <tr> <td><b>Died</b></td> <td></td> <td></td> </tr> </tbody> </table>	Numbers to date	Residents/Students	Staff	<b>Total</b>			<b>With ILI</b>			<b>Hospitalized</b>			<b>Died</b>		
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D	<p><b><u>Laboratory Information</u></b></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>															