Respiratory Viruses in Luxembourg (ReViLux)

Report – Sentinel Week 16

Summary

At the conclusion of **Week 16 of 2025**, the sentinel surveillance network reported **baseline epidemic activity**, with **4.7% of consultations** linked to influenza-like illness (ILI)—a notable increase of **2.5%** from the previous week. However, as illustrated in **Figure 1**, this surge aligns with trend lines from previous seasons, suggesting a similar pattern of increase in week 16. While this rise is expected to be part of a milder secondary wave, it is also important to note that Week 16 marks the third and last week of the spring school holidays. The epidemic activity is still at the baseline level and we assume it will go down in coming weeks just like the trend of previous years.

Analysis of **specimens collected over the past week** indicates **positivity rates** of **8.0% for Influenza B** and **8.0% for RSV**, while no positive samples were detected for **Influenza A or SARS-CoV-2**. However, results for Week 16 remain incomplete, as six samples are still awaiting arrival and processing in the laboratory.

During the 2024/25 season, a total of 2,781 samples have been processed, of which 899 tested positive for Influenza, including 399 cases of Influenza B and 500 cases of Influenza A. Among the Influenza A cases, 476 samples (95.2%) have undergone subtyping, identifying 195 cases (41.0%) as A(H1)pdm09 and 281 cases (59.0%) as A(H3).

Syndromic surveillance over the last 4 Weeks (Table 1)

Week	Acute Respiratory Infection (ARI)		Influenza Like Illness (ILI)		Total consultations
	N	%	N	%	
2025/13	51	15.5	18	5.5	328
2025/14	56	15.0	13	3.5	373
2025/15	36	15.9	5	2.2	226
2025/16	34	17.6	9	4.7	193

Sentinel Surveillance Network

The Sentinel Surveillance aims at monitoring the 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 of the upcoming calendar year .

Clinical Results

At the end of the week 16, only **4.7%** of the consultations were reported as ILI, representing a baseline level epidemic activity for Luxembourg, according to ECDC and the Moving Epidemic Method. 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.

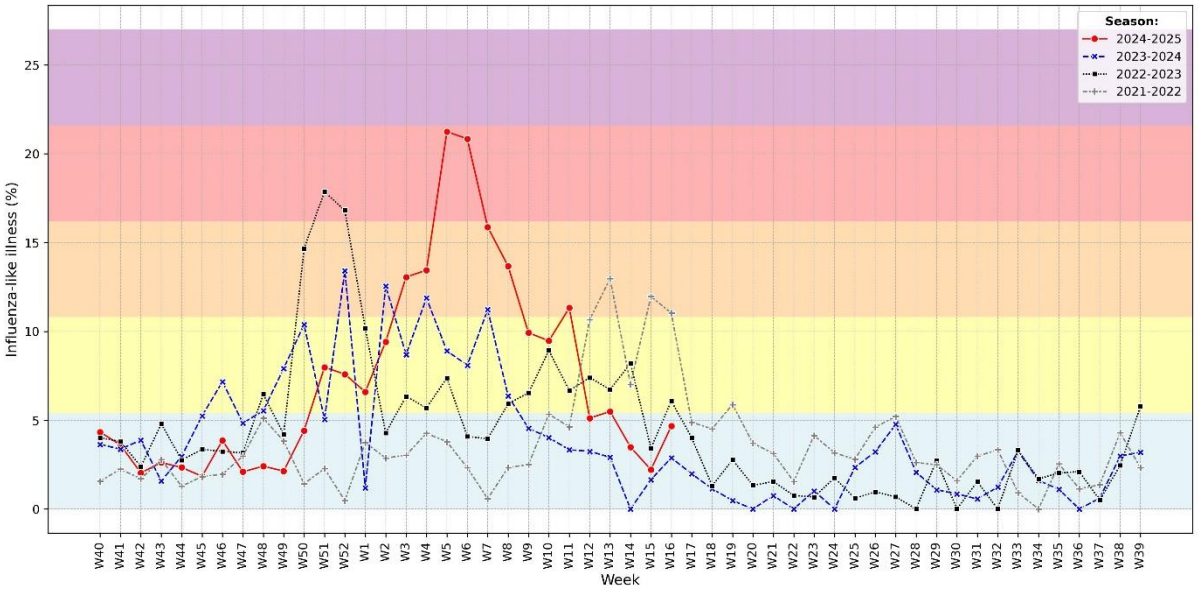

Figure 1. Percentage of patients with influenza-like illness over the last three seasons
Background colours according to intensity of circulation: baseline, low, medium, high, very high.

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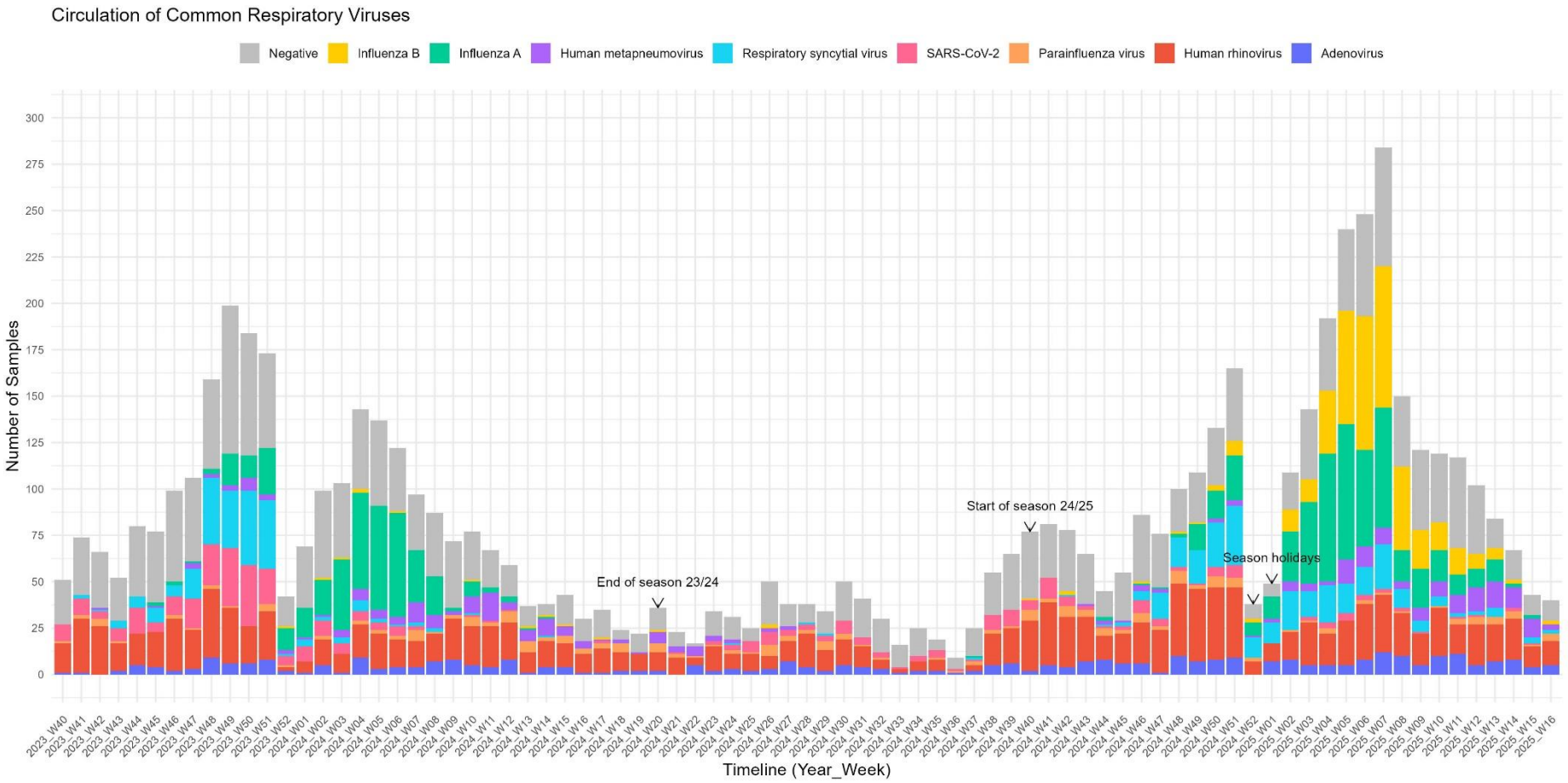

Figure 2. Distribution of respiratory viruses detected within the Sentinel Network, by calendar week. Results from last week are not yet consolidated.

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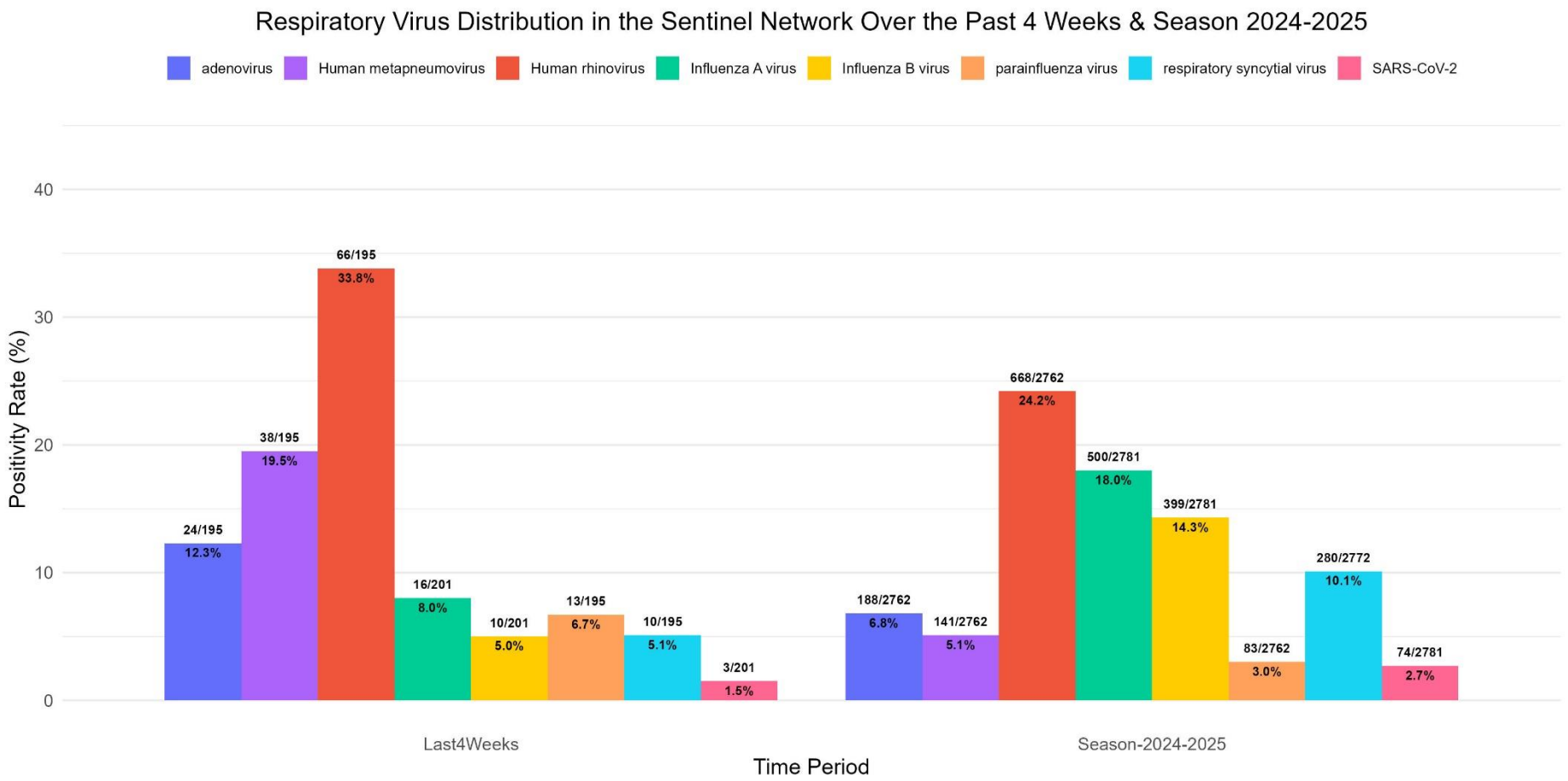

*Figure 3. Distribution of respiratory viruses detected within the Sentinel Network over the last 4 weeks and Season 2024-2025. On the top of the bar is depicted the number of positive samples/total samples and inside the bar is depicted the positivity rate per respiratory virus in percentage. Last 4 weeks were Week 13, 14, 15 and 16. Results from last week are not yet consolidated. *Co-detection counted once for each virus detected.*

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Reference

European Centre for Disease Prevention and Control. Communicable Disease Threats Report Week https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-12-18-april-2025-week-16

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