Respiratory Viruses in Luxembourg (ReViLux)

Sentinel Network Report -Week 06

Summary of Sentinel Network activities

Influenza-like illness **(ILI)** accounted **for 8.7%** of consultations, surpassing the baseline, according to ECDC.

In week 2026/06, 114 sentinel samples were analysed, with about two-thirds positive for respiratory viruses. **Influenza A (30.7%)** remained the dominant circulating pathogen, with the most recent cases in children. **RSV (8.0%)** circulation remained low, while **SARS-CoV-2** positivity increased slightly to **5.3**%. **Human rhinovirus (22.3%)** and **metapneumovirus (10.7%)** were detected across all age-groups, while **parainfluenzavirus (1.8%)** and **adenovirus (1.8%)** were mostly found in children under 5 years.

RSV vaccine coverage season 25/26

The sentinel networks collects additional metadata for each sample received, including RSV vaccine status and the month/year of vaccination for children under 2 years of age and adults aged 65 years and above. During the 2025/26 season, 254 samples were received from children under 2 years and 93 from adults above 65 years. RSV vaccine information was available for 78% (N=198) of cases, and 89 children received passive immunisation with monoclonal antibodies. Among children aged 9 to 23 months, 16 cases (17.9%) tested positive for RSV, suggesting waning protection against infection during the second RSV season. As these infections occurred in the community, protection against severe disease is still thought to persist.

Age	Total number of samples	Patients with with known RSV vaccination status	Monoclonal antibodies	Mother vaccinated	RSV vaccination
below 1 year	109	81 (74.3%)	33 (40.7%)	5 (6.2%)	
1 year	145	117 (80.7%)	56 (47.9%)		
≥65 years	93	21 (22.6%)			1 (4.8%)

Sentinel Surveillance Network

The Sentinel Surveillance aims to monitor circulating respiratory viruses, from traditional ones like influenza to more recent ones like SARS-CoV-2, and hence underpin public health actions. The Sentinel Network is a group of general practitioners and paediatricians spread across the country. They report the weekly number of patients showing symptoms suggestive of acute respiratory infection (ARI) and influenza-like illness (ILI), and those patients are then sampled and tested for a panel of respiratory viruses. The circulation of respiratory viruses in the Northern Hemisphere is generally monitored by seasons that range from week 40 to week 20. The period between weeks 20 and 40 is usually called inter-season.

Clinical results

In weeks 2026/06, consultations for acute respiratory infections (ARI) and ILI rates remained stable at 12.8 % and 8.7% respectively. These figures remain indicative of low epidemic activity. Similar trends are being observed in other European countries, despite high circulation of influenza A.

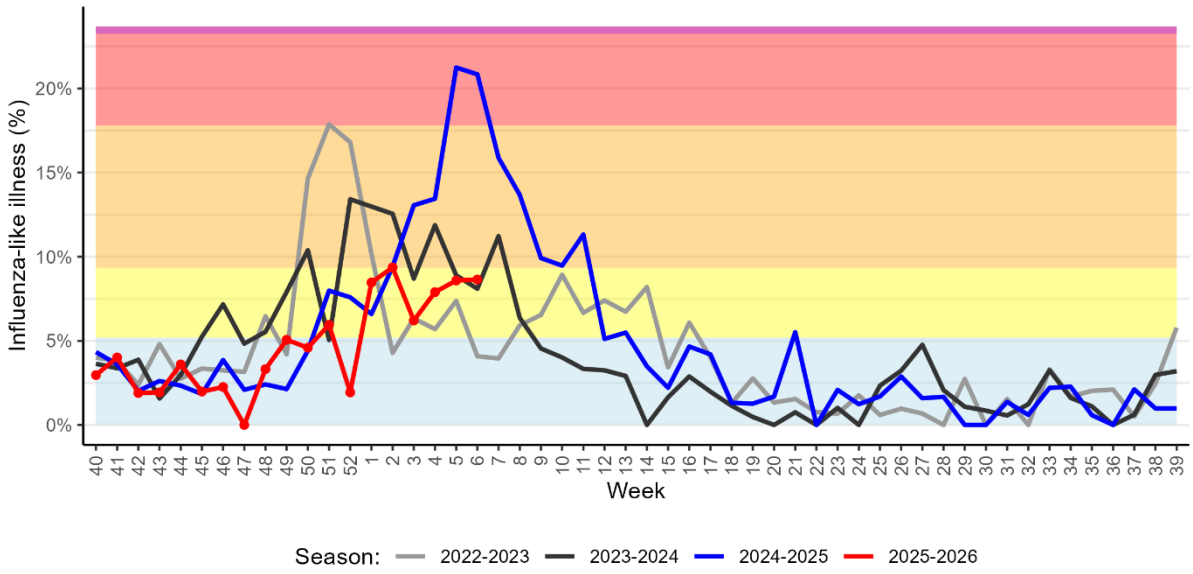
Historical trends in ILI consultations are presented in figure 2, and a detailed summary of the ARI and ILI case counts for the past four weeks is provided in table 1.

Table 1. Syndromic surveillance over the last 4 weeks

Week	ARI		ILI		Total consultations
	N	%	N	%	
2026/03	55	11.78	29	6.21	467
2026/04	43	10.29	33	7.89	418
2026/05	51	12.88	34	8.59	396
2026/06	68	12.78	46	8.65	532

ARI: Acute Respiratory Infections; ILI: Influenza-like Illness.

Figure 1. Percentage of patients with Influenza-like illness over the last three seasons and 2025-2026 (red) Background colours according to intensity of circulation: baseline, low, medium, high, very high.



Laboratory results

During week 2026/06, the LNS received 114 sentinel specimens. Of these, 34.2% (N=39) were from adults aged 18 to 64 years, followed by 32.5% (N=37) from children under 5 years of age. Children aged 5 to 17 years accounted for 26.3% (N=30), while patients aged ≥ 65 years represented 7.0% (N=8). Overall, samples were evenly distributed by gender, with 50.0% (N=57) from female and 50.0% (N=57) from male patients.

Respiratory viruses were detected in 74 (64.9%) of the 114 sentinel samples. The predominant pathogen was **influenza A (30.7%)**, followed by **human rhinovirus (22.3%)** and **metapneumovirus (10.7%)**. **RSV** positivity **(8.0%)** remained below 10% for the past four consecutive weeks, while **SARS-CoV-2** positivity increased slightly to **5.3%** affecting all age-groups below 60 years of age. Over the past two weeks, influenza A positivity decreased from 47.6% to nearly 30.7%, although circulation remains high. During the last two weeks (2026/05-6), 80 new cases were identify across all age-groups, with the majority detected in children under 5 years (38.8%) and children aged 5 to 17 years (36.3%). In total, 78 (97.5%) of the 80 influenza A cases were subtyped: 68% (N=53) were identified as A(H3) and 32.0% (N=25) as A(H1)pdm09 (Figure 5 and 6).

Since the beginning of the season, 157 RSV cases have been confirmed. Subtyping identified 87 RSV-A (64.9%) and 47 (35.1%) RSV- B cases. Approximately 32% of RSV infections occurred in children under 2 years of age, with a similar proportion in children aged 2 to 4 years, and 23% in adults aged 18 to 64 years.

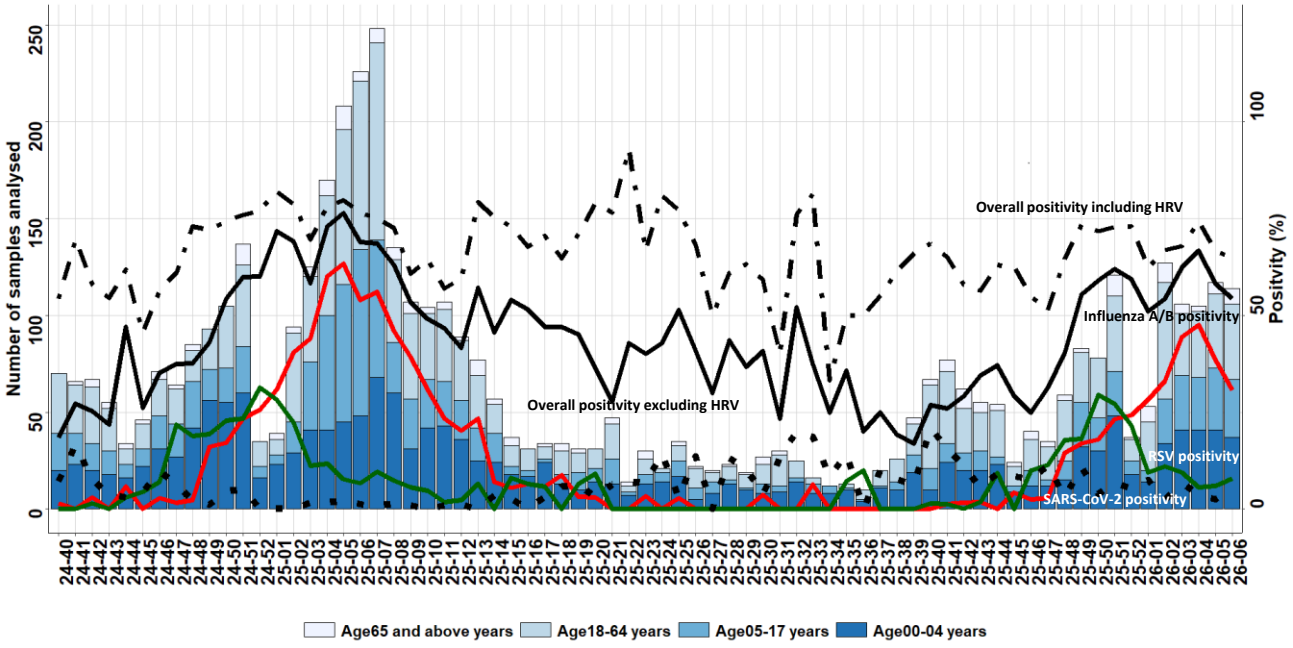
Furthermore, over the past two weeks, human rhinovirus and metapneumovirus have been detected in all age-groups, while parainfluenzavirus and adenovirus were primarily detected in children under 5 years of age.

An overview of the circulating viral pathogens in the sentinel network in Luxembourg during the current and previous (inter)- season is presented in figure 2, 3 and table 2.

Table 2. Distribution of respiratory viruses detected within the Sentinel Network during the past 4 weeks compared to previous season; Total N detected during season 2025/26 and previous season; Results from last weeks are not all yet consolidated.

Virus	Season 2025/26					Season 2024/25		
	Positivity Rate in %							
	W03	**W04**	**W05**	**W06**	**Total N (%)**	**W05**	**W06**	**Total N (%)**
Influenzavirus A	44,3	47,6	38,5	30,7	314 (22,2)	35,1	23,0	502 (17,2)
Human rhinovirus	8,5	13,3	14,7	22,3	345 (24,4)	11,5	13,3	720 (24,8)
Metapneumovirus	2,8	5,7	9,5	10,7	63 (4,5)	6,3	4,9	157 (5,4)
Respiratory syncytial virus	9,4	5,7	6,0	8,0	157 (11,1)	7,7	6,6	287 (9,9)
SARS-CoV-2	6,6	3,8	2,6	5,3	101 (7,1)	1,9	1,3	80 (2,7)
Adenovirus	7,5	6,7	4,3	1,8	74 (5,2)	2,4	3,5	203 (7,0)
Parainfluenzavirus	0,0	2,9	0,9	1,8	47 (3,3)	0,0	0,9	99 (3,4)
Influenzavirus B	0,0	0,0	0,0	0,0	0 (0,0)	29,3	31,9	404 (13,9)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/06) including overall sample positivity- including human rhinovirus (HRV, dot-dash line), excluding HRV (black line), SARS-CoV-2 (dotted line), influenza **combined** (red) and RSV (green); Secondary axis corresponds to positivity; Results from last weeks are not all yet consolidated.*



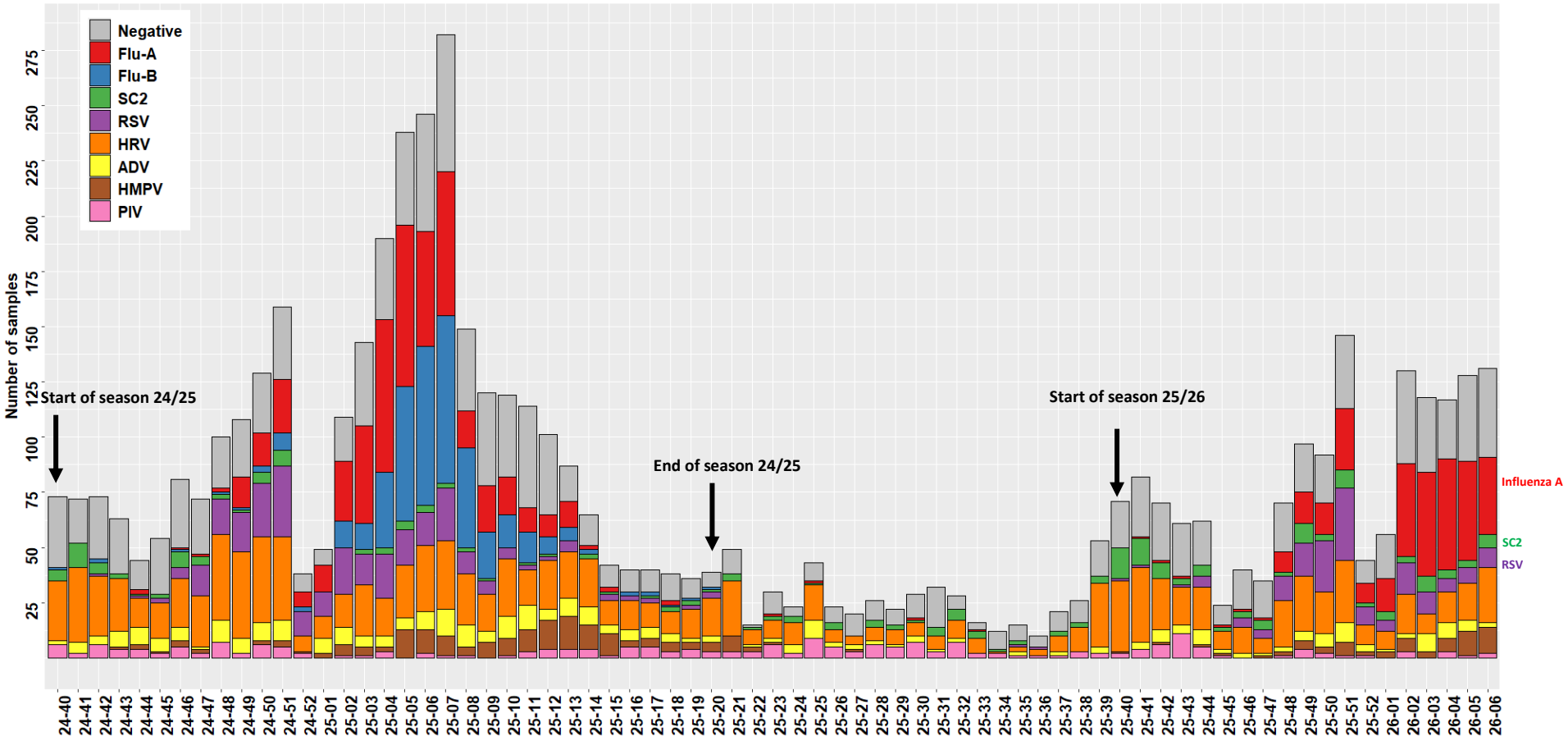


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: SARS-CoV-2; Results from last weeks are not all yet consolidated.

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Figure 4. Number of RSV cases detected in different age-groups (N=157) from 2025/40 to 2026/06

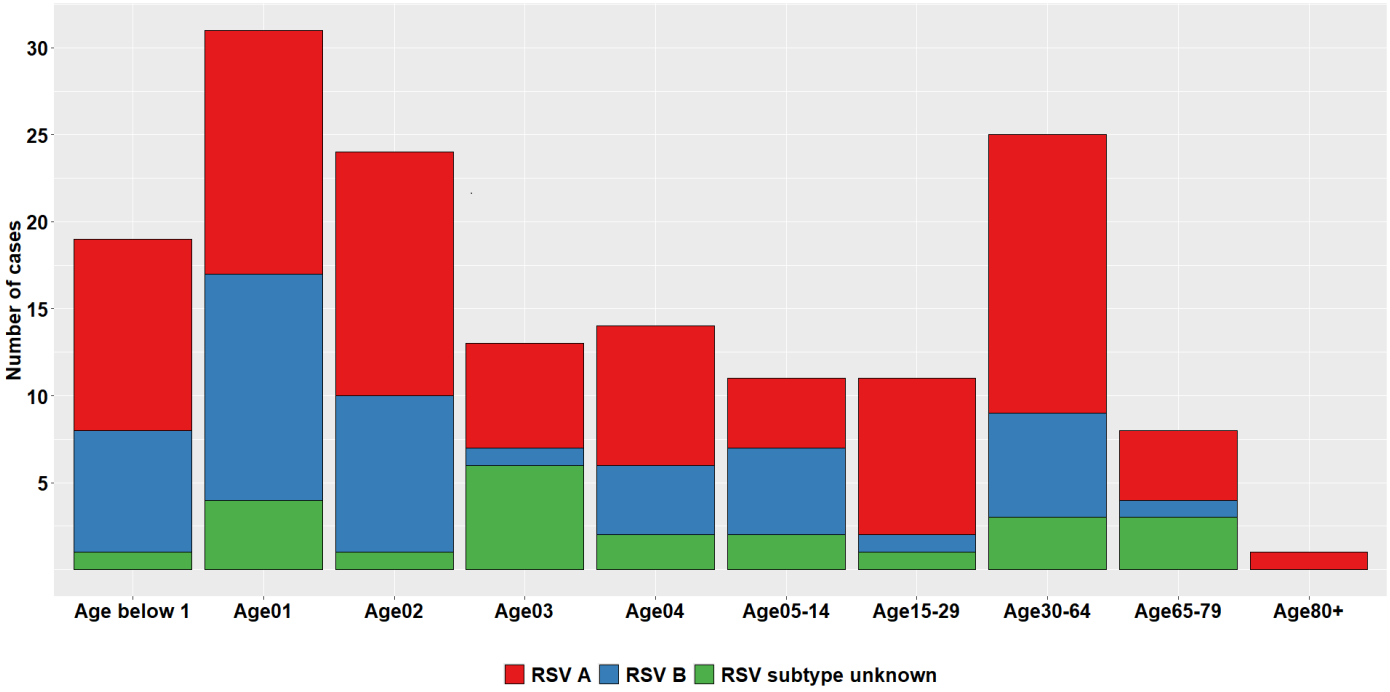


Figure 5. Influenza cases by age group: comparison of 2025/40-2026/06 (N=314) vs. 2026/05-06 (N=80); AH3 and AH1pdm09 percentages in brackets; blue-subtyping pending

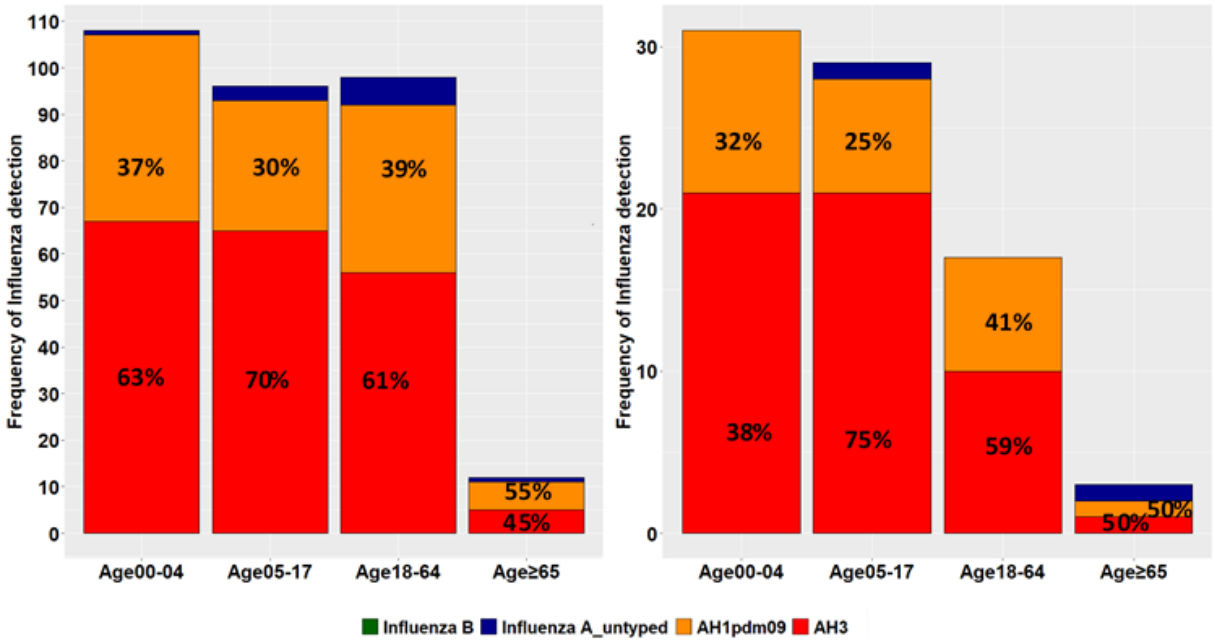
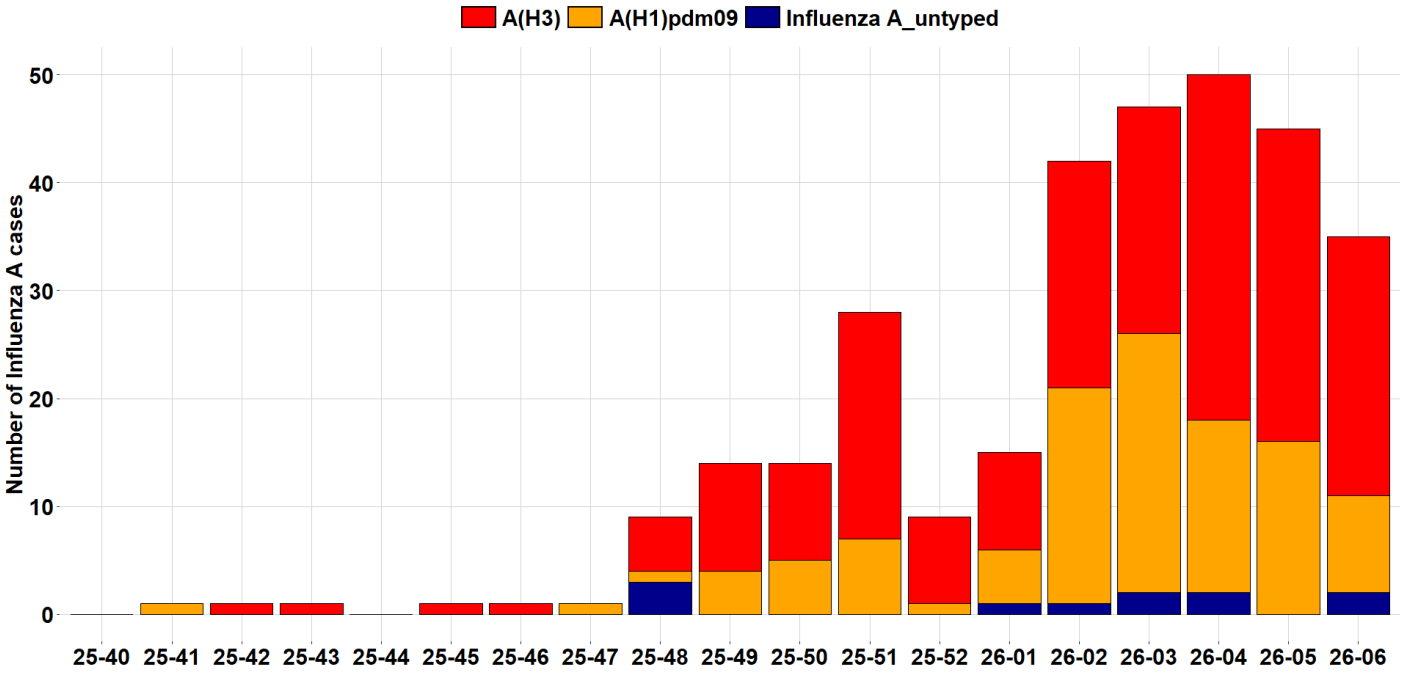


Figure 6. Overall influenza A detection by week and subtype: N=314 cases with 303 (97%) subtyped; 193 (64.0%) A(H3) and 110 cases (36.0%) as A(H1)pdm09



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