

British Columbia Influenza Surveillance Bulletin

Influenza Season 2014-15, Number 16, Week 4

January 25 to 31, 2015

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Declining Influenza A(H3N2) Activity in BC

In week 4 (January 25 to 31, 2015), several surveillance indicators suggest declining influenza-like illness activity in BC; however, elevated activity continues to be observed across most regions of the province. Influenza A(H3N2) remains the predominant circulating influenza virus, with ongoing co-circulation of respiratory syncytial virus.

The proportion of patients testing positive for influenza at the BC provincial laboratory continued to decline in week 4, with positivity dipping below 30% for the first time since week 50. Fifteen new confirmed influenza outbreaks have been reported from LTCFs since our last bulletin one week ago, bringing the cumulative tally of facility outbreaks this season to 151, exceeding by about two-thirds the prior 2012-13 full season record (n=91).

On February 5, investigators of the Canadian Immunization Research Network published interim estimates of 2014/15 influenza vaccine effectiveness (VE) against laboratory-confirmed influenza hospitalizations, indicating no vaccine protection. VE against hospitalization with A(H3N2) adjusted for age and comorbidity was -22% (95% confidence interval [CI]: -77 to 16%) overall and -33% (95% CI: -104 to 13%) in elderly adults ≥ 65 years old. The authors underscore the importance of adjunct protective measures. See: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=21024>.

Prepared by BCCDC Influenza & Emerging Respiratory Pathogens Team

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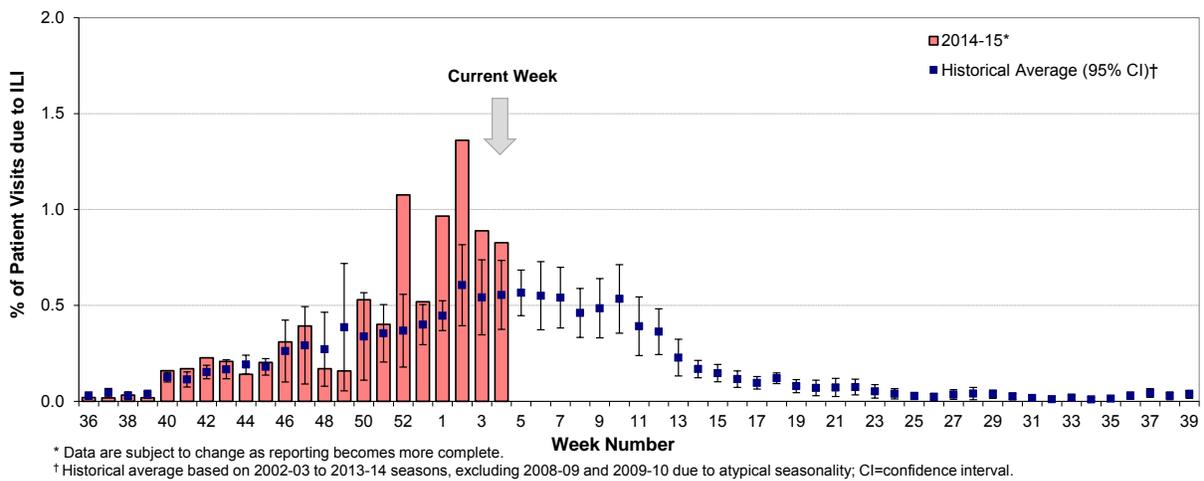
Report Disseminated: February 5, 2015

British Columbia

Sentinel Physicians

In week 4, the proportion of patients with influenza-like illness (ILI) among those presenting to sentinel physicians remained stable at around 0.8%, significantly above the historical average for this time of year for the sixth consecutive week but lower than in week 2 when rates spiked above 1%. So far in week 4, 47% of sentinel sites have reported data.

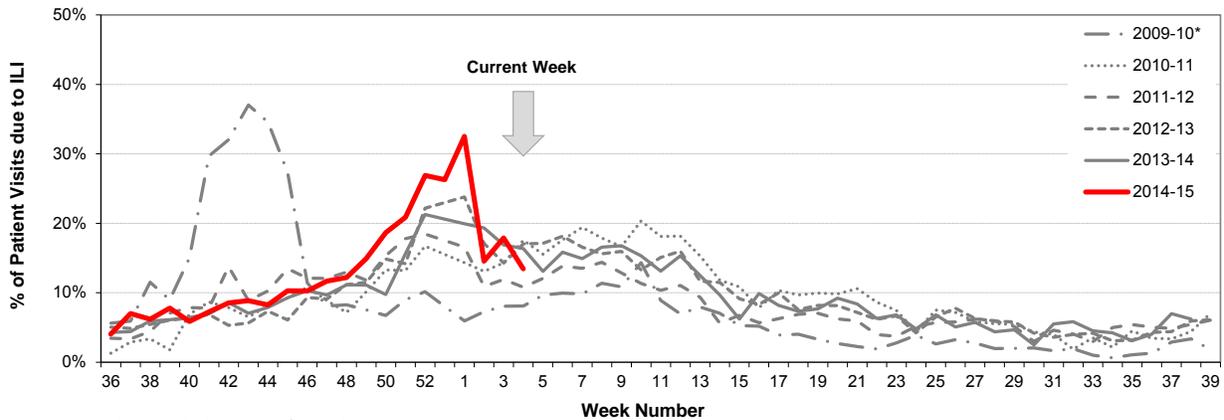
Percent of patient visits to sentinel physicians due to influenza-like illness (ILI) compared to historical average, British Columbia, 2014-15



BC Children’s Hospital Emergency Room

The proportion of visits to BC Children’s Hospital Emergency Room (ER) attributed to ILI continued a declining trend from a peak of 33% in week 1 to 14% in week 4, returning to levels consistent with those observed in previous seasons for this time of year.

Percent of patients presenting to BC Children’s Hospital ER with triage chief complaint of “flu,” “influenza” or “fever/cough,” British Columbia, 2014-15



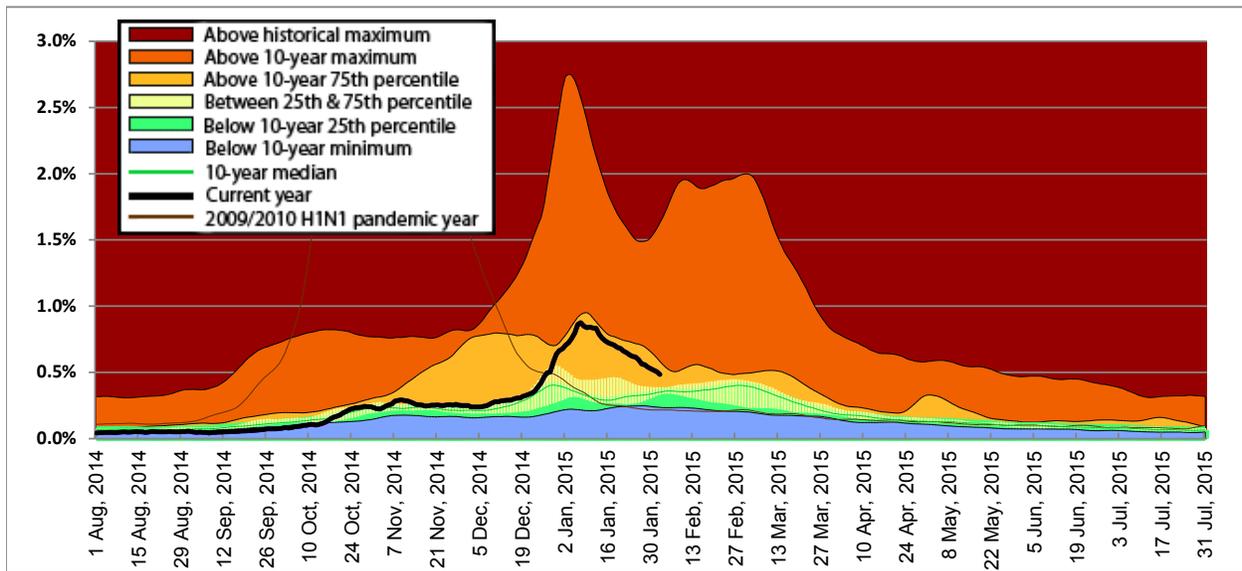
Source: BCCH Admitting, discharge, transfer database, ADT

* Data from 2010-11 to 2014-15 are based on new variable (Triage Chief Complaint) for capturing ILI symptoms and are not directly comparable to data for 2009-10. In week 9 of the 2011-12 season, the BCCH ER implemented a new data collection system, the National Ambulatory Care Reporting System (NACRS); data are not directly comparable to data collected using old system.

Medical Services Plan

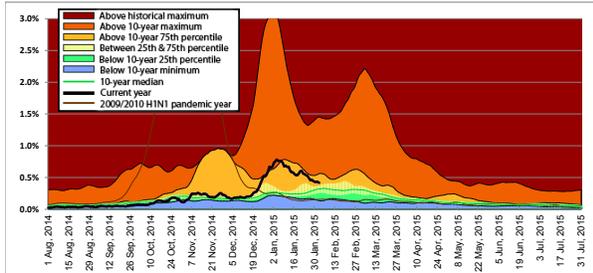
In week 4, BC Medical Services Plan (MSP) general practitioner claims for influenza illness (II), as a proportion of all submitted MSP claims, continued a gradual decline for the province overall and in most regional Health Authorities, with the exception of NHA where rates remained stable. However, rates remained above 10-year 75th percentiles for this time of year across the province.

Service claims submitted to MSP for influenza illness (II)* as a proportion of all submitted general practitioner service claims, British Columbia, 2014-15

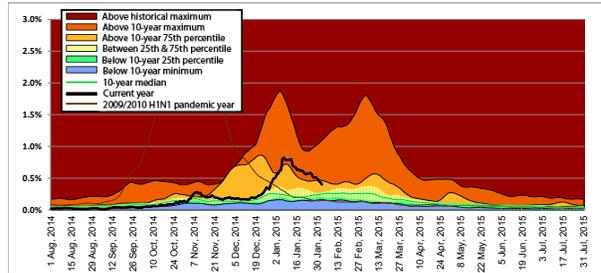


* Influenza illness is tracked as the percentage of all submitted MSP general practitioner claims with ICD-9 code 487 (influenza). Data provided by Population Health Surveillance and Epidemiology, BC Ministry of Health Services.
Note: MSP week beginning 3 August 2014 corresponds to Sentinel ILI week 32; data current to February 2, 2015.

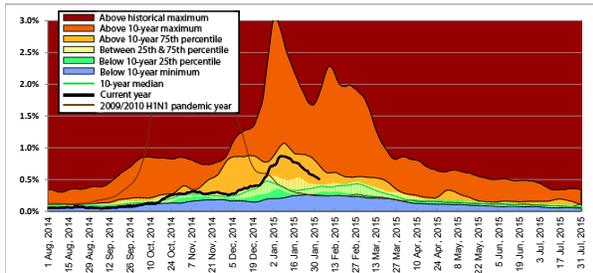
Interior



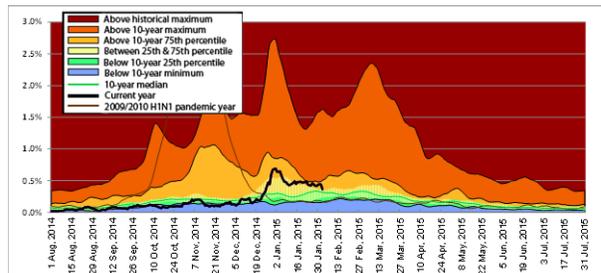
Vancouver Island



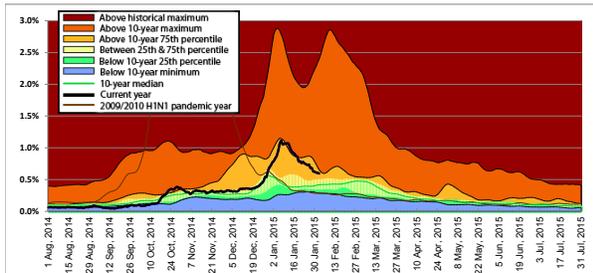
Fraser



Northern



Vancouver Coastal



Laboratory Reports

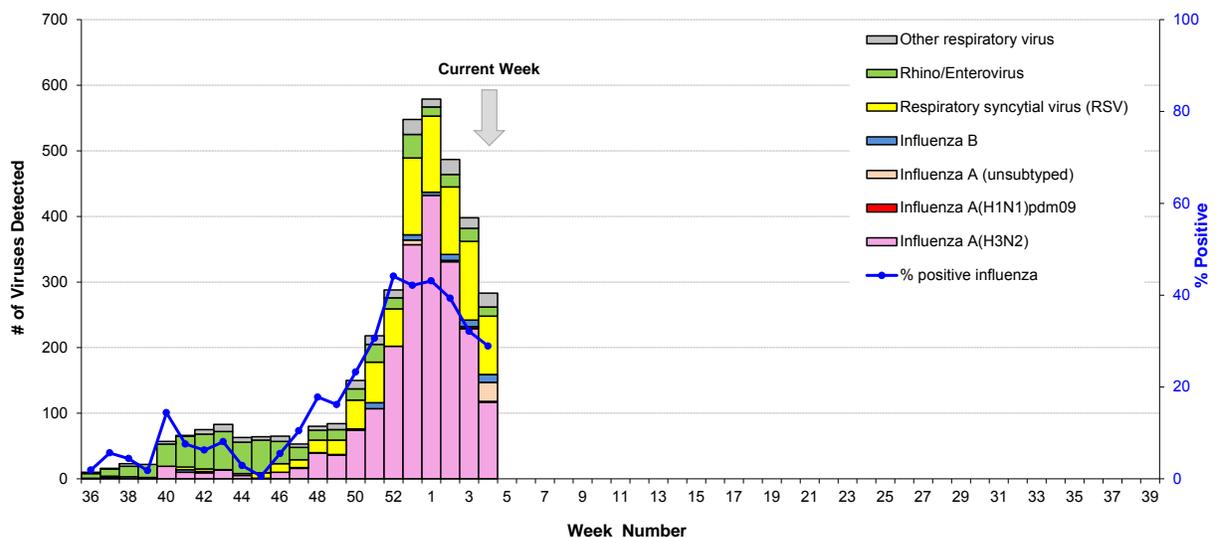
BC Public Health Microbiology & Reference Laboratory (PHMRL)

In week 4, the BC Public Health Microbiology & Reference Laboratory (PHMRL) tested 550 patients for respiratory viruses. Of these, 158 (29%) tested positive for influenza, including 146 (92%) influenza A [117 A(H3N2), 1 A(H1N1)pdm09, 2 A(H7N9), and 26 with subtype pending] and 12 (8%) influenza B. Influenza positivity has been gradually declining since a peak in week 52 at 44%, driven primarily by decreased circulation of A(H3N2), and dipped below 30% for the first time since week 50. Respiratory syncytial virus (RSV) activity remained stable during this period and, after influenza, was the most commonly detected respiratory virus.

Cumulatively, during the 2014-15 influenza season (since week 40, starting September 28, 2014), 2090 (31%) patients have tested positive for influenza at the BC PHMRL, including 2027 (97%) with influenza A and 63 (3%) with influenza B. One paediatric patient who had recently been vaccinated with the live-attenuated influenza vaccine (LAIV) tested positive for influenza A(H1N1)pdm09, A(H3N2) and influenza B in week 2; these are assumed to be vaccine strain detections, rather than true co-infection. Two adult patients with recent travel to China tested positive for avian influenza A(H7N9) in week 4 (see details in the [Emerging Respiratory Pathogens](#) section).

So far this season, A(H3N2) has been the dominant subtype in BC, with lesser co-circulation of influenza B and minimal detection of A(H1N1)pdm09. The majority of influenza detections continue to be in elderly adults (≥ 65 years of age), driven in part by record reports of influenza outbreaks in long-term care facilities (LTCFs).

Influenza and other virus detections among respiratory specimens submitted to BC Public Health Microbiology & Reference Laboratory, PHSA, 2014-15

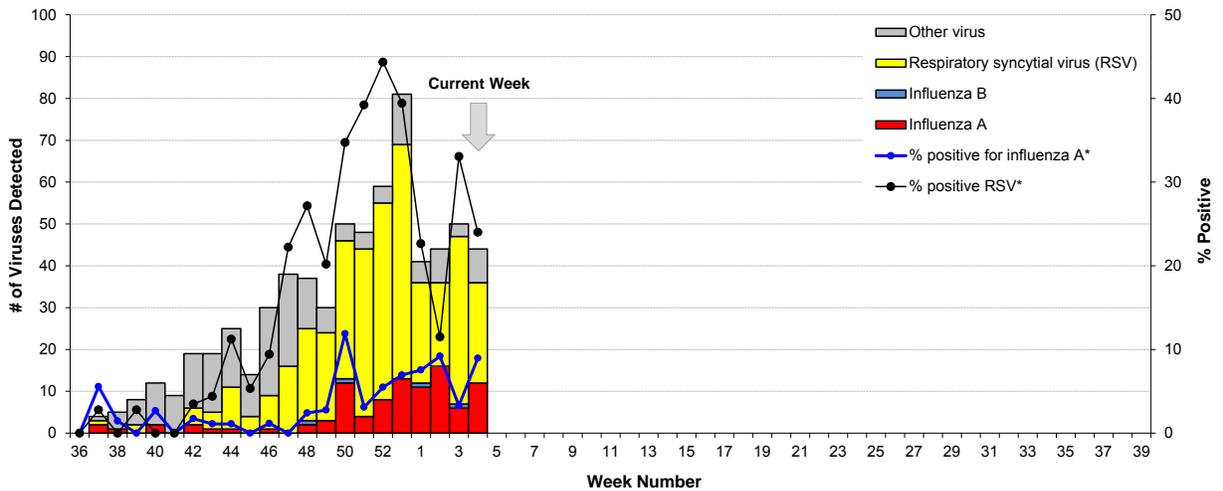


Note: Data current to February 4, 2015.

BC Children's and Women's Health Centre Laboratory

In week 4, the BC Children's and Women's Health Centre Laboratory conducted 134 tests for influenza A and 100 tests for influenza B. Of these, 12 (9%) were positive for influenza A and none were positive for influenza B. The percent of tests positive for influenza A was 9% in week 4, comparable to week 2 (9%) but somewhat higher than week 3 (3%). RSV remained the most commonly detected respiratory virus during this period.

Influenza and other virus detections among respiratory specimens submitted to BC Children's and Women's Health Centre Laboratory, 2014-15



* 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.

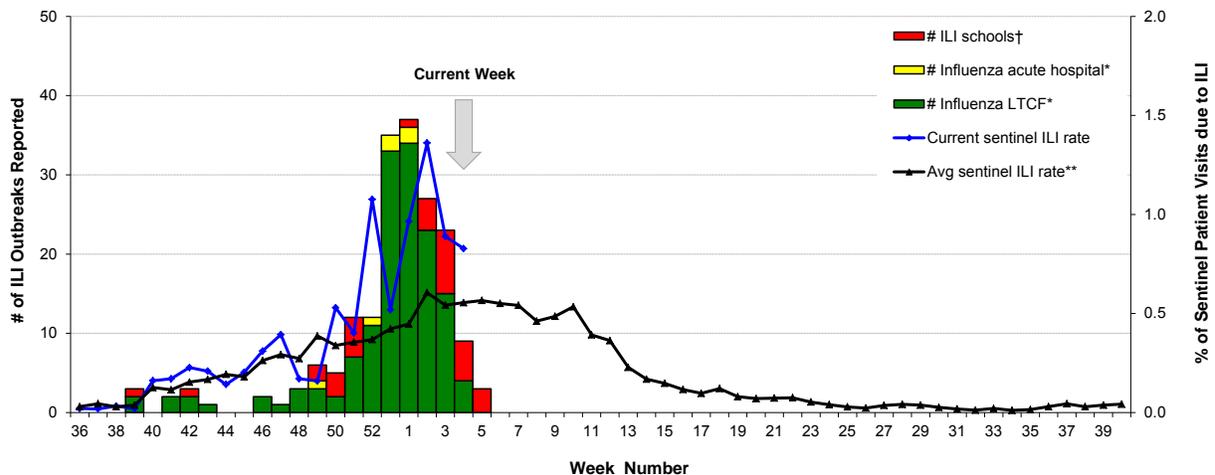
Influenza-like Illness (ILI) Outbreaks

Since our last bulletin one week ago, 15 new laboratory-confirmed influenza outbreaks in LTCFs were reported, including 6 due to influenza A(H3N2) and 9 due to influenza A with pending subtype. Of the new LTCF outbreaks, 2 had symptom onset in week 2 (1 IHA and 1 VIHA), 9 had symptom onset in week 3 (5 FHA, 2 IHA, and 2 VCHA), and 4 had symptom onset in week 4 (2 FHA, 1 VCHA, and 1 VIHA).

Cumulatively, since week 39 (starting September 21, 2014), 151 facility outbreaks due to laboratory-confirmed influenza have been reported, including 145 from LTCFs and 6 from acute care. All but five of these outbreaks were due to influenza A [all A(H3N2) where subtype information is available]; three were due to influenza B, and two were due to both influenza A and B detected in separate units.

The number of year-to-date facility outbreaks reported during the 2014-15 season is now more than double the same period (week 40 – week 4) during the last 2012-13 season of dominant, mismatched H3N2 activity (n=70), and has surpassed by about two-thirds the total number of facility influenza outbreaks reported across the entire 2012-13 season (week 40 – week 17) (n=91), which had previously been the year of record facility outbreak reports, now supplanted by the 2014-15 season.

Number of influenza-like illness (ILI) outbreaks reported, compared to current sentinel ILI rate and historical average sentinel ILI rate, British Columbia, 2014-15



* Facility-based influenza outbreaks defined as 2 or more ILI cases within 7-day period, with at least one laboratory-confirmed case of influenza.
† School-based ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.
** Historical values exclude 2008-09 and 2009-10 seasons due to atypical seasonality.

Updated AMMI Guidelines: LTCF Outbreak Control

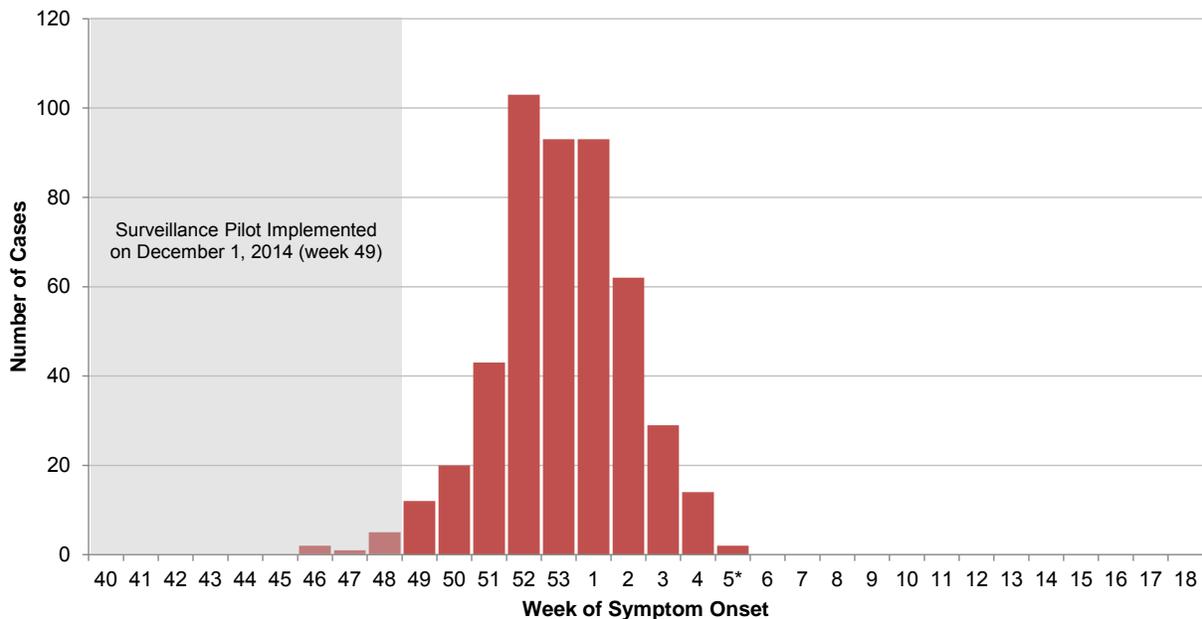
In the context of documented vaccine mismatch to circulating A(H3N2) viruses, all of which retain sensitivity to the neuraminidase inhibitor drugs, the Association of Medical Microbiology and Infectious Disease (AMMI) Canada has posted updated recommendations for antiviral use, notably in relation to LTCF outbreak control, available here: www.ammi.ca/guidelines.

Laboratory-confirmed Influenza Hospitalizations

On December 1, 2014, the BC Centre for Disease Control and the regional Health Authorities implemented an influenza severe outcome surveillance (SOS) pilot in BC for monitoring laboratory-confirmed influenza hospitalizations. An epidemic curve of hospitalized influenza cases by week of symptom onset is shown below, mirroring trends observed in other surveillance indicators. Of note, reporting delays should be taken into account in interpreting trends, particularly for the most recent weeks of the epidemic curve displayed.

Elderly adults are disproportionately represented among influenza-related hospitalizations this season, as is typically observed during A(H3N2)-dominant seasons. The median age of cases is 79 years (range: <1 year to >100 years). While individuals ≥65 years of age comprise <20% of the BC population, they comprise >70% of influenza hospitalizations reported to date in BC. Similarly, while individuals ≥80 years old make up <5% of the BC population, they comprise about half of all influenza-related hospitalizations. The majority (>80%) of cases have had one or more pre-existing comorbidities. Almost all cases have been due to influenza A, all A(H3N2) among those with subtype information available, with a minority due to influenza B.

Number of laboratory-confirmed influenza hospitalizations by week of symptom onset, British Columbia, 2014-15



* Based on partial week; data are subject to change as reporting becomes more complete. Includes influenza SOS case report forms received as of 3:00 PM PST on February 5, 2015.

Symptom onset date was imputed as hospital admission date minus two days where symptom onset was unknown.

Only severe cases of laboratory-confirmed influenza admitted to an intensive care unit (ICU) are reported in FHA; in all other Health Authorities, both hospitalizations and ICU admissions are reported.

National

FluWatch (week 3)

In week 3, all influenza indicators declined from the previous week, indicating that the peak of the influenza season in Canada may have passed. However, many regions continue to report localized or sporadic influenza activity, and 15 regions in BC, ON, QC, NF and PEI reported widespread activity. The percentage of influenza positive tests was 27% in week 3, down from a peak of 36% in week 52. In week 3, 2,928 (27%) influenza viruses were detected, including 2,788 (96%) influenza A [1,163 A(H3N2), 6 A(H1N1)pdm09, and 1,619 unsubtype] and 112 (4%) influenza B. Influenza A(H3N2) continues to be the most common type of influenza affecting Canadians. In laboratory detections, hospitalizations, and deaths, the majority of cases have been among seniors ≥65 years of age. Details are available at: www.phac-aspc.gc.ca/fluwatch/14-15/index-eng.php.

National Microbiology Laboratory (NML): Strain Characterization

From September 1, 2014 to February 5, 2015, the NML has antigenically characterized 151 influenza viruses [75 A(H3N2), 2 A(H1N1)pdm09, and 74 influenza B] and genetically characterized 538 influenza A(H3N2) viruses that were received from Canadian laboratories.

Influenza A(H3N2): Of the 613 A(H3N2) viruses characterized so far this season by the NML, 610 (99%) showed antigenic or genetic evidence of antigenic drift (i.e. vaccine mismatch). Of the 75 A(H3N2) viruses antigenically characterized by haemagglutinin inhibition (HI) assay: 69 (92%) were similar to A/Switzerland/9715293/2013, the WHO-recommended A(H3N2) component for the 2015 Southern Hemisphere influenza vaccine; one (1%) was similar to A/Texas/50/2012, the WHO-recommended A(H3N2) component for the 2014-15 Northern Hemisphere influenza vaccine used this season; and 5 (7%) showed reduced titres to A/Texas/50/2012 but could not be further characterized in relation to A/Switzerland/9715293/2013 due to insufficient titres. Genetic characterization was performed on 538 A(H3N2) viruses that did not grow to sufficient titres for antigenic characterization by HI assay. Of the 538 A(H3N2) viruses genetically characterized: 536 (~100%) belonged to a genetic group that typically shows reduced titres to A/Texas/50/2012 due to amino acid mutations at antigenic sites. The remaining two (<1%) viruses belonged to a genetic group that does not show reduced titres to A/Texas/50/2012.

Influenza A(H1N1)pdm09: Of the 2 A(H1N1)pdm09 viruses characterized, both were antigenically similar to A/California/7/2009, the WHO-recommended A(H1N1)pdm09 component for the 2014-15 Northern Hemisphere influenza vaccine.

Influenza B: Of the 74 influenza B viruses characterized, 67 (91%) viruses were antigenically similar to B/Massachusetts/2/2012 (Yamagata-lineage), the WHO-recommended influenza B vaccine component for the 2014-15 Northern Hemisphere influenza vaccine, 3 (4%) viruses showed reduced titres with antiserum produced against B/Massachusetts/2/2012, signalling antigenic drift from vaccine strain, and 4 (5%) were antigenically similar to B/Brisbane/60/2008 (Victoria-lineage), the WHO-recommended influenza B/Victoria vaccine component for the quadrivalent 2014-15 Northern Hemisphere influenza vaccine.

National Microbiology Laboratory (NML): Antiviral Resistance

From September 1, 2014 to February 5, 2015, the NML received influenza viruses from Canadian laboratories for drug susceptibility testing. Of the 693 influenza A viruses [691 A(H3N2) and 2 A(H1N1)pdm09] tested against amantadine, 690 A(H3N2) viruses and both A(H1N1)pdm09 viruses were resistant; one A(H3N2) virus was sensitive to amantadine. Of the 425 influenza viruses [352 A(H3N2), 2 A(H1N1)pdm09, and 71 influenza B] tested against oseltamivir, all were sensitive. Of the 424 influenza viruses [351 A(H3N2), 2 A(H1N1)pdm09, and 71 influenza B] tested against zanamivir, all were sensitive.

Interim Estimates of 2014/15 Influenza Vaccine Effectiveness, Canada

Canadian Sentinel Physician Surveillance Network (SPSN), Community-based

On January 29, the Canadian Sentinel Physician Surveillance Network (SPSN) published interim estimates of vaccine effectiveness (VE) against medically attended, laboratory-confirmed influenza infection for the 2014/15 influenza vaccine. Of the characterized viruses contributing to VE analysis, virtually all (99%) clustered with phylogenetic clades that are considered antigenically distinct from the vaccine strain. Consistent with this substantial vaccine mismatch in circulating viruses, little to no protection against the dominant circulating A(H3N2) viruses was found by the Canadian SPSN. VE against medically attended laboratory-confirmed A(H3N2) infection was estimated at -8%, with 95% confidence intervals (CIs) spanning -50% to 23%. When analyses were restricted to non-elderly adults 20-64 years old, VE was 2% (95% CI: -49 to 36%). Details are available at:

www.eurosurveillance.org/ViewArticle.aspx?ArticleId=21022.

Canadian Immunization Research Network (CIRN), Hospital-based

On February 5, the Serious Outcomes Surveillance Network of the Canadian Immunization Research Network (CIRN) published interim estimates of VE against influenza-associated hospitalizations for laboratory-confirmed influenza for the 2014/15 influenza vaccine. Influenza A(H3N2) was the predominant influenza virus detected among hospitalized cases, accounting for 99% of influenza A viruses with known subtype. Unmatched VE estimates adjusted for age and comorbidity were -17% (95% CI: -56 to 13%) overall and -22% (95% CI: -77 to 16%) for influenza A(H3N2). Among elderly adults ≥65 years old, adjusted VE estimates were -25% (95% CI: -74 to 10%) and -33 (95% CI: -104 to 13%), respectively. Among non-elderly adults <65 years old, VE estimates were 11% (95% CI: -66 to 52%) and 8% (95% CI: -102 to 58%), respectively. Details are available at:

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=21024>.

International

USA (week 3)

During week 3, influenza activity remained elevated in the United States. Of the 23,339 specimens tested, 4,651 (20%) were positive for influenza, including 4,343 (93%) influenza A [1,698 A(H3N2), 2 A(H1N1)pdm09, and 2,643 with subtyping not performed] and 308 (7%) influenza B. Of the 478 A(H3N2) influenza viruses collected since October 1, 2014, and characterized by HI assay, 159 (33%) were characterized as A/Texas/50/2012-like, the A(H3N2) component of the 2014-15 Northern Hemisphere influenza vaccine, and 319 (67%) either showed reduced titres with antiserum produced against A/Texas/50/2012 or belonged to a genetic group that typically shows reduced titres to A/Texas/50/2012. Among viruses that showed reduced titres with antiserum raised against A/Texas/50/2012, most were antigenically similar to A/Switzerland/9715293/2013, the A(H3N2) virus selected for the 2015 Southern Hemisphere influenza vaccine. The proportion of outpatient visits for ILI was 4.4%, above the national baseline of 2.0%, and the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold. Five influenza-associated paediatric deaths were reported. Details are available at: www.cdc.gov/flu/weekly/.

WHO

There have been no WHO influenza surveillance updates since our last bulletin. Previous influenza updates are available at: www.who.int/influenza/surveillance_monitoring/updates/en/.

Emerging Respiratory Pathogens

Avian Influenza A(H7N9), Human Cases, British Columbia

On January 26, 2015, the BC Centre for Disease Control reported two cases of avian influenza A(H7N9) in a BC couple who had recently returned from travelling in China. The index case was presumptively diagnosed with laboratory-confirmed influenza A(H7N9) infection at the BC Public Health Microbiology and Reference Laboratory (PHMRL) on January 23 and confirmed by Canada's National Microbiology Laboratory (NML) on January 26. A second individual who travelled with the confirmed index case and resides in the same household has also been diagnosed with A(H7N9) infection, confirmed by the NML on January 29 and likely acquired from a common avian source while abroad. These are the first documented cases of human infection with A(H7N9) imported to North America. Both individuals are adults 50-60 years of age. Both cases developed acute respiratory symptoms after returning to Canada and both have fully recovered from their illness; neither case was hospitalized and both were managed as outpatients.

To date, more than 500 cases of avian influenza A(H7N9) have been reported globally since its first emergence in human populations in February 2013. Given ongoing activity in the affected region, further cases are anticipated through the late winter and spring period as observed each year since 2013, although it is not yet evident whether the very large number of cases seen last winter will be repeated in the coming months of 2015. Although multiple clusters of limited transmission in close contact settings (e.g. households) have been reported, there remains no evidence of sustained human-to-human transmission and the risk to Canadians remains low.

Details are available at:

<http://www.bccdc.ca/dis-cond/DiseaseStatsReports/EmergingRespiratoryVirusUpdates.htm>.

WHO Recommendations for Influenza Vaccines

WHO Recommendations for 2014-15 Northern Hemisphere Influenza Vaccine

On February 20, 2014, the WHO announced the recommended strain components for the 2014-15 Northern Hemisphere trivalent influenza vaccine (TIV):*

- an A/California/7/2009(H1N1)pdm09-like virus;
- an A/Texas/50/2012(H3N2)-like virus;
- a B/Massachusetts/2/2012-like (Yamagata-lineage) virus.

*These recommended strains are the same as those used for the 2013-14 Northern Hemisphere vaccine.

For further details: www.who.int/influenza/vaccines/virus/recommendations/2014_15_north/en/.

WHO Recommendations for 2015 Southern Hemisphere Influenza Vaccine

On September 25, 2014, the WHO announced the recommended strain components for the 2015 Southern Hemisphere trivalent influenza vaccine (TIV):

- an A/California/7/2009(H1N1)pdm09-like virus;*
- an A/Switzerland/9715293/2013(H3N2)-like virus;†
- a B/Phuket/3073/2013-like (Yamagata-lineage) virus.‡

*Recommended strain has been retained as the A(H1N1) component since the 2009 pandemic and has been included in the Southern Hemisphere vaccine since 2010 and in the Northern Hemisphere vaccine since 2010-11.

†A/South Australia/55/2014, A/Norway/466/2014, and A/Stockholm/6/2014 are A/Switzerland/9715293/2013-like viruses. Recommended strain is considered antigenically distinct from the A/Texas/50/2012-like virus recommended for the 2014-15 Northern Hemisphere vaccine and clusters within the emerging phylogenetic clade 3C.3a.

‡ Recommended strain is the same influenza B-Yamagata lineage as the B/Massachusetts/2/2012-like virus recommended for the 2014-15 Northern Hemisphere vaccine but represents a phylogenetic clade-level change from clade 2 to clade 3.

For further details: www.who.int/influenza/vaccines/virus/recommendations/2015_south/en/.

Additional Information

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/guidelines

Web Sites:

BCCDC Emerging Respiratory Pathogen Updates:

www.bccdc.ca/dis-cond/DiseaseStatsReports/EmergingRespiratoryVirusUpdates.htm

Influenza Web Sites

Canada – Flu Watch: www.phac-aspc.gc.ca/fluwatch/

Washington State Flu Updates: www.doh.wa.gov/Portals/1/Documents/5100/fluupdate.pdf

USA Weekly Surveillance Reports: www.cdc.gov/flu/weekly/

European Influenza Surveillance Scheme:

ecdc.europa.eu/EN/HEALTHTOPICS/SEASONAL_INFLUENZA/EPIDEMIOLOGICAL_DATA/Pages/Weekly_Influenza_Surveillance_Overview.aspx

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/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm

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	<u>Reporting Information</u>	Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
	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	<u>First Notification</u>
	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: _____)
	<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
Total		
With ILI		
Hospitalized		
Died		

C	<u>Update AND Outbreak Declared Over</u>
	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
Total		
With ILI		
Hospitalized		
Died		

D	<u>Laboratory Information</u>
	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