

# Respiratory Viruses in Luxembourg (ReViLux)

## Sentinel Network Report -Week 10

### Summary of Sentinel Network activities

At the end of week **2025/10**, the sentinel network detected a medium epidemic activity with downward trend, based on **9.5%** of consultations being associated with influenza-like illness. Among the specimens collected by the sentinel network over the last week, the percentage of positive tests for **Human rhinovirus** was **25.0%**, **16.3%** for **Influenza A** and **14.4%** for **Influenza B**, while **RSV** activity was at **4.8%** and that of **SARS-CoV-2** at a very low level.

In total, this season (24/25) 2,384 samples were received with 830 Influenza positive samples (367 Influenza B and 463 Influenza A). So far, 442 of the 463 Influenza A samples (95.5%) have been subtyped. Hundred and ninety four (43.9%) Influenza A samples have been subtyped as A(H1)pdm09 and 248 (56.1%) samples as A(H3) virus. During week 2025/10, Influenza A and B positivity rates decreased slightly, but still indicate a mixture of subtypes spread across the country.

RSV continues to circulate at low level (5%) with 42.2% of subtype A and 57.8% subtype B cases.

Syndromic surveillance over the last 4 weeks (Table 1)

Week	ARI		ILI		Total consultations
	N	%	N	%	
2025/07	102	18.61	87	15.88	548
2025/08	70	19.94	48	13.68	351
2025/09	42	10.97	38	9.92	383
2025/10	60	16.71	34	9.47	359

*ARI: Acute Respiratory Infections; ILI: Influenza-Like Illness.*

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## 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 north hemisphere is generally monitored by seasons that go from week 40 to week 20. The period between weeks 20 and 40 is usually called inter-season.

### Clinical results

Last week (**end of week 2025/10**), **9.5%** of the consultations were reported as ILI, representing a medium epidemic activity for Luxembourg, according to ECDC and the Moving Epidemic Method. Over the last three weeks medium ILI rates have been observed in Luxembourg, with a decreasing trend, but rates still indicate considerable respiratory virus activity.

The history of ILI consultations is displayed in figure 1, and a detailed summary of the number of ARI and ILI cases during the last four weeks is included in table 1.

### Laboratory results

Over the last week, the most frequently detected viruses (according to positivity rates) were **Human rhinovirus (25.0%)**, followed by **Influenza A (16.3%)** and **Influenza B (14.4%)**. During week 2025/10, Influenza B decreased below 15%, Influenza A decreased from 19.6% (2025/09) to 16.3%, while no new cases of SARS-CoV-2 were detected within the sentinel network. Overall Influenza positivity decreased from nearly 40% (2025/09) to 30.8% (2025/10) (table 2 and figure 4). An overview of the circulating viral pathogens during the current and previous inter- season is displayed in figure 2 and table 2.

Nearly 65% of the Influenza A cases identified this week were in children below 5 years of age, while Influenza B was detected in all age-groups under 65 years old.

RSV activity remained stable at around 5% (2025/10). So far this season (24/25), two hundred and sixty six RSV cases have been detected, including ninety seven RSV-A cases and hundred and thirty three RSV-B cases. Approximately, 55% of cases were aged 1 and 4 years (figure 3).

In total, 2384 sentinel samples have been analysed with more than 60% of samples belonging to age-group below 18 years and with 52% of female cases. Over the past week, 37% of samples were from adults over 18 years old and 4% from adults above 65 years old (figure 4).

Over the past 2 weeks, Human rhinovirus was detected in all age-groups, while Adenovirus and Metapneumovirus were detected predominantly in children. Over the last 2 weeks, about 75% of all co-infections (N=25) were detected primarily in children below 5 years, 20% in children aged between 5 and 18 years and 4% in adults. The most commonly identified combination was Human rhinovirus with Metapneumovirus, followed by Adenovirus and Influenza A. So far this season, ten patients were co-infected with Influenza A and B.

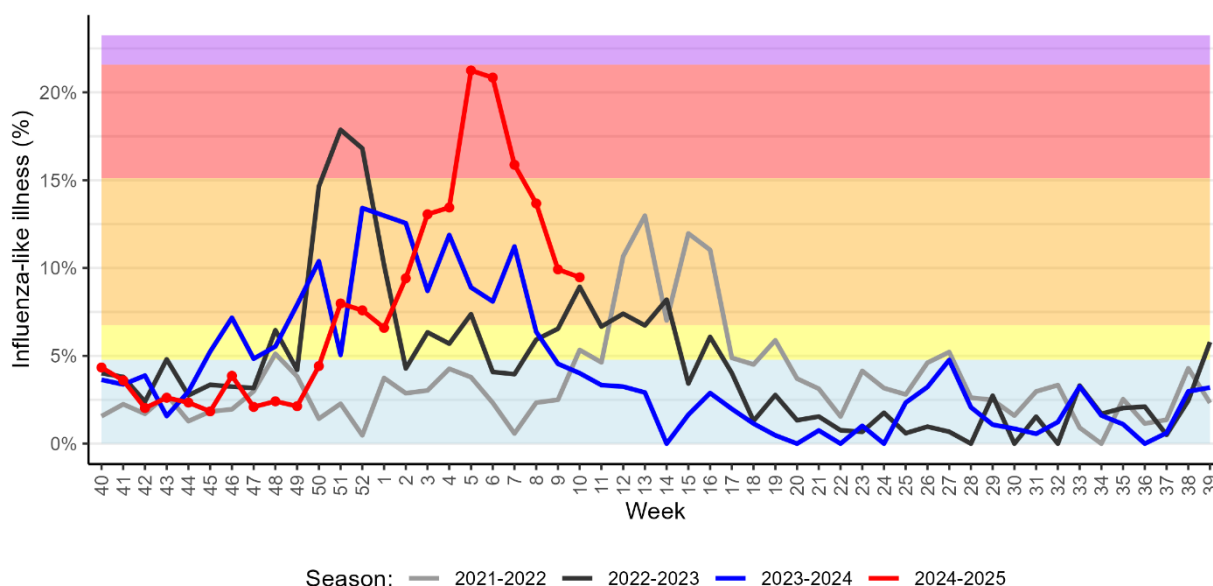


Figure 1. Percentage of patients with influenza-like illness over the last three seasons  
Background colours according to intensity of circulation: baseline, low, medium, high, very high.

Table 2. Distribution of respiratory viruses detected within the Sentinel Network previous 4 weeks compared to previous year. Data for week 2025/10 not yet completely consolidated

Virus	Season 2024/25					Season 2023/24	
	Positivity Rate in %					Positivity Rate in %	
	W07	W08	W09	W10	Total N (%)	W10	Total N (%)
Human rhinovirus	12.6	17.0	15.9	25.0	564 (23.8)	32.6	572 (24.9)
Influenzavirus A	26.2	12.6	19.6	16.3	463 (19.4)	7.6	388 (16.5)
Influenzavirus B	30.6	33.3	19.6	14.4	367 (15.4)	0.8	12 (0.5)
Adenovirus	4.9	7.4	4.7	9.6	148 (6.2)	9.8	125 (5.4)
Metapneumovirus	3.7	3.0	6.5	7.7	80 (3.4)	8.3	125 (5.4)
Respiratory syncytial virus	9.7	7.4	5.6	4.8	266 (11.2)	0.8	212 (9.2)
Parainfluenzavirus	0.4	0.7	0.0	1.0	63 (2.7)	5.3	77 (3.4)
SARS-CoV-2	0.8	1.5	0.9	0.0	69 (2.9)	0.8	227 (9.7)

Co-detection counted once for each virus detected & N- total number of detection during season

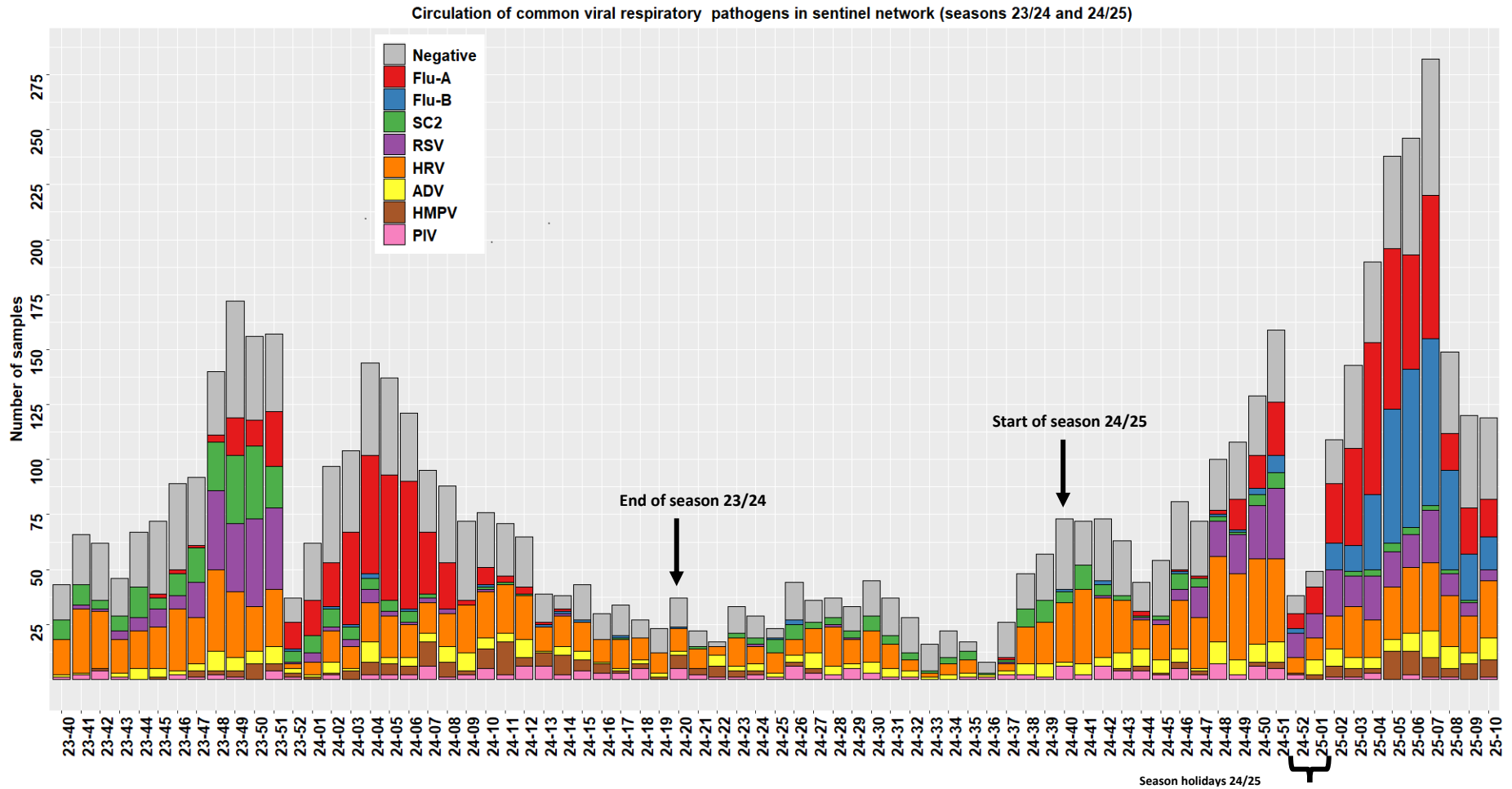


Figure 2. Distribution of respiratory viruses detected within the Sentinel Network. by calendar week. Results from last weeks are not all yet consolidated.  
 FLU-A: Influenzavirus A; FLU-B: Influenzavirus B; PIV: Parainfluenzavirus; RSV: Respiratory syncytial virus; ADV: Adenovirus; MPV: Metapneumovirus; HRV: Human rhinovirus; SC2: SARS-CoV-2.

Figure 3. Displays RSV cases according to different age groups with highest impact among the 1 years old. Data for week 2025/10 not yet completely consolidated

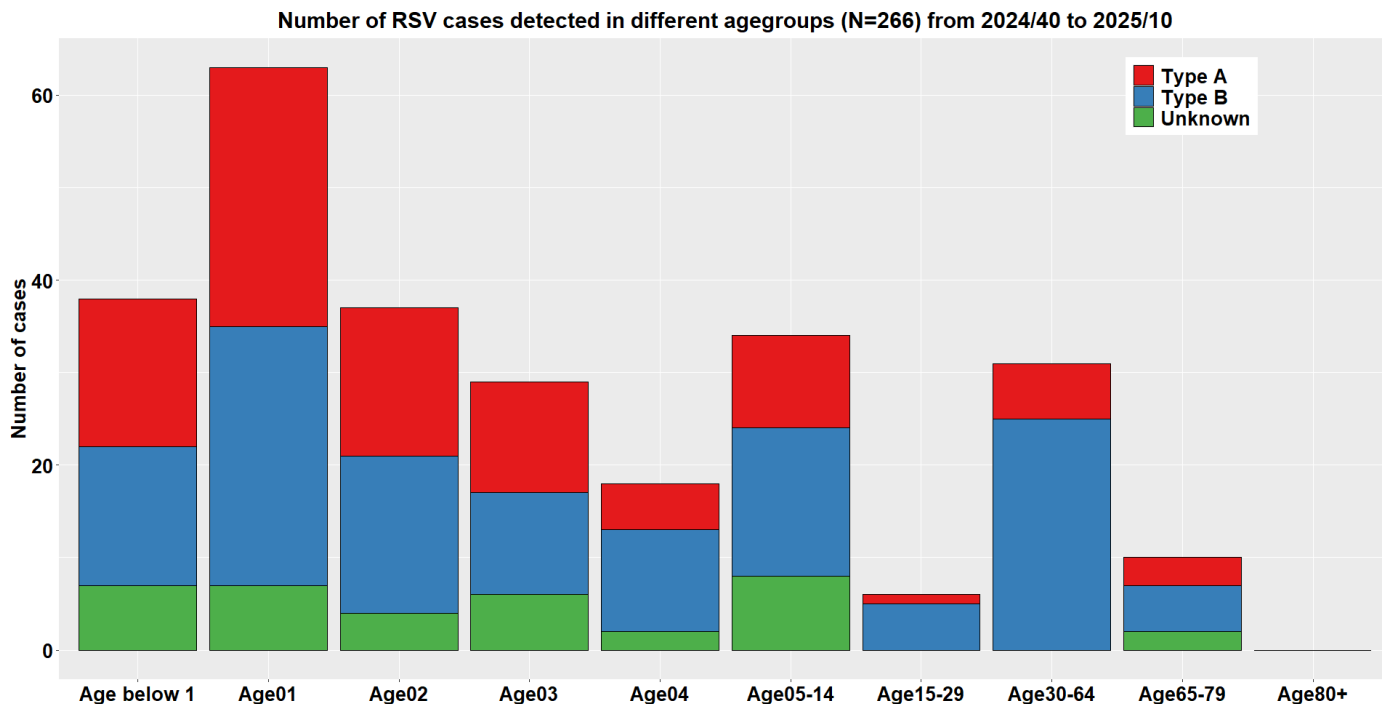


Figure 4. Displays number of sentinel samples received per week by age-group including overall sample positivity including Human rhinovirus (HRV. dotted line), excluding HRV (black line) and Influenza combined (red). Secondary axis corresponds to positivity

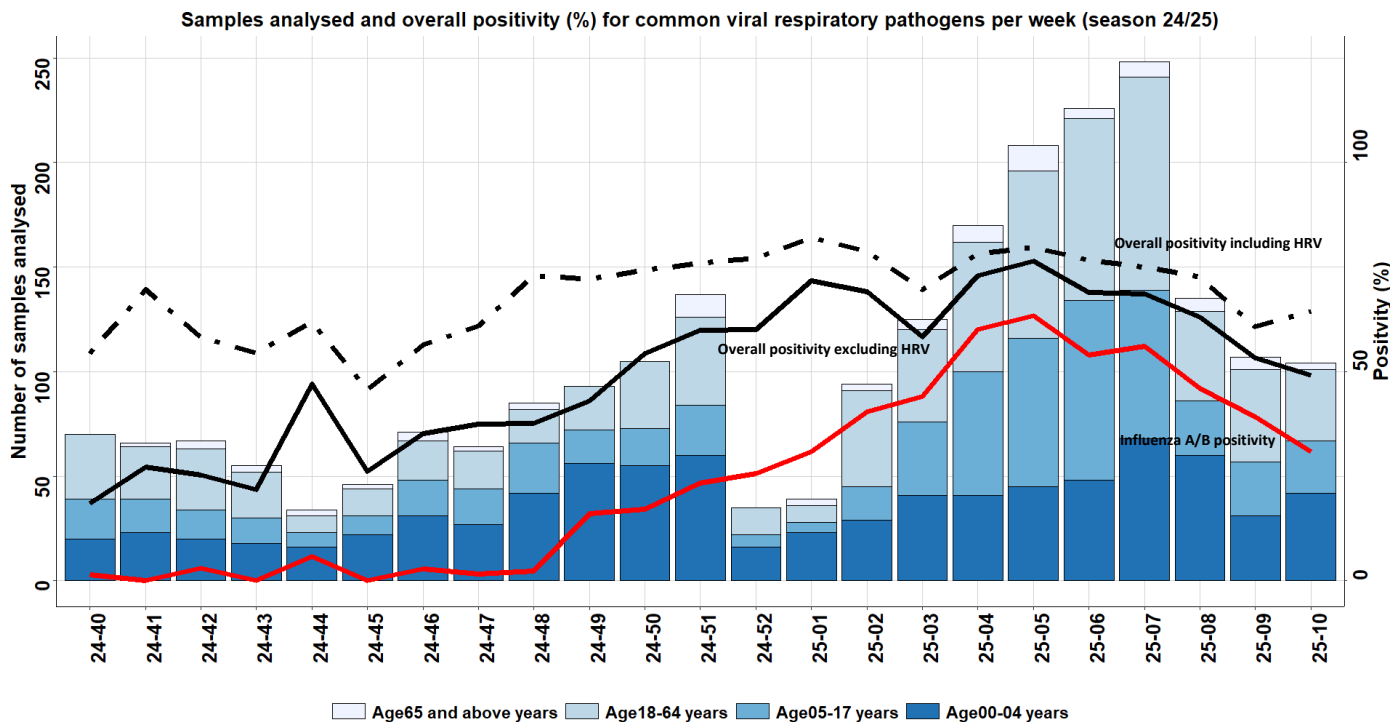
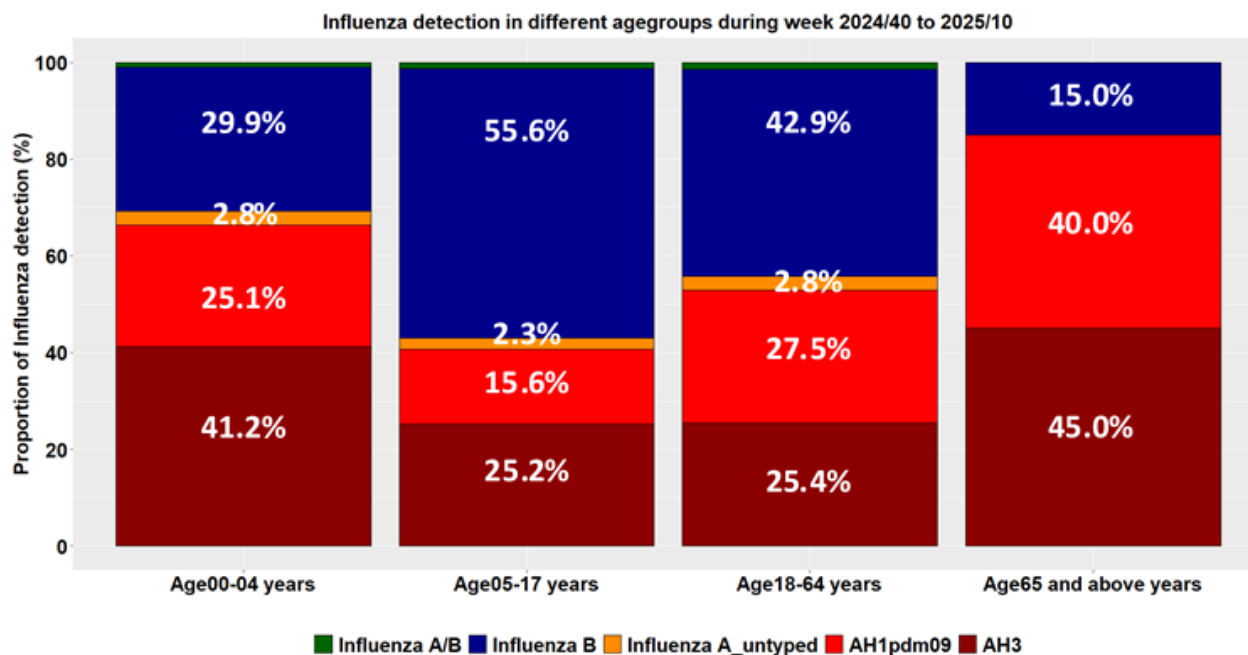


Figure 5. Displays detection of Influenza subtypes by age-group. Data for week 2025/10 not yet completely consolidated



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