RESPIRATORY WATCH

Week 8 (February 22 to February 28, 2015)

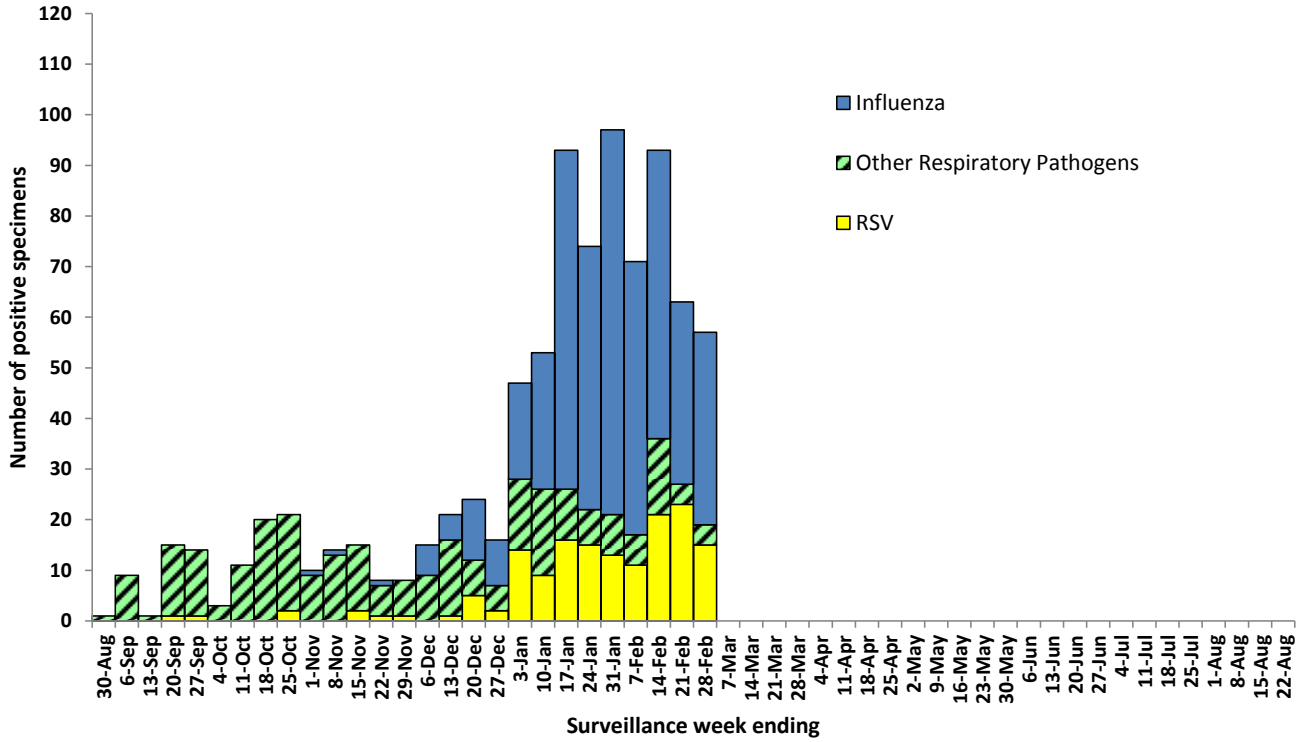
Summary of Nova Scotia surveillance findings, for the period ending February 28, 2015:

- There were 29 positive influenza cases received this week, 16 influenza A unsubtyped and 13 influenza B. There have been 456 lab confirmed* cases of influenza this season (169 influenza A H3, 225 influenza A (unsubtyped**) and 62 influenza B).
- There have been 19 ICU admissions of laboratory confirmed influenza for the 2014-2015 influenza season.
- There have been 16 influenza deaths*** for the 2014-2015 influenza season.
- Positive results were received for coronavirus, metapneumovirus, mycoplasma pneumonia, pertussis, and RSV.
- The ILI rate for Nova Scotia for this reporting period was 2.5.
- Eighty-seven percent of emergency departments reported ILI data.

*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.
**Subtyping was discontinued on February 5, 2015. Subtyping was performed on 175 specimens and all were H3.
***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.

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



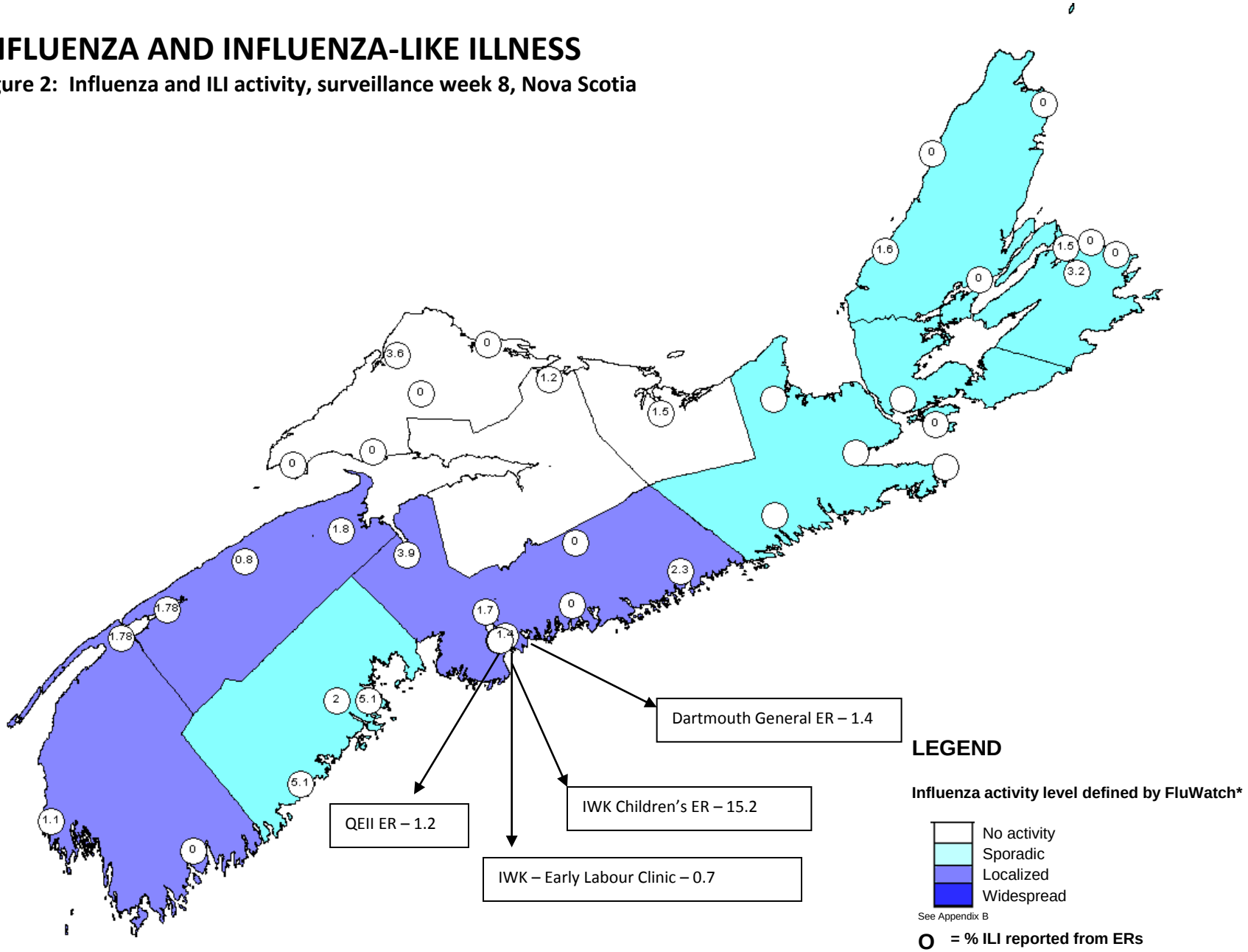
This figure is based on laboratory information. All other figures and tables in this report are based on ANDS data.

RESPIRATORY WATCH

Week 8 (February 22 to February 28, 2015)

INFLUENZA AND INFLUENZA-LIKE ILLNESS

Figure 2: Influenza and ILI activity, surveillance week 8, Nova Scotia



RESPIRATORY WATCH

Week 8 (February 22 to February 28, 2015)

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

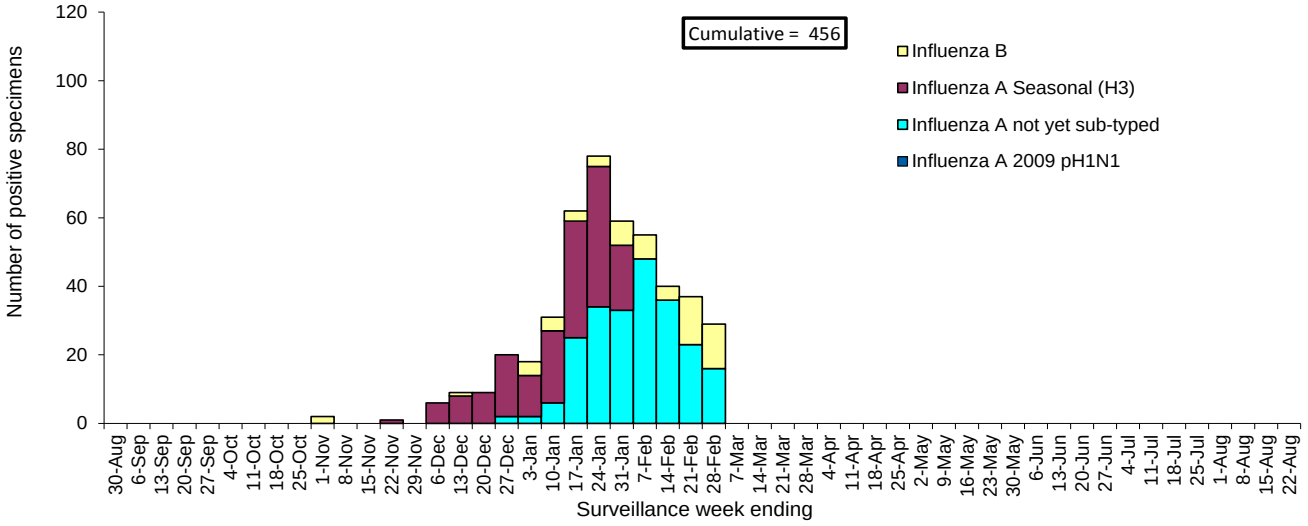
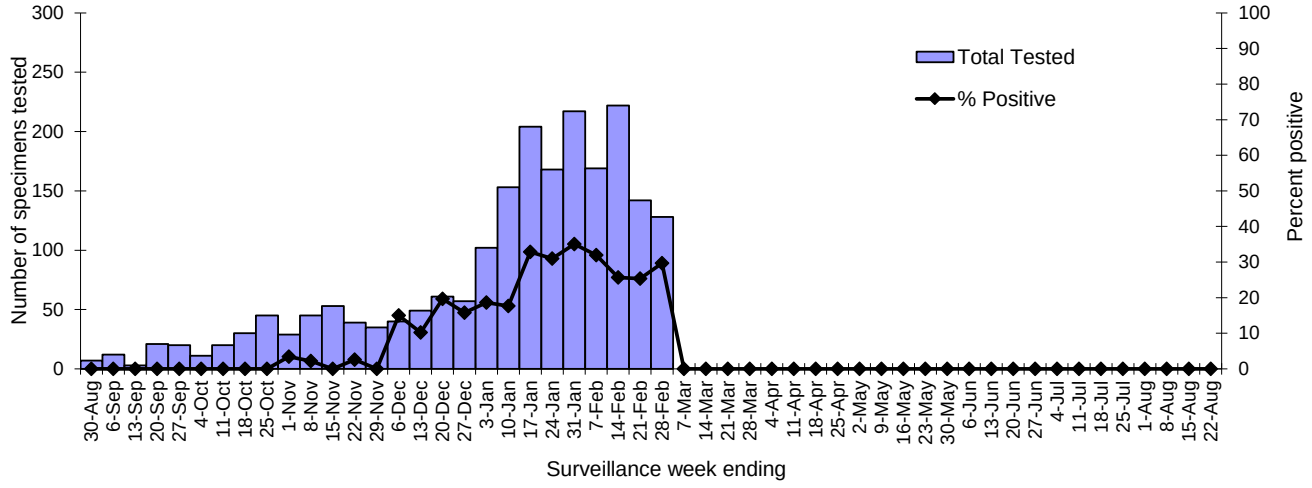


Figure 4: Number of specimens tested for influenza and percent positive, Nova Scotia Provincial Public Health Laboratory Network, 2014–2015*



*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 Scotia
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	2	1	0	0	0	0	2	11	16
Cumulative 2014 - 2015	14	10	13	3	4	9	17	64	91	225
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	1	104	169
Influenza B										
Current Week	1	0	2	0	0	0	1	0	9	13
Cumulative 2014 - 2015	8	0	4	1	1	0	1	8	39	62

RESPIRATORY WATCH

Week 8 (February 22 to February 28, 2015)

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

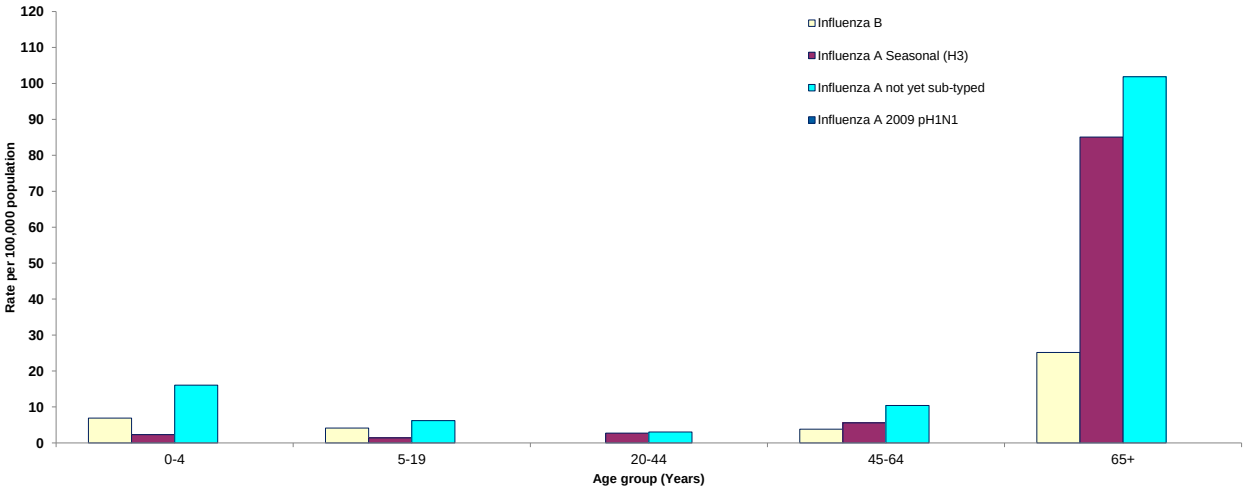
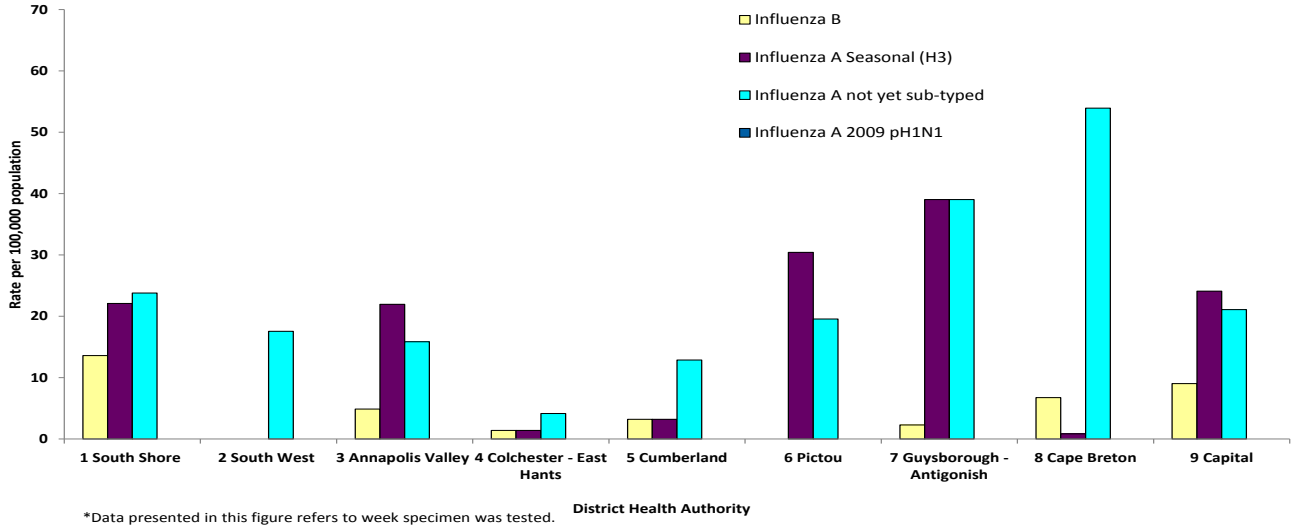


Figure 6: Influenza rate per 100,000 population by type and DHA, cumulative, Nova Scotia, 2014–2015



*Data presented in this figure refers to week specimen was tested.

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

	ER SURVEILLANCE			
	%ILI	Reporting ERs		
DHA 1	3.6	3	of 3	
DHA 2	1.0	3	of 3	
DHA 3	1.0	3	of 3	
DHA 4	1.5	2	of 2	
DHA 5	1.9	5	of 5	
DHA 6	1.5	1	of 1	
DHA 7	0.0	1	of 6	
DHA 8	1.2	8	of 8	
DHA 9	1.6	7	of 7	
IWK	12.4	1	of 1	
Nova Scotia (excl. IWK)	**1.5**		**33 of 38**	**86.8%**
Nova Scotia (incl. IWK)	**2.5**		**34 of 39**	**87.2%**

RESPIRATORY WATCH

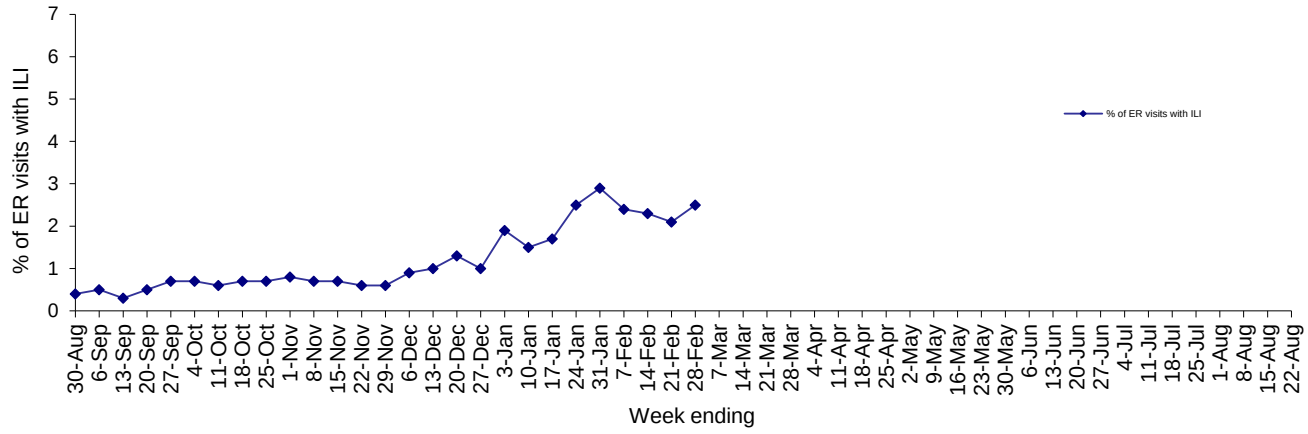
Week 8 (February 22 to February 28, 2015)

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	10	0	0
Cumulative 2014 - 2015	129	7	7
Influenza A Seasonal (H3)			
Current Week	0	0	0
Cumulative 2014 - 2015	87	8	9
Influenza B			
Current Week	6	0	0
Cumulative 2014 - 2015	41	4	0
Current Week Total	**16**	**0**	**0**
Season Total	**257**	**19**	**16**

* Note: Hospitalized cases exclude ICU admissions

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



RESPIRATORY WATCH

Week 8 (February 22 to February 28, 2015)

RESPIRATORY SYNCYTIAL VIRUS (RSV)

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

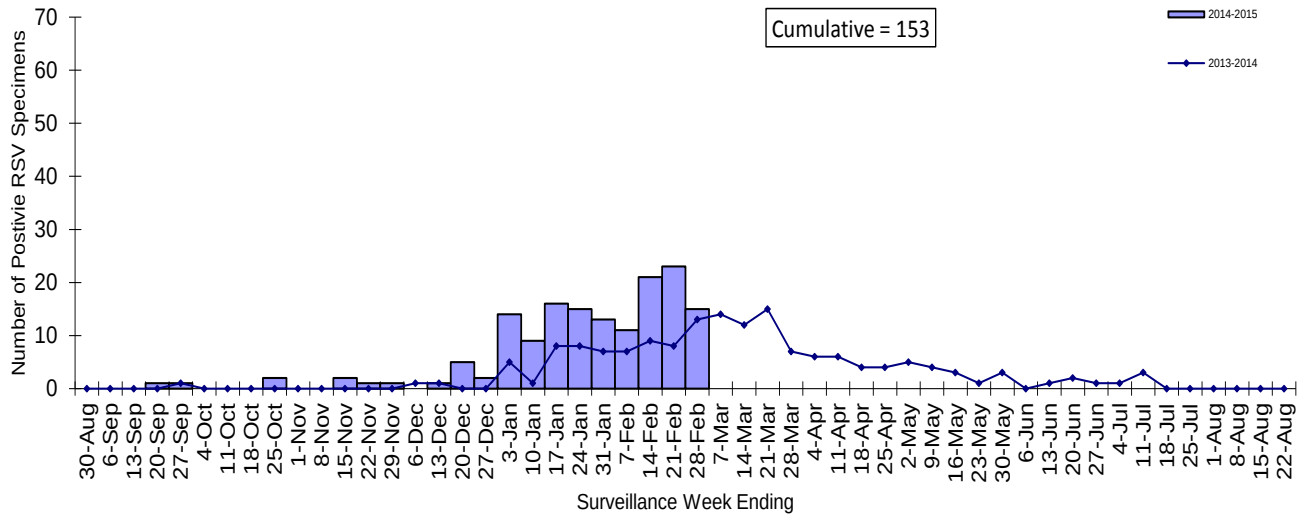
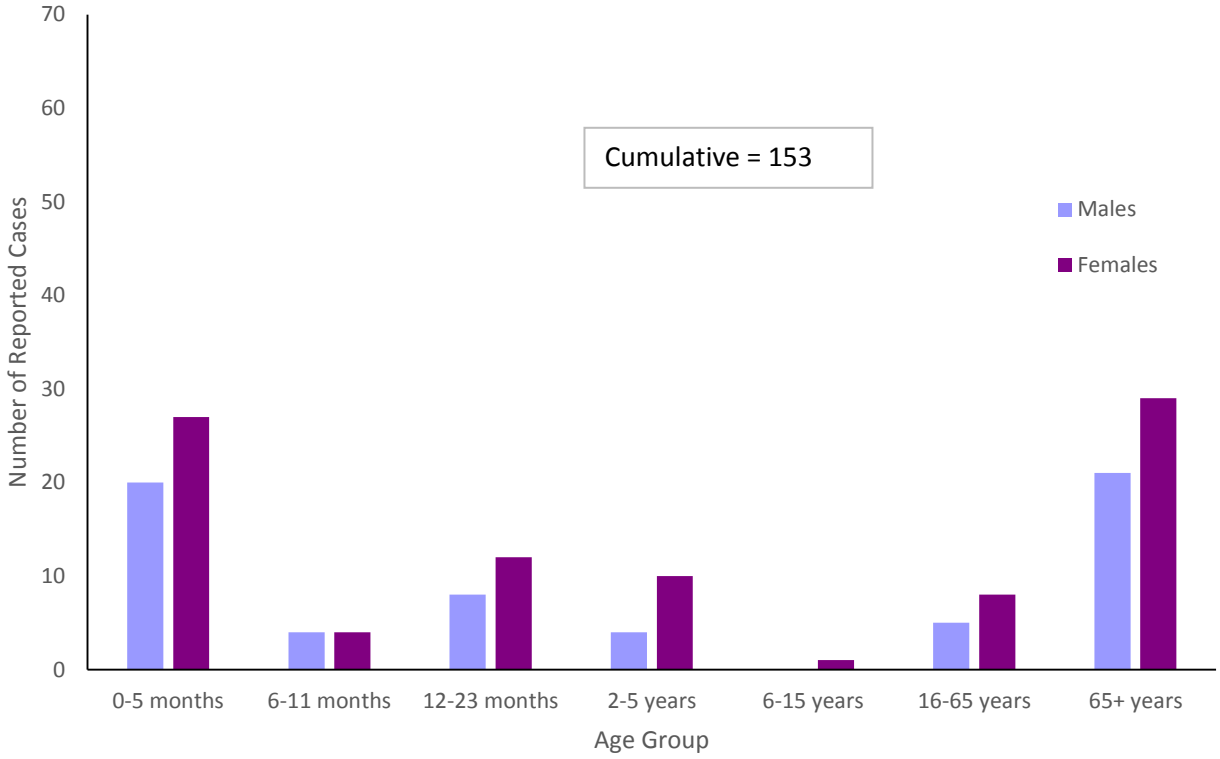


Figure 9: Cumulative number of positive RSV specimens by age group and sex, Nova Scotia, 2014-2015



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 Week			Cumulative Season-to-Date Totals		
Number and percent positive for:	n tested	n positive	% positive	n tested	n positive	% positive
Adenovirus	21	0	0.0	675	13	1.9
Bocavirus	21	0	0.0	675	0	0.0
Chlamydophila pneumoniae	20	0	0.0	549	0	0.0
Coronavirus	21	1	4.8	675	15	2.2
Enterovirus	21	0	0.0	675	2	0.3
Metapneumovirus	21	1	4.8	675	4	0.6
Mycoplasma pneumoniae	20	1	5.0	548	59	10.8
Parainfluenza	21	0	0.0	675	47	7.0
Pertussis	11	1	9.1	262	10	3.8
Respiratory syncytial virus A	21	0	0.0	707	1	0.1
Respiratory syncytial virus B	21	2	9.5	707	12	1.7
Respiratory syncytial virus not typed	98	13	0.0	1292	140	10.8
Rhinovirus	21	0	0.0	675	101	15.0

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†**

* ILI data may be reported through sentinel physicians, emergency room visits or health line telephone calls.

† 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