

Week 13 (March 29 to April 4, 2015)

### Summary of Nova Scotia surveillance findings, for the period ending April 4, 2015:

- There were 23 positive influenza cases received this week, 12 influenza A unsubtyped and 11 influenza B. There have been 720 lab confirmed\* cases of influenza this season (172 influenza A H3, 329 influenza A (unsubtyped\*\*) and 219 influenza B).
- There have been 33 ICU admissions of laboratory confirmed influenza for the 2014-2015 influenza season.
- There have been 27 influenza deaths\*\*\* for the 2014-2015 influenza season.
- Positive results were received for chlamydophila pneumonia, coronavirus, metapneumovirus, parainfluenza and RSV.
- The ILI rate for Nova Scotia for this reporting period was 1.2.
- Seventy-six percent of emergency departments reported ILI data.

**NOTE:** The 2014-2015 influenza season is defined using the Public Health Agency of Canada's influenza surveillance weeks. This year runs from August 24, 2014 (Week 35) to August 29, 2015 (week 34)

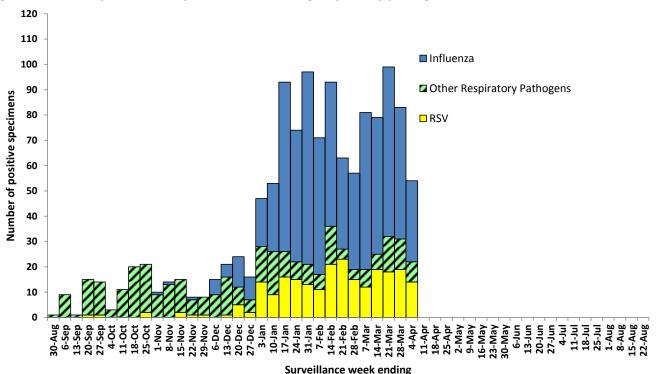


Figure 1: Summary of laboratory detected circulating respiratory pathogens, Nova Scotia, 2014–2015

This figure is based on laboratory information. All other figures and tables in this report are based on ANDS data.

<sup>\*</sup>Lab confirmed cases of influenza are only the 'tip of the iceberg', representing a fraction of individuals infected. Laboratory testing is reserved for patients admitted to hospital with respiratory infection. Because we do not routinely test community specimens, the number of laboratory confirmed cases is an underestimation of the true number of infections.

<sup>\*\*</sup>Subtyping was discontinued on February 5, 2015. Subtyping was performed on 175 specimens and all were H3.

<sup>\*\*\*</sup>Deaths include individuals with a positive influenza test result. For some individuals with pre-existing conditions, influenza may not have been the major contributing cause of death or hospitalization.

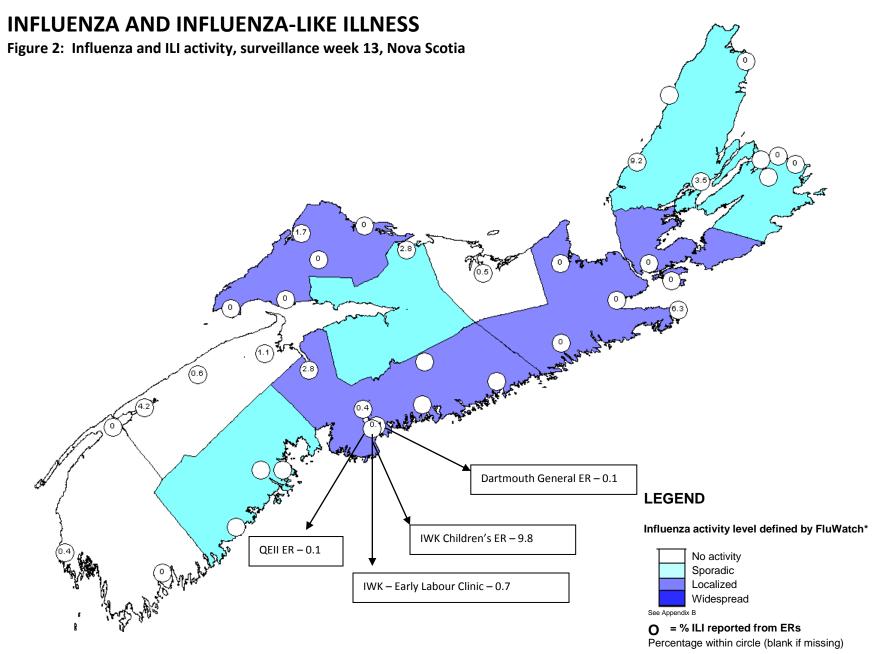


Figure 3: Number of reported lab-confirmed influenza cases by type and report week, Nova Scotia, 2014–2015

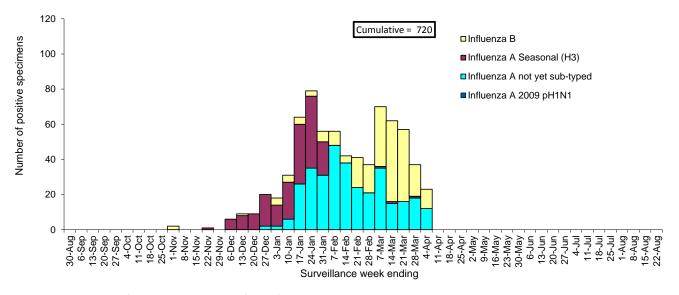
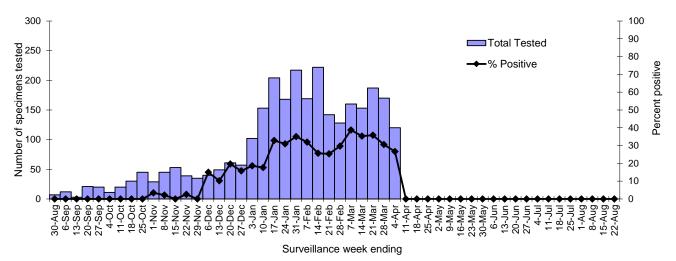


Figure 4: Number of specimens tested for influenza and percent positive, Nova Scotia Provincial Public Health Laboratory Network, 2014–2015\*



<sup>\*</sup>Data presented in this figure refers to week specimen was tested.

Table 1: Influenza case counts by DHA, current surveillance week and cumulative, Nova Scotia, 2014–2015

	DHA 1	DHA 2	DHA 3	DHA 4	DHA 5	DHA 6	DHA 7	DHA 8	DHA 9	Nova Scoti
Influenza A 2009 pH1N1										
Current Week	0	0	0	0	0	0	0	0	0	0
Cumulative 2014 - 2015	0	0	0	0	0	0	0	0	0	0
Influenza A (not yet sub-typed)										
Current Week	0	0	0	1	3	0	0	2	6	12
Cumulative 2014 - 2015	17	12	20	10	16	12	18	80	144	329
Influenza A Seasonal (H3)										
Current Week	0	0	0	0	0	0	0	0	0	0
Cumulative 2014 - 2015	13	0	18	1	1	14	17	2	106	172
Influenza B										
Current Week	2	0	0	0	1	0	1	0	7	11
Cumulative 2014 - 2015	29	11	17	6	6	6	8	16	120	219

Figure 5: Influenza rate per 100,000 population by type and age group, cumulative, Nova Scotia, 2014–2015

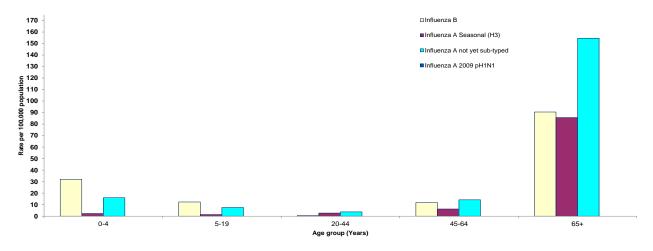


Figure 6: Influenza rate per 100,000 population by type and DHA, cumulative, Nova Scotia, 2014–2015

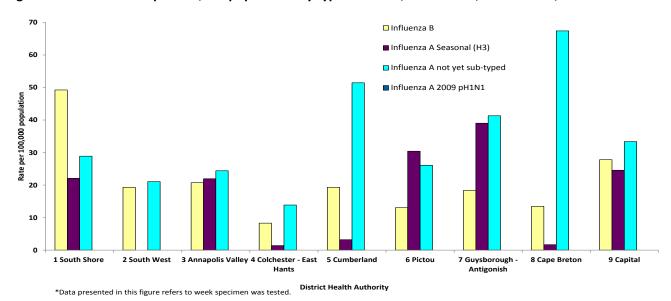


Table 2: ILI reporting from emergency departments, Nova Scotia, 2014-2015

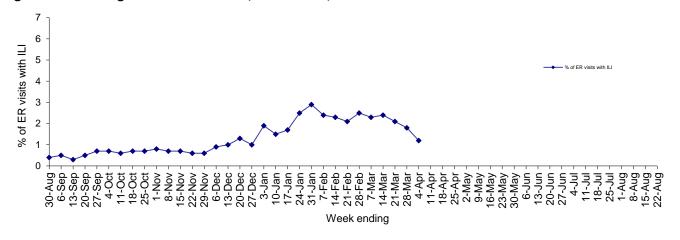
	ER		
	%ILI	Reporting ERs	
DHA 1	-	0 of 3	
DHA 2	0.2	3 of 3	
DHA 3	1.1	3 of 3	
DHA 4	0.5	2 of 2	
DHA 5	0.8	5 of 5	
DHA 6	0.5	1 of 1	
DHA 7	0.3	6 of 6	
DHA 8	2.1	5 of 8	
DHA 9	0.5	4 of 7	
IWK	7.7	1 of 1	
Nova Scotia (excl. IWK)	0.7	29 of 38	76.3%
Nova Scotia (incl. IWK)	1.2	30 of 39	76.9%

Table 3: Hospitalizations, ICU Admissions and Deaths for influenza positive patients, Nova Scotia, 2014-2015

	Hospitalized*	ICU	Death
Influenza A 2009 pH1N1			
Current Week	0	0	0
Cumulative 2014 - 2015	0	0	0
Influenza A (not yet sub-typed)			
Current Week	1	0	0
Cumulative 2014 - 2015	186	13	13
Influenza A Seasonal (H3)  Current Week  Cumulative 2014 - 2015	0 90	0 8	0 11
Influenza B Current Week Cumulative 2014 - 2015	3 131	1 12	0 3
Current Week Total Season Total	4 407	1 33	0 27

<sup>\*</sup> Note: Hospitalized cases exclude ICU admissions

Figure 7: Percentage of ER visits with ILI, Nova Scotia, 2014–2015



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### **RESPIRATORY SYNCYTIAL VIRUS (RSV)**

Figure 8: Number of positive RSV specimens by report week, Nova Scotia, 2014–2015

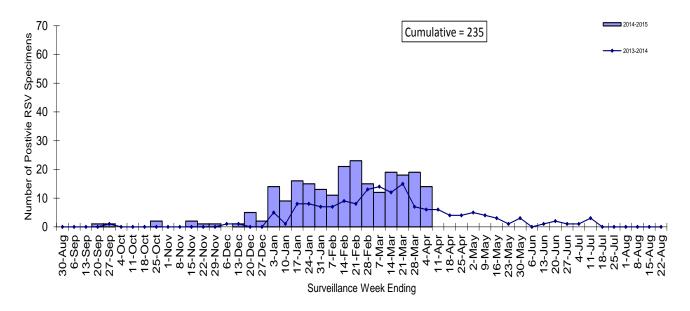
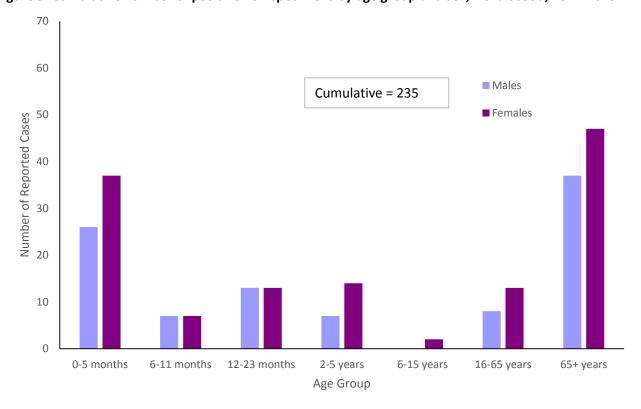


Figure 9: Cumulative number of positive RSV specimens by age group and sex, Nova Scotia, 2014-2015



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### **OTHER RESPIRATORY PATHOGENS**

Table 4: Total number of specimens tested and number (%) positive for other respiratory pathogens, by report week and cumulative season, Nova Scotia, 2014–2015

		Surveillance \	Neek		Cumulative Season-to-Date Totals		
Number and percent positive for:	n tested	n positive	% positive	n tested	n positive	% positive	
Adenovirus	24	0	0.0	800	13	1.6	
Bocavirus	24	0	0.0	800	0	0.0	
Chlamydophila pneumoniae	5	1	20.0	624	1	0.2	
Coronavirus	24	4	16.7	800	27	3.4	
Enterovirus	24	0	0.0	800	2	0.3	
Metapneumovirus	24	2	8.3	800	11	1.4	
Mycoplasma pneumoniae	5	0	0.0	623	64	10.3	
Parainfluenza	24	1	4.2	800	62	7.8	
Pertussis	5	0	0.0	349	14	4.0	
Respiratory syncytial virus A	24	0	0.0	832	1	0.1	
Respiratory syncytial virus B	24	4	16.7	832	22	2.6	
Respiratory syncytial virus not typed	92	10	0.0	1911	212	11.1	
Rhinovirus	24	0	0.0	800	104	13.0	

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### APPENDIX: Definitions used in Influenza Surveillance, 2014-2015

1) ILI in the general population:

Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which is likely due to influenza. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

2) Outbreaks of influenza / ILI by setting:

#### Schools and Daycares:

Greater than 10% absenteeism (or absenteeism that is higher (e.g. >5-10%) than expected level as determined by school or public health authority) which is likely due to ILI.

### **Hospitals and residential institutions:**

Two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case. Institutional outbreaks should be reported within 24 hours of identification. Residential institutions include but not limited to long-term care facilities (LTCF) and prisons.

#### Other Settings:

Two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case; i.e. closed communities.

3) National FluWatch Definitions for Influenza Activity Levels:

### Influenza activity levels are defined as:

1 = No activity: i.e. no laboratory-confirmed influenza detections in the reporting week, however,

sporadically occurring ILI\* may be reported

2 = Sporadic: sporadically occurring ILI\* and lab confirmed influenza detection(s) with no outbreaks

detected within the influenza surveillance region†

**3** = Localized: (1) evidence of increased ILI\* and

(2) lab confirmed influenza detection(s) together with

(3) outbreaks in schools, hospitals, residential institutions and/or other types of facilities

occurring in less than 50% of the influenza surveillance region †

4 = Widespread: (1) evidence of increased ILI\* and

(2) lab confirmed influenza detection(s) together with

(3) outbreaks in schools, hospitals, residential institutions and/or other types of facilities

occurring in greater than or equal to 50% of the influenza surveillance region†

<sup>\*</sup> ILI data may be reported through sentinel physicians, emergency room visits or health line telephone calls.

<sup>†</sup> Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist.

- 4) District Health Authorities (DHAs), Nova Scotia:
  - DHA 1 South Shore Health
  - DHA 2 South West Health
  - DHA 3 Annapolis Valley Health
  - DHA 4 Colchester East Hants Health Authority
  - DHA 5 Cumberland Health Authority
  - DHA 6 Pictou County Health Authority
  - DHA 7 Guysborough Antigonish Strait Health Authority
  - DHA 8 Cape Breton District Health Authority
  - DHA 9 Capital Health