

Weekly Update

February 4, 2014

The purpose of this report is to inform Public Health staff, primary care providers, acute care staff and other community practitioners about recent and historical respiratory virus activity in the province of Alberta. Unless otherwise noted, all data presented are current as of the Saturday prior to the day the report is released.

Summary of What's New

Alberta

- Influenza A had the highest percent positivity (13.9%) among specimens tested for respiratory viruses in week 5, followed by HMPV (10.6%) ([Figure 1](#)).
- There were 130 new cases of lab confirmed influenza in week 5 in Alberta; 4 A(H3), 89 A(H1N1)pdm09, 27 A(unresolved subtype), and 10 B ([Table 1](#)). So far this season (Aug 25 – Feb 1, 2014), there have been 2859 cases of lab confirmed influenza; 32 A(H3), 2686 A(H1N1)pdm09, 97 A(unresolved subtype) and 44 B.
- The rate of influenza A(H1N1)pdm09 continued to decrease to 2.2 (per 100,000) in Alberta in week 5 ([Figure 2](#)).
- In week 5, the less than 2 year olds remained the age group with the highest rate of influenza A(H1N1)pdm09 with a rate of 11 cases per 100,000 Albertans. The rates for all age groups decreased this week in Alberta.
- There were 2 ILI outbreaks reported with onset in week 5 ([Table 2](#)); 1 Flu B and 1 hMPV.
- The Health Link Alberta call rate for cough was 18.9 calls per 100,000 Albertans in week 5 ([Figure 6](#)).
- There were 550 visits with ILI (6.0% of all visits) to Edmonton zone Emergency Departments/Urgent Care Centres (EDIS sites only) in week 5 ([Figure 7](#)).
- In week 5, 0.70% and 0.46% of patient visits to Alberta sentinel physicians were attributed to ILI (influenza like illness) and LRTI (lower respiratory tract infection), respectively ([Figure 8](#)).
- Public health administered influenza immunization data is available in [Table 3](#) and [Table 4](#).

North America

- As per FluWatch (PHAC), influenza continued to decrease in Canada in week 4. The predominant influenza virus type remained A(H1N1)pdm09.
- As of flu week 4, the National Microbiology Lab (NML) of Canada has antigenically characterized 556 influenza samples – 35 A(H3N2), 473 A(H1N1)pdm09, and 48 B. The majority (99%) of the viruses were similar to the WHO strain recommendations for the 2013-14 seasonal influenza vaccine. Two A(H1N1)pdm09 viruses showed reduced titres to antiserum against the reference A/California/07/2009 strain. Five (5) influenza B samples were similar to the strain recommended in the 2011-2012 vaccine. There were 397 viruses tested for antiviral resistance to oseltamivir and 390 for zanamivir; all were sensitive. All 341 influenza A virus samples tested for resistance to amantadine were resistant.
- According to FluView (US CDC), influenza activity remained high in the US in week 4. Of the specimens tested, Influenza A(subtype not performed) and A(H1N1)pdm09 predominated.

International

- As per the most recent WHO influenza update (Jan 27, 2014), influenza activity remained high in North America in recent weeks with influenza A(H1N1)pdm09 prevailing. In China, activity has been increasing with influenza A(H1N1)pdm09, A(H3N2) and B co-circulating. A slight increase in activity has been observed in Europe.
- Influenza activity has remained low for the southern hemisphere.
- In the tropical zone, variable influenza activity was reported.

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Current Global Information

[FluWatch \(PHAC\)](#)

[FluView \(US CDC\)](#)

[HPA \(UK\)](#)

[WHO](#)

[Travel Advisories](#)

Surveillance and Reporting

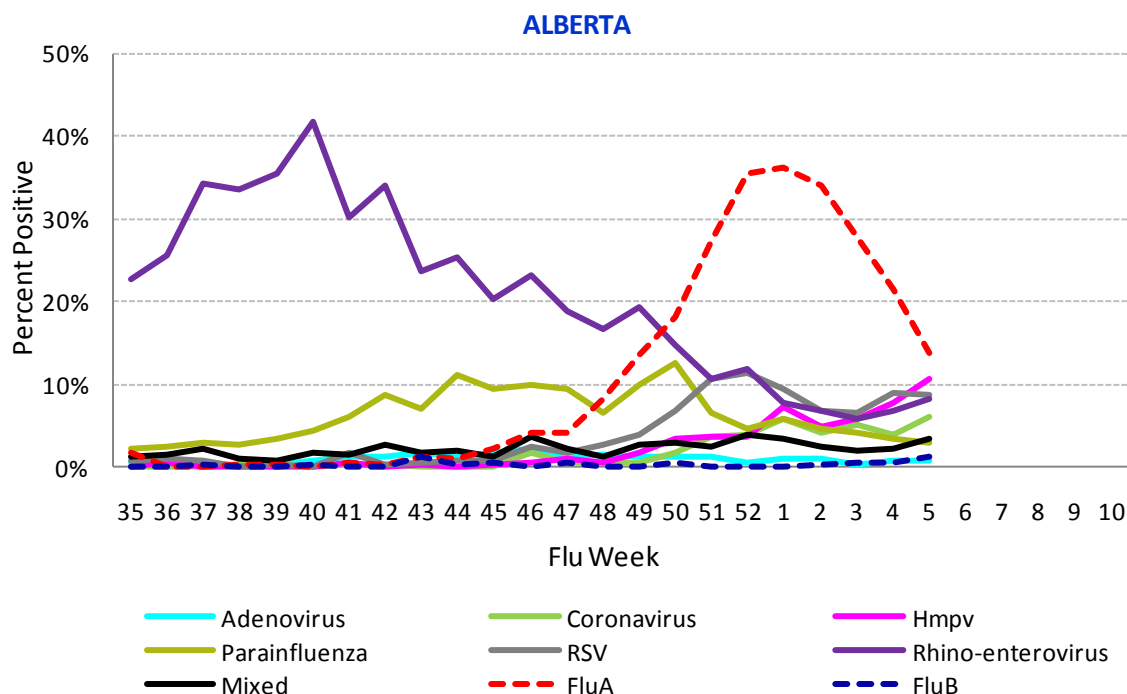
Public Health Surveillance and Infrastructure

If you have questions about the Alberta Respiratory Virus Surveillance Report, or any of the indicators, please contact:
AHS.PublicHealthSurveillance@albertahealthservices.ca

Laboratory Data

Effective January 7, 2014 respiratory virus testing from community physicians, including group practices and walk-in clinics, has been discontinued. These samples are now only tested for influenza A and B.

Figure 1: Alberta weekly respiratory specimen percent positivity, by virus type



[Click here for ZONE figures of respiratory virus specimen percent positivity](#)

Source: DIAL – Provincial Laboratory (includes specimens received on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#). "Percent positive" is the number of positive specimens for that virus as a percent of the total number of specimens tested for respiratory viruses.

Table 1: New and cumulative laboratory confirmed influenza cases, by subtype, Alberta and Zones

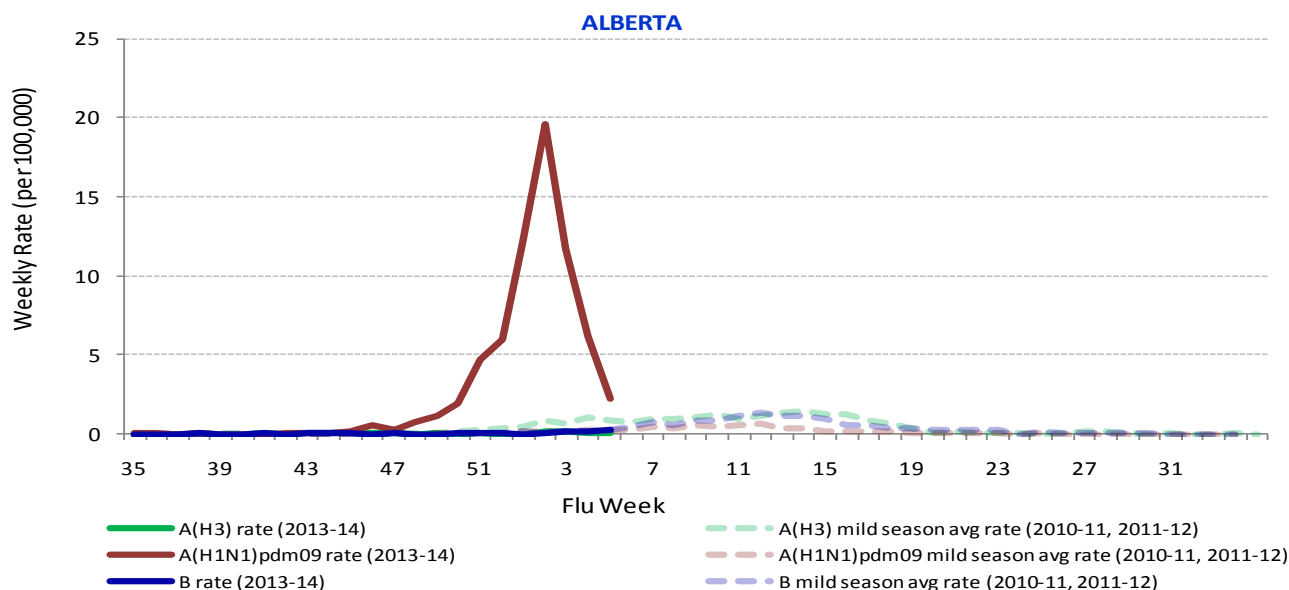
Zones	Week 5 (Jan 26 - Feb 1, 2014)					Cumulative (Aug 25 - Feb 1, 2014)				
	Influenza A				Influenza B	Influenza A				Influenza B
	A(H3)	A(H1N1) pdm09	A (unresolved type due to low viral load)	A (total)	B (total)	A(H3)	A(H1N1) pdm09	A (unresolved type due to low viral load)	A (total)	B (total)
South	0	13	1	14	0	0	160	5	165	4
Calgary	3	13	2	18	1	12	674	8	694	11
Central	0	15	4	19	1	2	464	18	484	10
Edmonton	1	22	13	36	8	17	861	47	925	16
North	0	26	7	33	0	1	527	19	547	3
Alberta Total	4	89	27	120	10	32	2686	97	2815	44

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Surveillance and Reporting

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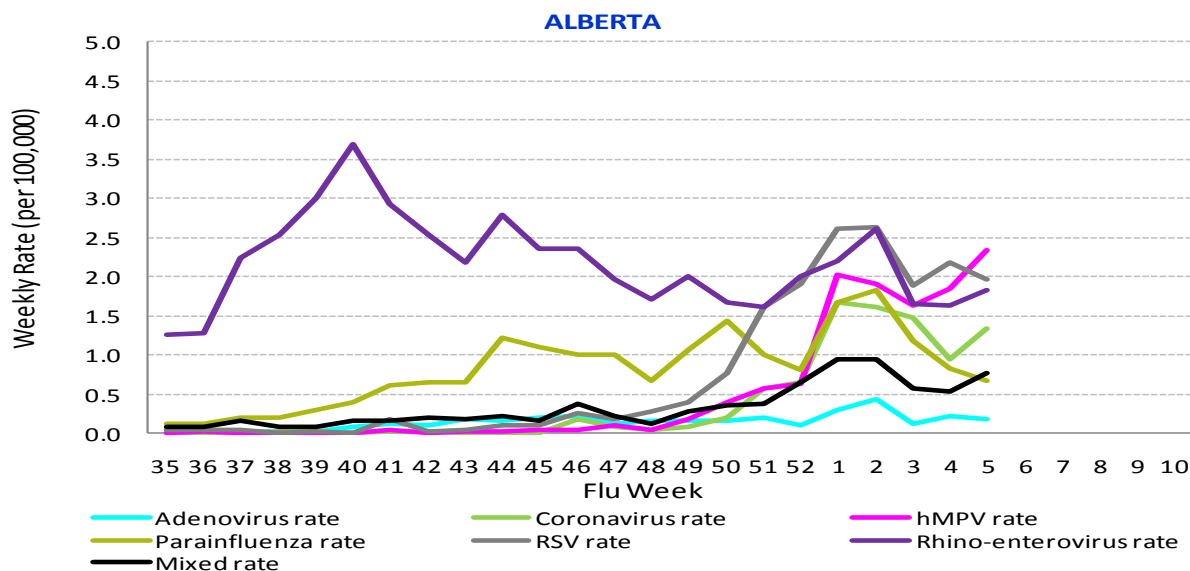
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Figure 2: Alberta weekly rates (per 100,000) of lab confirmed influenza, by subtype


[Click here for ZONE figures - rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

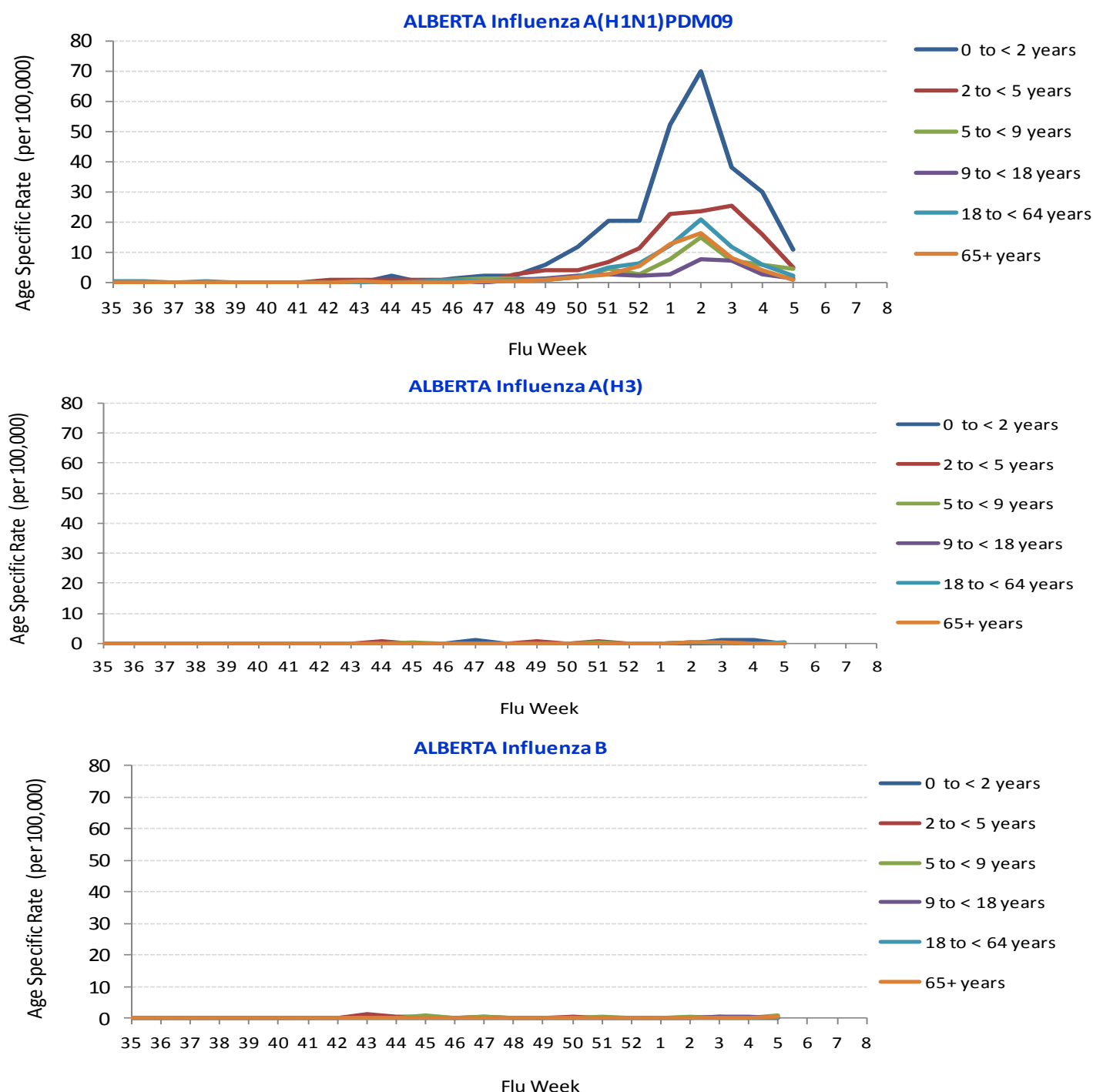
Effective January 7, 2014 respiratory virus testing from community physicians, including group practices and walk-in clinics, has been discontinued. These samples are now only tested for influenza A and B. As such the rates in Figure 3 may be under represented as of week 2.

Figure 3: Alberta weekly rates (per 100,000) of lab confirmed respiratory viruses (excluding influenza), by virus type


[Click here for ZONE figures - rates of lab confirmed respiratory viruses](#)

Source: DIAL – Provincial Laboratory (includes specimens received on or before Feb 1, 2014). For more information on data definitions and sources see [Data Notes](#).

Figure 4: Alberta weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype

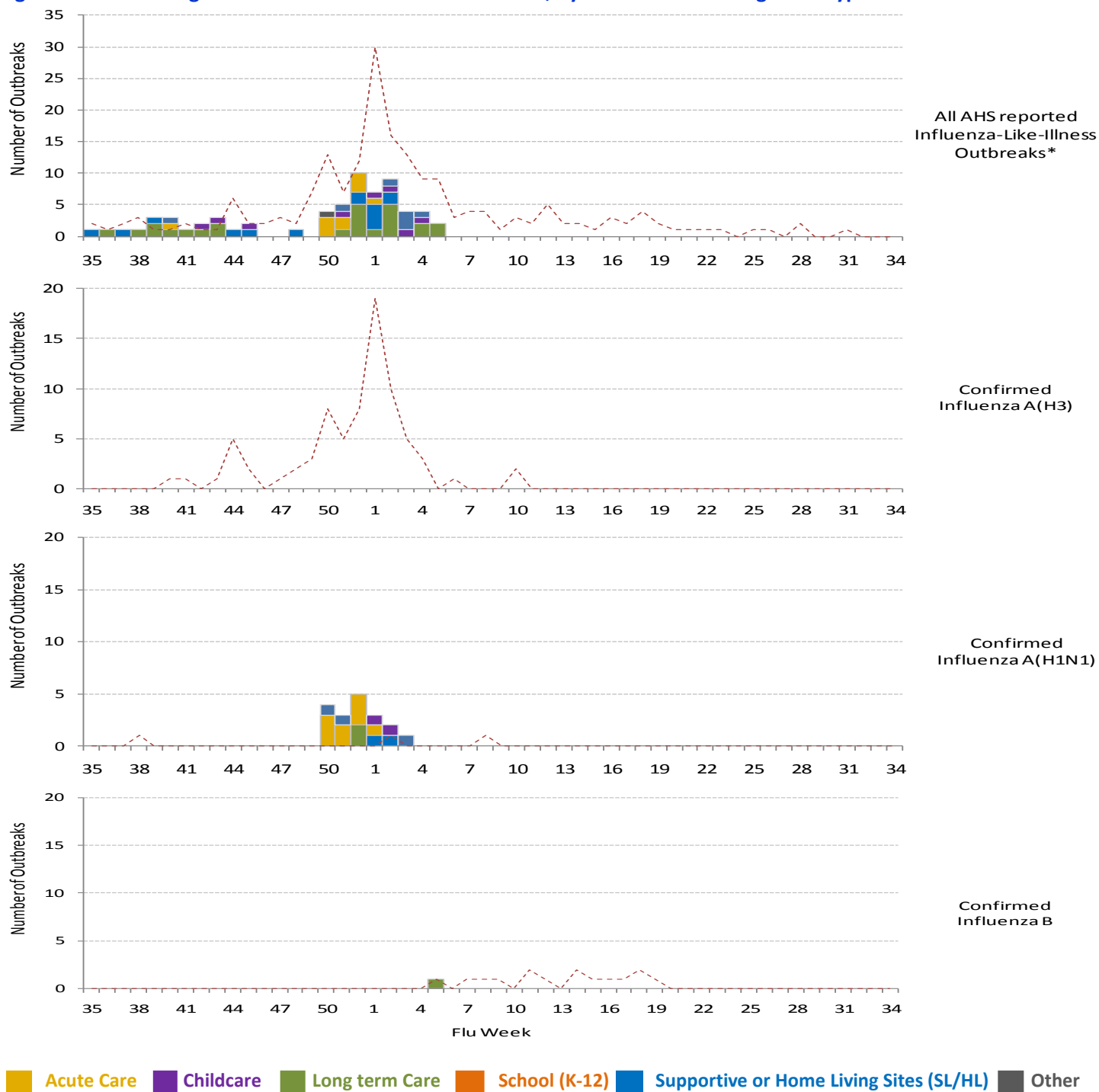


[Click here for ZONE figures - age specific rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources see [Data Notes](#).

Influenza-Like-Illness (ILI) Outbreak Investigations

Figure 5: AHS investigated ILI outbreaks in Alberta facilities, by onset week and organism type

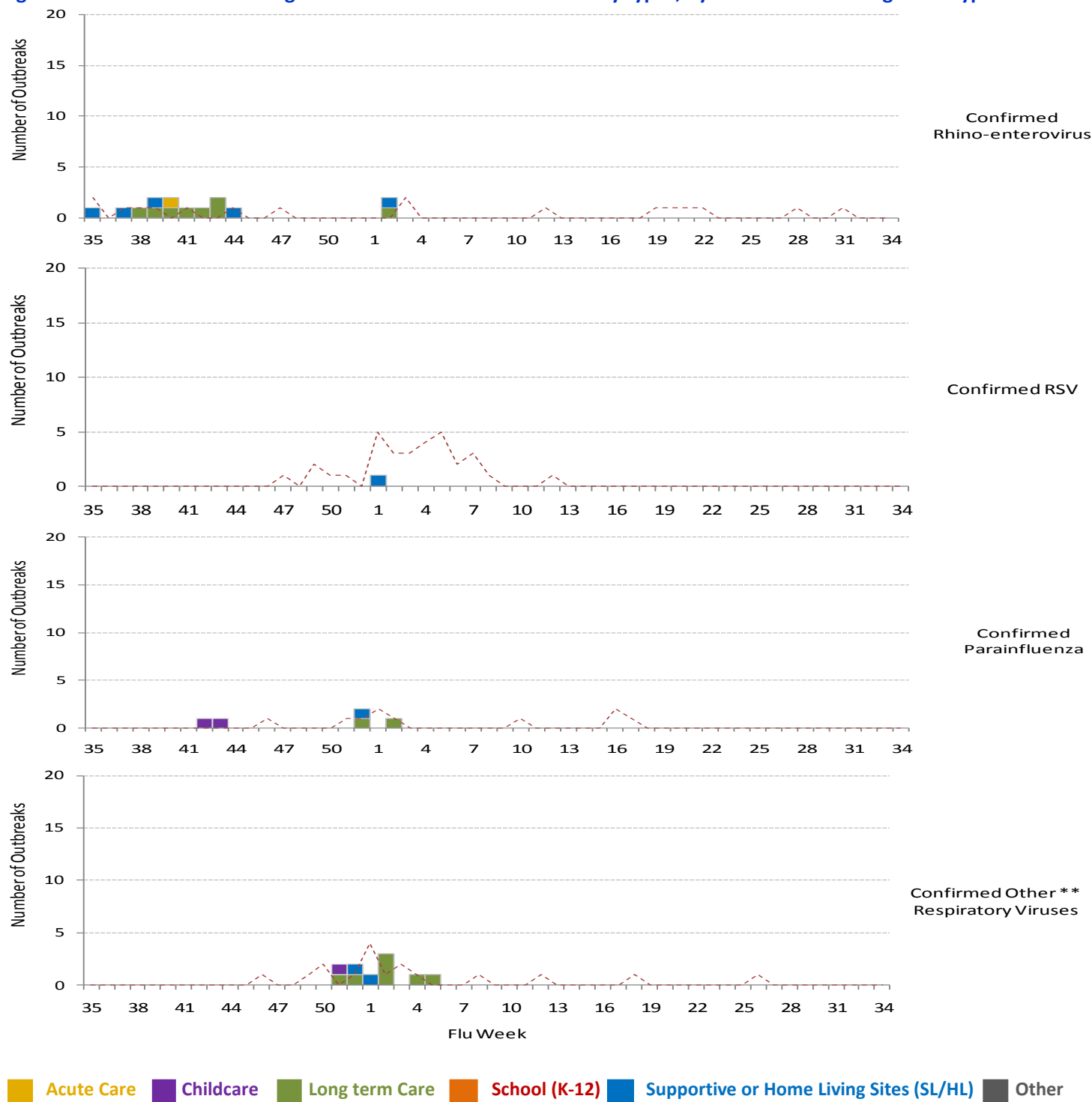


Source: CDRS as of Feb 4, 2014 (obtained via the Alberta Outbreak Reporting Form). For more information on data definitions and sources, see [Data Notes](#). All reported outbreaks include those with a confirmed organism, those where no organism was confirmed, those pending lab confirmation and those where no specimens were tested. Note: Some outbreaks may involve more than one pathogen.

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Figure 5 continued: AHS investigated ILI outbreaks in Alberta facility types, by onset week and organism type


Source: CDRS as of Feb 4, 2014 (obtained via the Alberta Outbreak Reporting Form). For more information on data definitions and sources, see [Data Notes](#).

** Other confirmed respiratory viruses include influenza A (unresolved type), adenovirus, coronavirus, and hMPV. Note: Some outbreaks may involve more than one pathogen.

Table 2: New and cumulative AHS investigated ILI outbreaks, by onset date and by organism, Alberta and Zones

ALBERTA													
Organism	Weeks 5 (Jan 26 - Feb 1, 2014)						Cumulative (Aug 25 - Feb 1, 2014)						
	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	-	2	2	-	9	2	3	18
Confirmed Flu B	1	-	-	-	-	-	1	-	-	-	-	-	1
Confirmed RSV	-	-	-	-	-	-	-	1	-	-	-	-	1
Confirmed Parainfluenza	-	-	-	-	-	-	2	1	-	-	2	-	5
Confirmed Rhino-enterovirus	-	-	-	-	-	-	8	5	-	1	-	-	14
Confirmed other** respiratory viruses	1	-	-	-	-	-	7	2	-	-	1	-	10
Initial report only (lab results pending)	-	-	-	-	-	-	1	-	-	-	2	2	5
Unknown (none confirmed or no specimen available)	-	-	-	-	-	-	4	3	-	-	1	3	11
Total	2	0	0	0	0	0	25	14	0	10	8	8	65
SOUTH													
Organism	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	-	-	-	-	-	1	-	1
Confirmed Flu B	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed RSV	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed Parainfluenza	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed Rhino-enterovirus	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed other** respiratory viruses	-	-	-	-	-	-	-	-	-	-	-	-	0
Initial report only (lab results pending)	-	-	-	-	-	-	-	-	-	-	-	-	0
Unknown (none confirmed or no specimen available)	-	-	-	-	-	-	-	-	-	-	-	-	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	1
CALGARY													
Organism	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	-	-	1	-	3	-	-	4
Confirmed Flu B	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed RSV	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed Parainfluenza	-	-	-	-	-	-	-	1	-	-	-	-	1
Confirmed Rhino-enterovirus	-	-	-	-	-	-	-	1	-	-	-	-	1
Confirmed other** respiratory viruses	-	-	-	-	-	-	2	-	-	-	-	-	2
Initial report only (lab results pending)	-	-	-	-	-	-	-	-	-	-	-	-	0
Unknown (none confirmed or no specimen available)	-	-	-	-	-	-	2	-	-	-	-	-	2
Total	0	0	0	0	0	0	4	3	0	3	0	0	10

 Source: CDRS as of Feb 4, 2014 (obtained via the Alberta Outbreak Reporting Form). For more information on data definitions and sources, see [Data Notes](#).

**Other confirmed viruses include influenza A(unresolved type) adenovirus, coronavirus and hMPV.

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Table 2 continued: New and cumulative AHS investigated ILI outbreaks, by onset date and by organism, Alberta and Zones

CENTRAL													
Organism	Weeks 5 (Jan 26 - Feb 1, 2014)						Cumulative (Aug 25 - Feb 1, 2014)						
	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	-	-	-	-	1	-	1	2
Confirmed Flu B	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed RSV	-	-	-	-	-	-	-	1	-	-	-	-	1
Confirmed Parainfluenza	-	-	-	-	-	-	1	-	-	-	-	-	1
Confirmed Rhino-enterovirus	-	-	-	-	-	-	1	3	-	-	-	-	4
Confirmed other** respiratory viruses	-	-	-	-	-	-	-	1	-	-	-	-	1
Initial report only (lab results pending)	-	-	-	-	-	-	-	-	-	-	-	-	0
Unknown (none confirmed or no specimen available)	-	-	-	-	-	-	-	1	-	-	-	-	1
Total	0	0	0	0	0	0	2	6	0	1	0	1	10
EDMONTON													
Organism	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	-	2	-	-	5	-	2	9
Confirmed Flu B	1	-	-	-	-	-	1	-	-	-	-	-	1
Confirmed RSV	-	-	-	-	-	-	-	-	-	-	-	-	0
Confirmed Parainfluenza	-	-	-	-	-	-	1	-	-	-	2	-	3
Confirmed Rhino-enterovirus	-	-	-	-	-	-	6	1	-	1	-	-	8
Confirmed other** respiratory viruses	1	-	-	-	-	-	5	1	-	-	1	-	7
Initial report only (lab results pending)	-	-	-	-	-	-	1	-	-	-	1	1	3
Unknown (none confirmed or no specimen available)	-	-	-	-	-	-	2	2	-	-	1	1	6
Total	2	0	0	0	0	0	18	4	0	6	5	4	37
NORTH													
Organism	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Long Term Care	SL/HL	School (K-12)	Acute Care	Child care	Other	Total
Confirmed Flu A(H3)	-	-	-	-	-	.	-	-	-	-	-	.	0
Confirmed A(H1N1)pdm09	-	-	-	-	-	.	-	1	-	-	1	.	2
Confirmed Flu B	-	-	-	-	-	.	-	-	-	-	-	.	0
Confirmed RSV	-	-	-	-	-	.	-	-	-	-	-	.	0
Confirmed Parainfluenza	-	-	-	-	-	.	-	-	-	-	-	.	0
Confirmed Rhino-enterovirus	-	-	-	-	-	.	1	-	-	-	-	.	1
Confirmed other** respiratory viruses	-	-	-	-	-	.	-	-	-	-	-	.	0
Initial report only (lab results pending)	-	-	-	-	-	.	-	-	-	-	1	1	2
Unknown (none confirmed or no specimen available)	-	-	-	-	-	.	-	-	-	-	-	2	2
Total	0	0	0	0	0	0	1	1	0	0	2	3	7

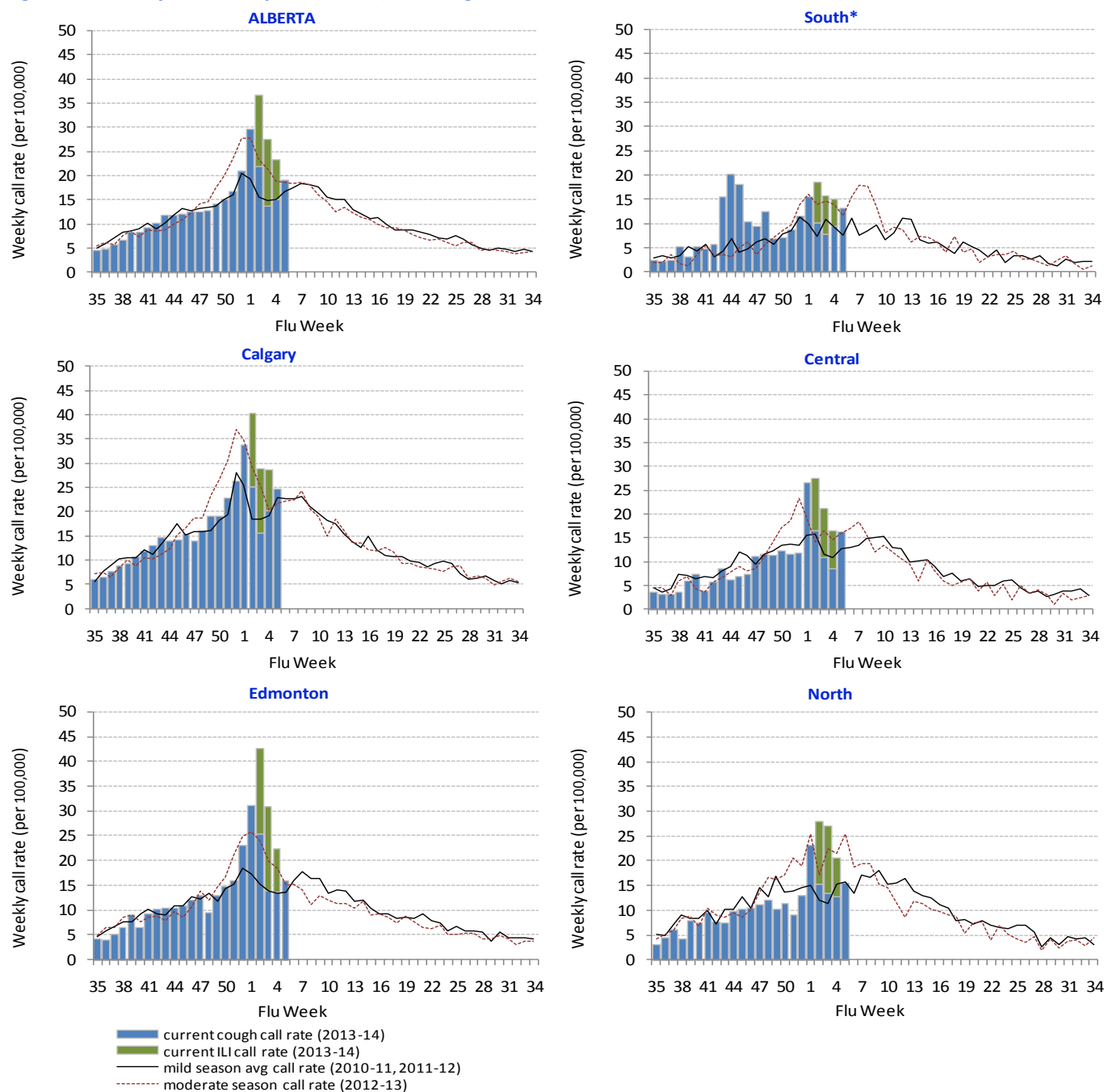
 Source: CDRS as of Feb 4, 2014 (obtained via the Alberta Outbreak Reporting Form). For more information on data definitions and sources, see [Data Notes](#).

**Other confirmed viruses include influenza A(unresolved type) adenovirus, coronavirus and hMPV.

Calls to Health Link Alberta

Effective January 7, 2014 a temporary influenza-like illness protocol was implemented due to the high call volume for influenza symptoms. People calling for cough may now be coded under cough or ILI depending on other symptoms. As such both are now included. Note that the ILI code also includes children who may not have had cough but exhibited at least two symptoms of ILI.

Figure 6: Weekly call rate (per 100,000) for cough or influenza-like illness, Alberta and Zones



*Please note that the jump in the South zone call rate for cough starting in week 43 is likely related to a measles outbreak that began around the same time.

Source: Sharp Focus - Health Link Alberta - via Alberta Real Time Syndromic Surveillance Net (ARTSSN) - calls received on or before Feb 1, 2014. For more information on data definitions and sources, see [Data Notes](#).

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Emergency Department Visits

Figure 7A: Weekly ILI emergency department visits, Edmonton zone (EDIS sites)

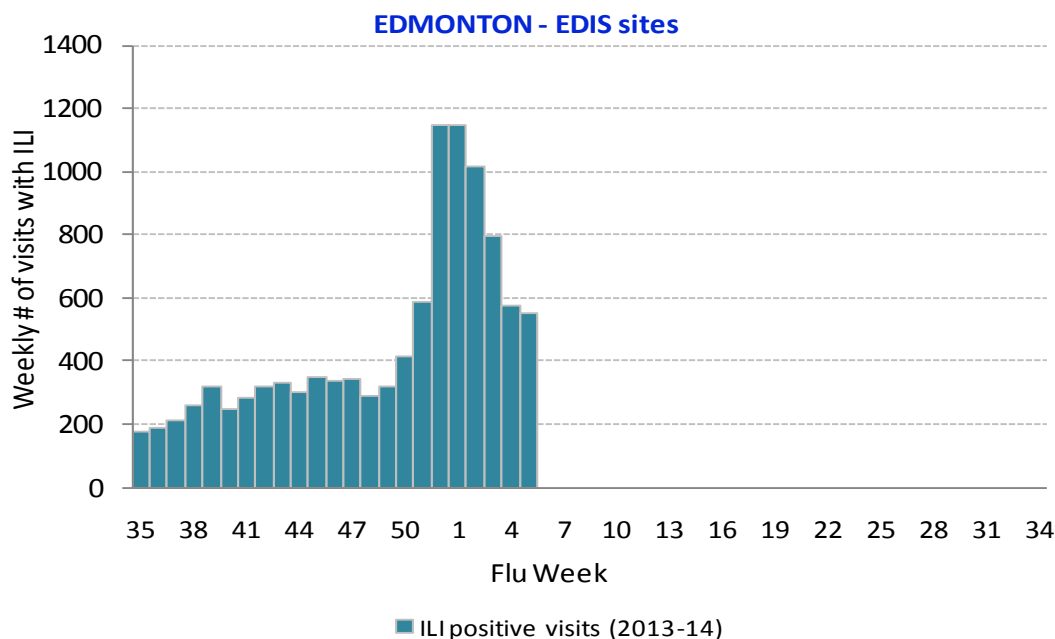
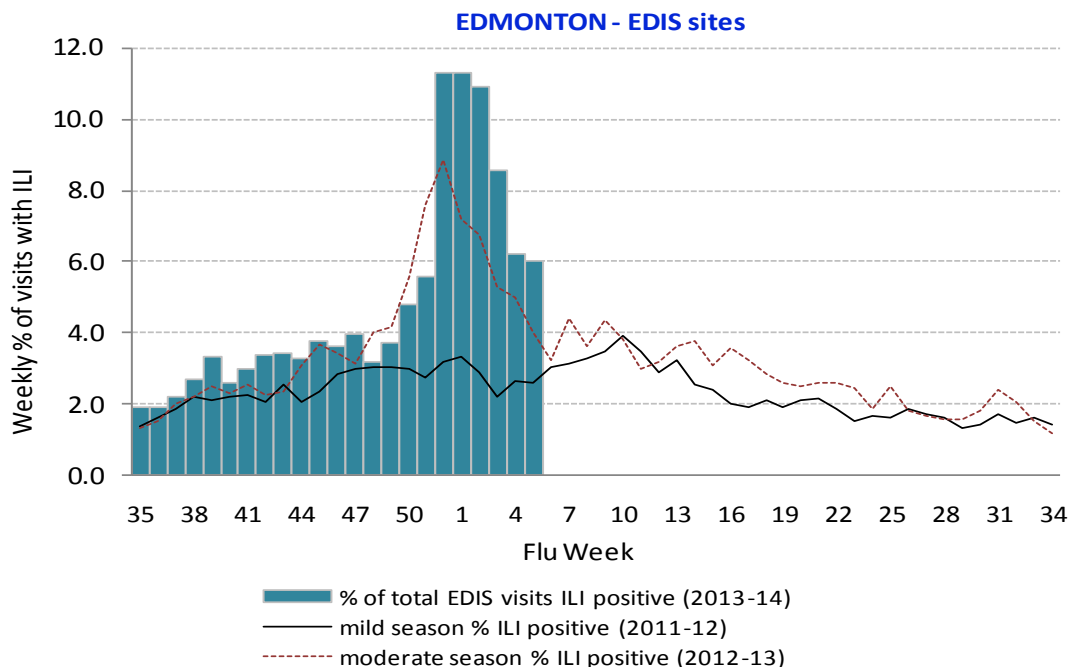
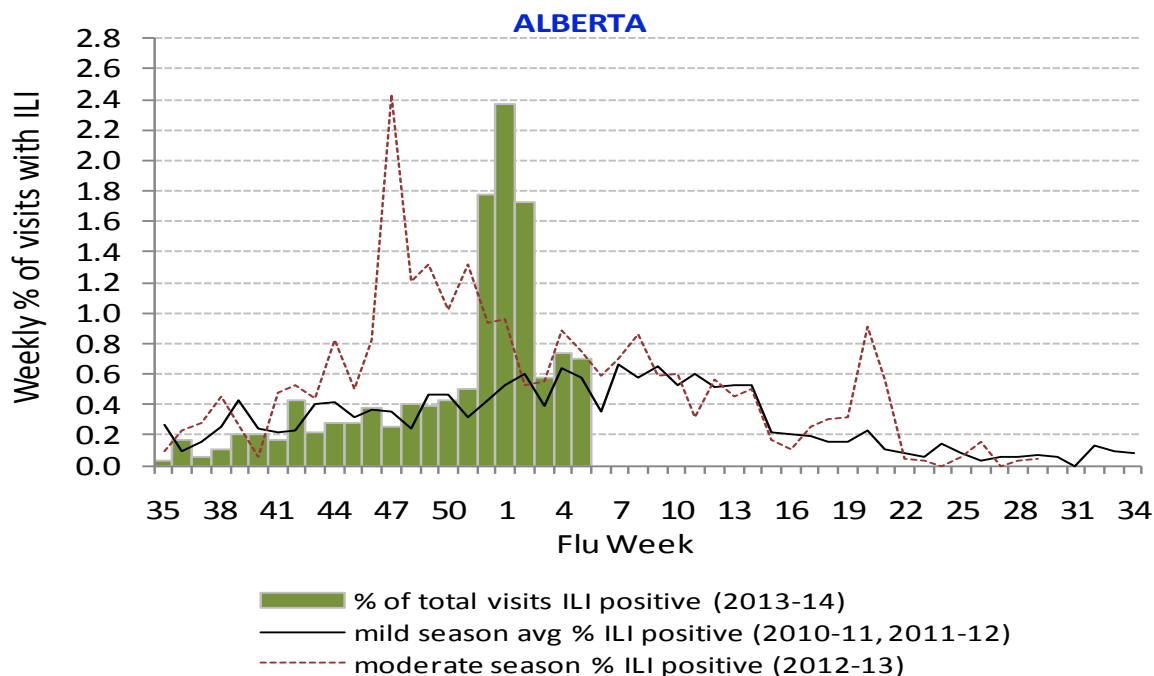
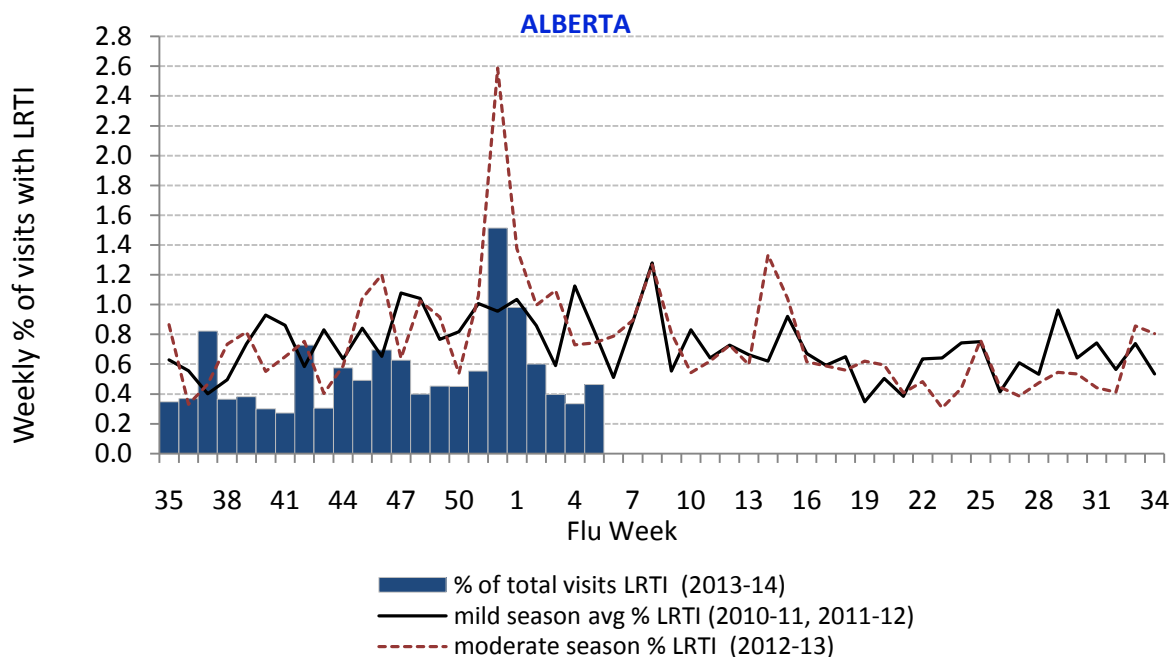


Figure 7B: Weekly percentage of all emergency department visits with ILI during screening at triage, Edmonton zone (EDIS sites)



Source: EDIS - via Alberta Real Time Syndromic Surveillance Net (ARTSSN) – visits on or before Feb 1, 2014. For more information on data definitions and sources, see [Data Notes](#).

TARRANT Sentinel Physician Office Visits
Figure 8A: Alberta weekly sentinel physician patient visits (%) with ILI (Influenza Like Illness)

Figure 8B: Alberta weekly sentinel physician patient visits (%) with LRTI (Lower Respiratory Tract Infection)


Source: Tarrant Viral Watch program – www.tarrantviralwatch.ca as of Feb 4, 2014. For more information on data definitions and sources, see [Data Notes](#).

Table 3: New AHS (Public Health) Delivered Influenza Immunizations, by priority group (Jan 26 –Feb 1, 2014)

Priority Group		South	Calgary	Central	Edmonton	North	Alberta
Long term care staff AHS/Covenant		0	0	0	0	0	0
Long term care staff Total		0	0	0	0	0	0
Health care workers AHS/Covenant		0	0	0	0	0	0
Health care workers Total		0	0	0	0	0	0
Pregnant women		0	0	0	0	0	0
Residents of long term care 65+		0	0	0	0	0	0
Residents of long term care <65		0	0	0	0	0	0
65 years of age and over		0	0	0	0	0	0
All children 6 months up to and including 23 months*	Dose #1	48	410	49	146	64	717
	Dose #2	70	488	70	235	64	927
	Annual	0	5	0	0	0	5
All children 24 months up to and including 59 months*	Dose #1	0	0	0	0	3	3
	Dose #2	14	176	21	72	19	302
	Annual	0	1	1	0	6	8
High risk: 5 years up to and including 8 years*	Dose #1	0	0	0	0	1	1
	Dose #2	0	3	0	1	1	5
	Annual	0	4	1	0	8	13
High risk: 9 years up to and including 17 years		0	1	0	0	2	3
High risk: 18 years up to and including 64 years		0	0	0	0	1	1
Healthy: 5 years up to and including 8 years*	Dose #1	0	0	0	0	18	18
	Dose #2	11	118	11	27	8	175
	Annual	0	1	0	0	93	94
Healthy: 9 years up to and including 17 years		0	2	0	0	57	59
Healthy: 18 years up to and including 64 years		0	2	0	0	4	6
Total number of clients who have received Dose 1 of 2		48	410	49	146	86	739
Total number of clients who have received Dose 2 of 2		95	785	102	335	92	1,409
Total number of clients who have received an Annual Dose		0	16	2	0	171	189
Total Doses Administered		143	1,211	153	481	349	2,337

Source: AHS Zones (doses do not include those delivered by external providers). For more information on data definitions and sources, see [Data Notes](#).

*Children under 9 years of age who have not received at least one dose in past years require two doses, given at least 4 weeks apart.

Table 4: Cumulative AHS Delivered Influenza Immunizations, by priority group (up to Feb 1, 2014)

Priority Group		South	Calgary	Central	Edmonton	North	Alberta
Long term care staff AHS/Covenant		86	29	138	94	808	1,155
Long term care staff Total		564	307	318	291	1,234	2,714
Health care workers AHS/Covenant		706	2,616	1,279	3,213	4,518	12,332
Health care workers Total		1,650	6,250	2,812	7,332	5,698	23,742
Pregnant women		204	1,397	400	1,402	558	3,961
Residents of long term care 65+		763	268	626	80	1,447	3,184
Residents of long term care <65		53	76	55	228	178	590
65 years of age and over		10,022	32,172	16,086	42,216	14,144	114,640
All children 6 months up to and including 23 months*	Dose #1	1,618	8,847	1,735	6,895	2,246	21,341
	Dose #2	800	4,379	923	3,257	949	10,308
	Annual	682	4,277	969	3,047	1,111	10,086
All children 24 months up to and including 59 months*	Dose #1	632	2,682	835	3,063	1,044	8,256
	Dose #2	204	1,036	268	809	284	2,601
	Annual	2,274	13,275	2,632	10,438	3,331	31,950
High risk: 5 years up to and including 8 years*	Dose #1	21	130	67	126	49	393
	Dose #2	2	29	14	30	6	81
	Annual	196	1,342	451	1,183	564	3,736
High risk: 9 years up to and including 17 years		214	1,314	465	1,233	645	3,871
High risk: 18 years up to and including 64 years		1,828	11,131	3,780	11,858	5,628	34,225
Healthy: 5 years up to and including 8 years*	Dose #1	369	1,475	417	1,524	593	4,378
	Dose #2	98	544	115	391	149	1,297
	Annual	2,421	15,562	3,024	12,337	3,982	37,326
Healthy: 9 years up to and including 17 years		2,093	13,539	3,484	12,520	5,648	37,284
Healthy: 18 years up to and including 64 years		9,379	71,219	15,599	66,093	25,637	187,927
Total number of clients who have received Dose 1 of 2		2,640	13,134	3,054	11,608	3,932	34,368
Total number of clients who have received Dose 2 of 2		1,104	5,988	1,320	4,487	1,388	14,287
Total number of clients who have received an Annual Dose		32,343	172,129	50,701	170,258	69,805	495,236
Total Doses Administered		36,087	191,251	55,075	186,353	75,125	543,891

Source: AHS Zones (doses do not include those delivered by external providers). For more information on data definitions and sources, see [Data Notes](#).

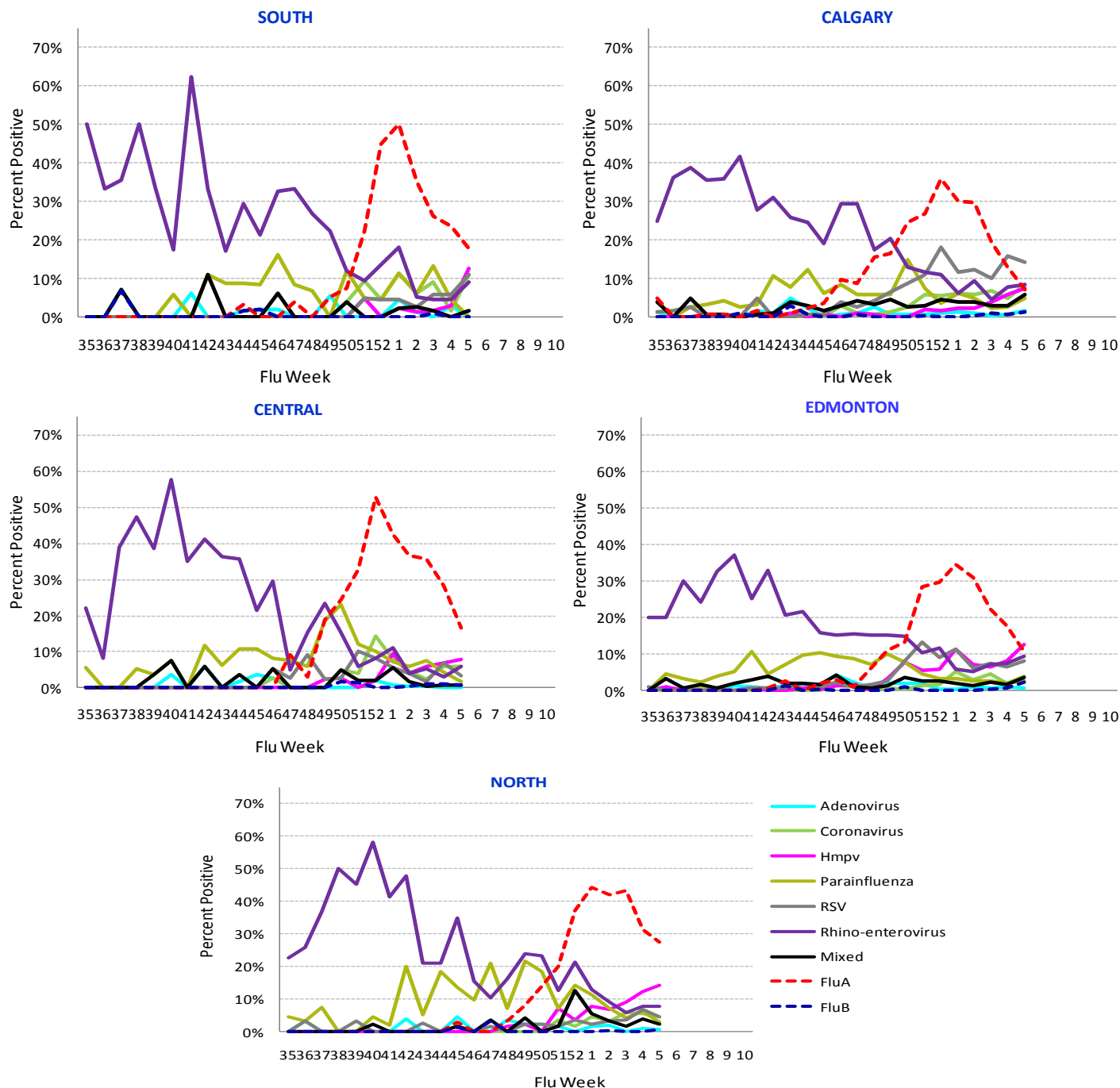
*Children under 9 years of age who have not received at least one dose in past years require two doses, given at least 4 weeks apart.

* *There is a difference of one between doses administered and recipients due to the vaccination of an underage child.

Appendix

Effective January 7, 2014 respiratory virus testing from community physicians, including group practices and walk-in clinics, has been discontinued. These samples are now only tested for influenza A and B.

Zones figure 1: Weekly respiratory specimen percent positivity, by virus type and zone



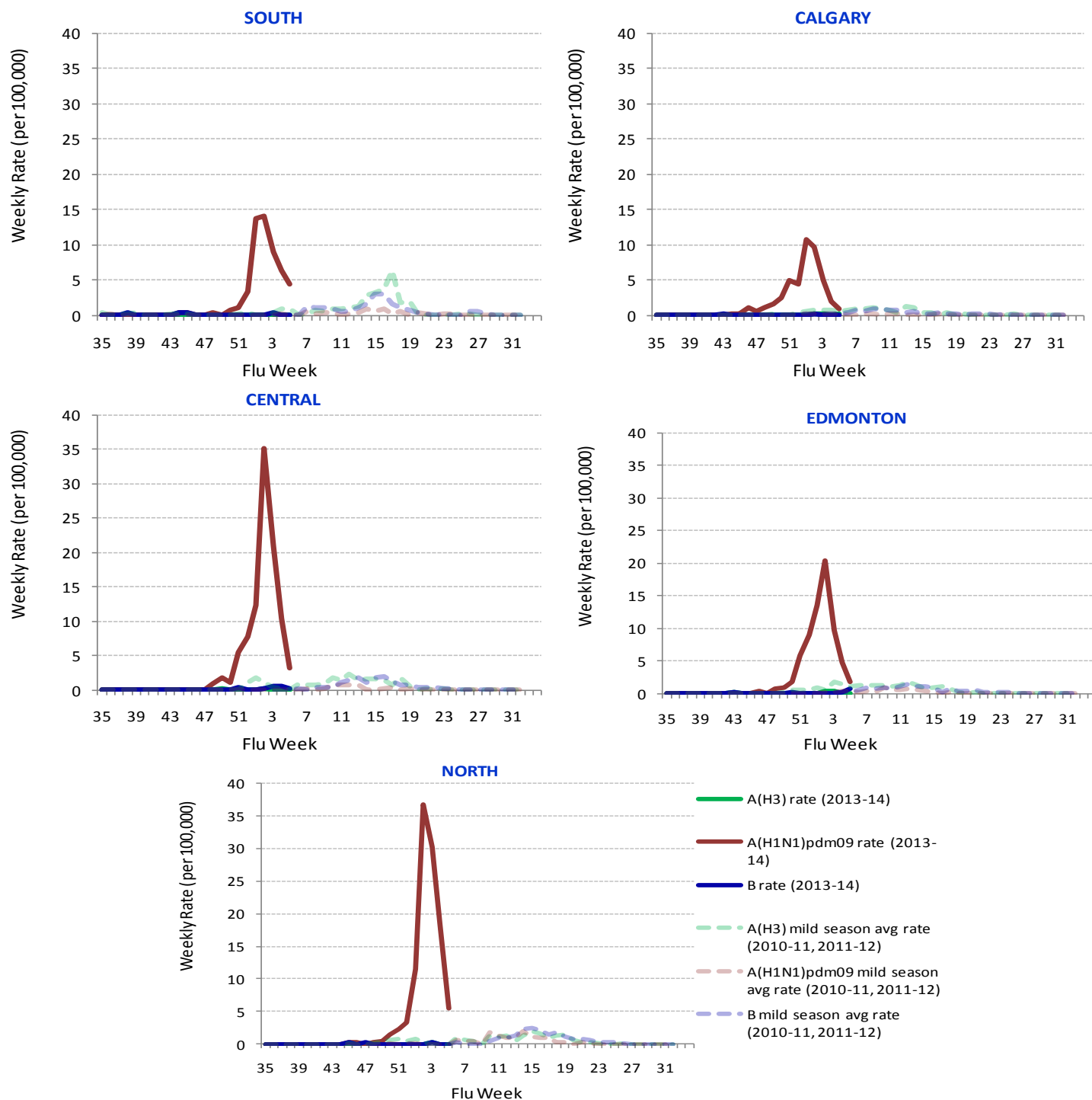
[Click here to return to Alberta figure - respiratory virus specimen percent positivity](#)

Source: DIAL – Provincial Laboratory (includes specimens received on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#). "Percent positive" is the number of positive specimens for that virus as a percent of the total number of specimens tested for respiratory viruses.

Surveillance and Reporting

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If you have questions about the Alberta Respiratory Virus Surveillance Report, or any of the indicators, please contact:
AHS.PublicHealthSurveillance@albertahealthservices.ca

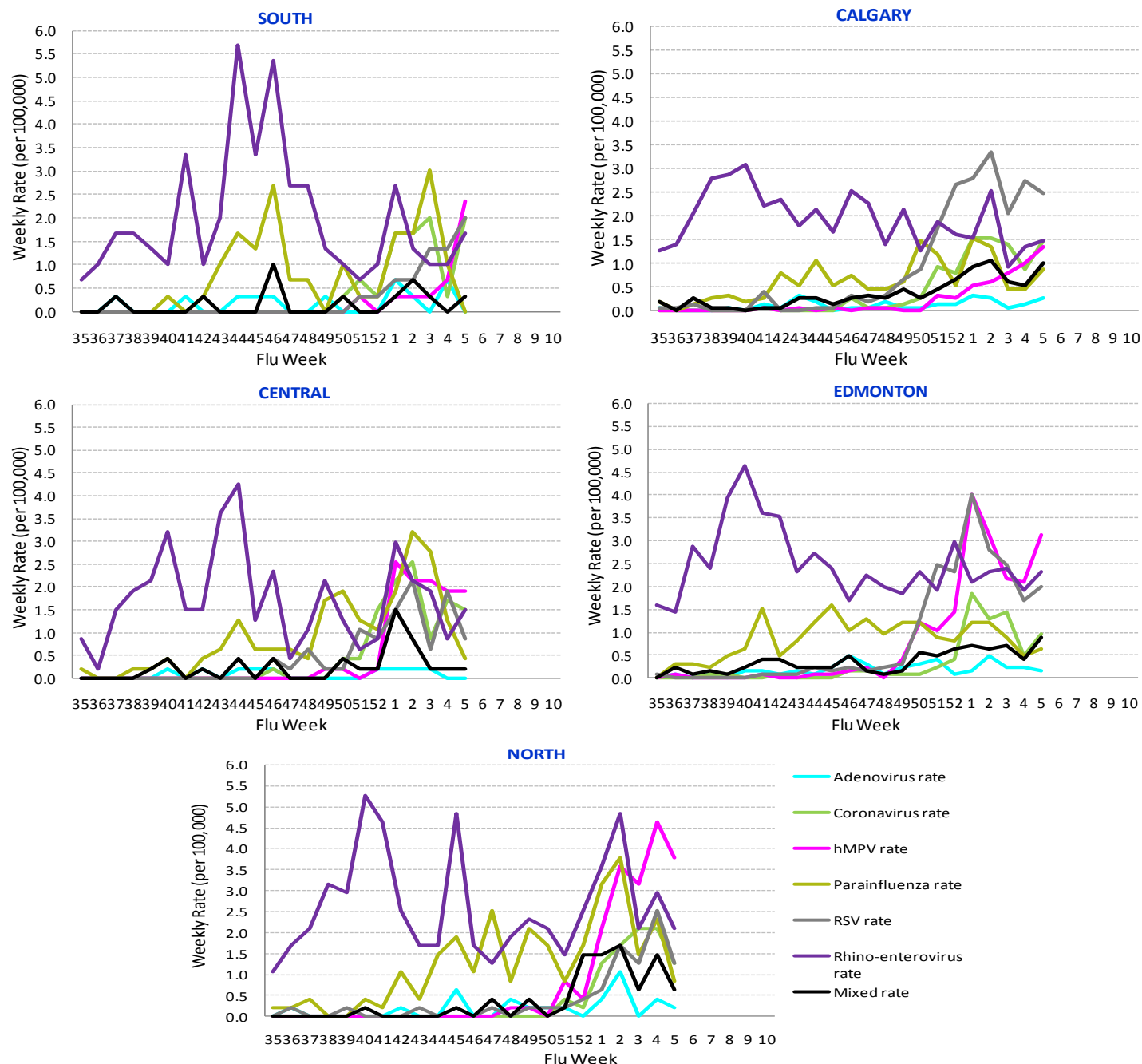
Zones figure 2: Weekly rates (per 100,000) of lab confirmed influenza, by subtype and Zone


[Click here to return to Alberta figure – rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Effective January 7, 2014 respiratory virus testing from community physicians, including group practices and walk-in clinics, has been discontinued. These samples are now only tested for influenza A and B. As such the rates in Figure 3 may be under represented as of week 2.

Zones figure 3: Weekly rates (per 100,000) of lab confirmed respiratory viruses (excluding influenza), by virus type and Zone



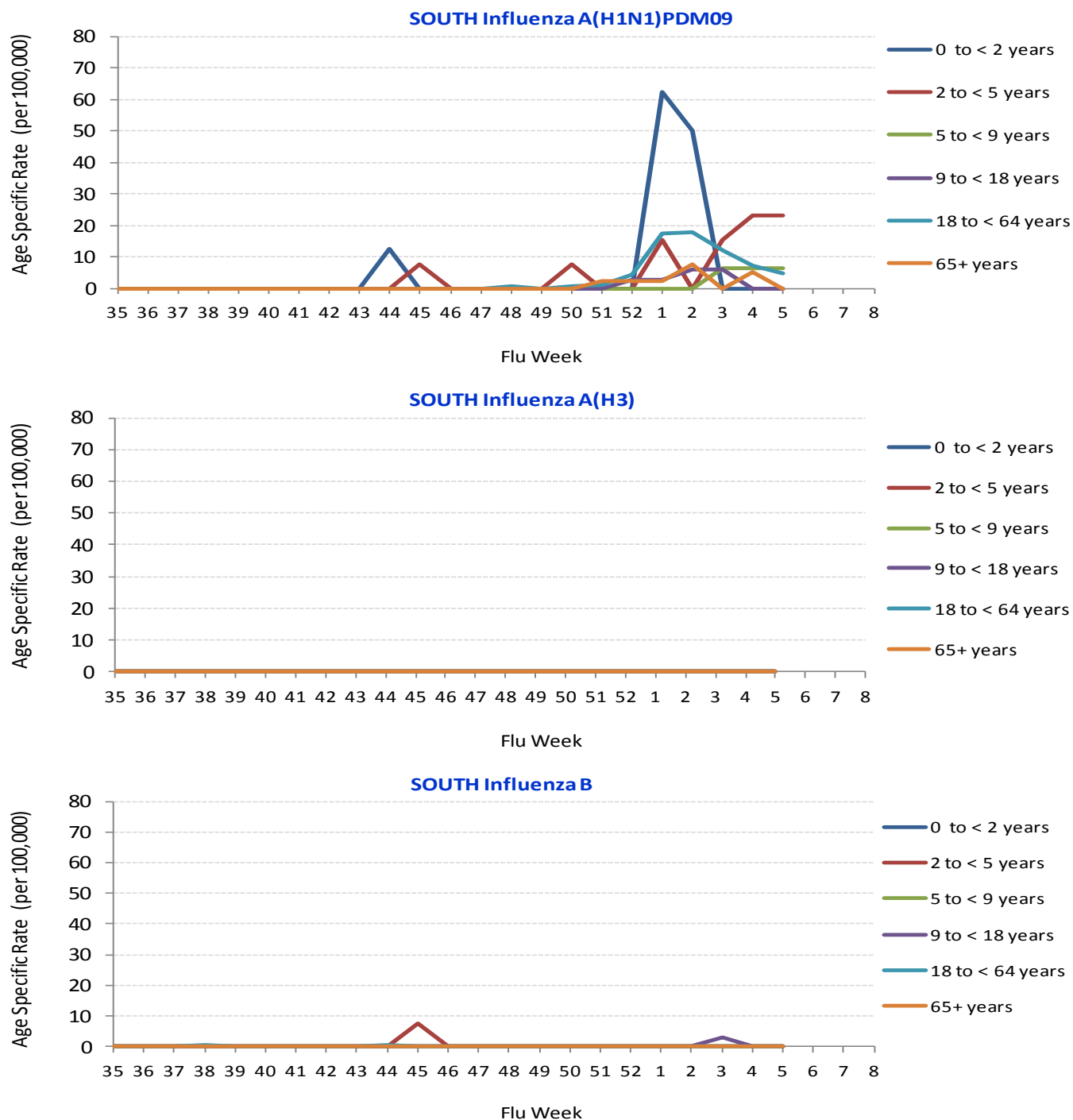
[Click here to return to Alberta figure - rates of lab confirmed respiratory viruses](#)

Source: DIAL – Provincial Laboratory (includes specimens received on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#). "Percent positive" is the number of positive specimens for that virus as a percent of the total number of specimens tested for respiratory viruses.

Surveillance and Reporting

Public Health Surveillance and Infrastructure

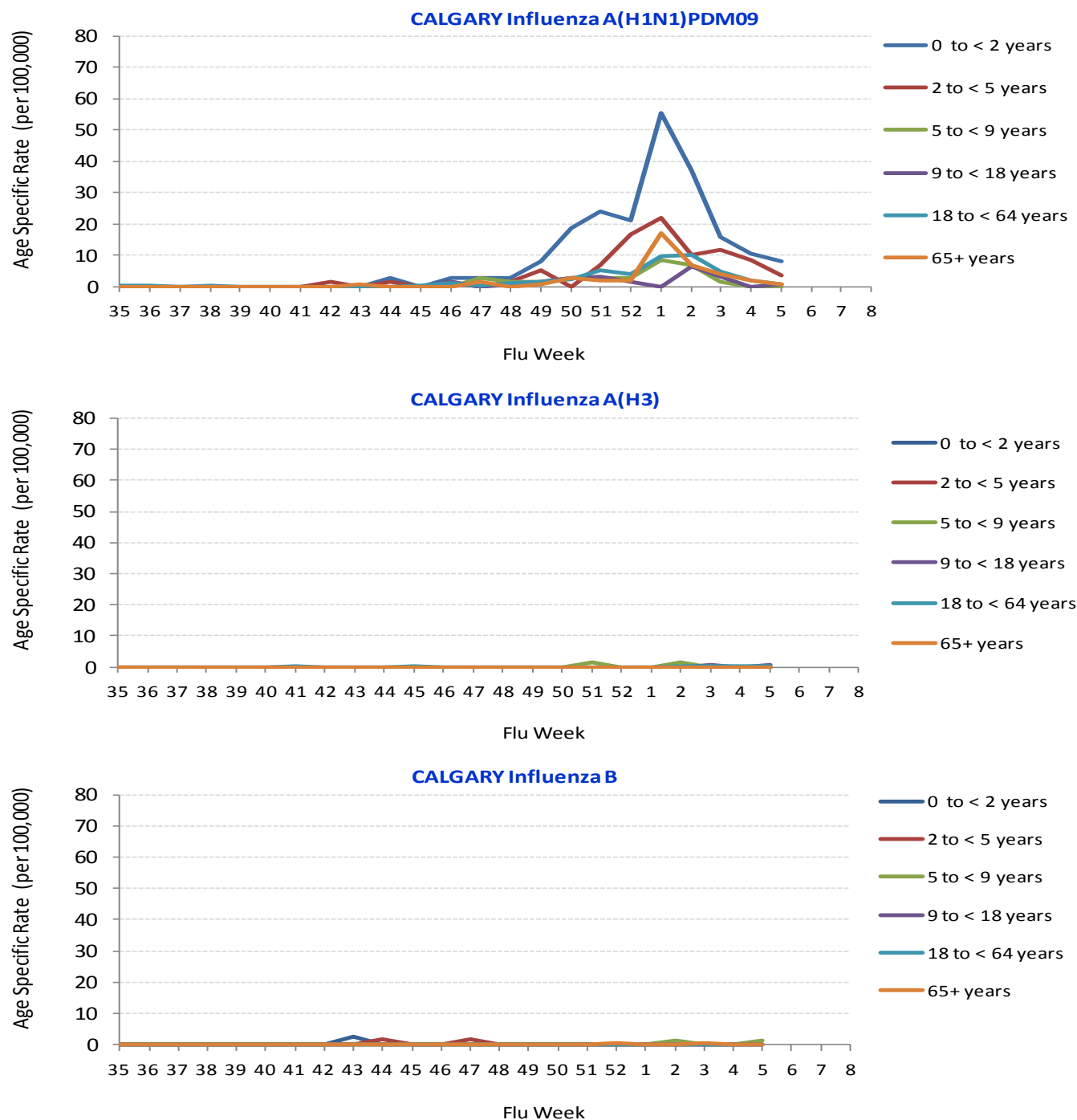
If you have questions about the Alberta Respiratory Virus Surveillance Report, or any of the indicators, please contact:
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Zones figure 4: Weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype, South zone


[Click here to return to Alberta figure - age specific rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

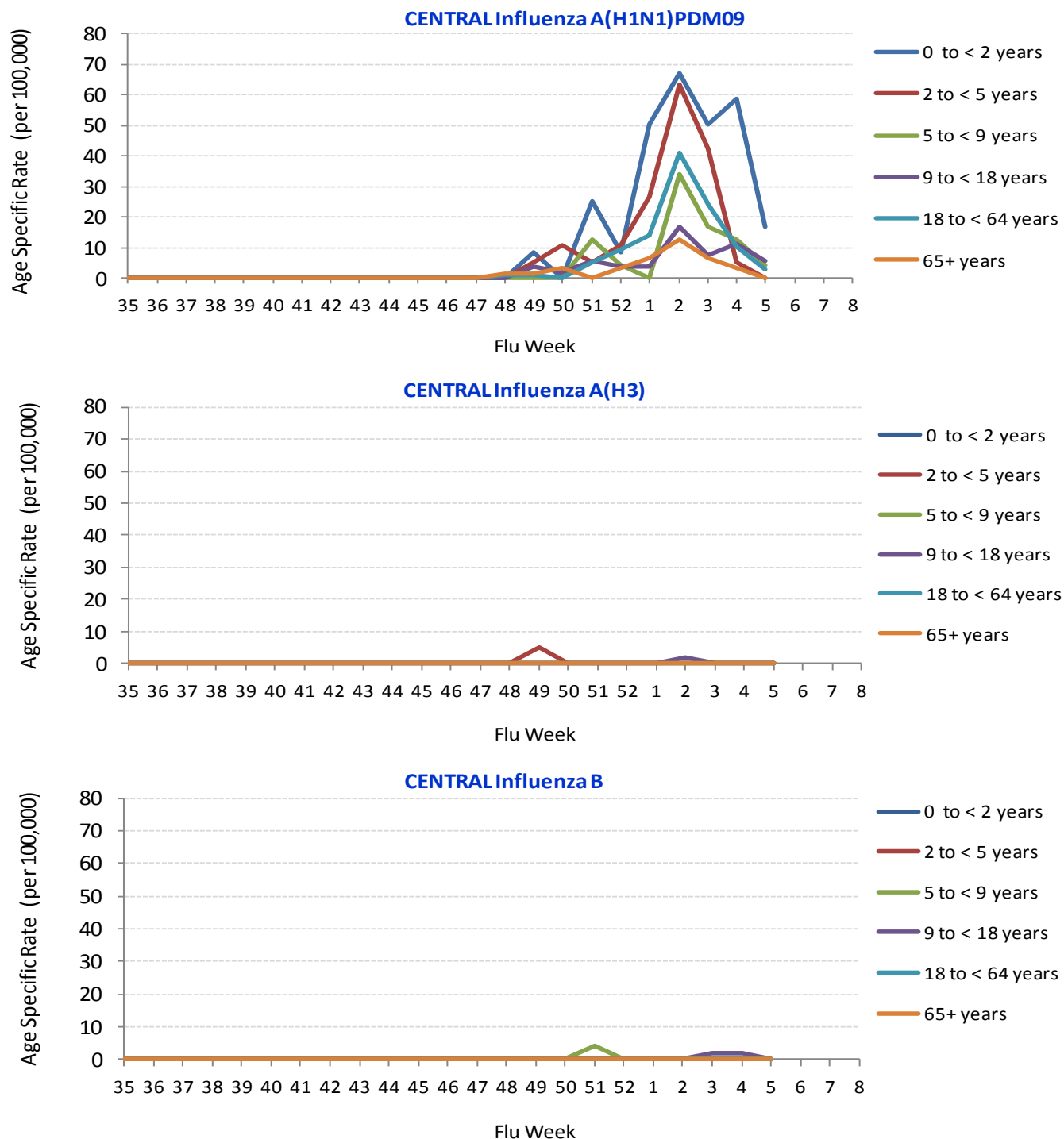
Zones figure 4 continued: Weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype, Calgary zone



[Click here to return to Alberta figure - age specific rates of lab confirmed influenza](#)

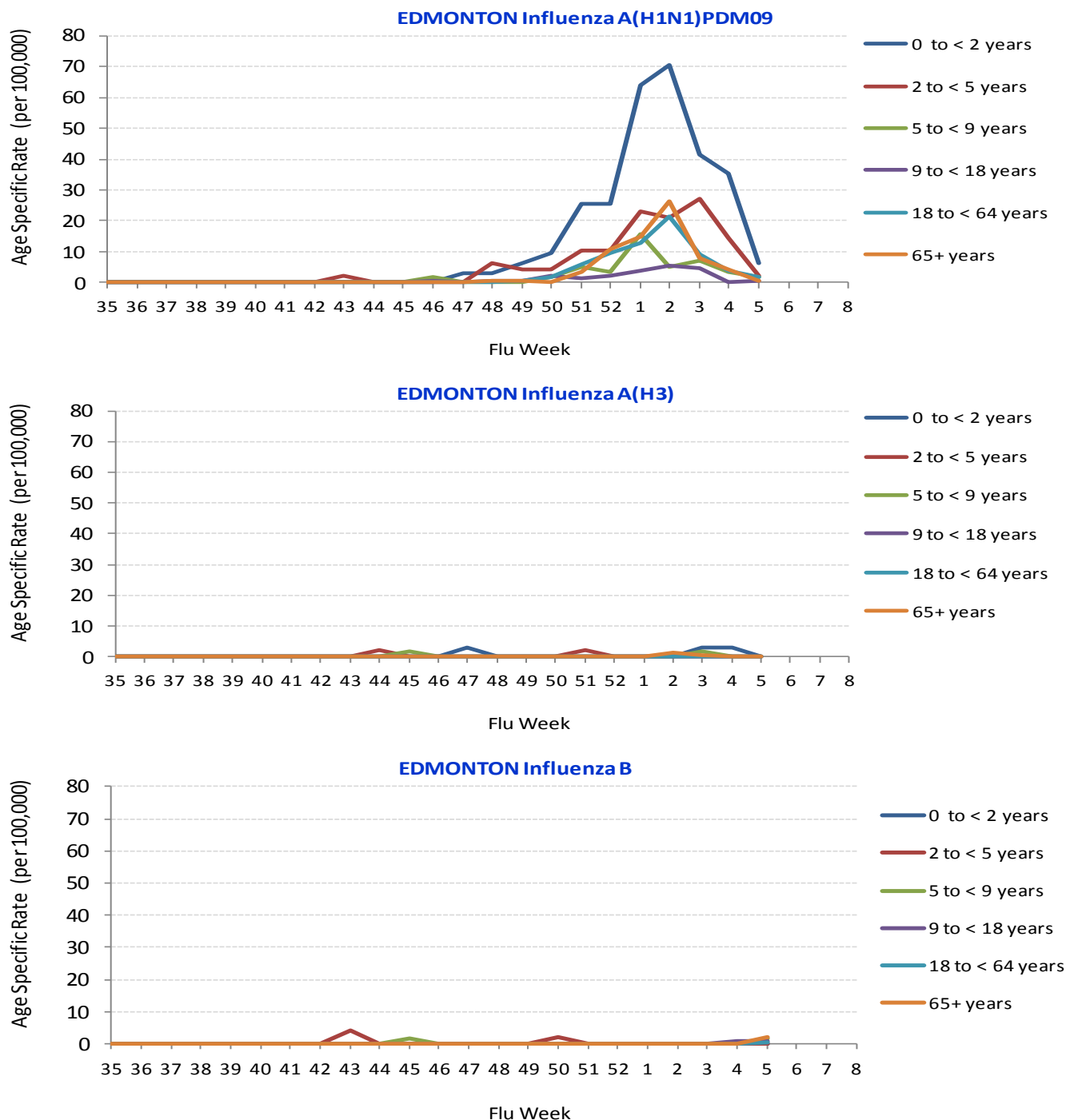
Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Zones figure 4: Weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype, Central zone



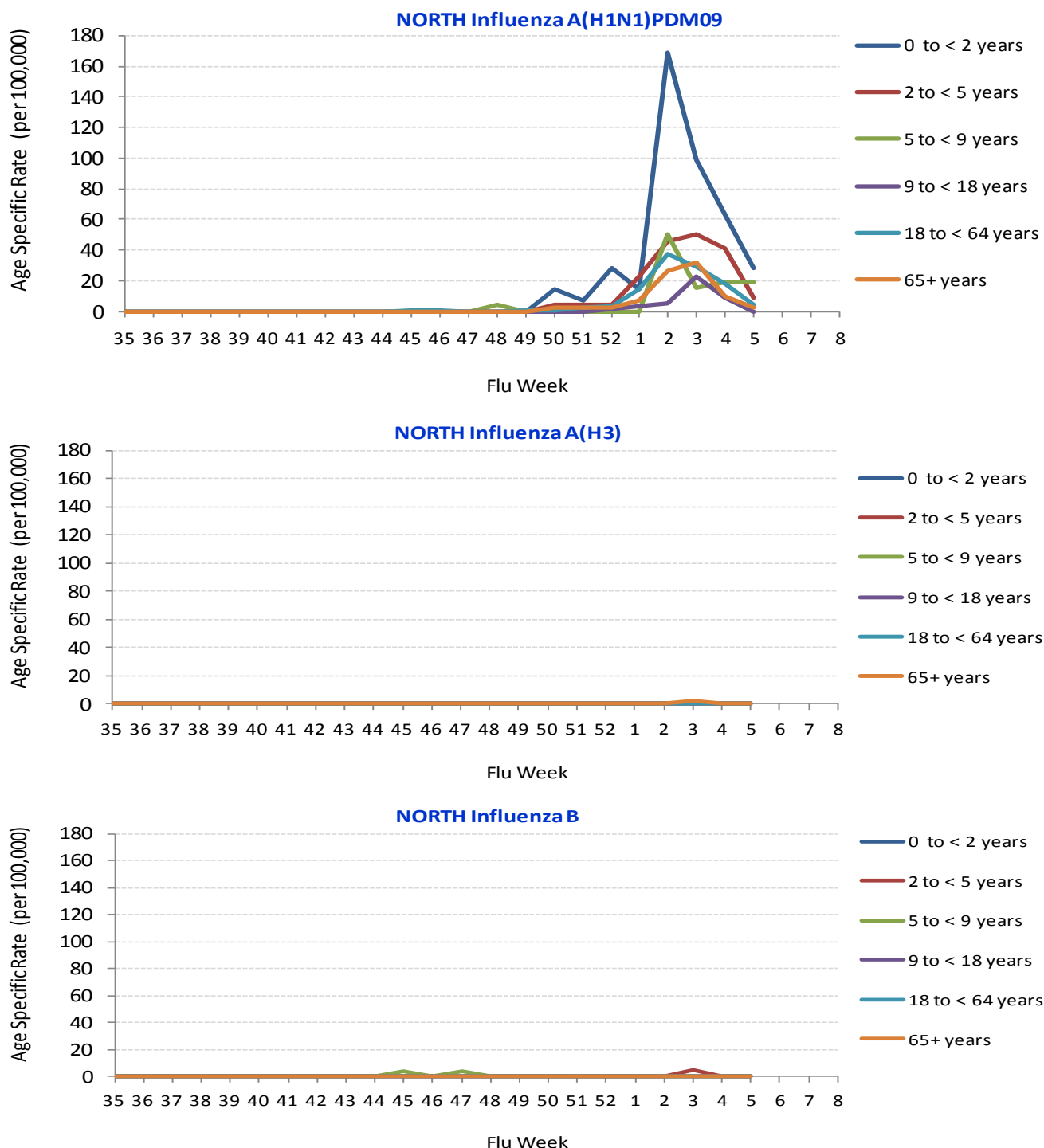
[Click here to return to Alberta figure - age specific rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Zones figure 4: Weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype and Zone


[Click here to return to Alberta figure - age specific rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Zones figure 4: Weekly age-specific rates of lab confirmed influenza (per 100,000) by subtype and Zone


[Click here to return to Alberta figure - age specific rates of lab confirmed influenza](#)

Source: DIAL – Provincial Laboratory (includes cases with positive influenza specimens classified on or before Feb 1, 2014). For more information on data definitions and sources, see [Data Notes](#).

Surveillance and Reporting

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Data Notes

LABORATORY DATA

Laboratory confirmed (non-influenza) respiratory virus activity is based on the Alberta Provincial Public Health Laboratory's DIAL system (Data Integration for Alberta Laboratories) – a specimen based system. Data are based on specimens obtained from residents of Alberta according to the date the sample was received at the Provincial laboratory. Respiratory samples submitted for testing at the Alberta Provincial Laboratory are first tested for influenza A & B. Those with a negative influenza result are then tested using the respiratory virus panel (RVP) which tests for the presence of non-influenza respiratory viruses. Samples from physicians participating in the Tarrant program and patients admitted to intensive or critical care units are tested for both non-influenza and influenza viruses. Definition for “mixed” – a single sample where multiple (non-influenza) viral organisms were isolated.

Laboratory confirmed influenza activity is based on the Alberta Provincial Public Health Laboratory's DIAL system (Data Integration for Alberta Laboratories) – an influenza case based system. Data are based on Alberta residents according to the date the sample was classified as influenza sub-type.

Effective January 7, 2014 respiratory virus testing from community physicians, including group practices and walk-in clinics, has been discontinued. These samples are now only tested for influenza A and B.

ILI OUTBREAK INVESTIGATIONS

Upon notification of an outbreak, the Alberta Health (AH)/Alberta Health Services (AHS) Outbreak Reporting Form (AORF) is completed by a communicable disease nurse, sent to AH and entered into the CDRS database. Outbreaks reported by First Nations and Inuit Health Branch (FNIHB) to AH are not included in this report. The AORF form includes information about the type and location of the outbreak, the facility, and the causative organism. Note that zone specific outbreaks are those reported by that zone, however specific cases may reside or have been exposed and/or infected outside of that zone. Not all outbreaks result in an organism being confirmed and for those that are confirmed, there may be a delay between reporting and identification of the organism; outbreaks are classified by the organism listed as the ILI Organism Confirmed on the AORF. This report does not include outbreaks suspected or confirmed to be caused by bacteria (i.e. pertussis, invasive pneumococcal disease) or viruses causing rash-like illness such as measles, rubella (German measles) or chickenpox. In this report, outbreaks are reported according to the onset date of the first case; where onset date is not available, the date the investigation is opened is used. The AHS Surveillance and Reporting team obtains the data via CDRS which is housed and maintained by AH.

CALLS TO HEALTH LINK ALBERTA

Health Link Alberta is a 24 hour a day, 7 day a week nurse-operated service that provides the public with advice and information about health symptoms and concerns. The original data source for calls to Health Link Alberta for cough is the Health Link database called Sharp Focus (obtained via the *Alberta Real Time Syndromic Surveillance Net - ARTSSN*). Note that one individual may place multiple calls.

The Health Link protocols selected for inclusion in this report are as follows: cough/hoarseness/stridor (PED), cough/hoarseness (ADULT).

Effective January 7, 2014 a temporary influenza-like illness protocol was implemented due to the high call volume for influenza symptoms. People calling for cough may now be coded under cough or ILI depending on other symptoms. As such both are now included. Note that the ILI code also includes children who may not have had cough but exhibited at least two symptoms of ILI.

EMERGENCY DEPARTMENT VISITS

Information on Edmonton zone Emergency Department Information System (EDIS) emergency department/urgent care centre visits with ILI at screenings at triage are provided by the ARTSSN data repository. When patients present at EDIS emergency departments, they are screened for ILI by the triage nurse. While this screening tool is not mandatory, compliance is consistently high.

The original data sources fed to the ARTSSN data repository are EDIS for the following Edmonton Zone emergency departments and urgent care centres: Royal Alexandra Hospital, Westview Health Centre, Sturgeon Community Hospital, Northeast Community Health Centre, Leduc Community Hospital, Grey Nuns Community Hospital, University of Alberta Hospital, Fort Saskatchewan Health Centre, and Misericordia Hospital.

SENTINEL PHYSICIAN OFFICE VISITS (TARRANT)

Tarrant Viral Watch is an Alberta Health funded program intended to monitor ILI (Influenza-like Illness) and LRTI (Lower Respiratory Tract Infections) in the community. Volunteer sentinel physician offices provide data to the Tarrant program, which in turn provide them to AHS Surveillance and Reporting on a weekly basis. ILI is defined as a respiratory illness with acute onset, with fever, and cough, and with 1 or more of sore throat, arthralgia, myalgia or prostration-which may be due to influenza virus (presentation may vary in pediatric and elderly populations). LRTI is defined as any acute infection with significant involvement of the respiratory tract below the larynx, as identified by history, physical signs and/or radiological findings. If a patient has ILI with lower tract involvement, they are coded as LRTI. Note that the definition of ILI may vary from other definitions.

INFLUENZA IMMUNIZATIONS

Influenza immunization data are reported by AHS zones. Numbers are available to the AHS Public Health Surveillance team at the beginning of the week for the doses administered the previous week (Sunday to Saturday). It includes those doses administered by AHS (Public Health) only. Clients can only exist in one priority group. Immunization coverage rates will be reported at the end of the influenza season.

POPULATION NUMBERS

Population data values used to calculate rates were estimated by AHS Patient Based Funding reflecting the March 31 populations for each year represented. Historical population values prior to 2012 are interpolations of actual population values (that is, annual values prior to March 31, 2012) from the Alberta Health Care Insurance Plan (AHCIP) Registration File. Forecast values (that is, for points in time after March 31, 2012) are estimated using the March 31, 2012 AHCIP Registration. The annual historical population files provided by Alberta Health (AH) include individuals registered under the Alberta Health Care Insurance Plan for only part of that fiscal year, but not as of March 31. AH marks these records (i.e., about 97,000, or 2.8% in 2006/07, representing residents that have died, moved, opted out, and so forth) as "inactive" and we exclude them. Individuals in the Alberta Health Care Insurance Plan aged 121 years or older have their date of birth (DOB) checked against additional sources and are "corrected", if possible; otherwise they are removed from the database. Finally, an extremely small volume of individuals with a missing or obviously invalid postal code, date of birth, or gender (e.g., about 600, or 0.02% in 2006/07) have been excluded.

Slight differences between values provided at this level of aggregation and data provided at other levels of aggregation may occur because of round-off error. 2013 populations are still considered projections.

2013-14 NORTHERN HEMISPHERE INFLUENZA SEASON VACCINE COMPOSITION RECOMMENDATION FOR TRIVALENT VACCINES

- an A/California/7/2009 (H1N1)pdm09-like virus*;
- an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011**;
- a B/Massachusetts/2/2012-like virus***

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

*A/Christchurch/16/2010 is an A/California/7/2009-like virus

**A/Texas/50/2012 is an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011. It is recommended that A/Texas/50/2012 is used as the A(H3N2) vaccine component because of antigenic changes in earlier A/Victoria/361/2011-like vaccine viruses (such as IVR-165) resulting from adaptation to propagation in eggs.

***B/Brisbane/33/2008 is a B/Brisbane/60/2008-like virus

FLU WEEKS

Flu weeks are the same as those defined by the Public Health Agency of Canada's (PHAC) FluWatch:

2013-14 influenza season flu week date ranges			Week	Start	End	Week	Start	End
			51	15-Dec-13	21-Dec-13	17	20-Apr-14	26-Apr-14
Week	Start	End	52	22-Dec-13	28-Dec-13	18	27-Apr-14	3-May-14
35	25-Aug-13	31-Aug-13	1	29-Dec-13	4-Jan-14	19	4-May-14	10-May-14
36	1-Sep-13	7-Sep-13	2	5-Jan-14	11-Jan-14	20	11-May-14	17-May-14
37	8-Sep-13	14-Sep-13	3	12-Jan-14	18-Jan-14	21	18-May-14	24-May-14
38	15-Sep-13	21-Sep-13	4	19-Jan-14	25-Jan-14	22	25-May-14	31-May-14
39	22-Sep-13	28-Sep-13	5	26-Jan-14	1-Feb-14	23	1-Jun-14	7-Jun-14
40	29-Sep-13	5-Oct-13	6	2-Feb-14	8-Feb-14	24	8-Jun-14	14-Jun-14
41	6-Oct-13	12-Oct-13	7	9-Feb-14	15-Feb-14	25	15-Jun-14	21-Jun-14
42	13-Oct-13	19-Oct-13	8	16-Feb-14	22-Feb-14	26	22-Jun-14	28-Jun-14
43	20-Oct-13	26-Oct-13	9	23-Feb-14	1-Mar-14	27	29-Jun-14	5-Jul-14
44	27-Oct-13	2-Nov-13	10	2-Mar-14	8-Mar-14	28	6-Jul-14	12-Jul-14
45	3-Nov-13	9-Nov-13	11	9-Mar-14	15-Mar-14	29	13-Jul-14	19-Jul-14
46	10-Nov-13	16-Nov-13	12	16-Mar-14	22-Mar-14	30	20-Jul-14	26-Jul-14
47	17-Nov-13	23-Nov-13	13	23-Mar-14	29-Mar-14	31	27-Jul-14	2-Aug-14
48	24-Nov-13	30-Nov-13	14	30-Mar-14	5-Apr-14	32	3-Aug-14	9-Aug-14
49	1-Dec-13	7-Dec-13	15	6-Apr-14	12-Apr-14	33	10-Aug-14	16-Aug-14
50	8-Dec-13	14-Dec-13	16	13-Apr-14	19-Apr-14	34	17-Aug-14	23-Aug-14