Respiratory Viruses in Luxembourg (ReViLux)

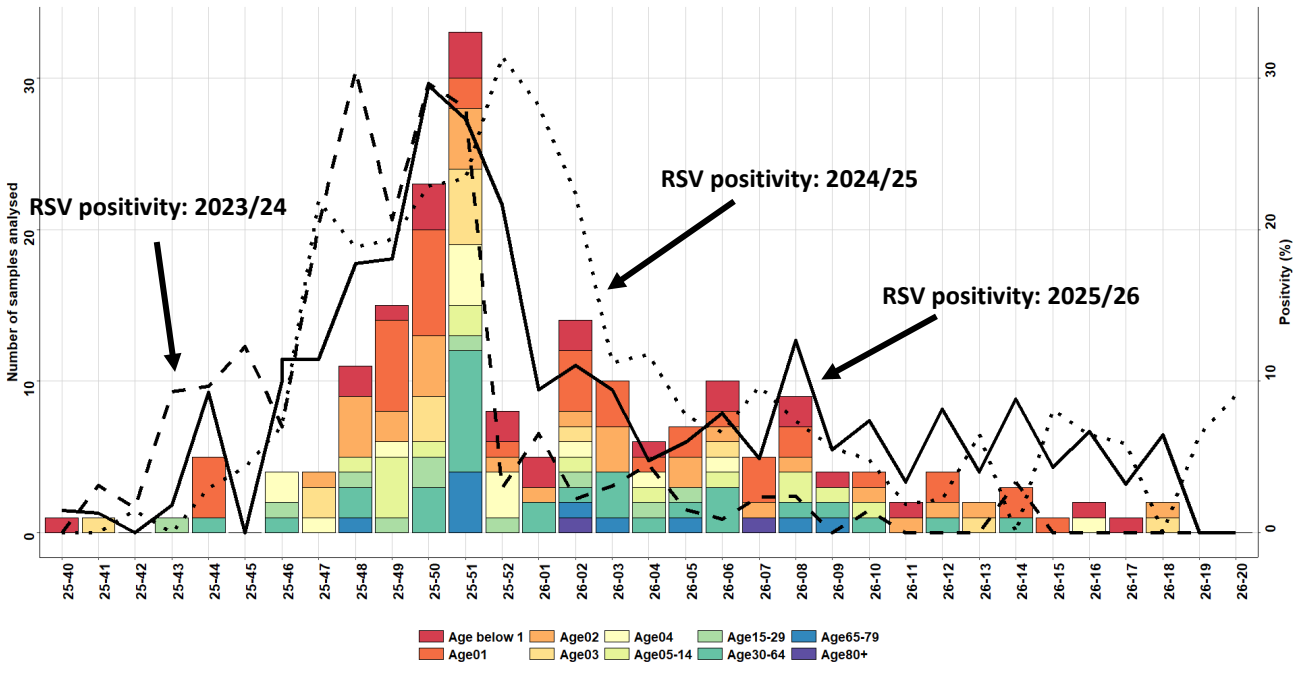
Sentinel Network Report -Week 20

Summary of Sentinel Network activities

At the end of the season 25/26, ARI and ILI activity remained at low levels, indicating overall low respiratory illness activity.

During week 2026/20, respiratory virus activity remained moderate, with 56.5% of sentinel samples testing positive. **Human rhinovirus (54.2%)** was the predominant pathogen, followed by **parainfluenza (16.7%)** and **human metapneumovirus (12.5%)**. No influenza, RSV or SARS-CoV-2 cases were detected in the past two weeks, confirming the end of circulation for major seasonal viruses. Overall results indicate low post-season respiratory activity, with non-seasonal viruses mainly affecting young children.

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 2026/20, the total number of consultations decreased to 214, compared with 246 in week 2026/19. The proportion of ARI increased slightly to 5.6%, but remained below 10%, indicating continued low levels of general respiratory infection activity. Meanwhile, ILI activity declined from 3.7% to 1.4%, remaining at baseline levels. Overall, these trends suggest low 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.

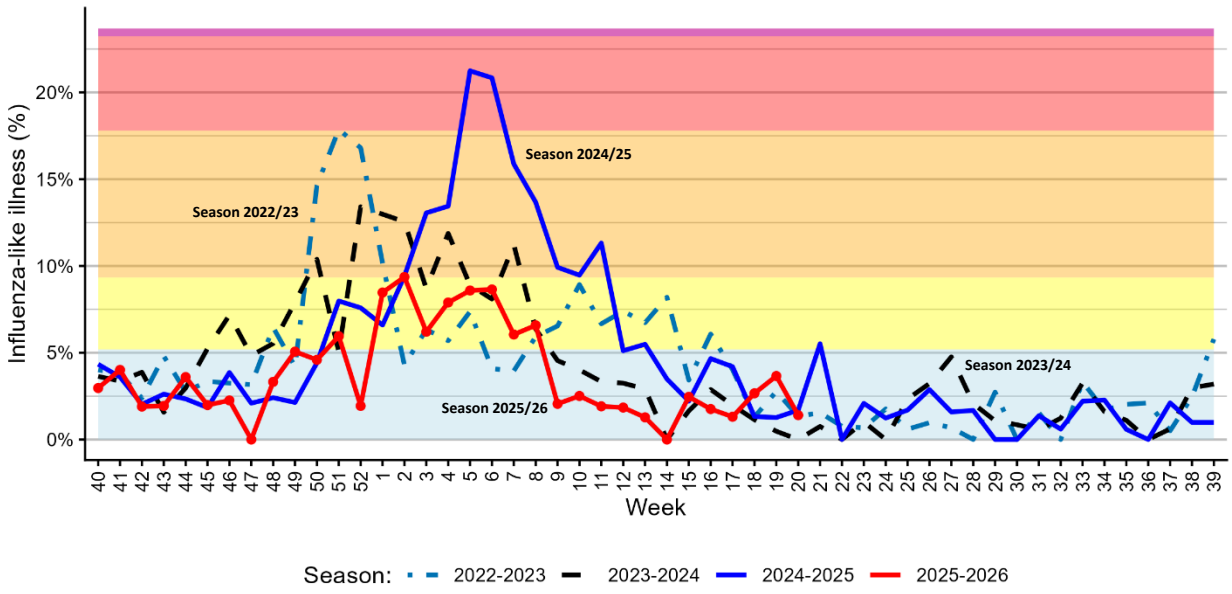
Table 1. Syndromic surveillance over the last 4 weeks

Week	ARI		ILI		Total consultations
	N	%	N	%	
2026/17	21	9.17	3	1.31	229
2026/18	25	9.51	7	2.66	263
2026/19	11	4.47	9	3.66	246
2026/20	12	5.61	3	1.40	214

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

National Reference Laboratory for Acute Respiratory Infections
Department of Microbiology - Laboratoire national de santé
1, rue Louis Rech | L-3555 Dudelange
T : (+352) 28 100 556 | F : (+352) 28 100 556 | Sentinelle@lns.etat.lu | www.lns.lu

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 2026/20, the LNS received 24 sentinel specimens. Of these, 58.3% (N=14) were from children aged 0 to 4 years, followed by 25.0% (N=6) from children aged 5 to 17 years. Adults aged 18 to 64 years accounted for 16.7% (N=4) of the samples, while no patients aged ≥ 65 years were represented. Overall, 56.5% (N=13) of samples were from female patients and 43.5% (N=10) were from male patients.

Respiratory viruses were detected in 17 (51.2%) of the 24 sentinel samples. In week 2026/20, the predominant pathogen was **human rhinovirus (54.2%)**, followed by **parainfluenza viruses (16.7%)**, human **metapneumovirus (12.5%)** and **adenovirus (4.2%)**.

Over the past two weeks, no influenza, RSV or SARS-CoV-2 cases were detected within the network.

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

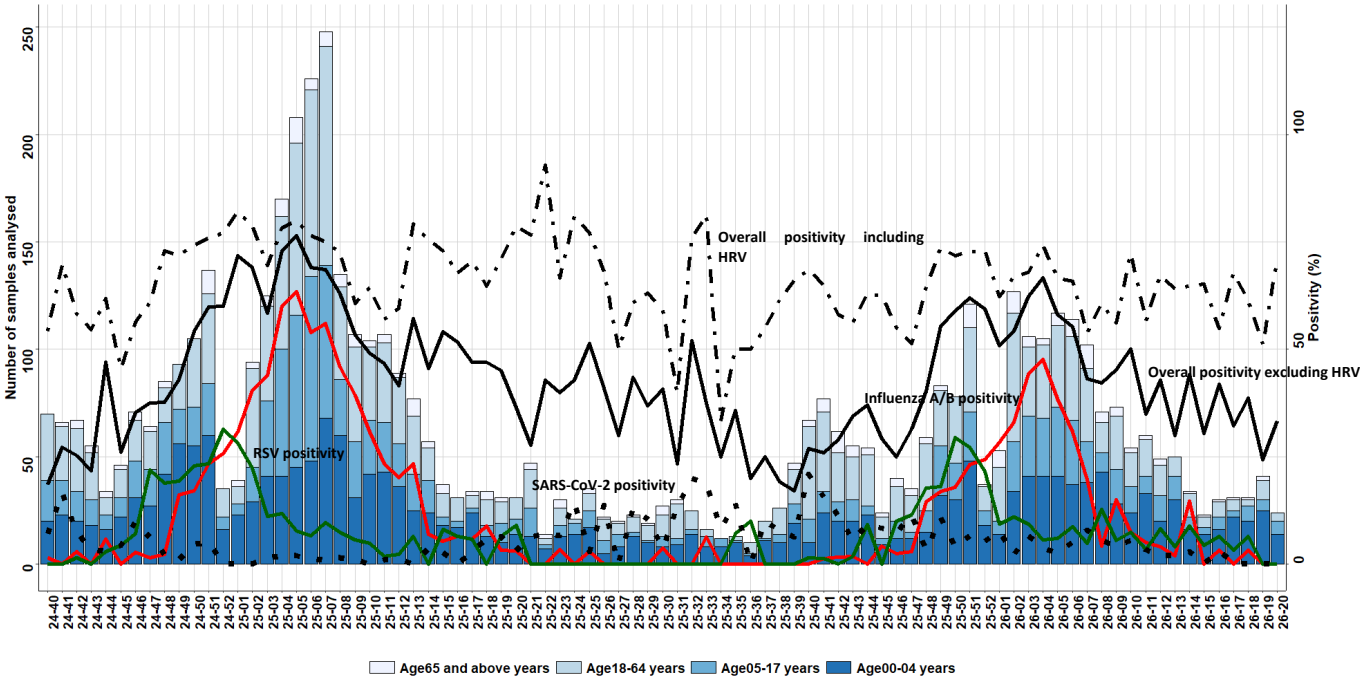
An overview of the circulating viral pathogens in the sentinel network in Luxembourg during the current and previous (inter)- season is presented in figure 2, 3 and table 2.

National Reference Laboratory for Acute Respiratory Infections
Department of Microbiology - **Laboratoire national de santé**
1, rue Louis Rech | L-3555 Dudelange
T : (+352) 28 100 556 | F : (+352) 28 100 556 | Sentinelle@lns.etat.lu | www.lns.lu

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 %							
	W17	W18	W19	W20	Total N (%)	W19	W20	Total N (%)
Human rhinovirus	45.2	32.3	34.1	54.2	538 (26.1)	41.9	51.5	720 (24.8)
Parainfluenzavirus	9.7	12.9	9.8	16.7	86 (4.2)	12.9	9.1	99 (3.4)
Metapneumovirus	16.1	9.7	7.3	12.5	131 (6.4)	9.7	12.1	157 (5.4)
Adenovirus	3.2	12.9	9.8	4.2	137 (6.6)	6.5	9.1	203 (7.0)
Respiratory syncytial virus	3.2	6.5	0.0	0.0	197 (9.75)	6.5	9.1	287 (9.9)
Influenzavirus B	0.0	3.2	0.0	0.0	2 (0.1)	3.2	3.0	404 (13.9)
SARS-CoV-2	0.0	0.0	0.0	0.0	125 (6.2)	6.5	3.0	80 (2.7)
Influenzavirus A	0.0	0.0	0.0	0.0	363 (17.6)	0.0	0.0	502 (17.2)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/20) 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.*



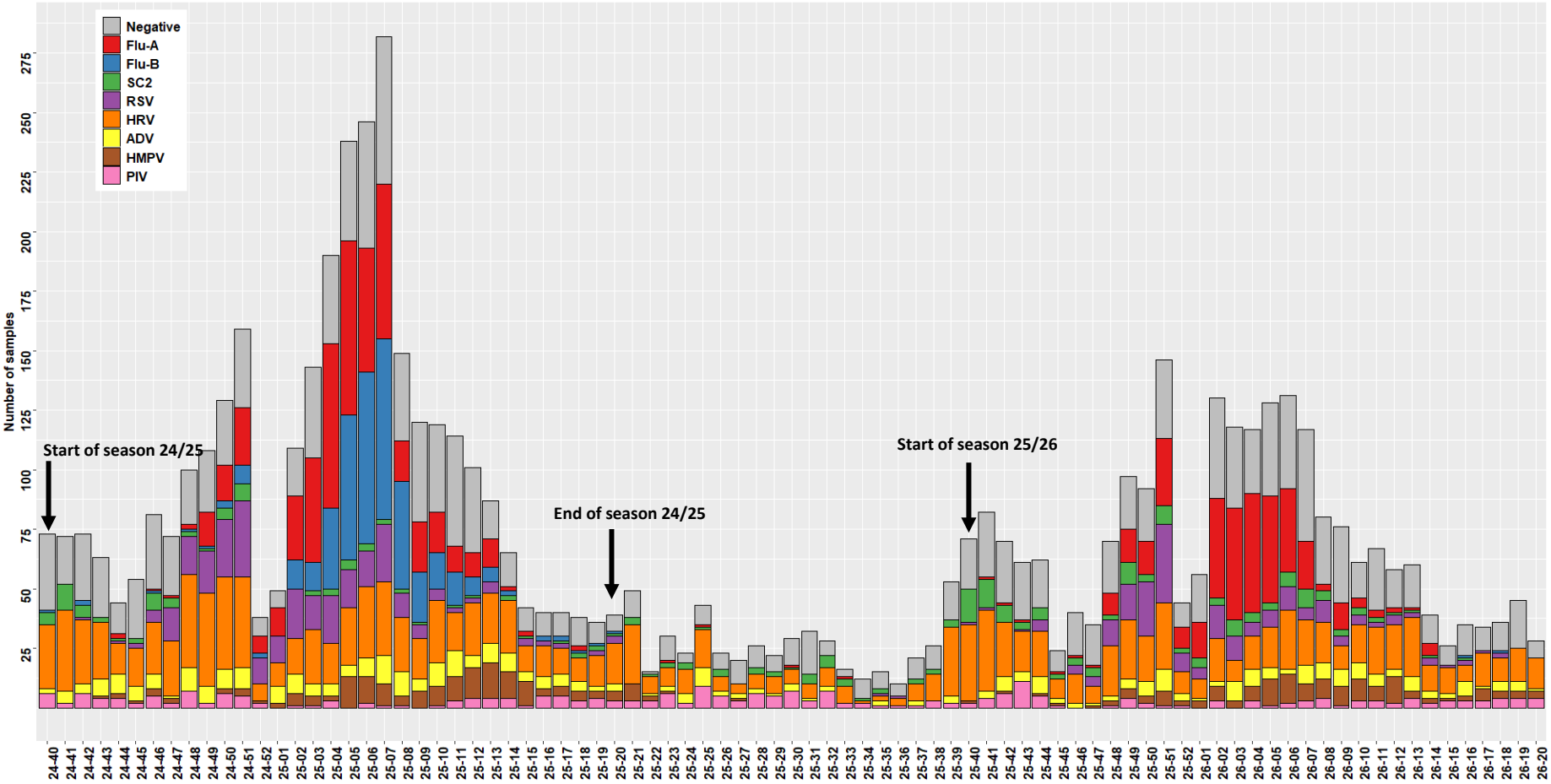


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: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

National Reference Laboratory for Acute Respiratory Infections
Department of Microbiology - **Laboratoire national de santé**
1, rue Louis Rech | L-3555 Dudelange
T : (+352) 28 100 556 | F : (+352) 28 100 556 | Sentinelle@lns.etat.lu | www.lns.lu

Figure 4. Number of RSV cases detected in different age-groups (N=197) from 2025/40 to 2026/20

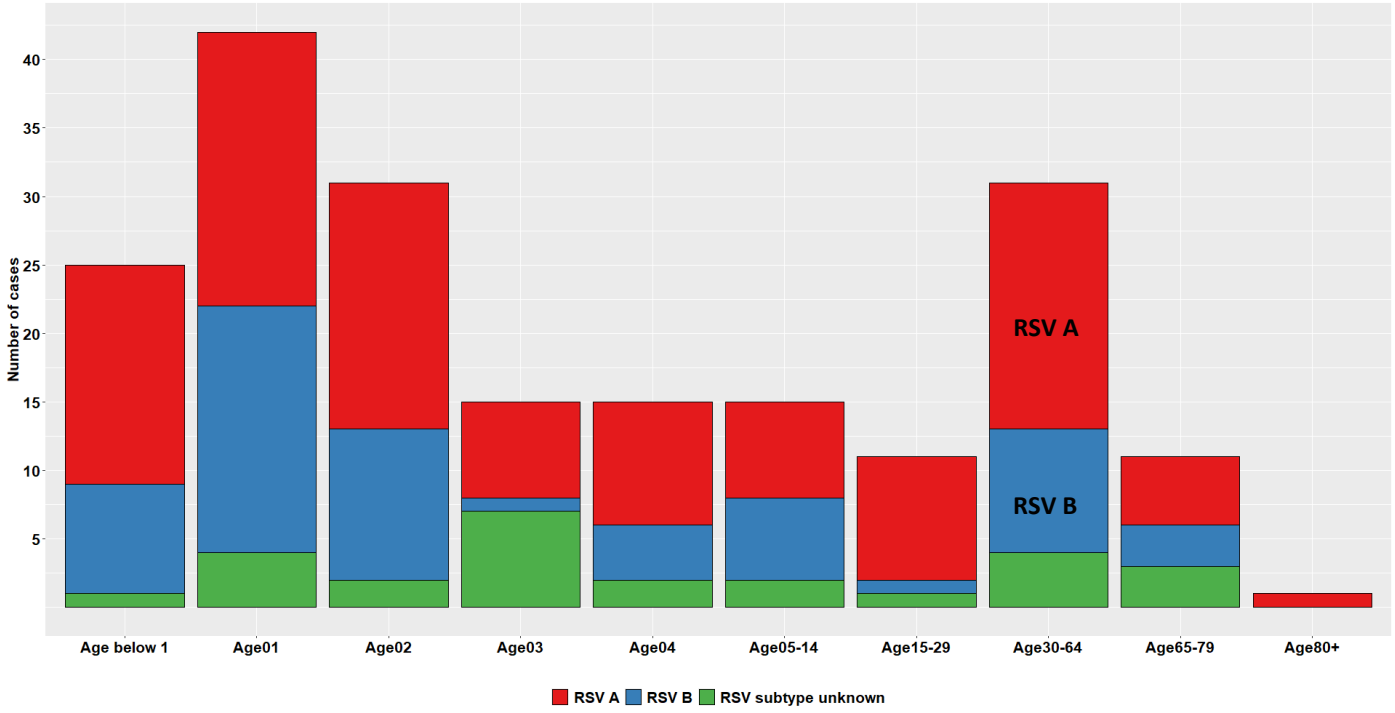


Figure 5. Number of Influenza cases detected in different age-group by subtypes (N=365) from 2025/40 to 2026/20; blue-subtyping pending

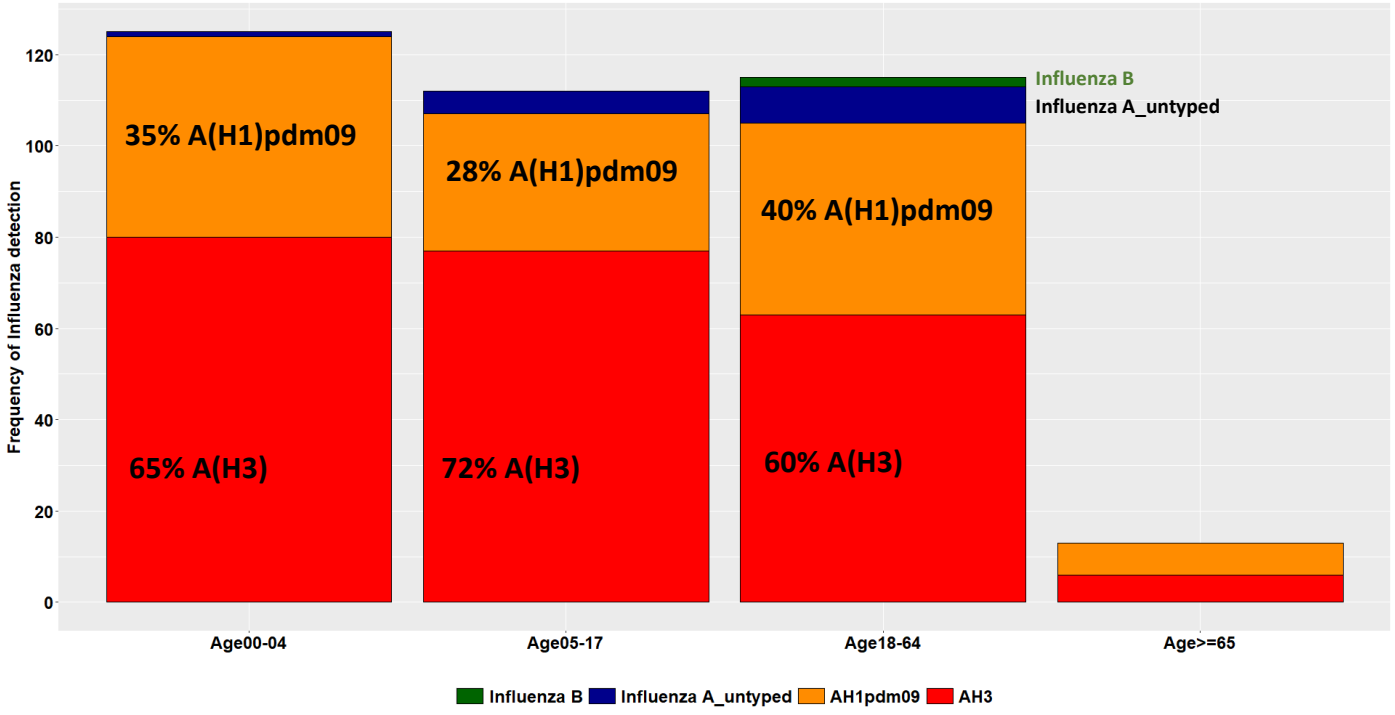
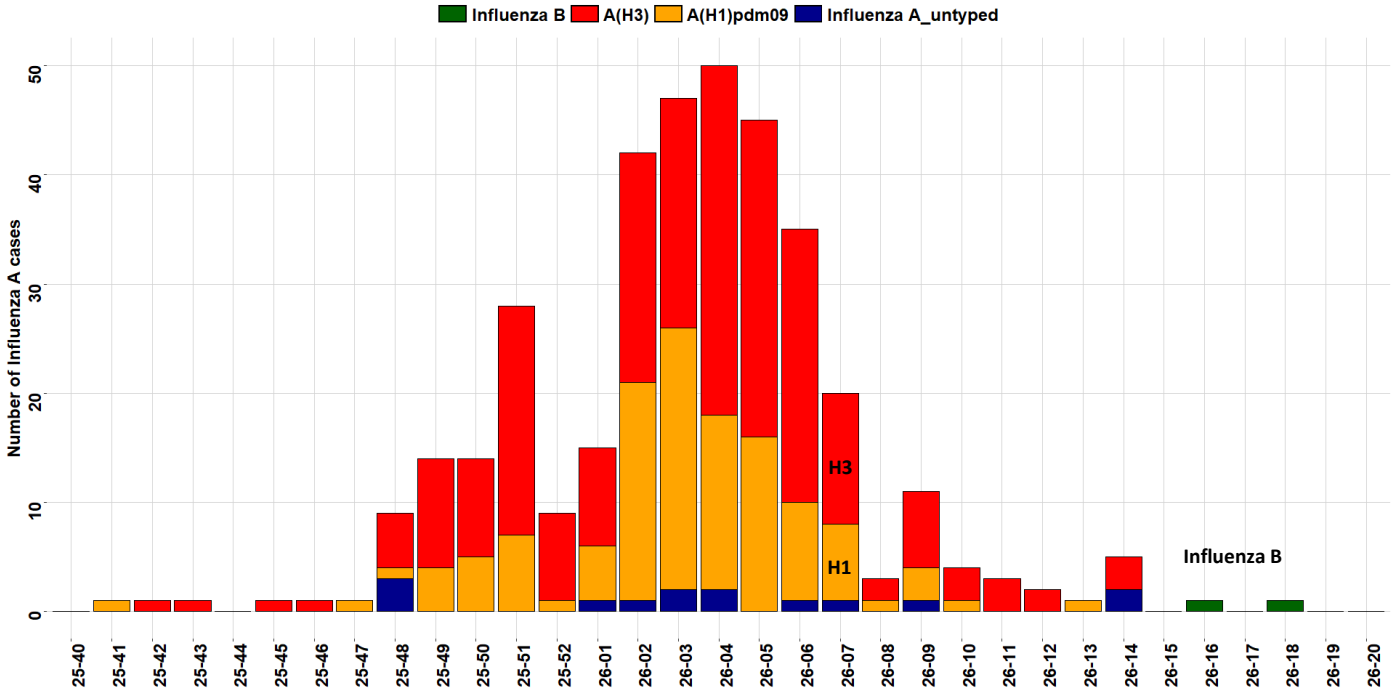


Figure 6. Overall influenza detection by week and subtype: N=365 cases with 349 (96.1%) Influenza A cases subtyped; 226 (64.8%) A(H3) and 123 cases (35.2%) as A(H1)pdm09



References

European Centre for Disease Prevention and Control. European Respiratory Virus Surveillance Summary (ERVISS), 2026, Week 18, Retrieved 22 May 2026, https://erviss.org/

European Centre for Disease Prevention and Control. Communicable Disease Threats Report Week, Retrieved 22 May 2026, https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-9-13-may-2026-week-20

World Health Organization. Global Influenza Programme. Retrieved 20 May 2026, https://www.who.int/tools/flunet

World Health Organization. Disease Outbreak News-Seasonal Influenza. Retrieved 20 May 2026, https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON586