

NATIONAL WEEKLY INFLUENZA BULLETIN OF THE RUSSIAN FEDERATION

week 12 of 2025 (17.03.25 - 23.03.25)

Summary.

Influenza and ARI incidence data. Influenza and other ARI activity in Russia decreased in comparison with previous week. The nationwide ILI and ARI morbidity level (91.2 per 10 000 of population) was higher than national baseline (89.9) by 1.4%.

Etiology of ILI & ARI. Among 13646 patients investigation 3093 (22.7%) respiratory samples were positive for influenza, including 441 cases of untyped influenza A in 11 cities, 705 cases of influenza A(H1N1)pdm09 in 41 cities, 48 cases of influenza A(H3N2) in 13 cities and 1899 cases of influenza B in 44 cities.

38 influenza viruses were isolated on MDCK cell culture, including 16 cases of influenza A(H1N1)pdm09 in Astrakhan (2), Vladimir (1), Yekaterinburg (4), Khabarovsk (9) and 22 cases of influenza B in Astrakhan (8), Veliky Novgorod (1), Ekaterinburg (2), Moscow (2), Orenburg (1), Khabarovsk (8). Since the beginning of the season 508 influenza viruses, including: 299 A(H1N1)pdm09 viruses, 13 - A(H3N2) and 196 influenza B viruses.

Antigenic characterization. Since the beginning of the season 262 influenza have been antigenically characterized by the NICs, including: 168 influenza A(H1N1)pdm09, 5 influenza A(H3N2) and 89 influenza B viruses. 166 A(H1N1)pdm09 viruses were similar to the reference strain A/Victoria/4897/22 recommended in the vaccines for the Northern Hemisphere countries for the 2024-2025 season, 2 A(H1N1)pdm09 strain reacted to a 1:8 homologous titer with serum to the vaccine strain. 4 A(H3N2) strain was similar to the vaccine strain A/Thailand/8/22, the other interacted to 1:8 homologous titer with serum to the A/Thailand/8/22 vaccine strain. 87 influenza B viruses were similar to the vaccine strain B/Austria/1359417/2021, 2 strains were drift variants and reacted to 1:8 homologous titer with serum to the vaccine strain.

Genetic analysis. Sequencing of 386 influenza A(H1N1)pdm09 viruses of the season 2024-2025 showed that all of them fell within clade 6B.1A.5a.2a, subclade C.1.9. 12 influenza A(H3N2) viruses belonged to clade 3c.2a1b.2a.2a.3a.1 (vaccine virus A/Thailand/8/2022-like), subclade J.2. 63 influenza B strains belonged to Victoria lineage, subclade V1A.3a.2 (B/Austria/1359417/2021-like). By genotypic testing all 461 influenza A and B viruses were susceptible to oseltamivir and zanamivir.

Susceptibility to antivirals. Since the beginning of the season 2024-2025, the sensitivity of 198 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) was studied in NIC Saint-Petersburg, including: 130 A(H1N1)pdm09 influenza viruses, 3 A(H3N2) influenza viruses and 65 influenza B viruses. All studied viruses were sensitive to neuraminidase inhibitors.

ARVI detections. The overall proportion of respiratory samples tested positive for other ARVI (PIV, ADV, RSV, RhV, CoV, MPV, BoV) was estimated in total as 11.5% (PCR).

In sentinel surveillance system clinical samples from 34 SARI patients were investigated by rRT-PCR for influenza, among them 10 (29.4%) cases of influenza were recognized, including: 7 cases of untyped influenza A(H1N1)pdm09 and 3 cases of influenza B. 2 (5.9%) of 34 SARI patients were positive for coronavirus SARS-CoV-2. Among 34 SARI samples 7 (20.6%) cases positive for ARVI were detected, including: 2 cases of PIV, 1 case of ADV, 3 cases of RhV and 1 case of CoV infection.

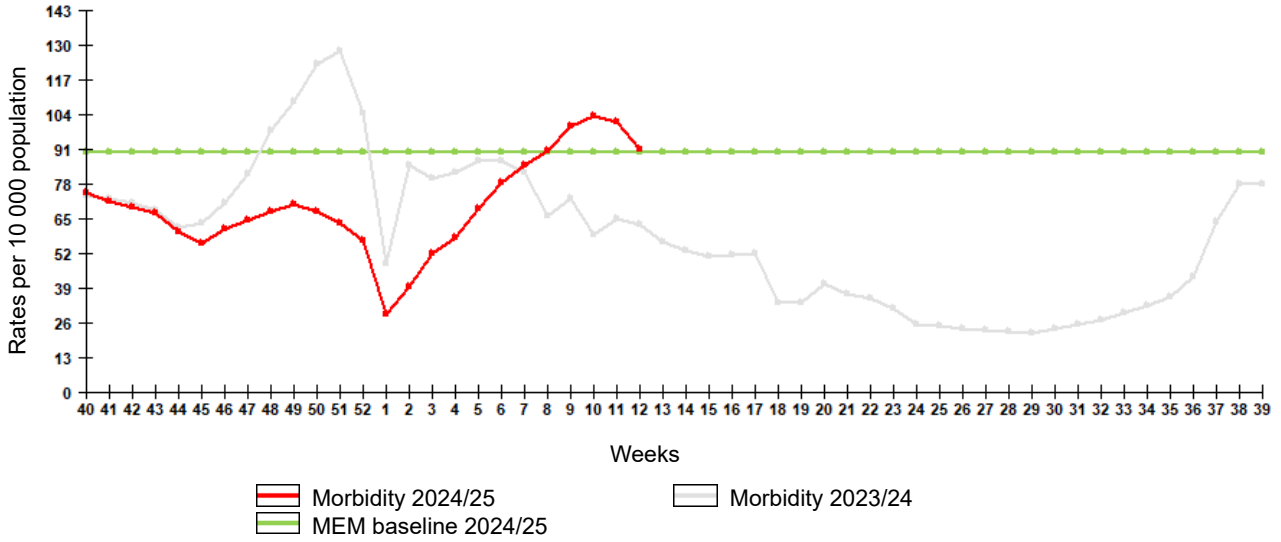
Clinical samples from 34 ILI/ARI patients were investigated by rRT-PCR for influenza, among them 3 (8.8%) cases of influenza A(H1N1)pdm09 were. Among 17 ILI/ARI samples 4 (23.5%) cases positive for ARVI were detected, including: 1 case of PIV, 1 case of RhV, 1 case of CoV and 1 case of MPV infection. Among 17 ILI/ARI patients no positive cases of coronavirus SARS-CoV-2 recognized.

COVID-19. The Federal Operational Headquarters for Combating the Novel Coronavirus Infection has discontinued the publication of weekly COVID-19 morbidity reports starting from epidemiological week 12. This decision is due to the stabilization of the epidemiological situation regarding COVID-19 and the transition of the virus to the category of seasonal respiratory infections.

According to the data obtained by NIC in Saint-Petersburg totally 13355 clinical samples were PCR investigated in last week. Among them coronavirus SARS-CoV-2 detected in 70 (0.5%) cases.

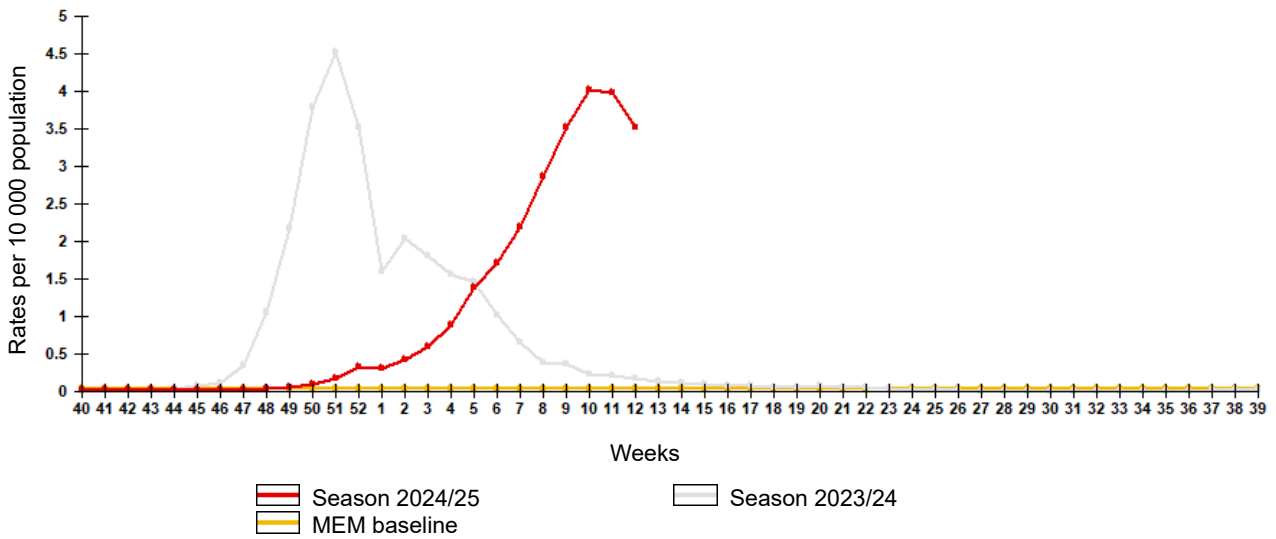
Influenza and ARI morbidity data

Fig. 1. Influenza and ARI morbidity in 61 cities under surveillance in Russia, seasons 2023/24 and 2024/25



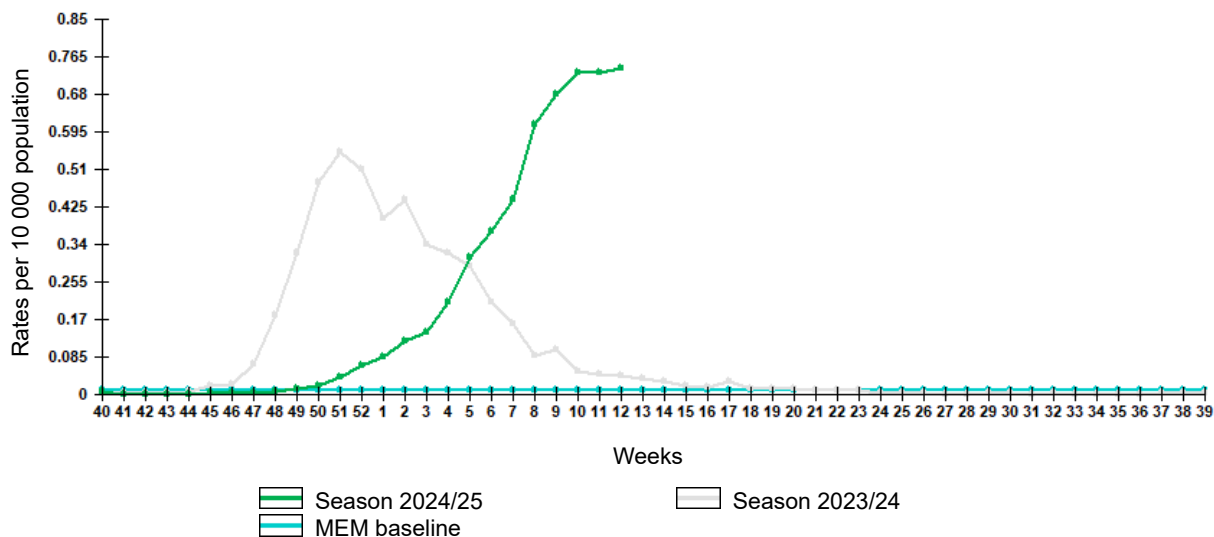
Epidemiological data showed decrease of influenza and other ARI activity in Russia in comparison with previous week. The nationwide ILI and ARI morbidity level (91.2 per 10 000 of population) was higher than national baseline (89.9) by 1.4%.

Fig. 2. Comparative data on incidence rate of clinically diagnosed influenza, seasons 2023/24 and 2024/25



Incidence rate of clinically diagnosed influenza decreased comparing to previous week and amounted to 3.52 per 10 000 of population, it was higher than pre-epidemic MEM baseline (0.040).

Fig. 3. Comparison of hospitalization rate with clinical diagnosis of influenza, seasons 2023/24 and 2024/25



Hospitalization rate of clinically diagnosed influenza increased comparing to previous week and amounted to 0.74 per 10 000 of population, it was higher than pre-epidemic MEM baseline (0.010).

Influenza and ARVI laboratory testing results

Cumulative results of influenza laboratory diagnosis by rRT-PCR were submitted by 45 RBLs and two WHO NICs. According to these data as a result of 13646 patients investigation 3093 (22.7%) respiratory samples were positive for influenza, including 441 cases of untyped influenza A in 11 cities, 705 cases of influenza A(H1N1)pdm09 in 41 cities, 48 cases of influenza A(H3N2) in 13 cities and 1899 cases of influenza B in 44 cities.

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Susceptibility to antiviral. Since the beginning of the season 2024-2025, the sensitivity of 198 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) was studied in NIC Saint-Petersburg, including: 130 A(H1N1)pdm09 influenza viruses, 3 A(H3N2) influenza viruses and 65 influenza B viruses. All studied viruses were sensitive to neuraminidase inhibitors.

Fig. 4. Geographic distribution of RT-PCR detected influenza viruses in cities under surveillance in Russia, week 12 of 2025

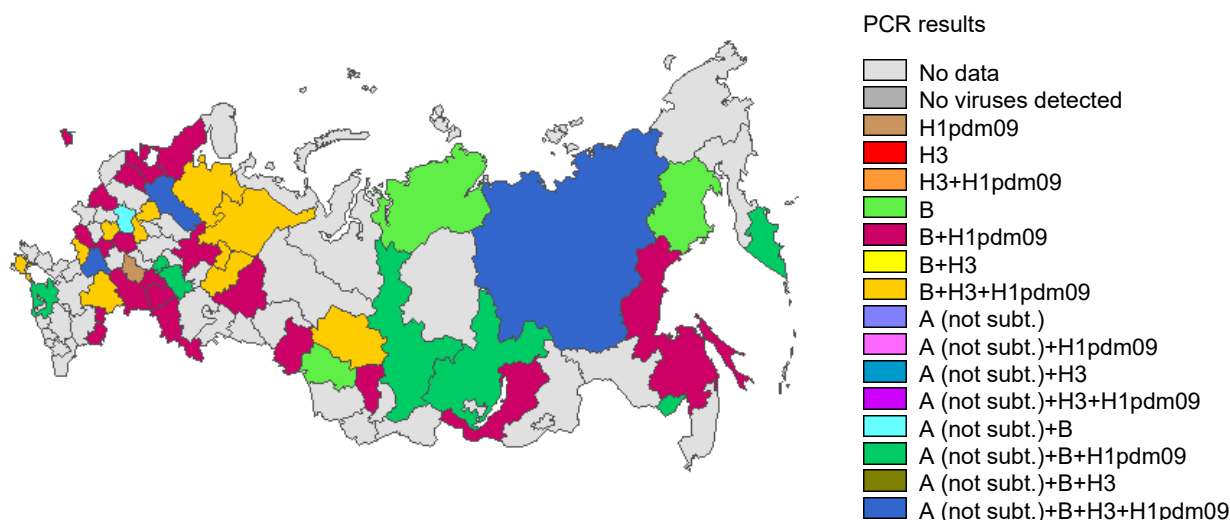


Fig. 5. Monitoring of influenza viruses detection by RT-PCR in Russia, season 2024/25

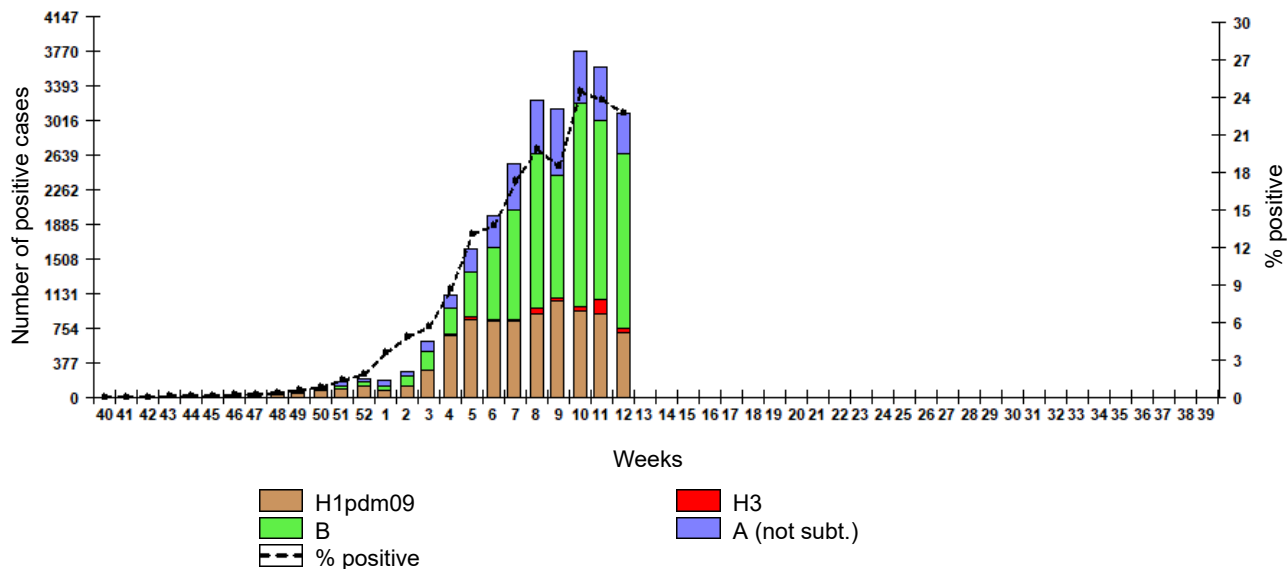
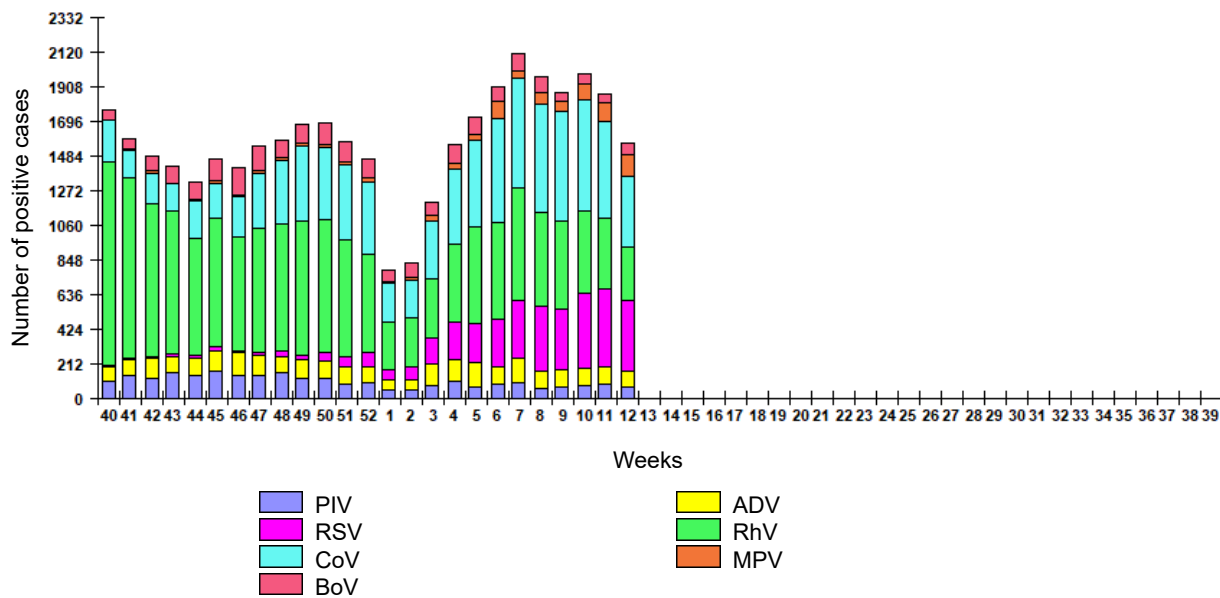


Fig. 6. Monitoring of ARVI detection by RT-PCR in Russia, season 2024/25



ARVI detections. The overall proportion of respiratory samples tested positive for other ARVI (PIV, ADV, RSV, RhV, CoV, MPV, BoV) estimated as **11.5%** of investigated samples by PCR.

Fig. 7. Monitoring of influenza viruses isolation in Russia, season 2024/25

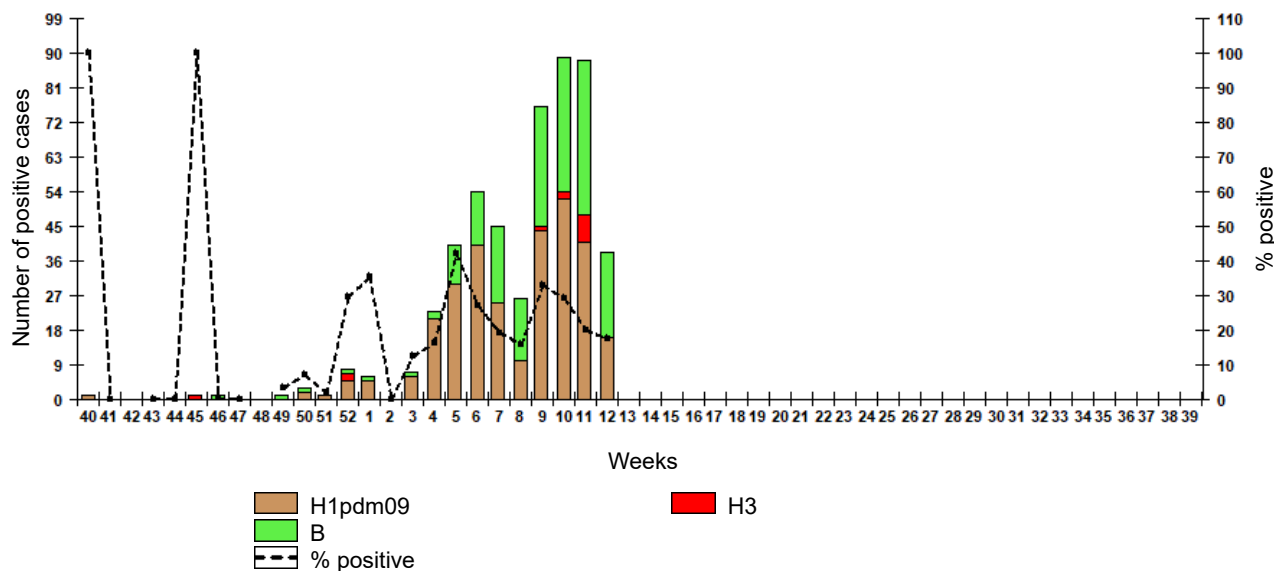


Table 1. Results of influenza and other ARVI detection by RT-PCR in Russia, week 12 of 2025

	Number of specimens / number of positive cases	% positive
<u>Influenza</u>		
Number of specimens tested for influenza	13646	-
Influenza A (not subt.)	441	3,2%
Influenza A(H1)pdm09	705	5,2%
Influenza A(H3)	48	0,4%
Influenza B	1899	13,9%
All influenza	3093	22,7%
<u>Other ARVI</u>		
Number of specimens tested for ARVI	13579	-
PIV	67	0,5%
ADV	100	0,7%
RSV	436	3,2%
RhV	331	2,4%
CoV	432	3,2%
MPV	129	0,9%
BoV	69	0,5%
All ARVI	1564	11,5%
<u>SARS-CoV-2 (COVID-19)</u>		
Number of specimens tested for SARS-CoV-2	13355	-
SARS-CoV-2	70	0,5%

Fig. 8. Results of PCR detections of SARS-CoV-2 in Russia



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Table 2. Results of influenza viruses isolation in Russia, week 12 of 2025

	Number of specimens / number of viruses	% isolated viruses
Number of specimens	220	-
Influenza A(H1)pdm09	16	7,3%
Influenza A(H3)	0	0,0%
Influenza B	22	10,0%
All influenza	38	17,3%

Sentinel influenza surveillance

Clinical samples from 34 SARI patients were investigated by rRT-PCR for influenza, among them 10 (29.4%) cases of influenza were recognized, including: 7 cases of unsubtype influenza A(H1N1)pdm09 and 3 cases of influenza B. 2 (5.9%) of 34 SARI patients were positive for coronavirus SARS-CoV-2. Among 34 SARI samples 7 (20.6%) cases positive for ARVI were detected, including: 2 cases of PIV, 1 case of ADV, 3 cases of RhV and 1 case of CoV infection.

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Fig. 9. Monitoring of influenza viruses detection by RT-PCR among SARI patients in sentinel hospitals, season 2024/25

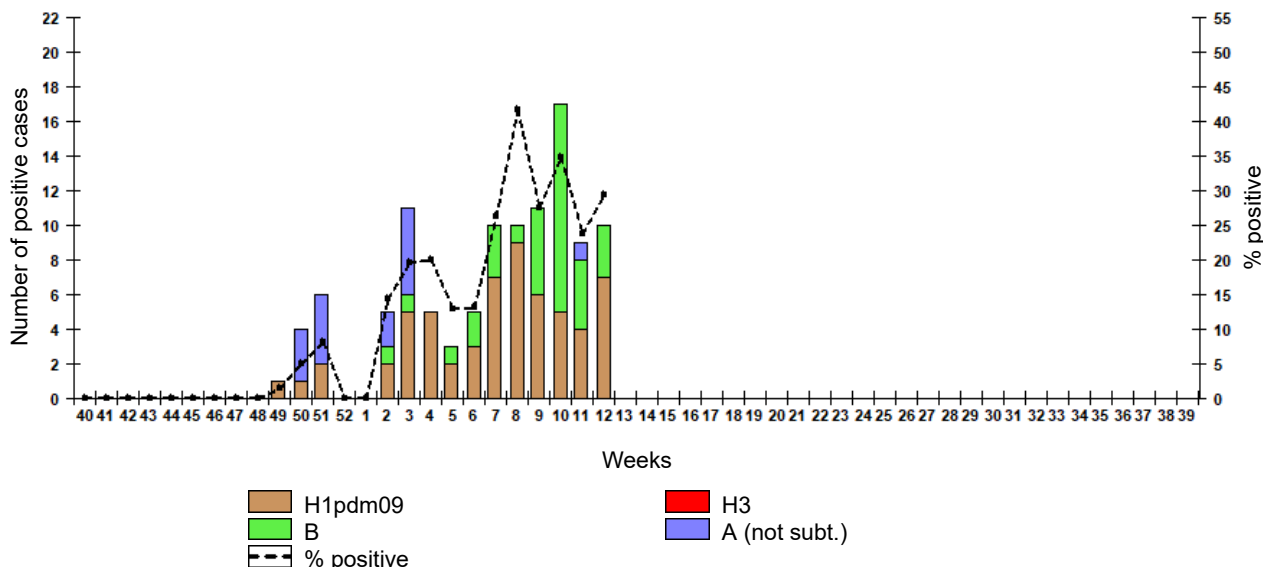


Fig. 10. Monitoring of influenza viruses detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

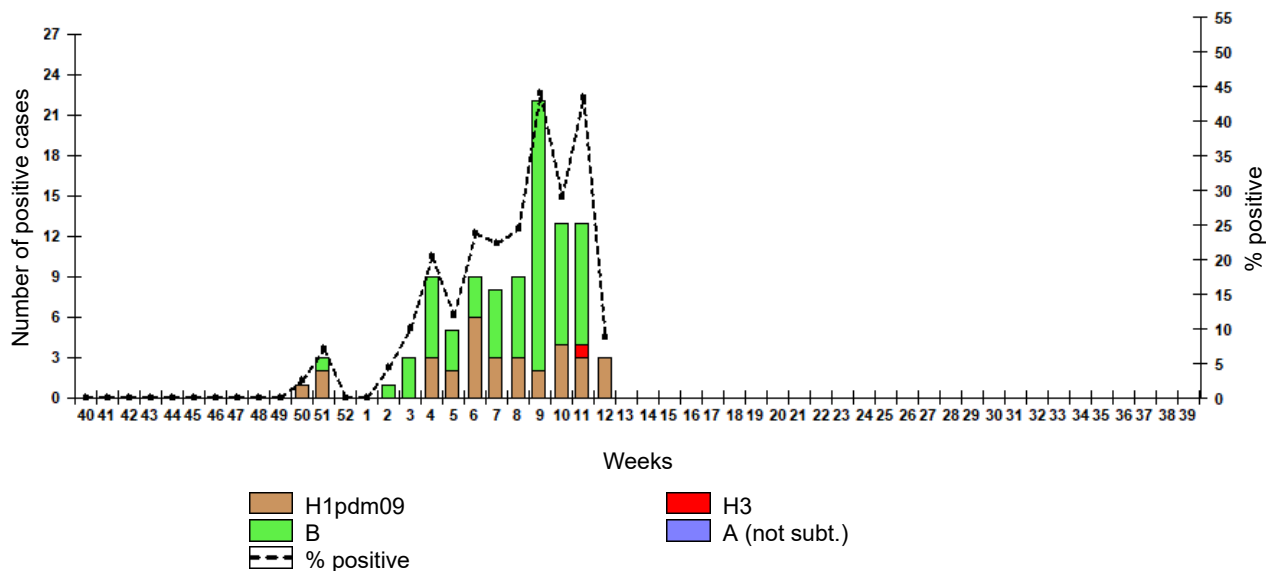


Fig. 11. Monitoring of ARVI detection by RT-PCR among SARI patients in sentinel hospitals, season 2024/25

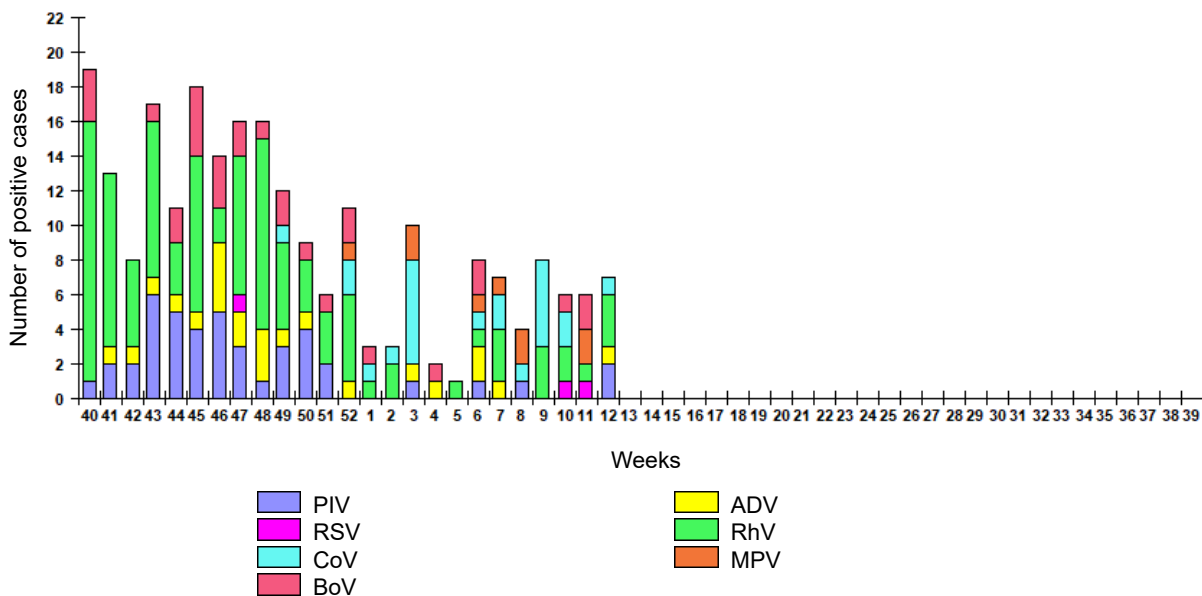


Fig. 12. Monitoring of ARVI detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

