Respiratory Viruses in Luxembourg (ReViLux)

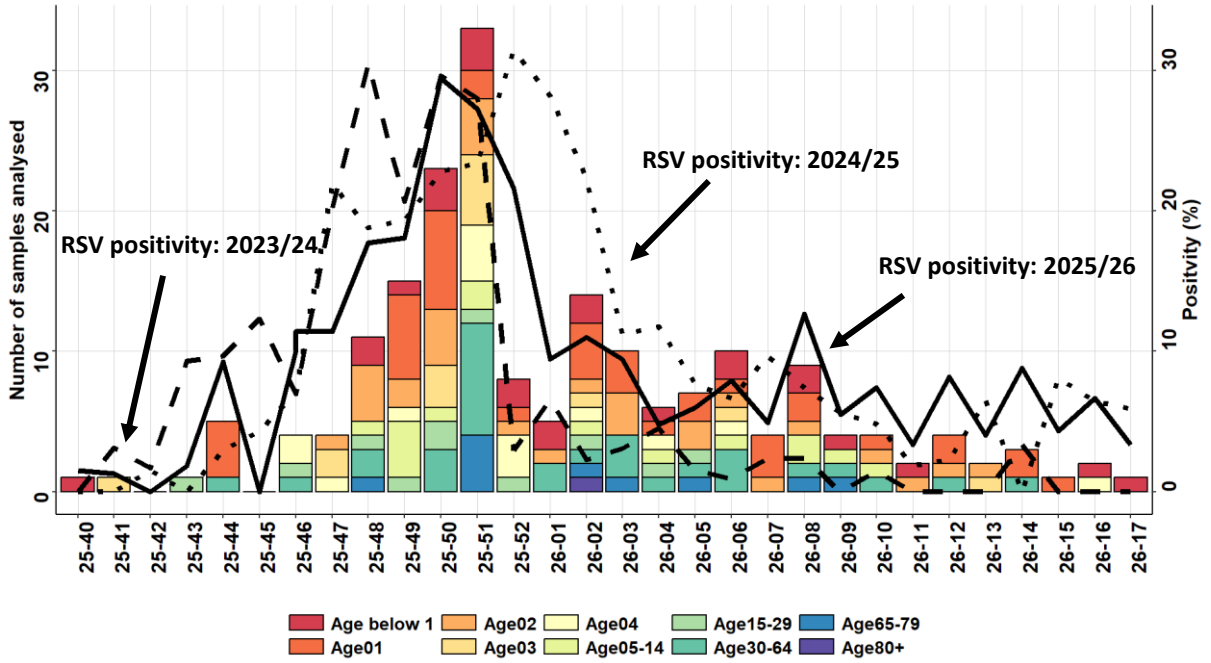
Sentinel Network Report -Week 17

Summary of Sentinel Network activities

Week 2026/17 shows a continued decline in ARI and very low ILI activity alongside fewer consultations, confirming the waning of respiratory illness typical of the post-winter period.

Week 2026/17 highlights the dominance of non-influenza respiratory pathogens, particularly **human rhinovirus (46.7%)**, with a noticeable increase in **human metapneumovirus (16.7%)**, while other viruses remained at low levels. Influenza circulation has ceased, and both **RSV (3.3%)** and SARS-CoV-2 activity stayed minimal, confirming the transition out of the winter season. Most detections occurred in children aged 0-4 years, although rhinovirus continued to circulate across all age groups.

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 2026/17, the total number of consultations decreased to 229 compared to 285 in week 2026/16, indicating a slight reduction in healthcare demand. The proportion of ARI continued its downward trend. Similarly, ILI activity remained very low at 1.3%. Overall, these trends suggest a continued decrease in respiratory illness activity, consistent with the end of the winter season and reduced circulation of major respiratory pathogens. This pattern is in line with reports from other EU/EEA countries.

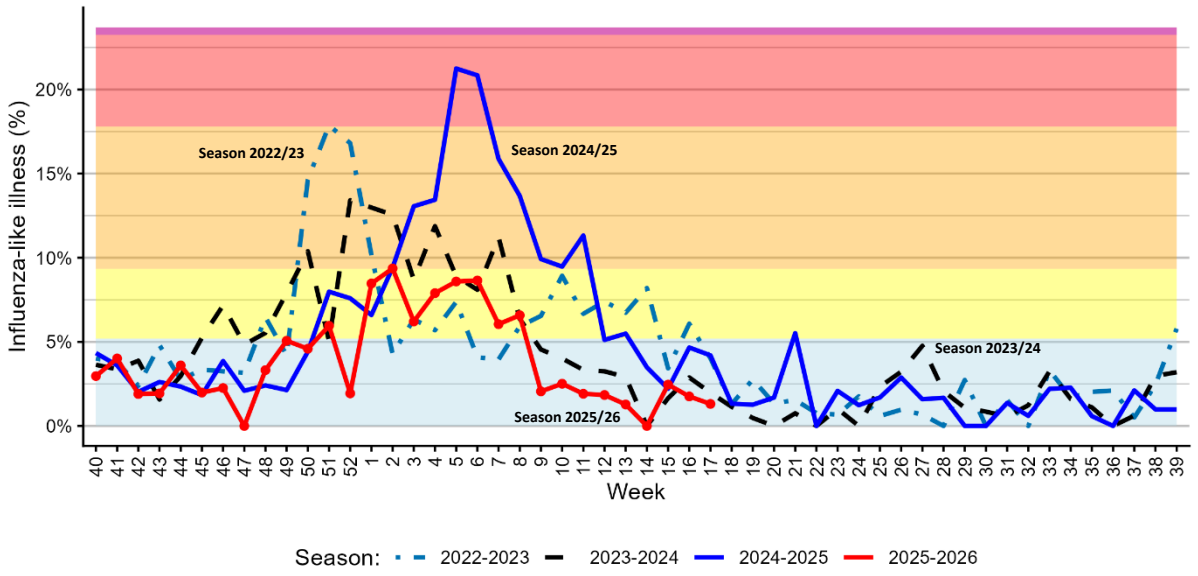
Historical trends in ILI consultations are presented in figure 2, and a detailed summary of the ARI and ILI case counts for the past four weeks is provided in table 1.

Table 1. Syndromic surveillance over the last 4 weeks

Week	ARI		ILI		Total consultations
	N	%	N	%	
2026/14	29	18.35	0	0.00	158
2026/15	13	10.66	3	2.46	122
2026/16	35	12.28	5	1.75	285
2026/17	21	9.17	3	1.31	229

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 2026/17, the LNS received 30 sentinel specimens. Of these, 70.0% (N=21) were from children aged 0 to 4 years, followed by 16.7% (N=5) from adults aged 18 to 64 years. Children aged 5 to 17 years accounted for 10.0% (N=3) of the samples, while patients aged ≥ 65 years represented 3.3% (N=1). Overall, samples were equally distributed by sex, with 50.0% (N=15) from male and 50.0% (N=15) were from female patients.

Respiratory viruses were detected in 21 (70.0%) of the 30 sentinel samples. In week 2026/17, the predominant pathogen was **human rhinovirus (46.7%)**, followed by **human metapneumovirus (16.7%)** and **parainfluenza viruses (10.0%)**. RSV and adenovirus were each detected in 3.3% of samples.

No influenza cases were detected in week 2026/17, confirming that the influenza season has ended, particularly after three consecutive weeks without any reported influenza A cases.

RSV activity remained below 10%, with only one new case detected. This case has not yet been subtyped. A similar level of RSV circulation was observed during the previous season. So far this season, 195 RSV cases have been detected, of which 86.7% (N=169) have been subtyped; 64.5% were RSV-A and 35.5% RSV-B.

Over the past two weeks only very low SARS-CoV-2 circulation has been observed.

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

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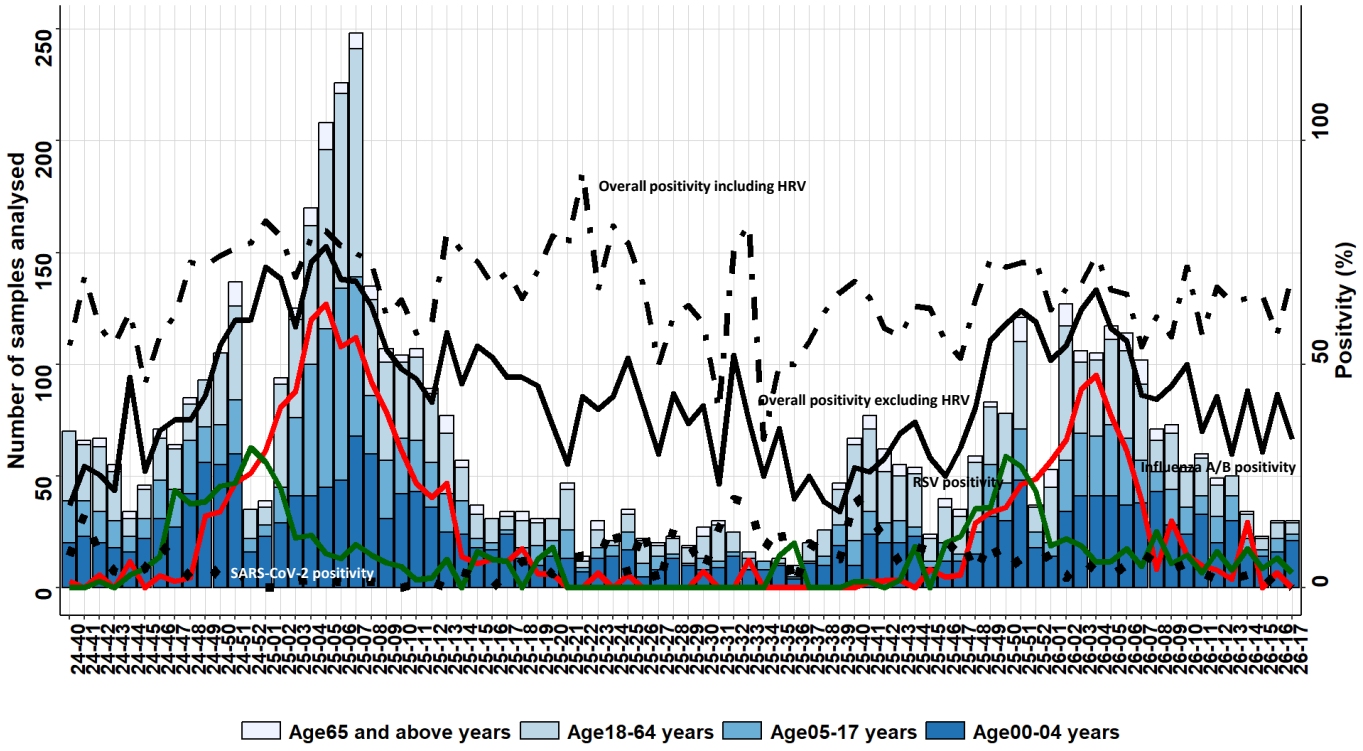
An overview of the circulating viral pathogens in the sentinel network in Luxembourg during the current and previous (inter)- season is presented in figure 2, 3 and table 2.

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 %							
	W14	W15	W16	W17	Total N (%)	W16	W17	Total N (%)
Human rhinovirus	32.4	47.8	23.3	46.7	514 (25.8)	41.9	32.4	720 (24.8)
Metapneumovirus	5.9	4.3	6.7	16.7	125 (6.3)	9.7	11.8	157 (5.4)
Parainfluenzavirus	5.9	13.0	10.0	10.0	78 (3.9)	16.1	14.7	99 (3.4)
Respiratory syncytial virus	8.8	4.3	6.7	3.3	195 (9.8)	6.5	5.9	287 (9.9)
Adenovirus	8.8	8.7	20.0	3.3	129 (6.5)	16.1	14.7	203 (7.0)
SARS-CoV-2	2.9	0.0	3.3	0.0	125 (6.3)	0.0	2.9	80 (2.7)
Influenzavirus B	0.0	0.0	3.3	0.0	1 (0.1)	6.5	5.9	404 (13.9)
Influenzavirus A	14.7	0.0	0.0	0.0	363 (18.2)	0.0	0.0	502 (17.2)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/17) 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.*



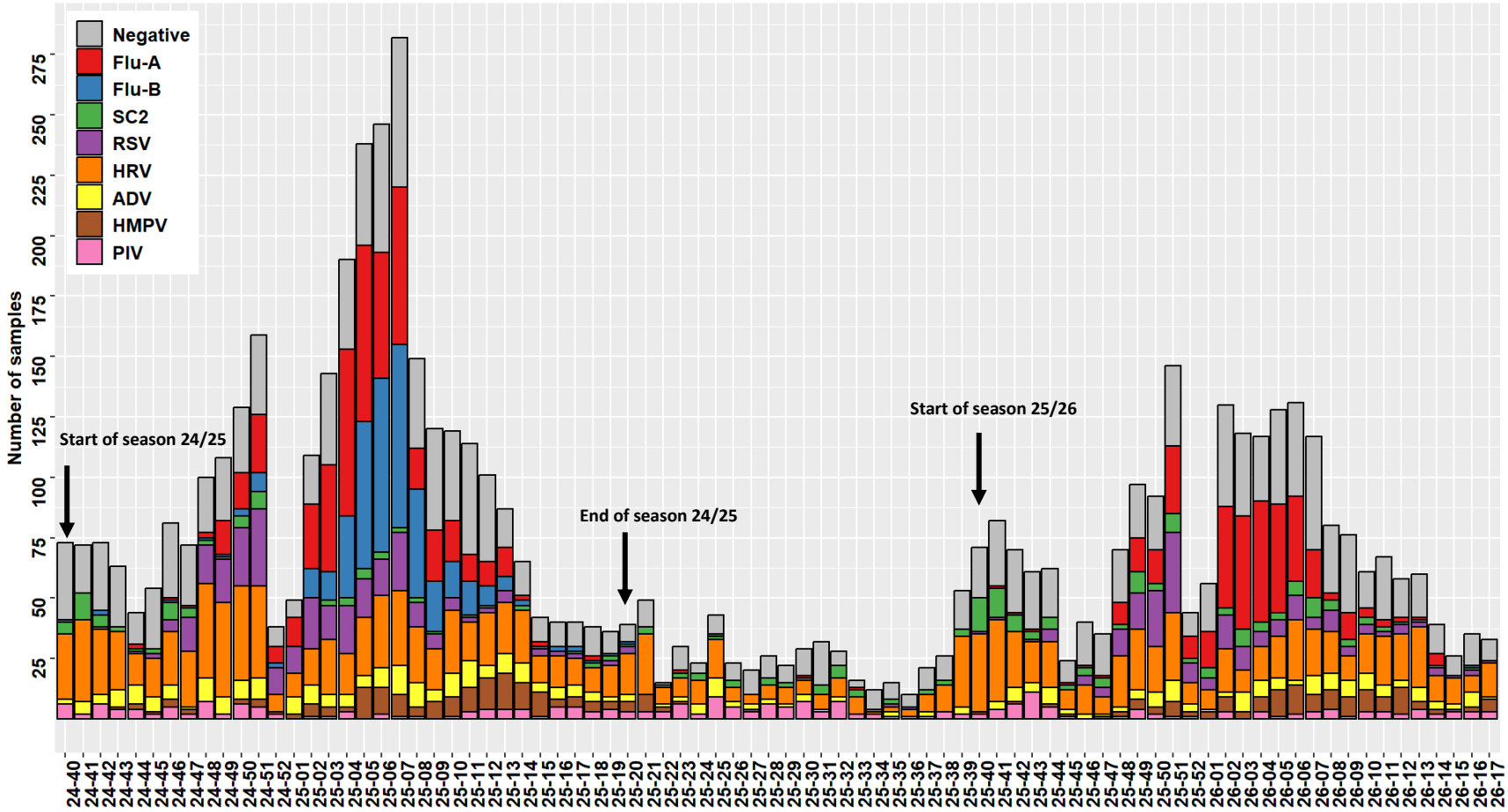


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: 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=195) from 2025/40 to 2026/17

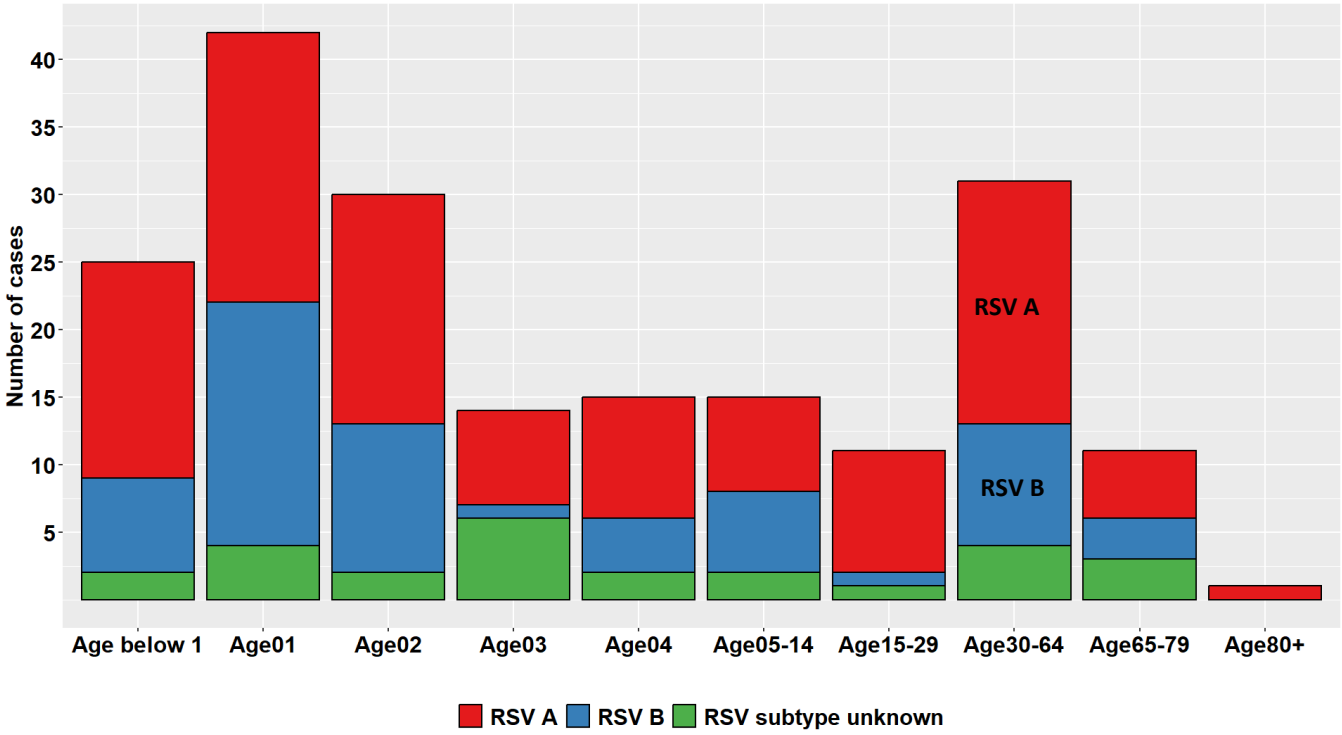


Figure 5. Number of Influenza cases detected in different age-group by subtypes (N=364) from 2025/40 to 2026/17; blue-subtyping pending

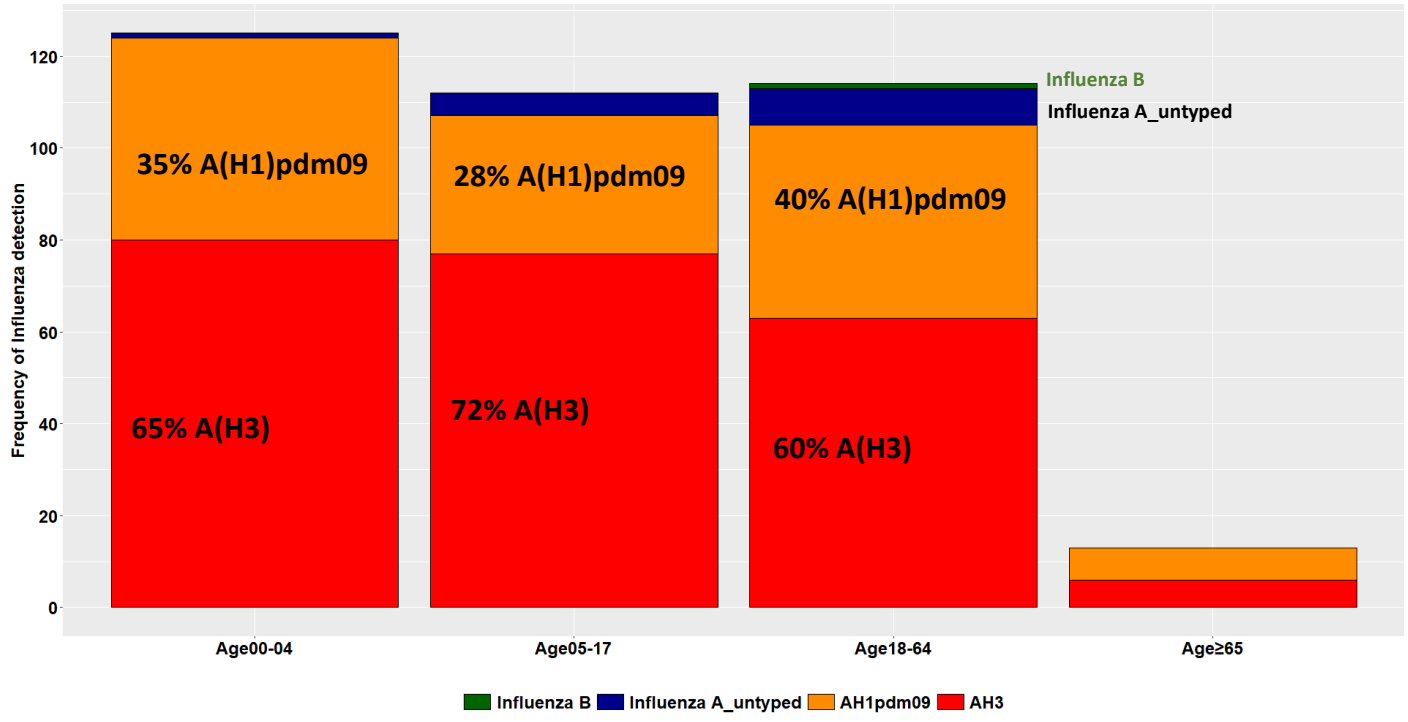
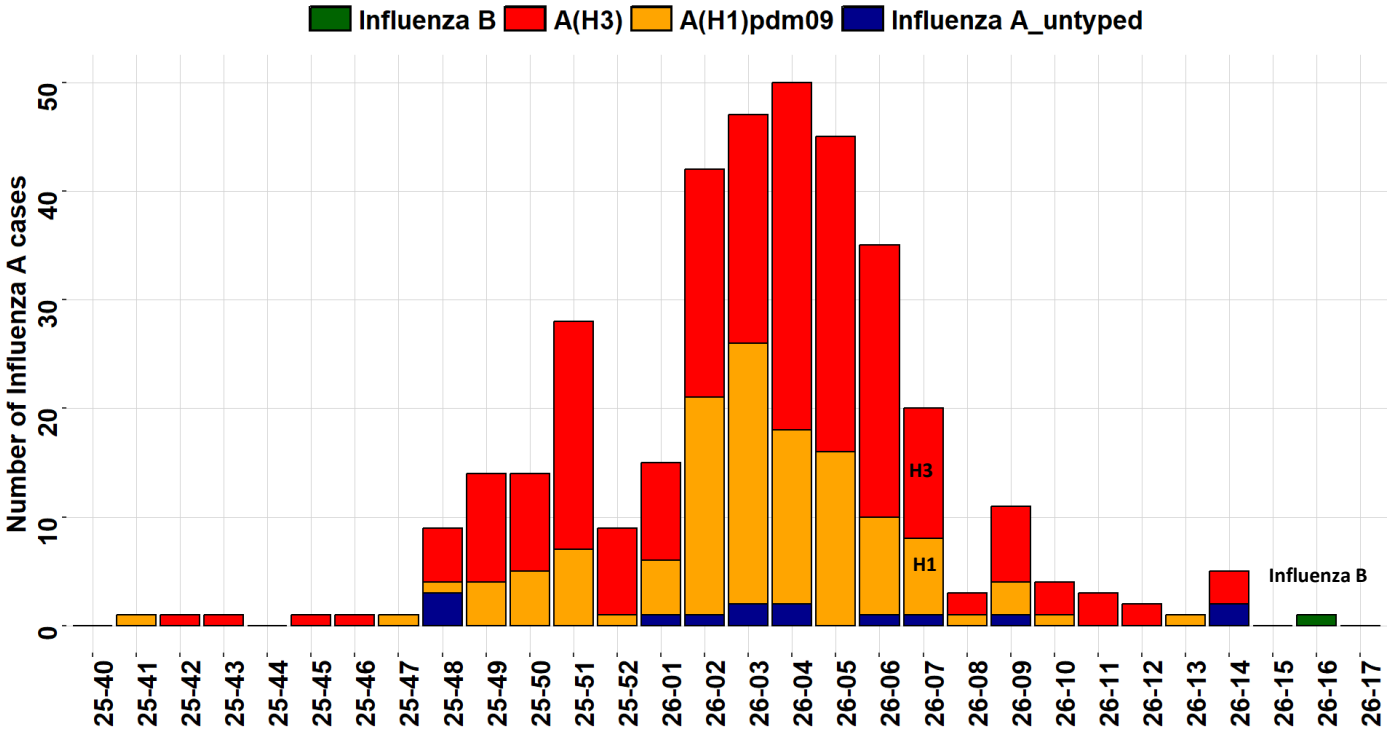


Figure 6. Overall influenza detection by week and subtype: N=364 cases with 349 (96.1%) Influenza A cases subtyped; 226 (64.8%) A(H3) and 123 cases (35.2%) as A(H1)pdm09



References

European Centre for Disease Prevention and Control. European Respiratory Virus Surveillance Summary (ERVISS), 2026, Week 16, Retrieved 30 April 2026, https://erviss.org/

European Centre for Disease Prevention and Control. Communicable Disease Threats Report Week, Retrieved 30 April 2026, https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-18-24-april-2026-week-17

World Health Organization. Global Influenza Programme. Retrieved 30 April 2026, https://www.who.int/tools/flunet

World Health Organization. Disease Outbreak News-Seasonal Influenza. Retrieved 30 April 2026, https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON586

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