Respiratory Viruses in Luxembourg (ReViLux)

Sentinel Network Report -Week 14

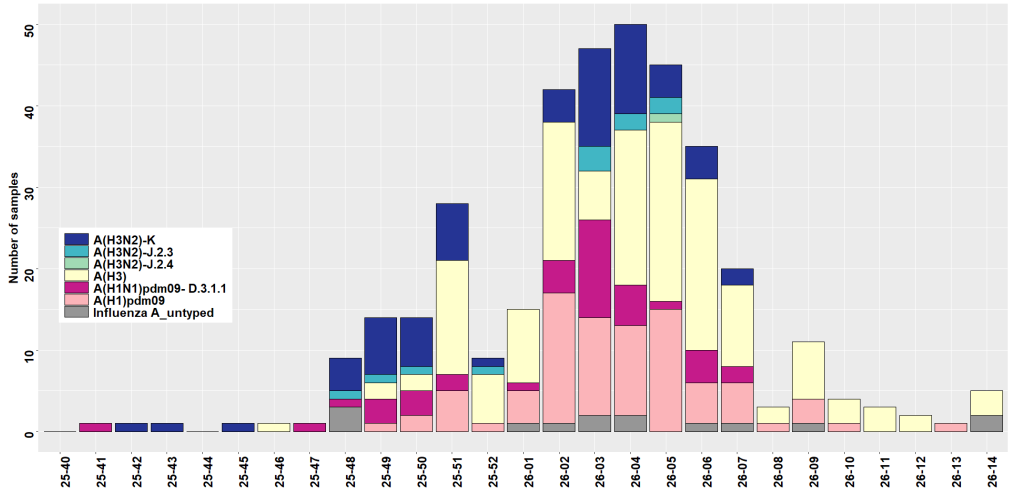
Summary of Sentinel Network activities

In week 2026/14, ARI consultations rose sharply to 18.4% despite declining overall visits, while ILI activity remained at baseline with no new cases reported.

During week 2026/14, 34 sentinel specimens were received, with the majority originating from children under 5 years of age, and respiratory viruses detected in 64.7% of the samples, most commonly **human rhinovirus** (**32.4%**). **Influenza A** activity increased, with five new cases detected (**14.7%** positivity), mainly among unvaccinated adolescents and adults, three of which were subtyped as A(H3), while **RSV (8.8%)** and **SARS-CoV-2 (2.9%)** circulation remained low. Overall, non-influenza respiratory viruses- particularly human rhinovirus- continued to predominate, with several pathogens primarily affecting children under 5 years of age.

Influenza A characterisation (2025/40- 2026/07)

Between weeks 2025/40 and 2026/07, we identified 334 influenza A cases, of which 117 samples (35.0%) were successfully sequenced across all age-groups. During this period, 206 cases (63.8%) were classified as A(H3) and 117 cases (36.2%) as A(H1)pdm09. Since August 2025, a notable global increase in A(H3N2) subclade K viruses has been observed. In our cohort, the K subclade was dominant during weeks 2025/42-07, accounting for 84.4% of detections; additionally eleven cases (14.3%) of the J.2.3 and 1 case (1.3%) of the J.2.4 subclade were identified. Among the influenza A(H1) samples, 40 (34.2%) were sequenced, all of which belonged to the D.3.1.1 subclade.



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 2026/14, the proportion of consultations for acute respiratory infections (ARI) increased markedly, from 10.6% in the previous week to 18.4%, while ILI activity remained very low and no new ILI cases were reported. Overall, the number of consultations continues to decline, likely reflecting reduced healthcare utilisation during the holiday period. Despite this decrease in total visits, ARI remains prevalent, indicating continued circulation and dominance of non-influenza respiratory infections. This pattern is consistent with reports from other EU/EEA countries, where ILI activity has recently been observed at baseline levels.

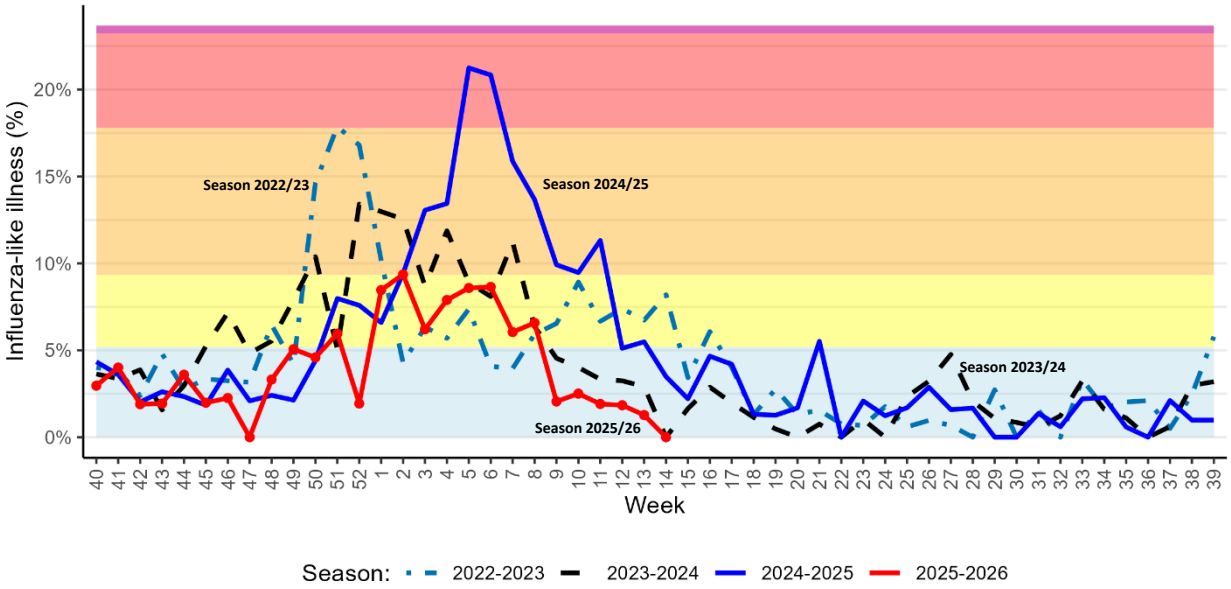
Historical trends in ILI consultations are presented in figure 2, and a detailed summary of the ARI and ILI case counts for the past four weeks is provided in table 1.

Table 1. Syndromic surveillance over the last 4 weeks

Week	ARI		ILI		Total consultations
	N	%	N	%	
2026/11	33	9.02	7	1.91	366
2026/12	32	9.82	6	1.84	326
2026/13	25	10.64	3	1.28	235
2026/14	29	18.35	0	0.00	158

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 2026/14, the LNS received 34 sentinel specimens. Of these, 47.1% (N=16) were from children under 5 years of age, followed by 32.4% (N=11) from adults aged 18 to 64 years. Children aged 5 to 17 years accounted for 17.7% (N=6), while patients aged ≥ 65 years represented 2.9% (N=1). Overall, 55.9% (N=19) of samples were from male and 44.1% (N=15) were from female patients.

Respiratory viruses were detected in 22 (64.7%) of the 34 sentinel samples. The predominant pathogen was **human rhinovirus (32.4%)**, followed by **influenzavirus A (14.7%)**, **adenovirus (8.8%)** and **RSV (8.8%).**

In week 2026/14, five new influenza A cases were detected, resulting in an increased positivity rate of 14.7% compared with 2.0% in week 2026/13. The age range of the affected patients was 13 to 55 years; three cases occurred in females and two in males. No recent travel history or influenza vaccination was reported. Furthermore, three of the five cases were subtyped as A(H3).

RSV- activity remained below 10%, with three new cases detected in week 2026/14, two of which were subtyped as RSV B.

SARS-CoV-2 positivity also remained below 5%, indicating continued very low circulation within the sentinel network. Over the past four weeks, 80% of identified SARS-CoV-2 cases occurred in children under 5 years of age.

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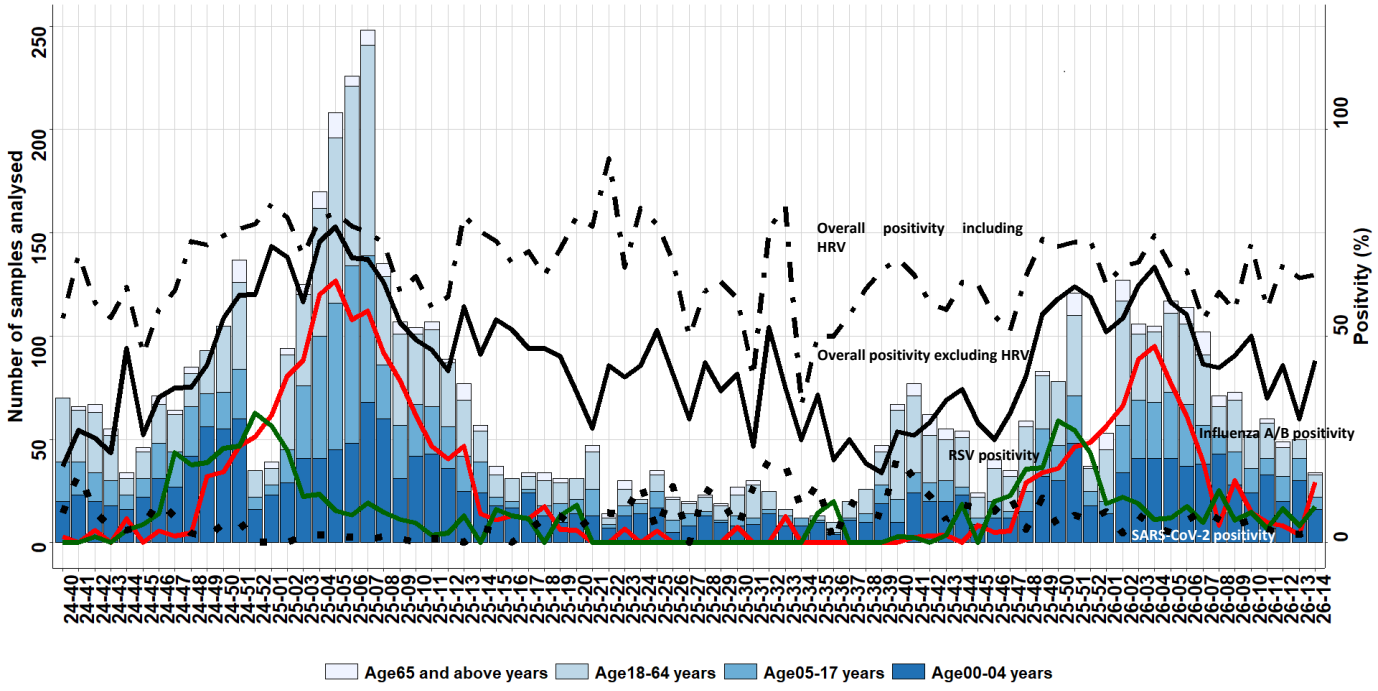
Over the past two weeks, human rhinovirus virus was detected across all age groups below 65 years, while adenovirus, human metapneumovirus, and parainfluenza viruses were predominantly identified in children under 5 years.

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 %							
	W11	**W12**	**W13**	**W14**	**Total N (%)**	**W13**	**W14**	**Total N (%)**
Human rhinovirus	33.3	38.8	50.0	32.4	482 (25.3)	27.3	38.6	720 (24.8)
Influenzavirus A	5.0	4.1	2.0	14.7	363 (19.0)	15.6	3.5	502 (17.2)
Respiratory syncytial virus	3.3	8.2	4.0	8.8	191 (10.0)	6.5	0.0	287 (9.9)
Adenovirus	8.3	6.1	12.0	8.8	120 (6.3)	10.4	14.0	203 (7.0)
Metapneumovirus	10.0	22.4	6.0	5.9	117 (6.1)	19.5	19.3	157 (5.4)
Parainfluenzavirus	5.0	4.1	8.0	5.9	69 (3.6)	5.2	7.0	99 (3.4)
SARS-CoV-2	3.3	2.0	2.0	2.9	124 (6.5)	0.0	3.5	80 (2.7)
Influenzavirus B	0.0	0.0	0.0	0.0	0 (0.0)	7.8	3.5	404 (13.9)

*Figure 2. Presents number of sentinel samples received per week by age-group (weeks 2024/40 to 2026/14) 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.*



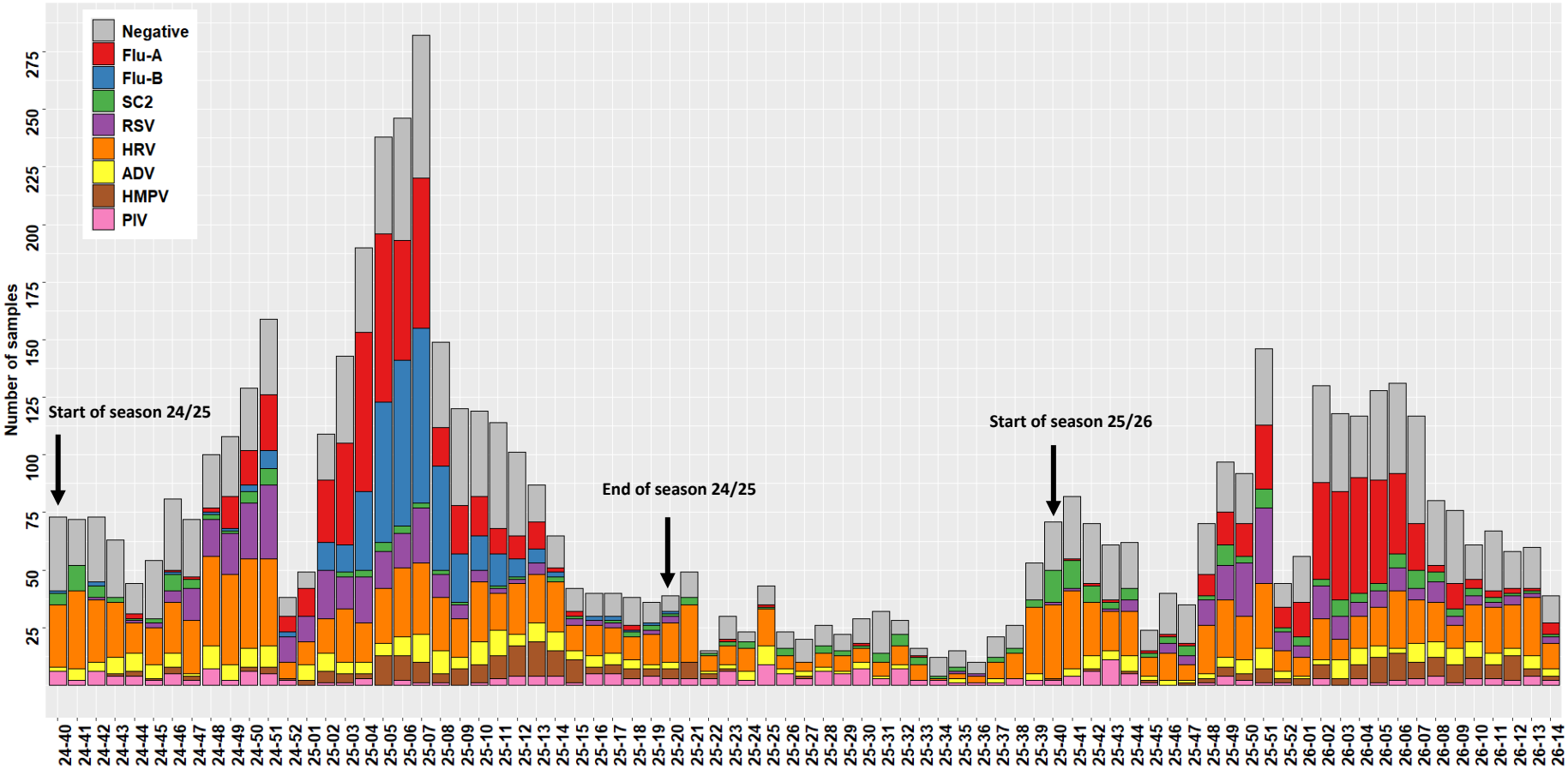


Figure 3. Circulation of respiratory viruses detected within the Sentinel Network by calendar week (seasons 24/25 and 25/26). FLU-A: influenzavirus A; FLU-B: influenzavirus B; PIV:parainfluenzavirus; RSV: respiratory syncytial virus; ADV: adenovirus; HMPV: metapneumovirus; HRV: human rhinovirus; SC2: 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=191) from 2025/40 to 2026/14

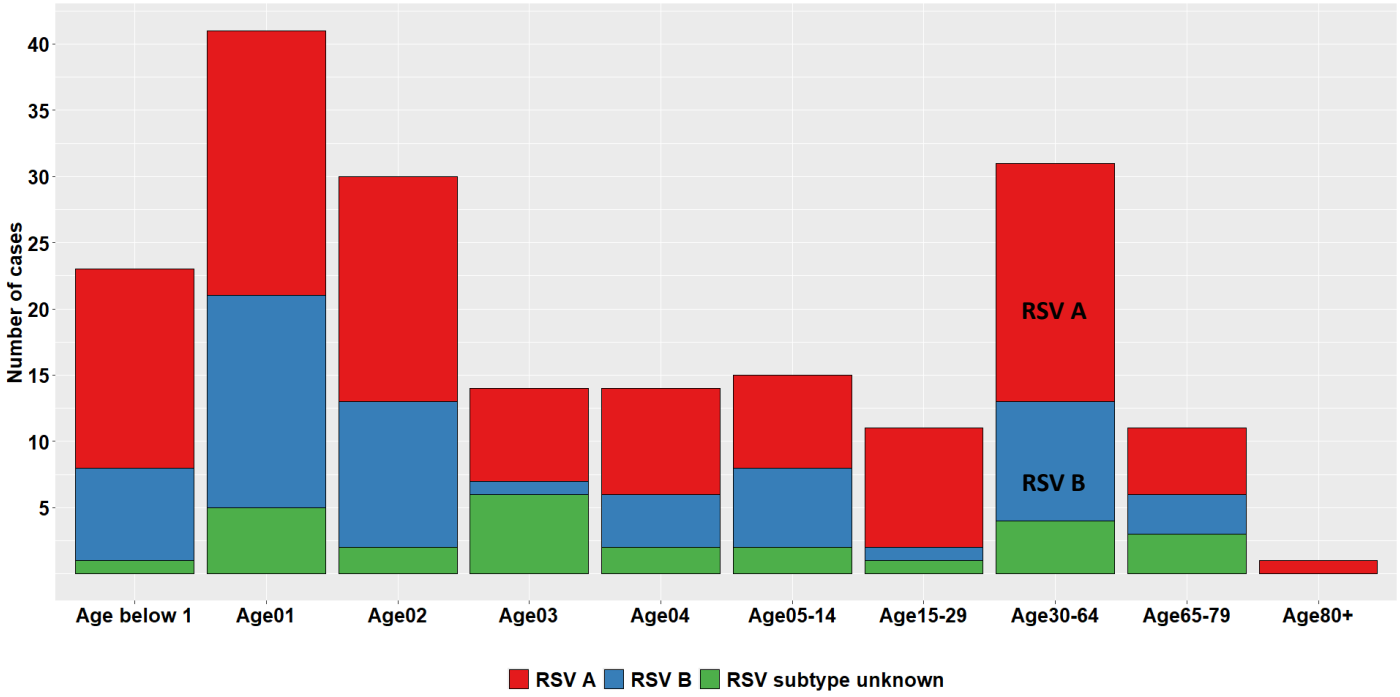
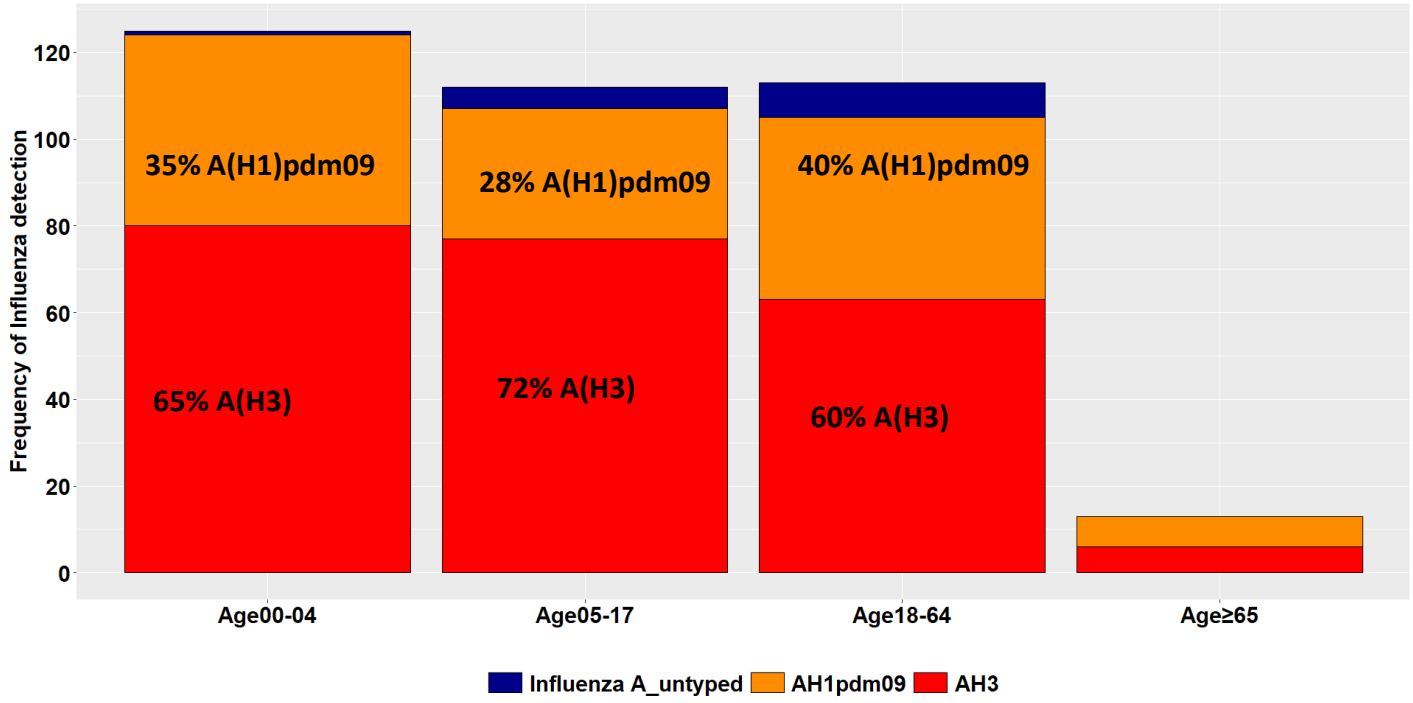


Figure 5. Number of Influenza A cases detected in different age-group by subtypes (N=363) from 2025/40 to 2026/14; blue-subtyping pending



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