Respiratory Viruses in Luxembourg (ReViLux)

Sentinel Network Report -Week 05

Summary of Sentinel Network activities

Influenza-like illness **(ILI)** accounted **for 8.6%** of consultations, surpassing the baseline, according to ECDC.

In week 2026/05, 117 sentinel samples were analysed, with two-thirds positive for respiratory viruses. **Influenza A (38.5%)** remained the dominant circulating pathogen, with the most recent cases in children. Both **RSV (6.1%)** and **SARS-CoV-2 (2.6%)** circulation remained low, with SARS-CoV-2 mainly in young children. **Human rhinovirus (14.8%)** and **metapneumovirus (9.6%)** were detected across all age-groups, while **parainfluenzavirus (0.9%)** and **adenovirus (6.7%)** were mostly found in children under 5 years.

Influenza vaccine coverage season 25/26

The sentinel networks collects additional metadata for each sample received. One of the variables collected relates to influenza vaccine status, month and year. So far in the season 2025/26, the sentinel network collected 1,303 samples. Influenza vaccine information was available for 893 cases (68.5%) and 62 cases (7.1%) were documented as vaccinated. Among the 62 vaccinated individuals, 9 tested positive for influenza A (5 A(H3) and 4 A(H1)pdm09). Four of these cases had received the vaccine less than 30 days before influenza A detection, while for the remaining cases, the month of vaccination was unknown.
Although infection can still occur after vaccination, the vaccine is nevertheless expected to provide protection against severe disease.

Age-group	Total samples (N=1,303)	Patients with known vaccination status	Influenza vaccinated patients (%)
0-4 years	444	356 (80.2%)	4 (1.2%)
5-17 years	254	199 (78.3%)	9 (4.5%)
18-64 years	520	272 (52.3%)	23 (8.5%)
≥65 years	85	42 (49.4%)	26 (61.9%)

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 2026/05, consultations for acute respiratory infections (ARI) and ILI rates increased slightly, rising from 10.3 to 12.9 % and 7.9 to 8.6%, respectively. These figures remain indicative of low epidemic activity. Similar trends are being observed in other European countries, despite high circulation of influenza A.

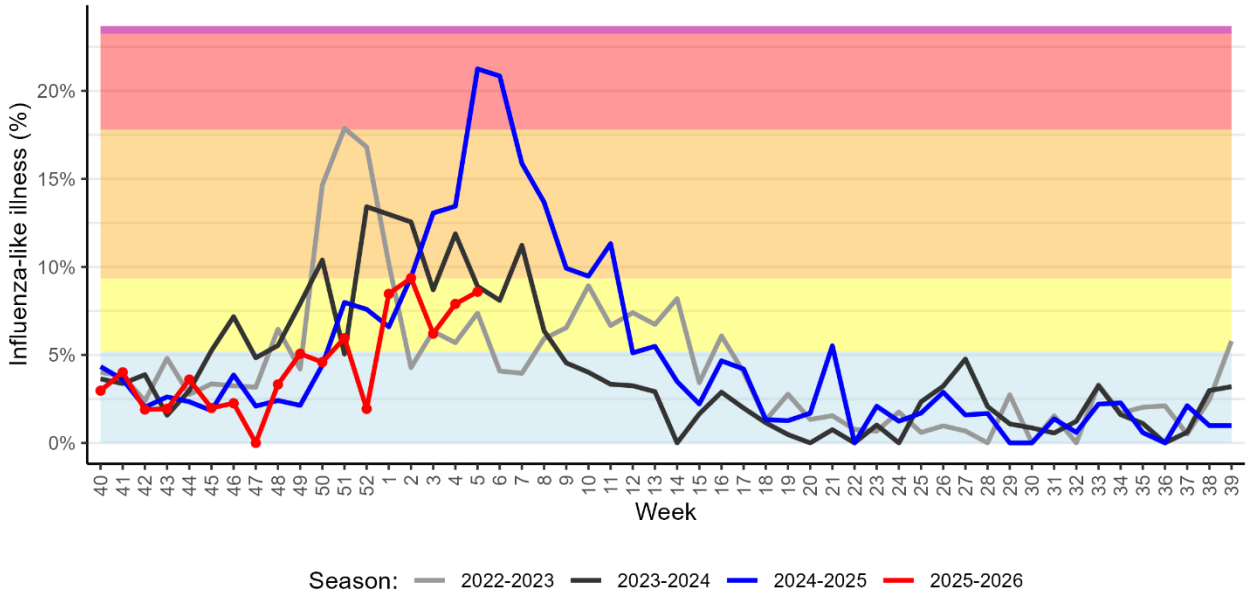
Historical trends in ILI consultations are presented in figure 2, and a detailed summary of the ARI and ILI case counts for the past four weeks is provided in table 1.

Table 1. Syndromic surveillance over the last 4 weeks

Week	ARI		ILI		Total consultations
	N	%	N	%	
2026/02	57	21.35	25	9.36	267
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

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 2026/05, the LNS received 117 sentinel specimens. Of these, 35.0% (N=41) were from children under 5 years of age, followed by 32.5% (N=38) from adults aged 18 to 64 years. Children aged 5 to 17 years accounted for 27.4% (N=32), while patients aged ≥ 65 years represented 5.1% (N=6). Overall, 59.8% (N=54) of samples were female and 40.2% (N=47) were male patients.

Respiratory viruses were detected in 78 (66.7%) of the 117 sentinel samples. The predominant pathogen was **influenza A (38.5%)**, followed by **human rhinovirus (14.8%)** and **metapneumovirus (9.6%)**. **RSV** positivity **(6.1%)** remained below 10% for the past three consecutive weeks, and **SARS-CoV-2** positivity **(2.6%)** remained below 5% in all age-groups over the past 2 weeks. During weeks 2026/03 and 2026/04, influenza A positivity increased to above 40%, but dropped to just below 40% in week 2026/05. Overall Influenza A circulation remains high, and over the last two weeks (2026/04-5), 95 new cases were identify across all age-group, with the majority detected in children under 5 years (40%) and children aged 5 to 17 years (34.7%). In total, 85 (89.5%) of the 95 influenza A cases have been subtyped: 67% (N=57) identified as A(H3) and 32.9% (N=28) as A(H1)pdm09 (Figure 5 and 6).

Since the beginning of the season, 148 RSV cases have been confirmed. Subtyping identified 82 RSV-A (66.1%) and 42 (33.9%) 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 22% in adults aged 18 to 64 years.

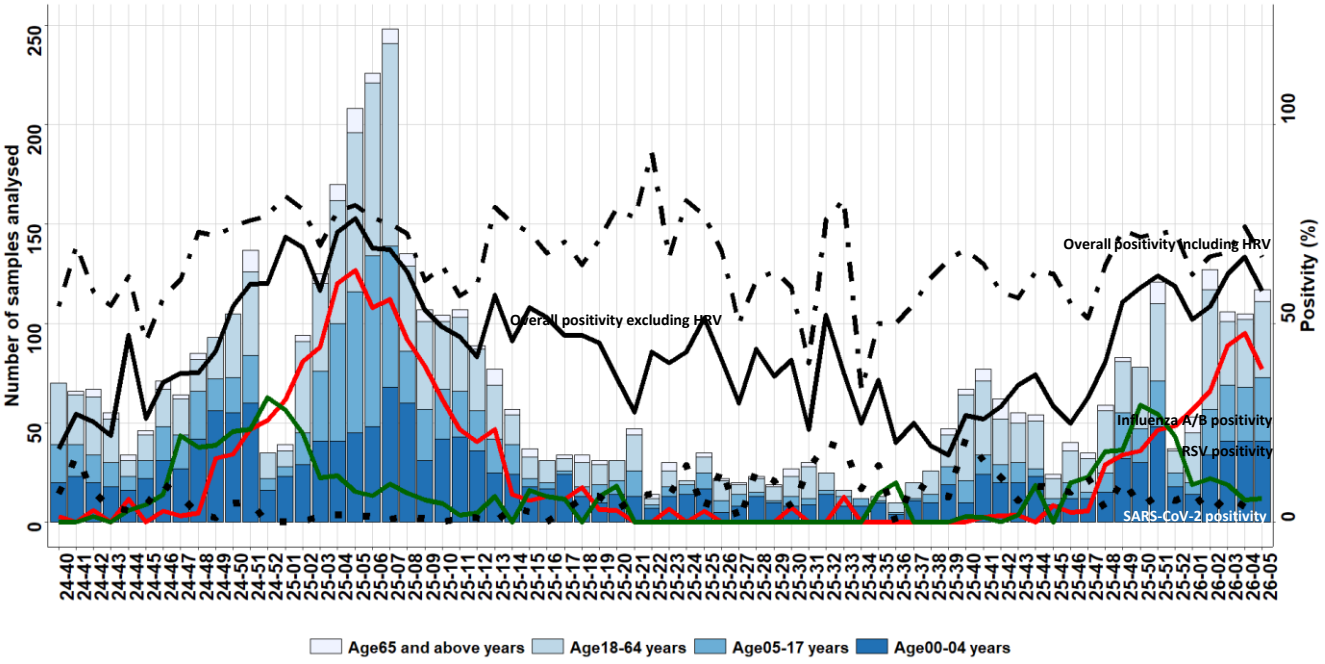
Furthermore, over the past two weeks, human rhinovirus and metapneumovirus have been detected in all age-groups, while parainfluenzavirus and adenovirus were primarily detected in children under 5 years of age.

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 %							
	W02	**W03**	**W04**	**W05**	**Total N (%)**	**W04**	**W05**	**Total N (%)**
Influenzavirus A	33.1	44.3	47.6	38.5	279 (21.4)	40.6	35.1	502 (17.2)
Human rhinovirus	14.2	8.5	13.3	14.8	320 (24.6)	10.0	11.5	720 (24.8)
Metapneumovirus	4.7	2.8	5.7	9.6	51 (3.9)	1.2	6.3	157 (5.4)
Respiratory syncytial virus	11.0	9.4	5.7	6.1	148 (11.4)	11.8	7.7	287 (9.9)
Adenovirus	1.6	7.5	6.7	4.3	72 (5.5)	2.9	2.4	203 (7.0)
SARS-CoV-2	2.4	6.6	3.8	2.6	95 (7.3)	1.8	1.9	80 (2.7)
Parainfluenzavirus	2.4	0.0	2.9	0.9	45 (3.5)	1.8	0.0	99 (3.4)
Influenzavirus B	0.0	0.0	0.0	0.0	0 (0.0)	20.0	29.3	404 (13.9)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/05) 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.*



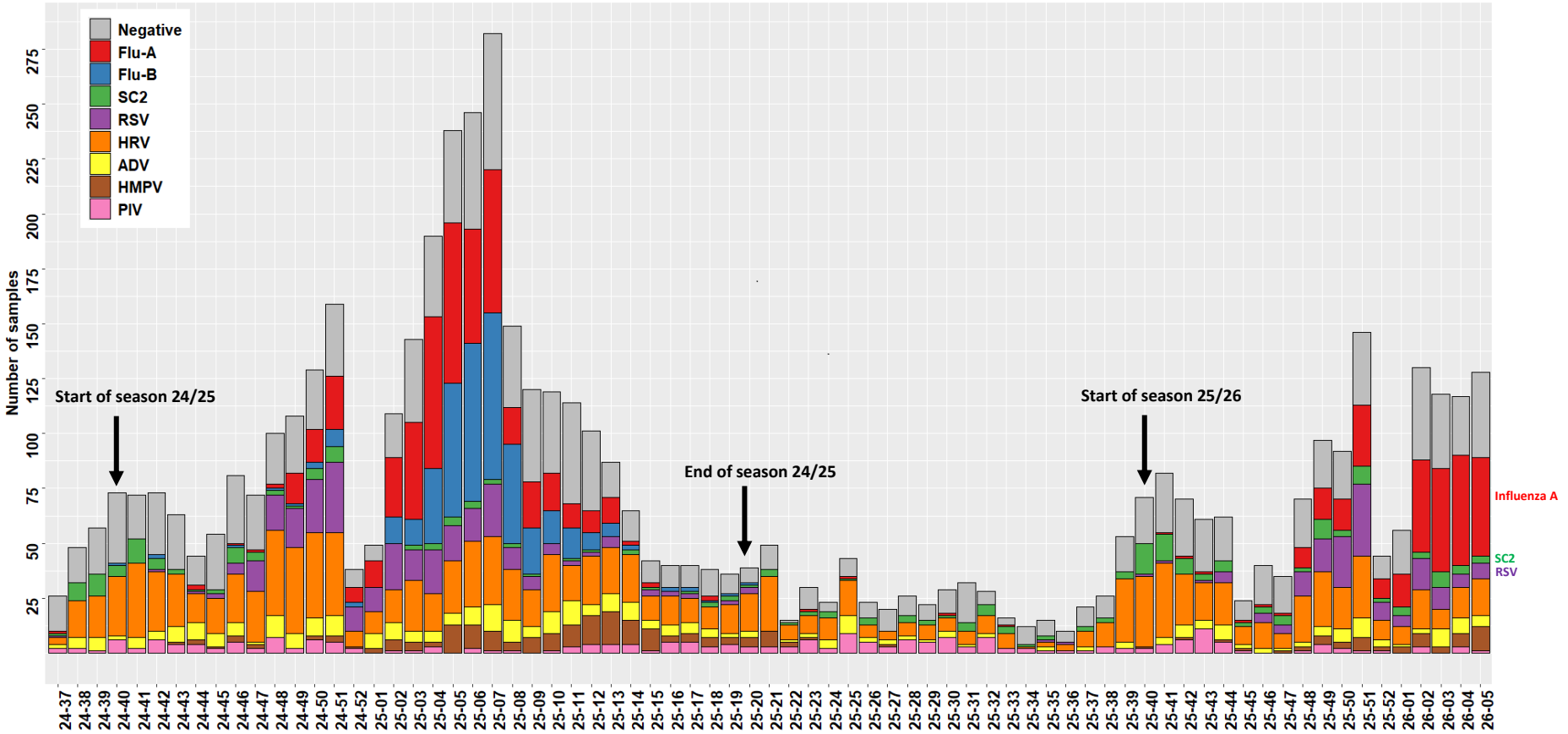


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: 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=148) from 2025/40 to 2026/05

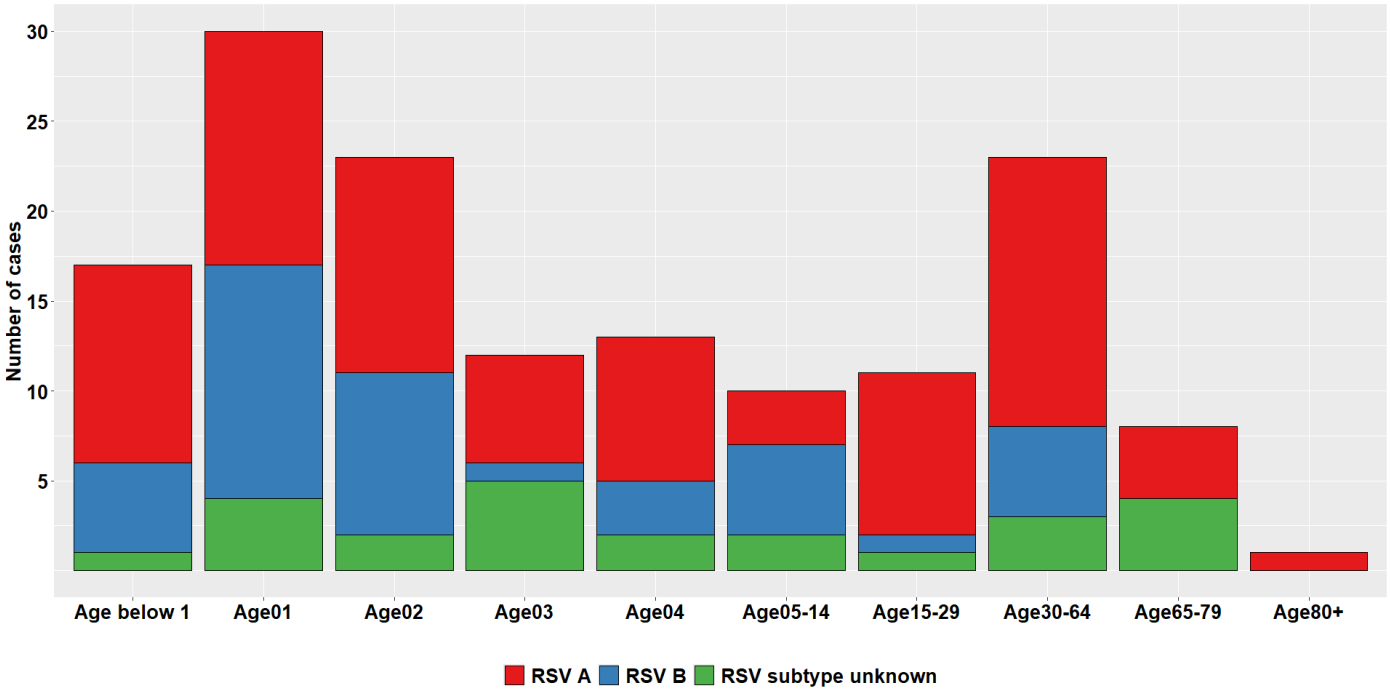


Figure 5. Influenza cases by age group: comparison of 2025/40-2026/05 (N=279) vs. 2026/04-05 (N=95); AH3 and AH1pdm09 percentages in brackets; blue-subtyping pending

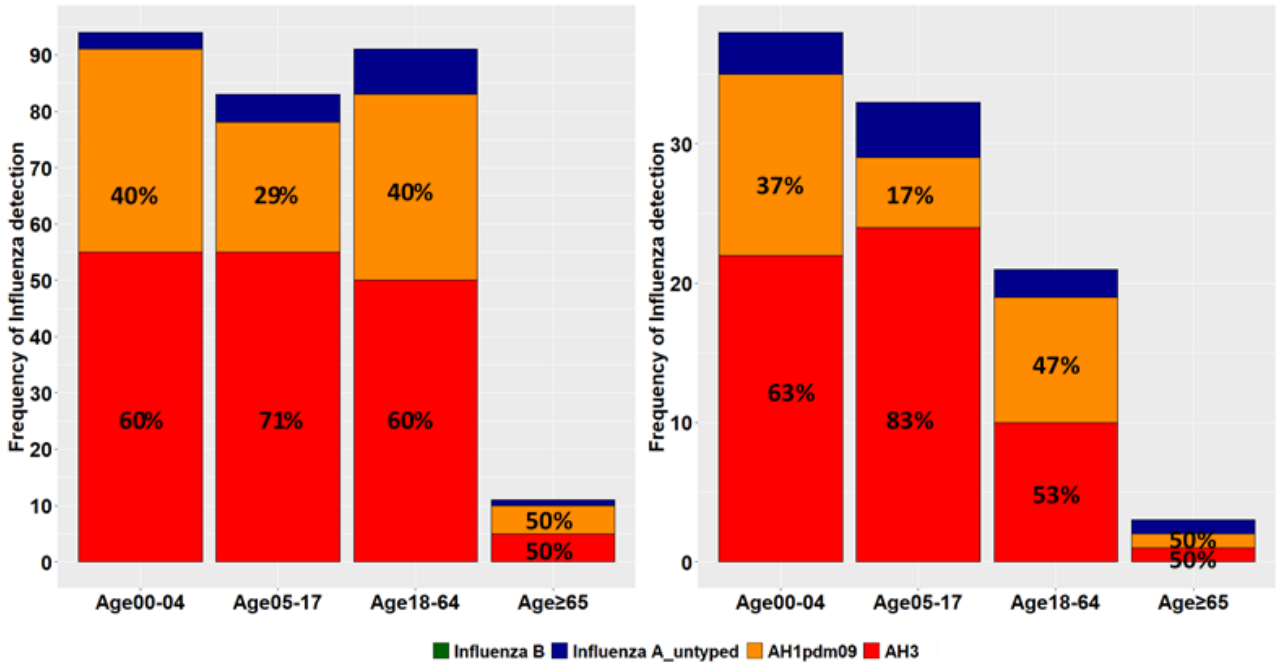
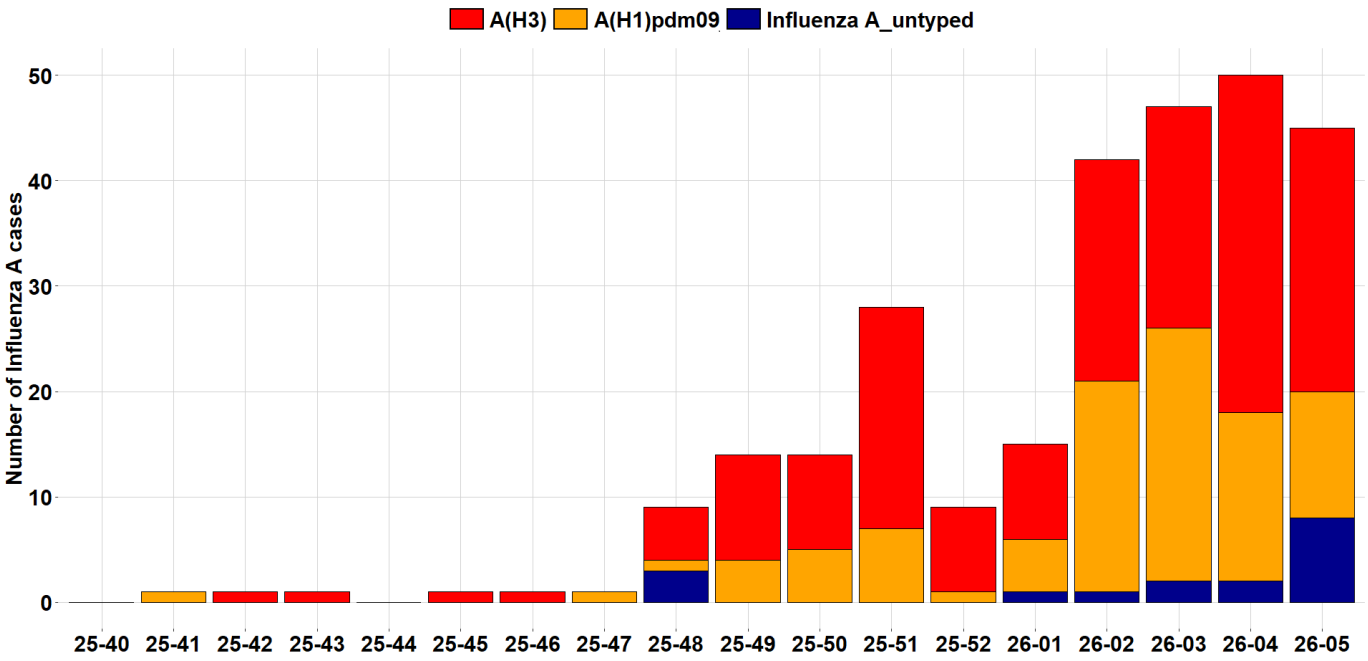


Figure 6. Overall influenza A detection by week and subtype: N=279 cases with 262 (93%) subtyped; 165 (63.0%) A(H3) and 97 cases (37.0%) as A(H1)pdm09



References

European Centre for Disease Prevention and Control. European Respiratory Virus Surveillance Summary (ERVISS), 2026, Week 04, Retrieved 04 February 2026, https://erviss.org/

European Centre for Disease Prevention and Control. Communicable Disease Threats Report Week, Retrieved 04 February 2026, https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-24-30-january-2026-week-5

European Centre for Disease Prevention and Control. Threat Assessment Brief: Assessing the risk of influenza for the EU/EEA in the context of increasing circulation of A(H3N2) subclade K, Retrieved 28 January 2026, https://www.ecdc.europa.eu/en/publications-data/threat-assessment-brief-assessing-risk-influenza-november-2025

World Health Organization. Global Influenza Programme. Retrieved 04 February 2026, https://www.who.int/tools/flunet

World Health Organization. Disease Outbreak News-Seasonal Influenza. Retrieved 04 February 2026, https://www.who.int/emergencies/disease-outbreak-news/item/2025-DON586

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