Respiratory Viruses in Luxembourg (ReViLux)

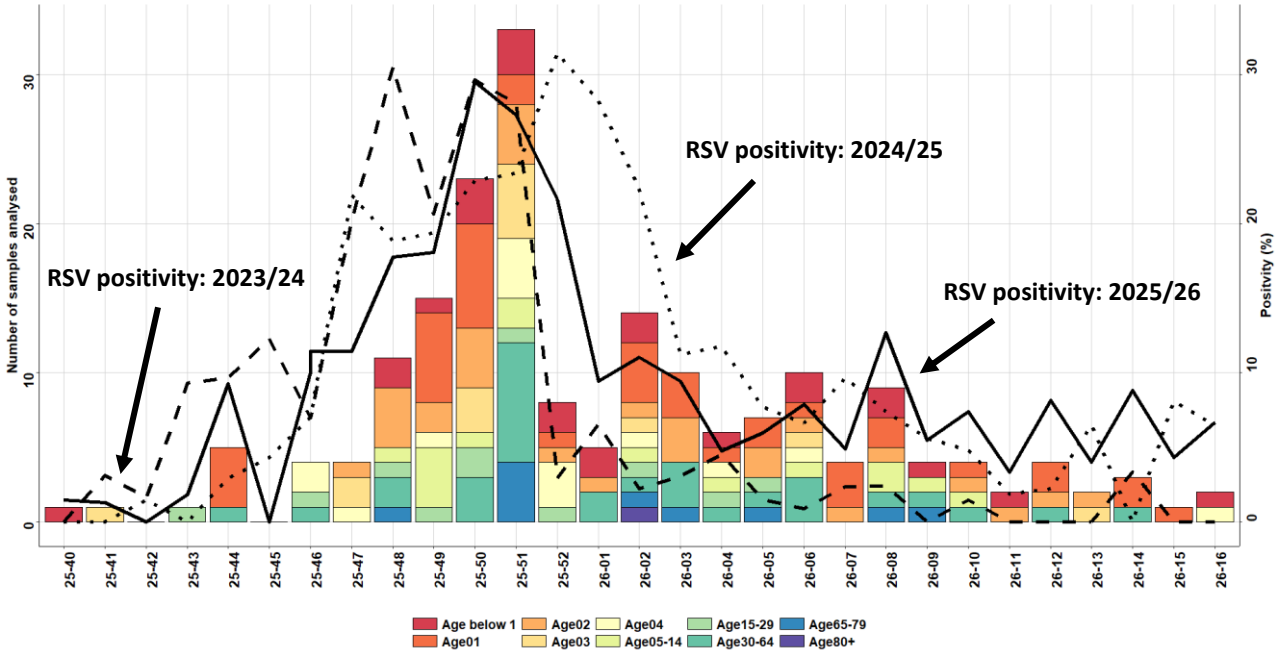
Sentinel Network Report -Week 16

Summary of Sentinel Network activities

In week 2026/16, following the return from the holiday period, consultation numbers increased alongside a rise of ARI (14.1%), while ILI activity (2.5%) remained low, indicating continued circulation of non-influenza respiratory infections.

During week 2026/16, 30 sentinel specimens were received, with over 50% from children aged 0-4 years, and respiratory viruses detected in 56.7% of samples, predominantly **human rhinovirus (23.3%)**, followed by **adenovirus (20.0%)** and **parainfluenza virus (10.0%)**. **RSV activity (6.7%)** remained low, confined to young children, **SARS-CoV-2 (3.3%)** circulation was minimal (one case), and no influenza A cases were detected. The first influenza B case of the 2025/26 was identified in the sentinel network, confirming **low influenza activity (3.3%)**, consistent with national and European trends.

RSV cases during the 2025/26 season and Positivity trends from previous seasons



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 week 2026/16, following the return from the holiday period, the total number of consultations increased compared with the preceding weeks. This was accompanied by an increase in acute respiratory infection (ARI) cases, which accounted for 14.1% of consultations. Influenza-like illness (ILI) activity remained low, with five cases reported (2.5%), similar to levels observed before the holidays. Overall, ARI continues to represent a larger share of consultations, suggesting ongoing circulation of non-influenza respiratory infections, while ILI activity remains at baseline levels. This pattern is in line with reports from other EU/EEA countries.

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	%	
2026/13	25	10.64	3	1.28	235
2026/14	29	18.35	0	0.00	158
2026/15	13	10.66	3	2.46	122
2026/16	28	14.14	5	2.53	198

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

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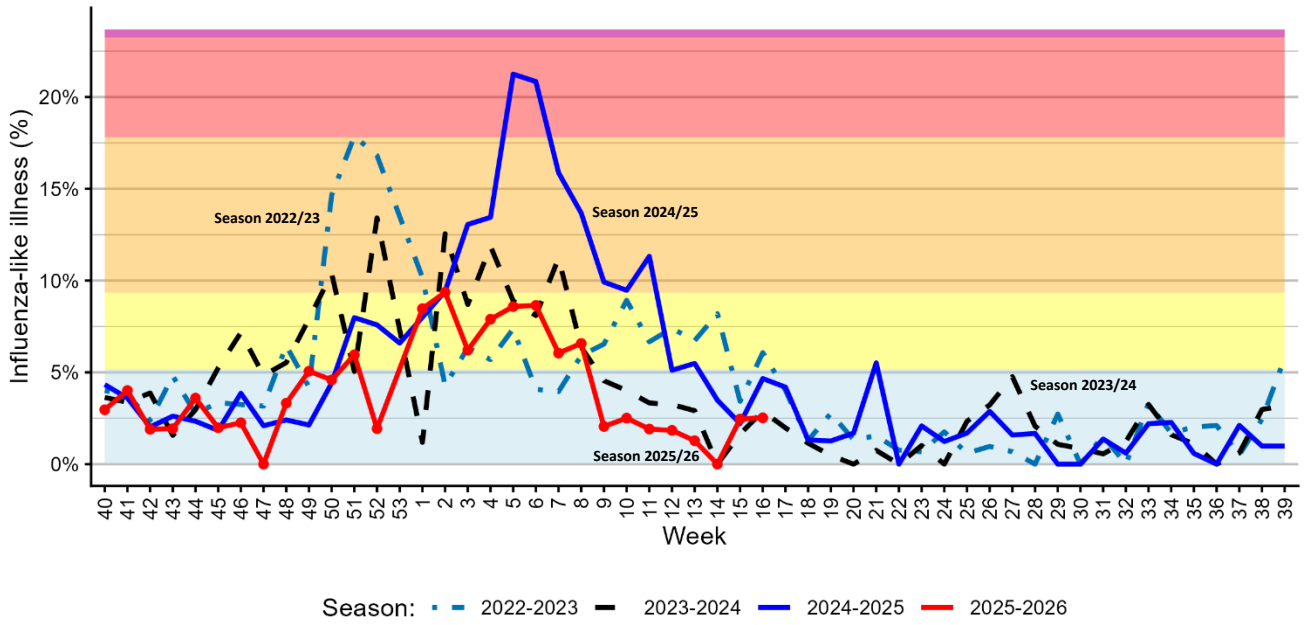
Figure 1. Percentage of patients with Influenza-like illness over the last three seasons and 2025-2026 (red) Background colours according to intensity of circulation: baseline, low, medium, high, very high.



Laboratory results

During week 2026/16, the LNS received 30 sentinel specimens. Of these, 53.3% (N=16) were from children aged 0 to 4 years, followed by 23.3% (N=7) from adults aged 18 to 64 years. Children aged 5 to 17 years accounted for 20.0% (N=6) of the samples, while patients aged ≥ 65 years represented 3.3% (N=1). Overall, 53.3% (N=16) of samples were from male and 46.7% (N=14) were from female patients.

Respiratory viruses were detected in 17 (56.7%) of the 30 sentinel samples. In week 2026/16, the predominant pathogen was **human rhinovirus (23.3%)**, followed by **adenovirus (20.0%)**, **parainfluenza viruses (10.0%)**, and **RSV (6.7%)**. Human metapneumovirus and SARS-CoV-2 were each detected in 6.7% and 3.3% of samples, respectively.

In week 2026/16, the sentinel network detected the first influenza B case of the 25/26 season, corresponding to a positivity rate of 3.3%. Low-level circulation of influenza B has been reported nationally and in other European countries this season. No influenza A cases were detected in week 2026/16, indicating very low circulation during the recent weeks.

RSV activity remained below 10%, with only two cases detected, both in children aged 0 to 4 years. These cases have not yet been subtyped. So far this season, 194 RSV cases have been detected, of which 86.1% (N=167) have been subtyped; 64.1% were RSV-A and 35.9% RSV-B.

SARS-CoV-2 activity remained low, with a positivity rate of 3.3% in week 2026/16, corresponding to one detected case in a child aged 0-4 years.

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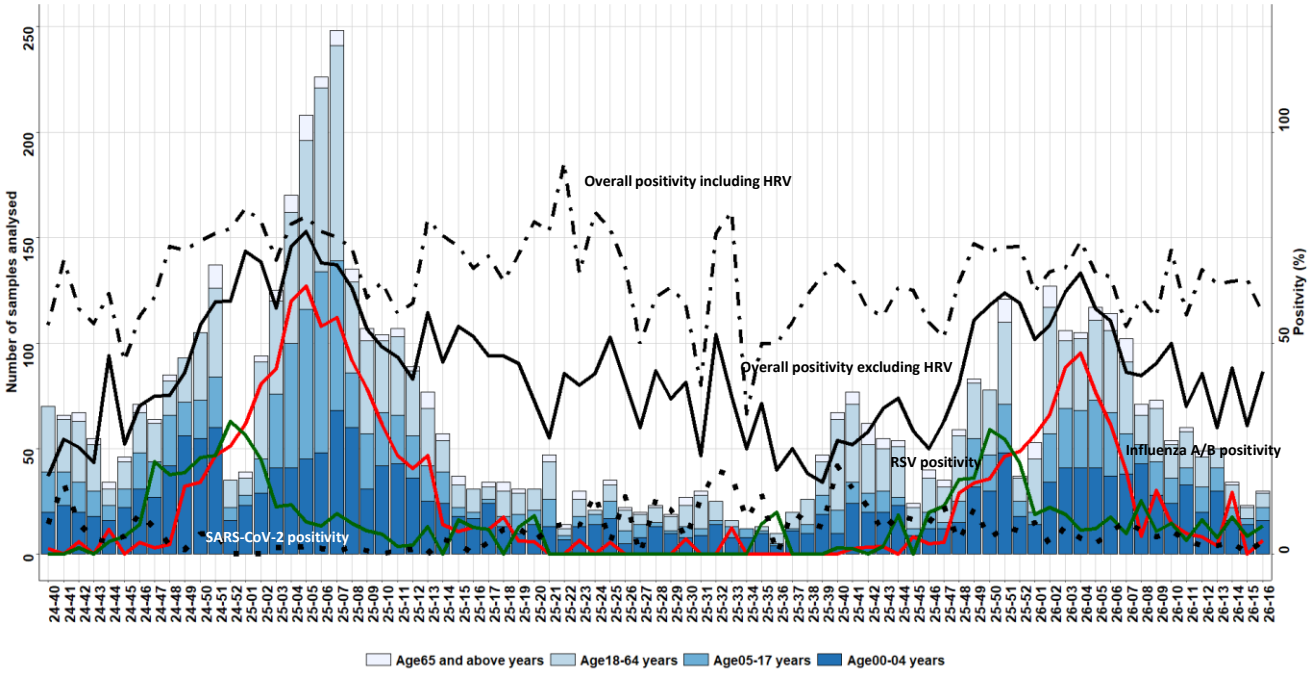
Over the past two weeks, human rhinovirus has continued to be detected across all age-groups, while adenovirus, human metapneumovirus, and parainfluenza viruses were predominantly identified in children under 5 years.

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 %							
	W13	**W14**	**W15**	**W16**	**Total N (%)**	**W15**	**W16**	**Total N (%)**
Human rhinovirus	50.0	32.4	47.8	23.3	500 (25.5)	29.7	41.9	720 (24.8)
Adenovirus	12.0	8.8	8.7	20.0	128 (6.5)	10.8	16.1	203 (7.0)
Parainfluenzavirus	8.0	5.9	13.0	10.0	75 (3.8)	2.7	16.1	99 (3.4)
Respiratory syncytial virus	4.0	8.8	4.3	6.7	194 (9.9)	8.1	6.5	287 (9.9)
Metapneumovirus	6.0	5.9	4.3	6.7	120 (6.1)	27.0	9.7	157 (5.4)
SARS-CoV-2	2.0	2.9	0.0	3.3	125 (6.4)	2.7	0.0	80 (2.7)
Influenzavirus B	0.0	0.0	0.0	3.3	1 (0.1)	0.0	6.5	404 (13.9)
Influenzavirus A	2.0	14.7	0.0	0.0	363 (18.5)	5.4	0.0	502 (17.2)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/16) 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.*



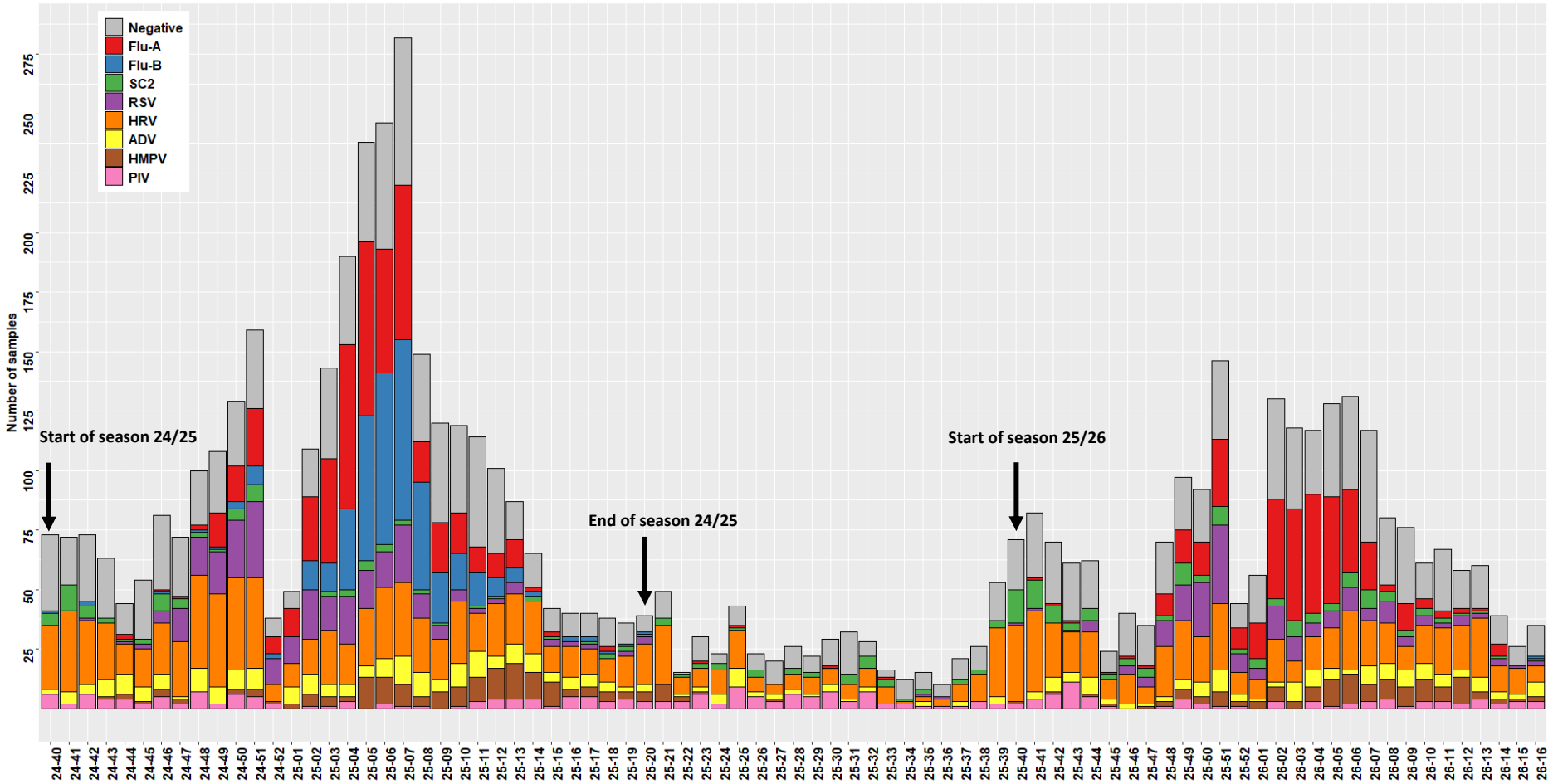


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: 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=194) from 2025/40 to 2026/16

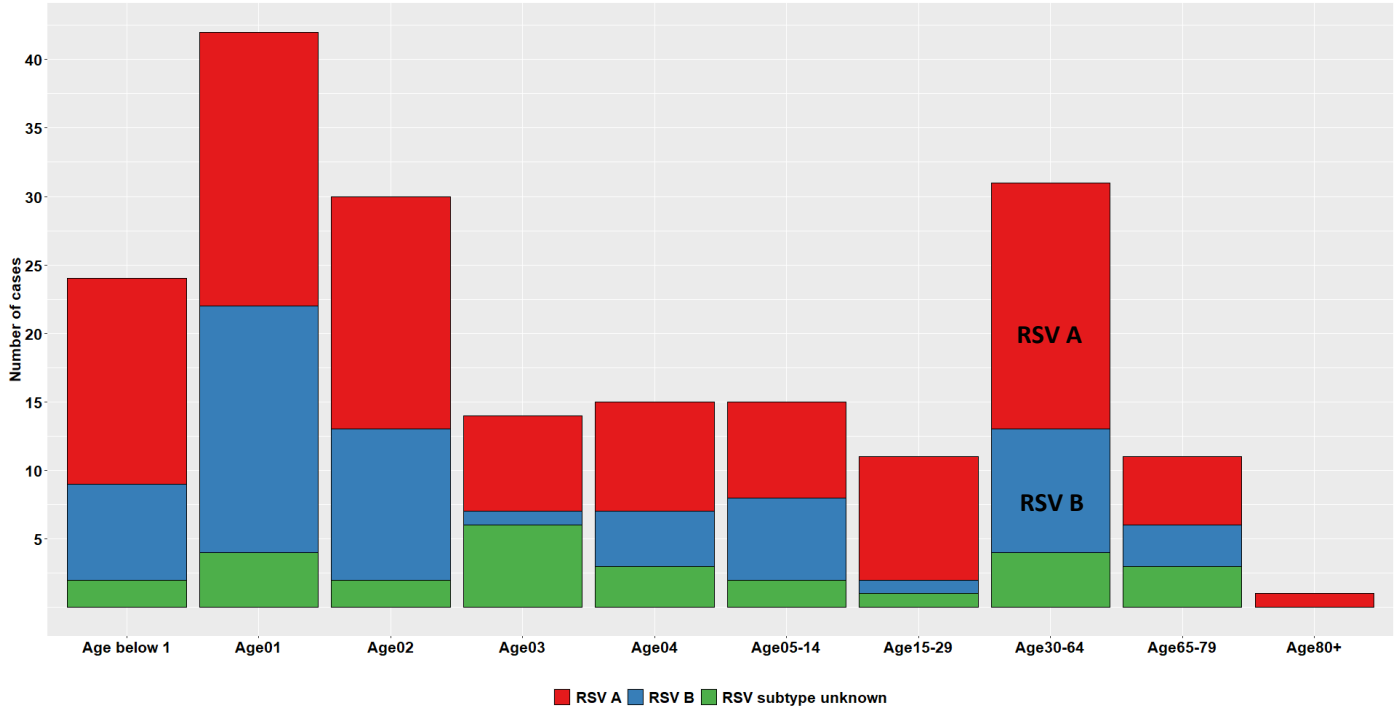


Figure 5. Number of Influenza cases detected in different age-group by subtypes (N=364) from 2025/40 to 2026/16; blue-subtyping pending

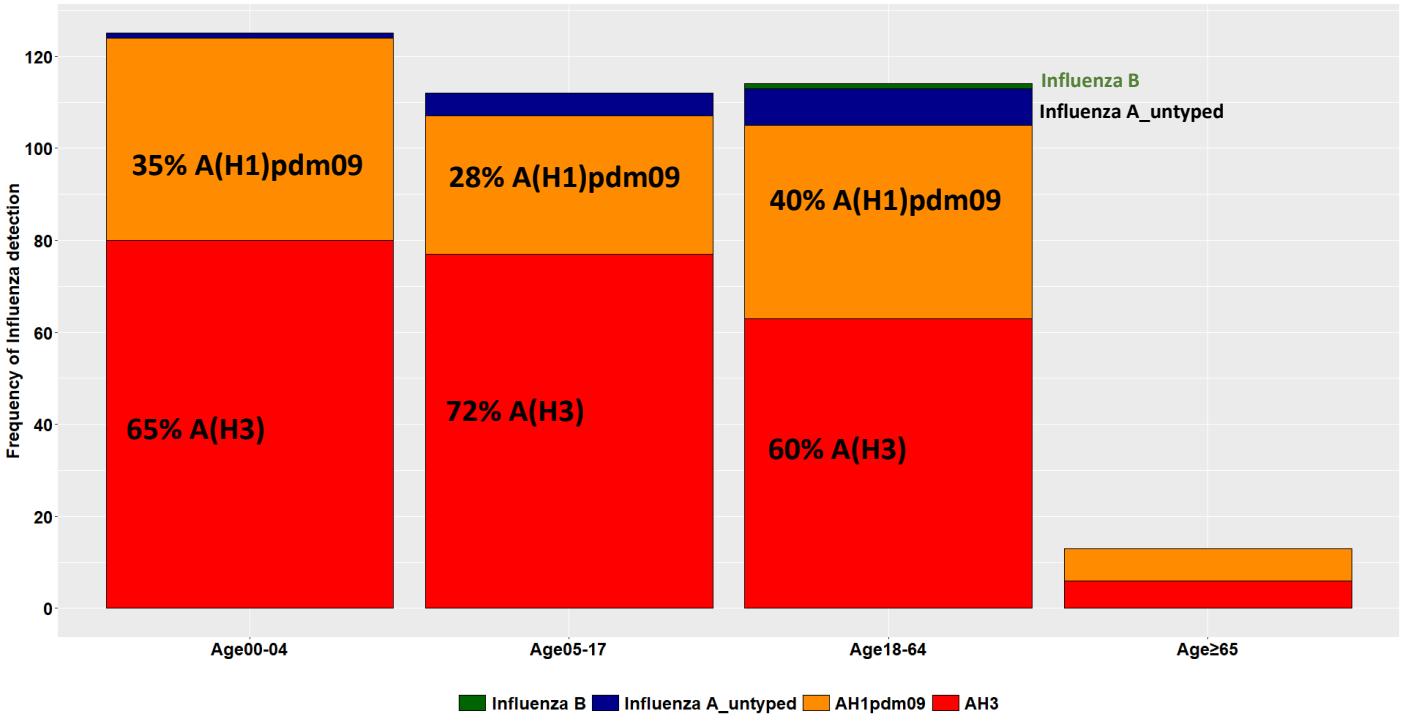
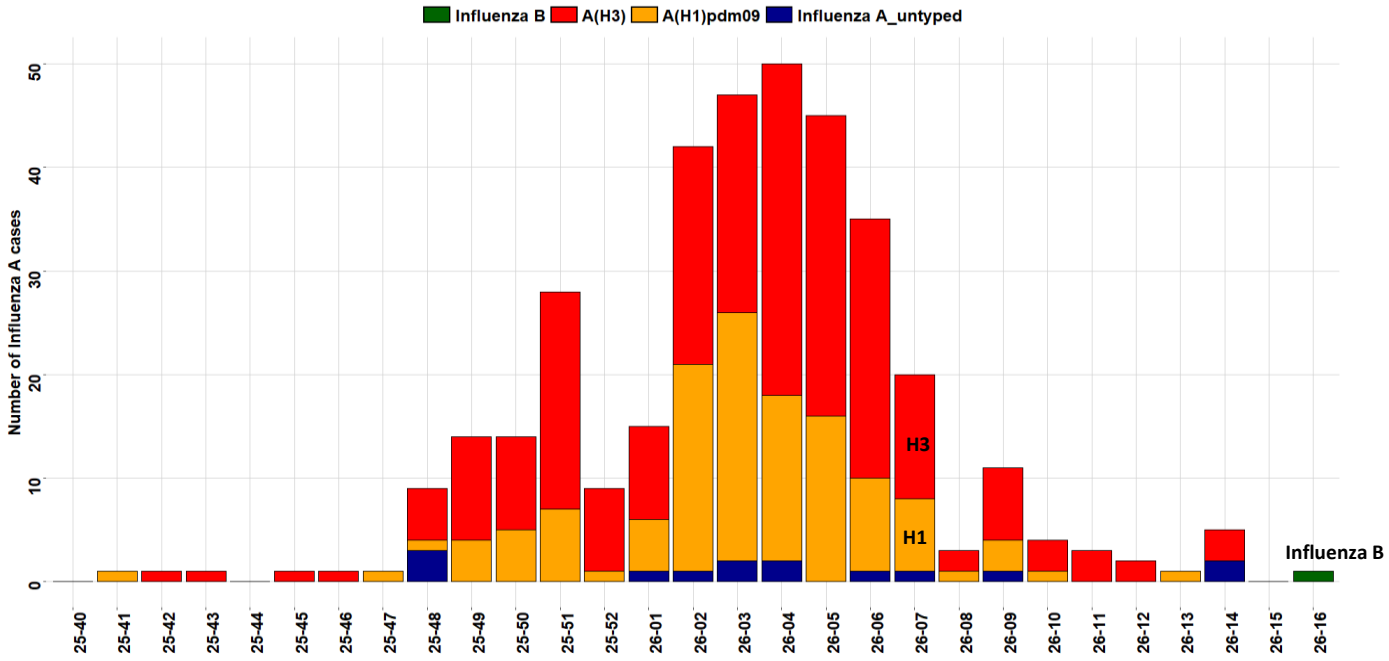


Figure 6. Overall influenza detection by week and subtype: N=364 cases with 349 (96.1%) Influenza A cases subtyped; 226 (64.8%) A(H3) and 123 cases (35.2%) as A(H1)pdm09



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