

NATIONAL WEEKLY INFLUENZA BULLETIN OF THE RUSSIAN FEDERATION

week 7 of 2025 (10.02.25 - 16.02.25)

Summary.

Influenza and ARI incidence data. Influenza and other ARI activity in Russia increased in comparison with previous week. The nationwide ILI and ARI morbidity level (85.3 per 10 000 of population) was lower than national baseline (89.9) by 5.1%.

Etiology of ILI & ARI. Among 14581 patients investigation 2528 (17.3%) respiratory samples were positive for influenza, including 503 cases of untyped influenza A in 12 cities, 829 cases of influenza A(H1N1)pdm09 in 45 cities, 8 cases of influenza A(H3N2) in 6 cities and 1188 cases of influenza B in 37 cities.

45 influenza viruses were isolated on MDCK cell culture, including 25 cases of influenza A(H1N1)pdm09 in Vladivostok (1), Moscow (4), Nizhny Novgorod (1), Novosibirsk (1), Orenburg (1), Samara (6), Saint-Petersburg (7), Ulan-Ude (1), Khabarovsk (3) and 20 cases of influenza B in Astrakhan (3), Kaliningrad (1), Nizhny Novgorod (2), Novosibirsk (2), Orenburg (2), Samara (1), Saint-Petersburg (8) and Khabarovsk (1). Since the beginning of the season 191 influenza viruses, including: 136 A(H1N1)pdm09 viruses, 3 - A(H3N2) and 52 influenza B viruses.

Antigenic characterization. Since the beginning of the season 74 influenza have been antigenically characterized by the NICs, including: 52 influenza A(H1N1)pdm09, 4 influenza A(H3N2) and 18 influenza B viruses. 50 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. 3 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. All 18 influenza B viruses were similar to vaccine strain B/Austria/1359417/2021.

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 40 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) was studied in NIC Saint-Petersburg, including: 31 A(H1N1)pdm09 influenza viruses, 2 A(H3N2) influenza viruses and 7 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 14.6% (PCR).

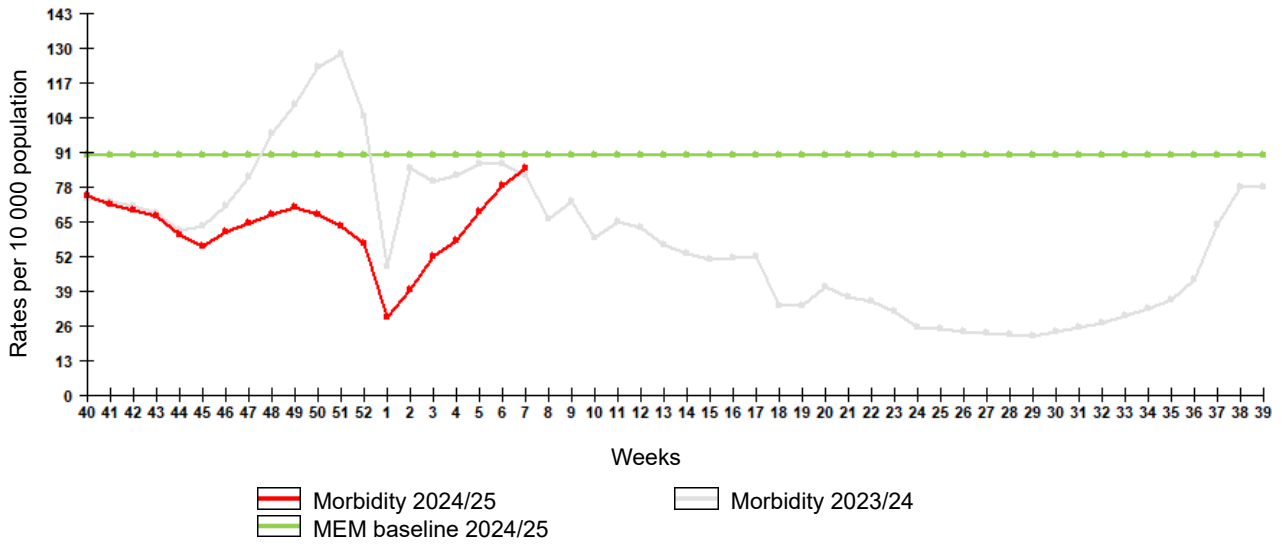
In sentinel surveillance system clinical samples from 22 SARI patients were investigated by rRT-PCR for influenza, among them 4 (18.2%) case of influenza (H1N1)pdm09. Among 22 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 22 SARI samples 4 (18.2%) cases positive for ARVI were detected, including: 3 cases of RhV and 1 case of MPV infection.

Clinical samples from 32 ILI/ARI patients were investigated by rRT-PCR for influenza, among them 3 (9.4%) case of influenza were recognized, including 2 cases of A(H1N1)pdm09 and 1 case of influenza B. Among 16 ILI/ARI samples 3 (18.8%) cases positive for ARVI were detected, including: 1 case of RhV and 2 cases of MPV infection. Among 32 ILI/ARI patients no positive cases of coronavirus SARS-CoV-2 recognized.

COVID-19. Totally 24 907 631 cases and 404 391 deaths associated with COVID-19 were registered in Russia including 6652 cases and 19 deaths in week 07. According to the data obtained by NIC in Saint-Petersburg totally 15631 clinical samples were PCR investigated in last week. Among them coronavirus SARS-CoV-2 detected in 228 (1.5%) cases.

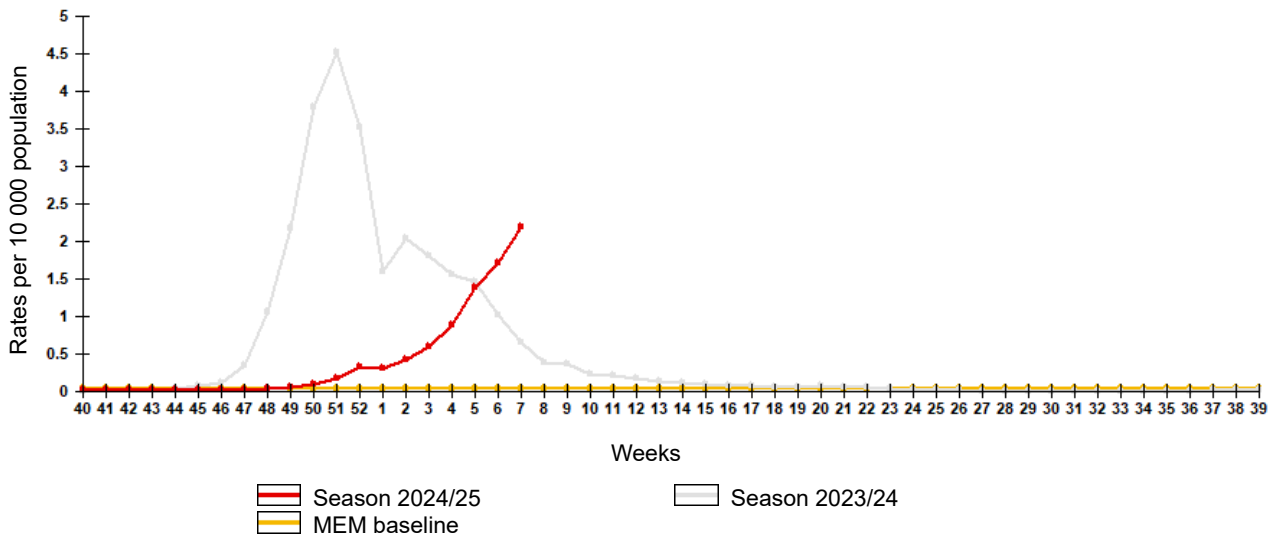
Influenza and ARI morbidity data

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



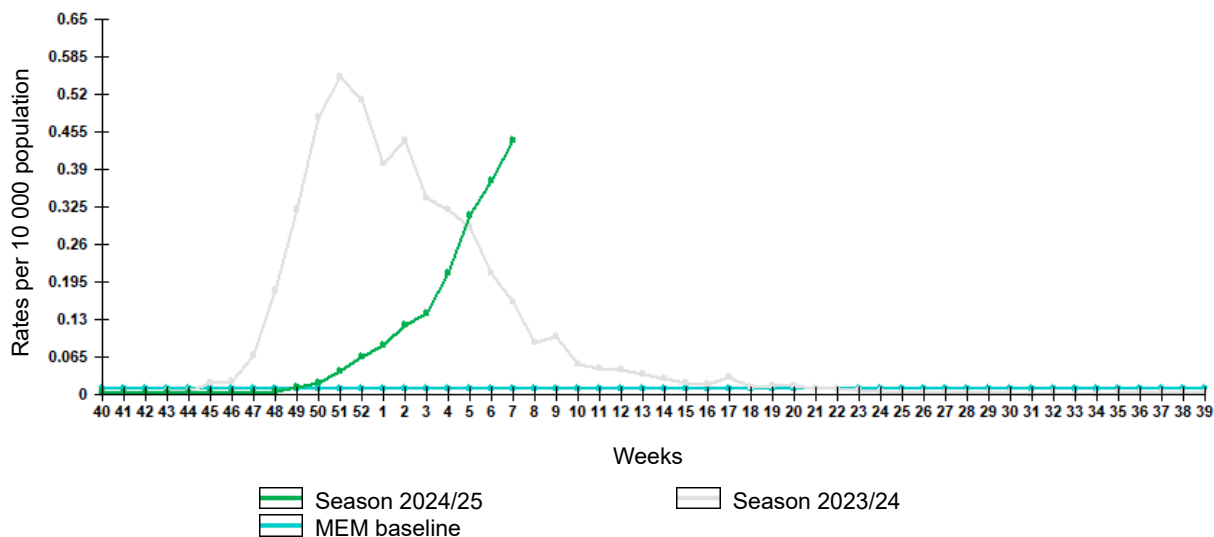
Epidemiological data showed increase of influenza and other ARI activity in Russia in comparison with previous week. The nationwide ILI and ARI morbidity level (85.3 per 10 000 of population) was lower than national baseline (89.9) by 5.1%.

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



Incidence rate of clinically diagnosed influenza increased comparing to previous week and amounted to 2.19 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 0.44 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 47 RBLs and two WHO NICs. According to these data as a result of 14581 patients investigation 2528 (17.3%) respiratory samples were positive for influenza, including 503 cases of unsubtype influenza A in 12 cities, 829 cases of influenza A(H1N1)pdm09 in 45 cities, 8 cases of influenza A(H3N2) in 6 cities and 1188 cases of influenza B in 37 cities.

45 influenza viruses were isolated on MDCK cell culture, including 25 cases of influenza A(H1N1)pdm09 in Vladivostok (1), Moscow (4), Nizhny Novgorod (1), Novosibirsk (1), Orenburg (1), Samara (6), Saint-Petersburg (7), Ulan-Ude (1), Khabarovsk (3) and 20 cases of influenza B in Astrakhan (3), Kaliningrad (1), Nizhny Novgorod (2), Novosibirsk (2), Orenburg (2), Samara (1), Saint-Petersburg (8) and Khabarovsk (1). Since the beginning of the season 191 influenza viruses, including: 136 A(H1N1)pdm09 viruses, 3 - A(H3N2) and 52 influenza B viruses.

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Fig. 4. Geographic distribution of RT-PCR detected influenza viruses in cities under surveillance in Russia, week 7 of 2025

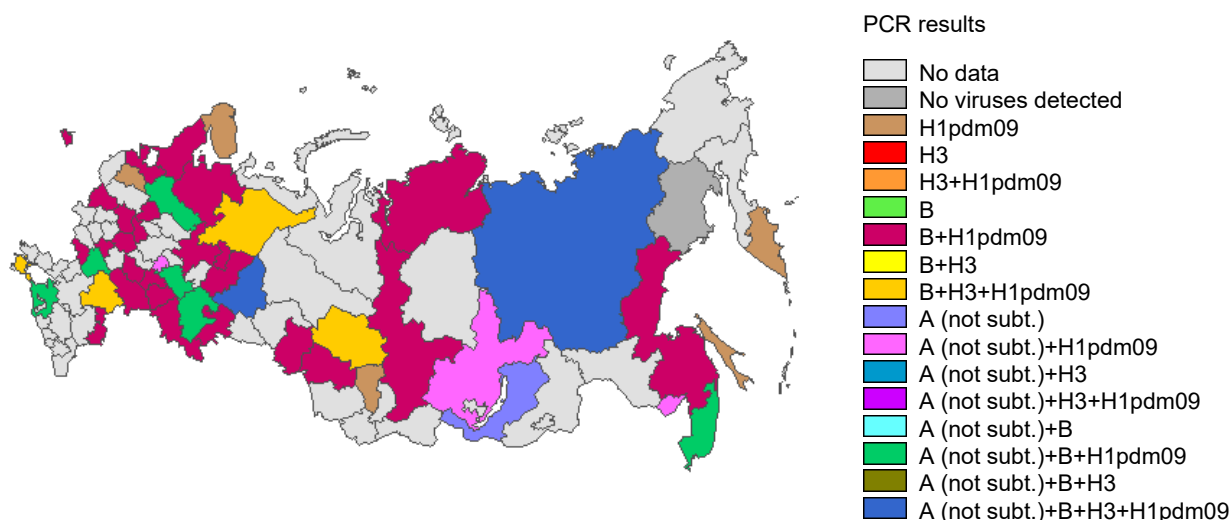


Fig. 5. Monitoring of influenza viruses detection by RT-PCR in Russia, season 2024/25

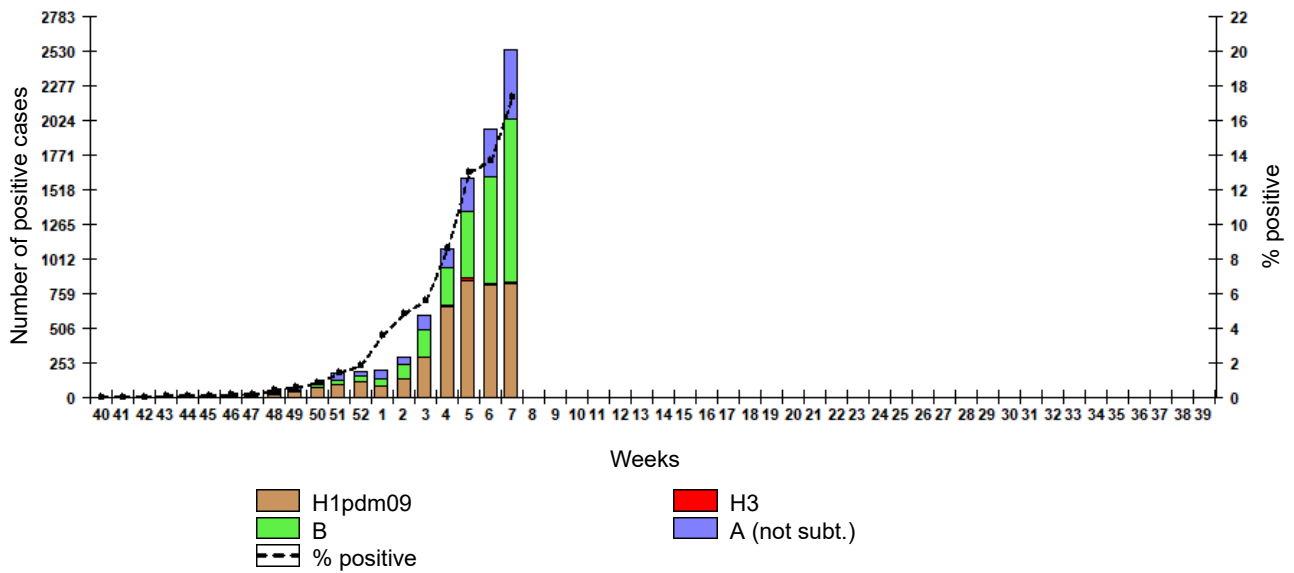
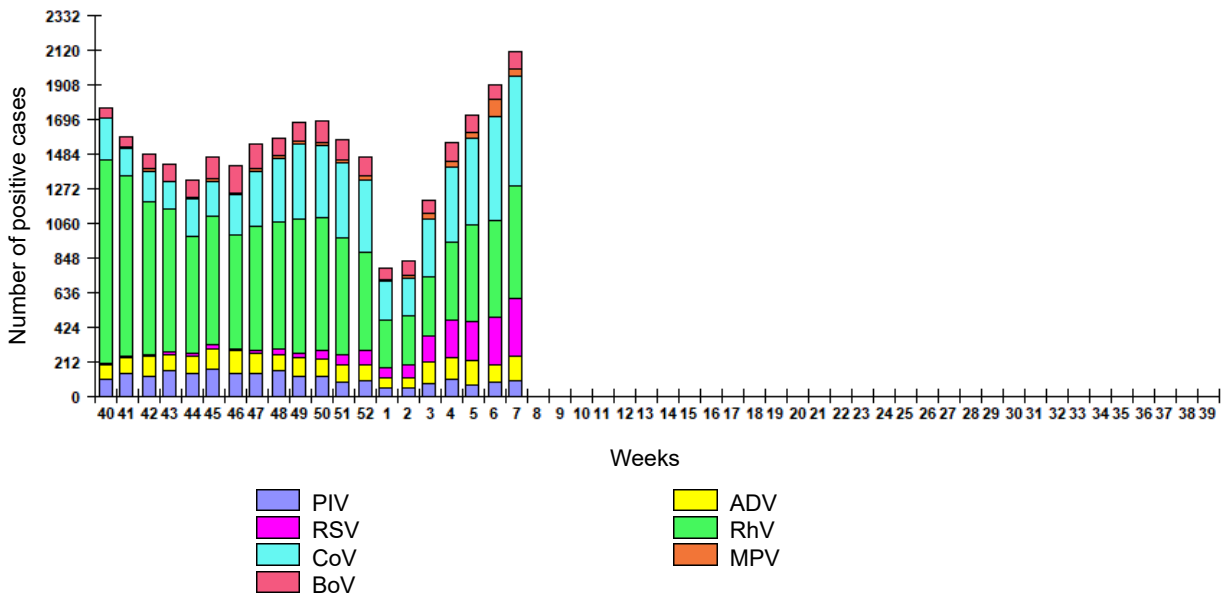


Fig. 6. Monitoring of ARVI detection by RT-PCR in Russia, season 2024/25



ARVI detections. The overall proportion of respiratory samples tested positive for other ARVI (PIV, ADV, RSV, RhV, CoV, MPV, BoV) estimated as **14.6%** of investigated samples by PCR.

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

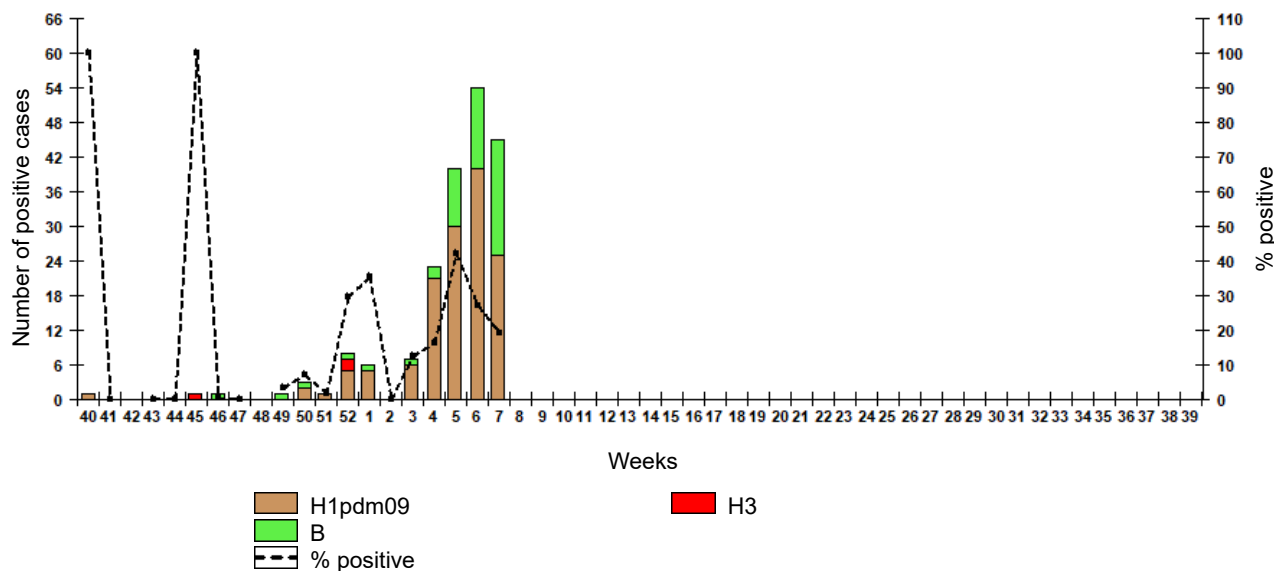


Table 1. Results of influenza and other ARVI detection by RT-PCR in Russia, week 7 of 2025

	Number of specimens / number of positive cases	% positive
<u>Influenza</u>		
Number of specimens tested for influenza	14581	-
Influenza A (not subt.)	503	3,4%
Influenza A(H1)pdm09	829	5,7%
Influenza A(H3)	8	0,05%
Influenza B	1188	8,1%
All influenza	2528	17,3%
<u>Other ARVI</u>		
Number of specimens tested for ARVI	14464	-
PIV	94	0,6%
ADV	150	1,0%
RSV	353	2,4%
RhV	692	4,8%
CoV	670	4,6%
MPV	45	0,3%
BoV	109	0,8%
All ARVI	2113	14,6%
<u>SARS-CoV-2 (COVID-19)</u>		
Number of specimens tested for SARS-CoV-2	15631	-
SARS-CoV-2	228	1,5%

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 7 of 2025

	Number of specimens / number of viruses	% isolated viruses
Number of specimens	234	-
Influenza A(H1N1)pdm09	25	10,7%
Influenza A(H3)	0	0,0%
Influenza B	20	8,5%
All influenza	45	19,2%

Sentinel influenza surveillance

Clinical samples from 22 SARI patients were investigated by rRT-PCR for influenza, among them 4 (18.2%) case of influenza (H1N1)pdm09. Among 22 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 22 SARI samples 4 (18.2%) cases positive for ARVI were detected, including: 3 cases of RhV and 1 case of MPV infection.

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

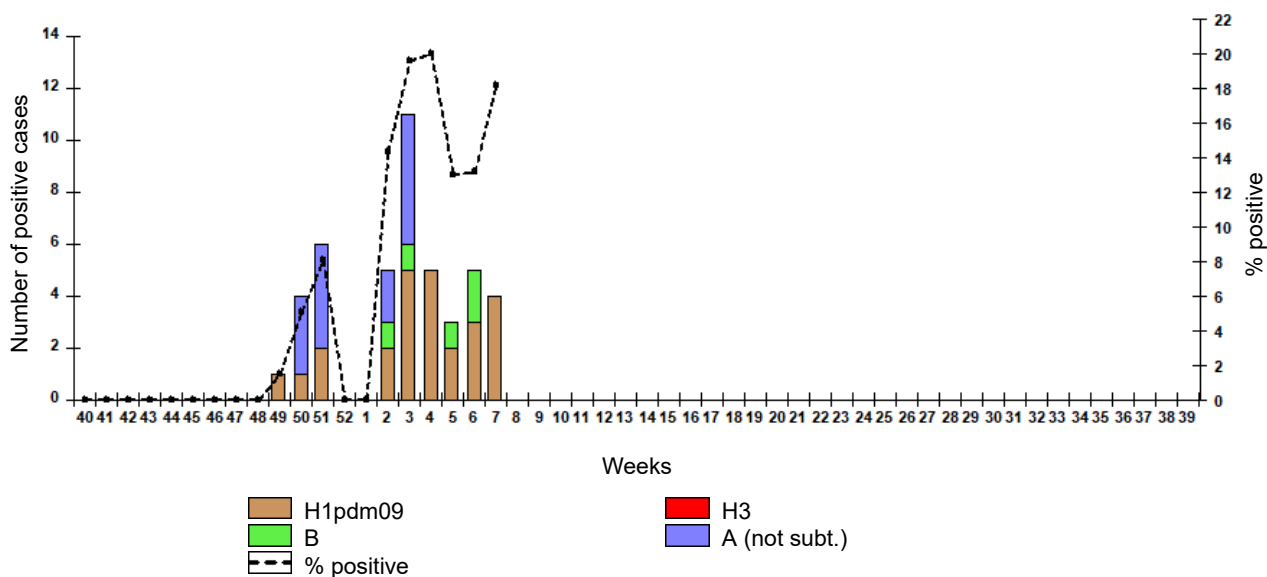


Fig. 10. Monitoring of influenza viruses detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

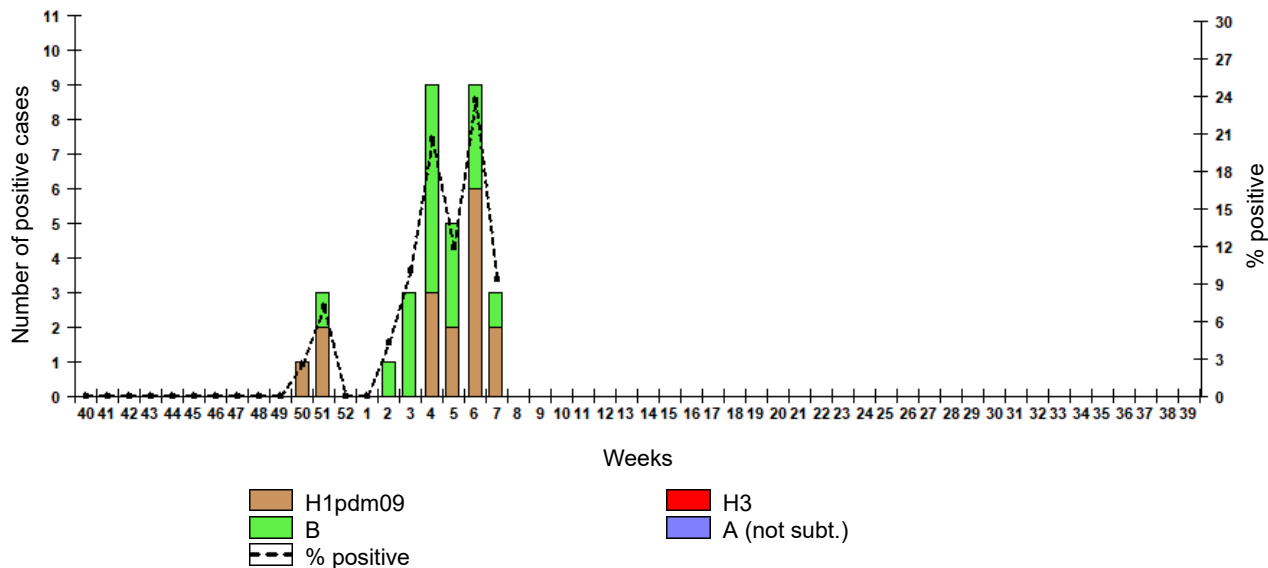


Fig. 11. Monitoring of ARVI detection by RT-PCR among SARI patients in sentinel hospitals, season 2024/25

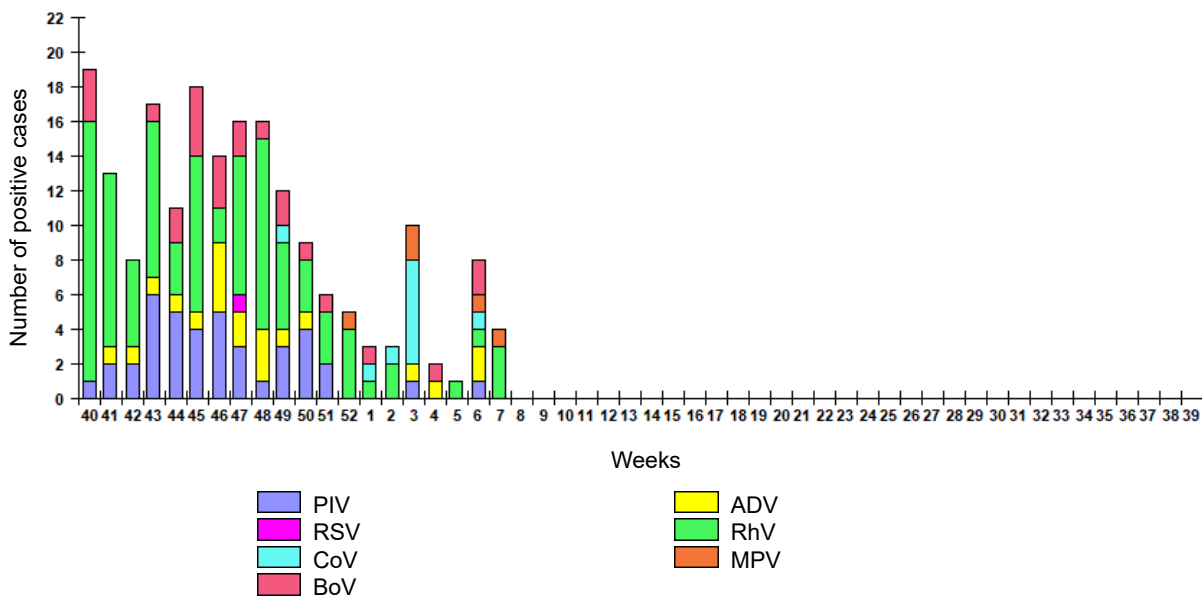


Fig. 12. Monitoring of ARVI detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

