

Section 1: Summary

During Week 49, there was sporadic activity in three zones.

- North** No activity.
- Edmonton** Sporadic activity. Two influenza A (1 H1N1) isolates in a child and an adult.
- Central** Sporadic activity. One influenza A isolate in an adult.
- Calgary** Sporadic activity. One influenza outbreak reported at a long-term care facility. Four influenza A isolates in adults.
- South** No activity.



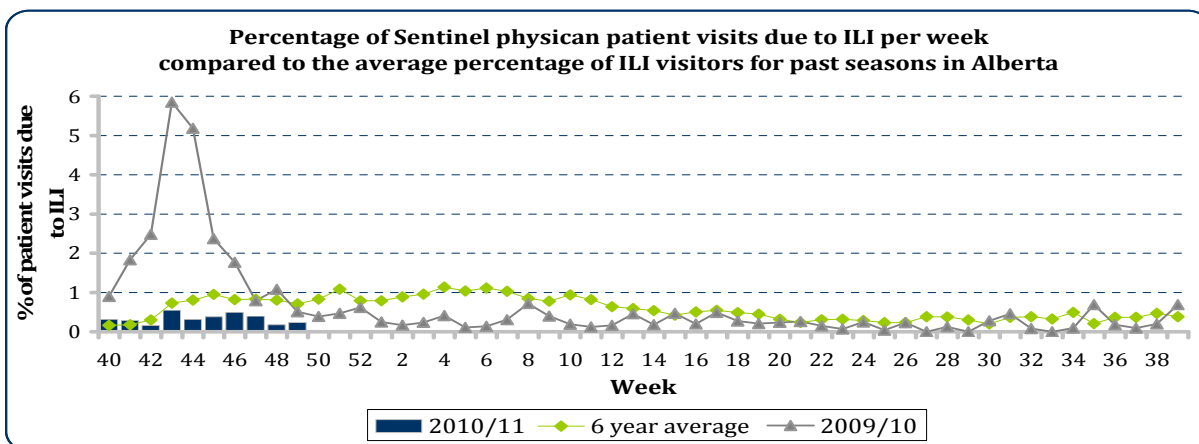
Section 2: Influenza-Like Illness - TARRANT

Sentinel physicians reported in all health zones during Week 49, and saw 2,941 patients. These 34 physicians diagnosed influenza-like-illness (ILI) or lower respiratory tract illness (LRTI) in **1.50%** of the patients seen, which is higher than the previous week. The majority of respiratory illness seen was LRTI.

Zone	Sentinel Doctors (#)	Sentinel Recorders (#)	Patients Seen (#)	ILI Cases (#)	Patients with ILI (%)	LRTI Cases (#)	Patients with LRTI (%)	Total ILI & LRTI Cases (#)	Patients with either ILI or LRTI (%)
North	8	2	436	0	0	6	1.38	6	1.38
Edmonton	11	5	784	2	0.26	20	2.55	22	2.81
Central	17	10	616	0	0	6	0.97	6	0.97
Calgary	32	13	811	4	0.49	5	0.62	9	1.11
South	10	4	294	1	0.34	0	0	1	0.34
Alberta	78	34	2,941	7	0.24	37	1.26	44	1.50

ILI= Influenza-Like Illness; LRTI = Lower Respiratory Tract Infection

Source: TARRANT. For more information, please go to the website: www.tarrantviralwatch.ca

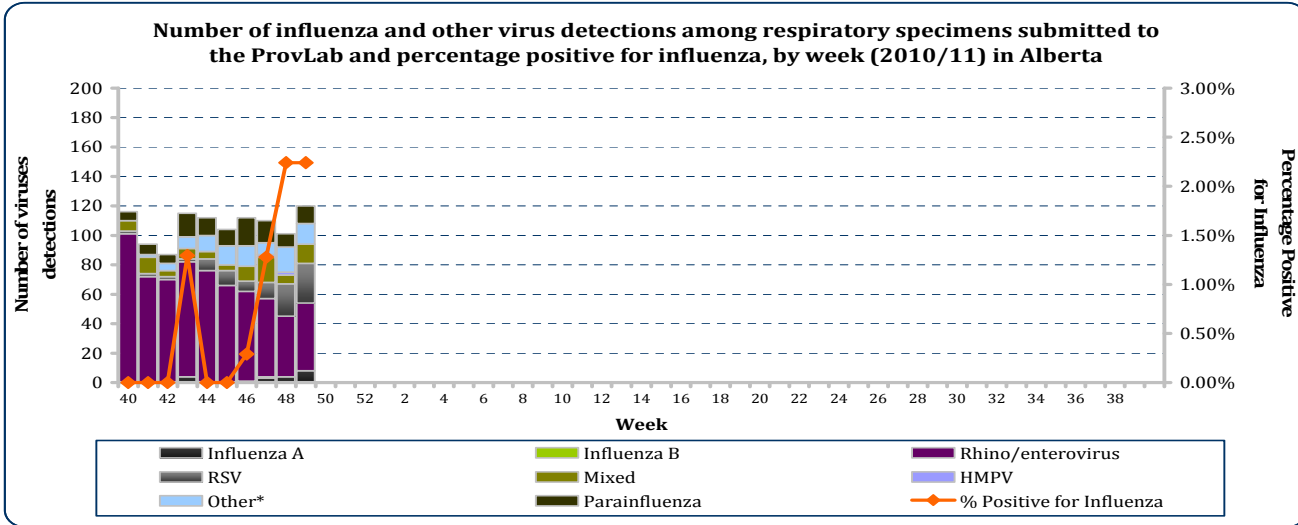


Source: TARRANT

Of note: 6 year average is 2003/04 to 2008/09

Section 3: Influenza Isolates

In Week 49, the Provincial Laboratory for Public Health (ProvLab) tested 357 specimens – 232 in North/Central and 125 in South. ProvLab confirmed four **influenza A** isolates; (4) in the Calgary zone; (2) in the Edmonton zone; and (1) in the Central zone. No **influenza B** isolates were confirmed. The percentage positive rate for influenza was 2.2%, which is higher than the previous week (1.3%). Rhino/enterovirus made up the largest number of virus detections for week 49.



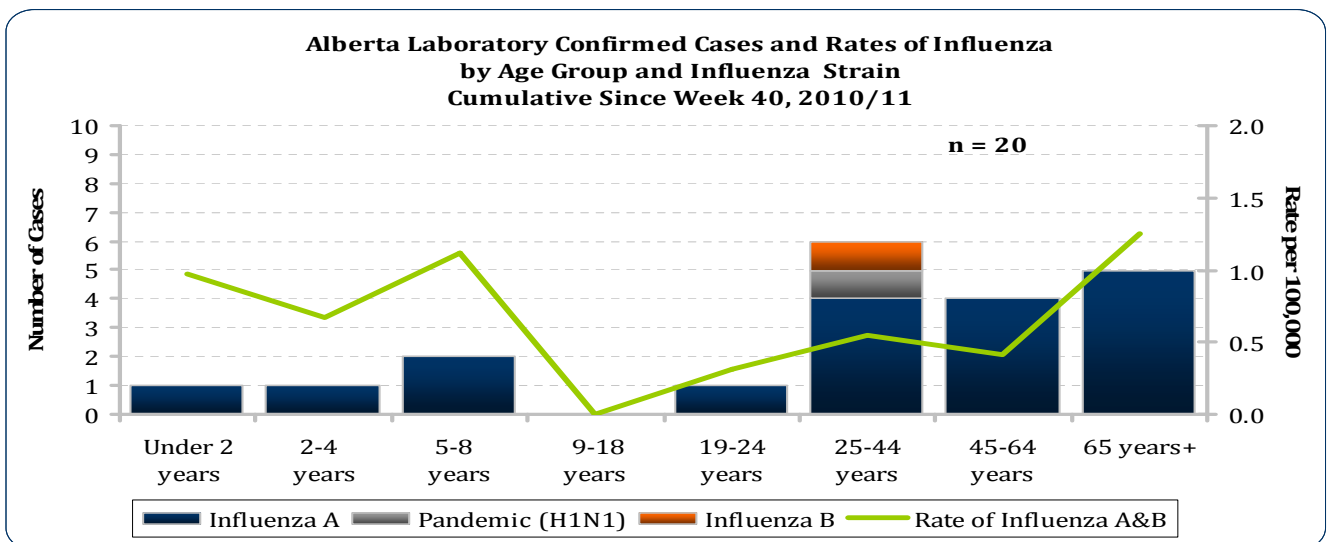
Sources: ProvLab, Dial System

Influenza Isolates (A&B) Reported by ProvLab				
AHS Health Zone	Week 49 Influenza A	Week 49 Influenza B	YTD (A) 2010/11*	YTD (B) 2010/11*
South	0	0	1	0
Calgary	4	0	15	0
Central	1	0	1	1
Edmonton	2	0	2	0
North	0	0	0	0
Alberta	7	0	19	1

The graph below shows the 20 lab-confirmed cases of influenza seen since October 3, 2010 by age group and influenza isolate, as well as the rate of influenza (both A & B) by age group. The 25 to 44 year age group has the greatest number of cases (6 cases; 30%). Persons 65 years of age and older have the highest rate of disease (1.3 cases per 100,000).

*YTD begins Week 40 (October 3, 2010)

Source: ProvLab – Note: Isolates reported by week subtyped



Source: ProvLab

Section 4: Outbreaks

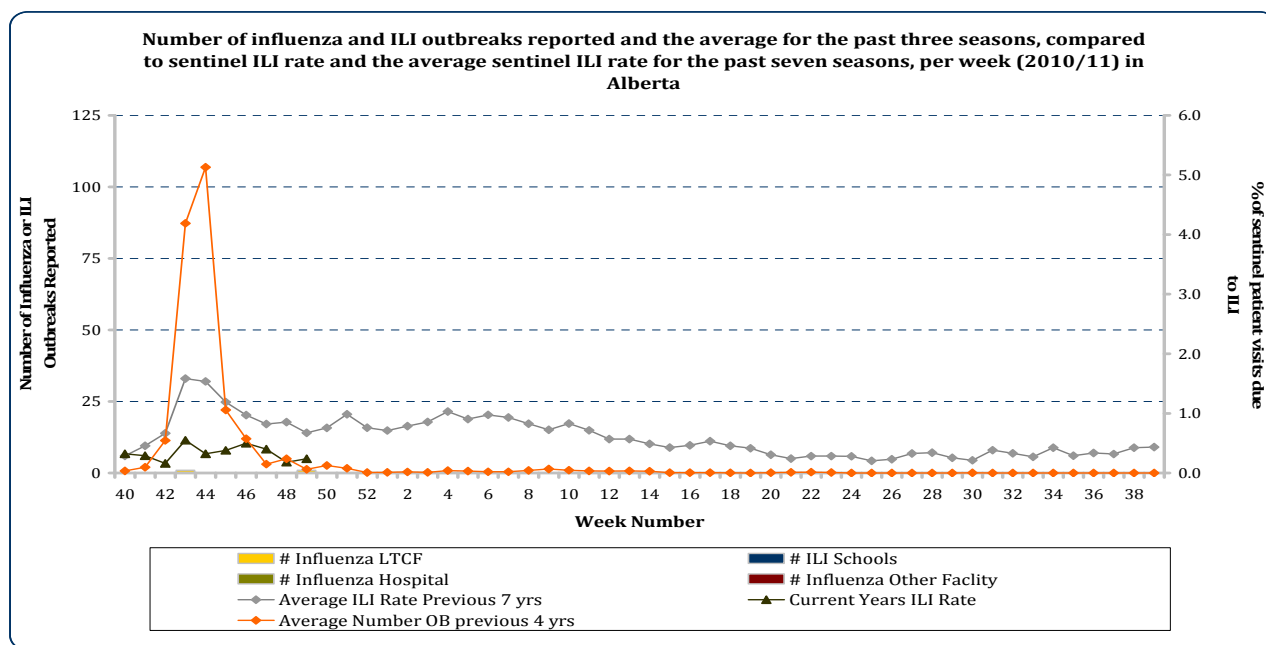
During week 49 there was an influenza outbreak reported by a LTCF in the Calgary zone.

Confirmed New Influenza or ILI Outbreaks Reported by Zones		
AHS Health Zone	Week 49	YTD 2010/11*
South	0	0
Calgary	1	2
Central	0	0
Edmonton	0	0
North	0	0
Alberta	1	2

Source: AHW outbreak database

Each week Alberta Health and Wellness (AHW) is reported respiratory outbreaks. To be considered a **Long-Term Care facility (LTCF), Hospital or other facility** influenza outbreak, two or more cases of ILI within a seven-day period including at least one laboratory confirmed case, must occur. Of note, outbreaks (OBs) where the isolated agent is respiratory syncytial virus (RSV), parainfluenza, human metapneumovirus, or Rhino/enterovirus are also reported to AHW. Finally, **school outbreaks** are reported when greater than 10% of a school population are absent on any given day, most likely due to ILI. Outbreaks are reported by date investigation of outbreak is opened.

The ILI rate for week 49 (0.24%) is less than the average ILI rate for the previous seasons (0.67%).

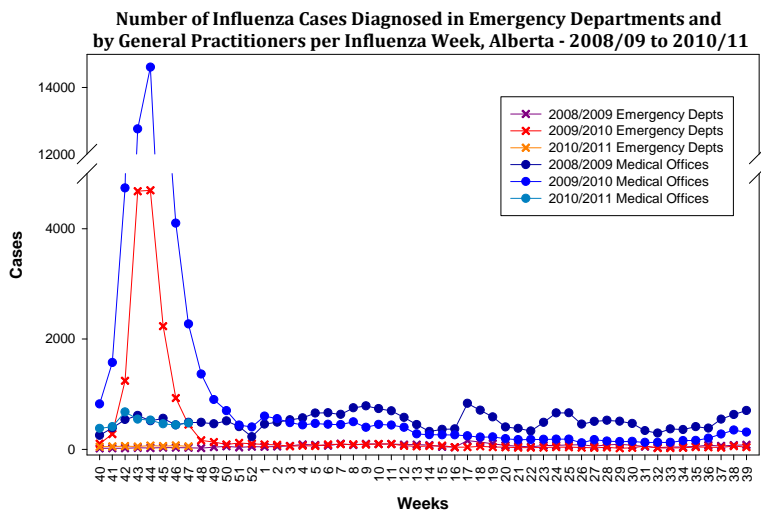


Sources: ProvLab, TARRANT, and AHW outbreak database

Section 5: Clinically Diagnosed Influenza

This graph is based on physician claims and hospitalization data and presents the number of influenza cases clinically diagnosed in Alberta's emergency departments and general practitioner offices. Data for the 2010/2011 as well as 2008/2009 and 2009/2010 are shown. Please note that this data captures the majority of claims within two weeks of reporting and will be updated on a weekly basis.

Influenza cases diagnosed at emergency departments and by general practitioners are less than the previous season, but similar to non-pandemic 2008/2009 season.



Section 6: Antigenic Characterization and Antiviral Resistance

To date, all of influenza isolates characterized by the National Microbiology Laboratory (NML) for this season, have been compatible to the vaccine components of the seasonal influenza immunization being offered in Alberta this season (H3N2, H1N1 and B).

To date, all influenza isolates tested by NML were resistant to Amantadine, sensitive to Oseltamivir, and sensitive to Zanamivir.

Section 7: Canadian and International Influenza Activity

The following links provide access to other Canadian and international websites related to influenza and ILI.

Canada – FluWATCH	http://www.phac-aspc.gc.ca/fluwatch/index-eng.php
British Columbia	www.bccdc.org/topic.php?item=80
Alberta	www.health.alberta.ca/health-info/influenza-evidence.html
Manitoba	www.gov.mb.ca/health/publichealth/cdc/surveillance/index.html#influenza
Ontario	www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_06/flubul_mn.html
Quebec	www.msss.gouv.qc.ca/sujets/prob_sante/influenza/index.php?accueil
New Brunswick	www.gnb.ca/0053/influenza/index-e.asp
Nova Scotia	www.gov.ns.ca/hpp/ocmoh/flu.htm
World Health Organization	www.who.int/topics/influenza/en/
USA – CDC	www.cdc.gov/flu/weekly/
European Centre for Disease Prevention & Control	www.ecdc.europa.eu/en/Health_Topics/influenza/news_archive.aspx
Avian Flu in Poultry	www.thepoultrysite.com/bird-flu