

NATIONAL WEEKLY INFLUENZA BULLETIN OF THE RUSSIAN FEDERATION

week 17 of 2025 (21.04.25 - 27.04.25)

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 (55.8 per 10 000 of population) was lower than national baseline (89.9) by 37.9%.

Etiology of ILI & ARI. Among 8996 patients investigation 965 (10.7%) respiratory samples were positive for influenza, including 192 cases of unsubtyped influenza A in 9 cities, 154 cases of influenza A(H1N1)pdm09 in 28 cities, 42 cases of influenza A(H3N2) in 13 cities and 577 cases of influenza B in 42 cities.

22 influenza viruses were isolated on MDCK cell culture, including 3 cases of influenza A(H1N1)pdm09 in Saint-Petersburg; 1 case of influenza A(H3N2) in Saint-Petersburg and 18 cases of influenza B in Vladivostok (2), Novosibirsk (4), Omsk (4), Saint-Petersburg (8). Since the beginning of the season 882 influenza viruses, including: 410 A(H1N1)pdm09 viruses, 33 - A(H3N2) and 439 influenza B viruses.

Antigenic characterization. Since the beginning of the season 352 influenza have been antigenically characterized by the NICs, including: 218 influenza A(H1N1)pdm09, 8 influenza A(H3N2) and 126 influenza B viruses. 216 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. 7 A(H3N2) strain was similar to the vaccine strain A/Thailand/8/22, one interacted to 1:8 homologous titer with serum to the A/Thailand/8/22 vaccine strain. 124 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 359 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) was studied in NIC Saint-Petersburg, including: 204 A(H1N1)pdm09 influenza viruses, 10 A(H3N2) influenza viruses and 145 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 **15.2%** (PCR).

In sentinel surveillance system clinical samples from 28 SARI patients were investigated by rRT-PCR for influenza, among them 2 (7.1%) cases of influenza B were recognized. Among 28 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 28 SARI samples 3 (10.7%) cases positive for ARVI were detected, including: 1 cases of RSV, 1 cases of RhV and 1 case of MPV infection.

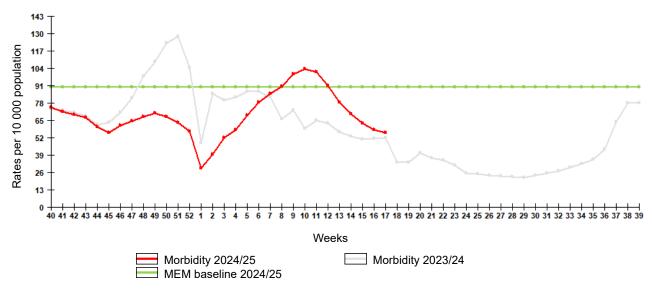
Clinical samples from 23 ILI/ARI patients were investigated by rRT-PCR for influenza, among them 3 (13.0%) cases of influenza A(H1N1)pdm09 were recognized. Among 17 ILI/ARI samples 6 (35.3%) cases positive for ARVI were detected, including: 4 cases of RhV and 2 cases of CoV infection. Among 17 ILI/ARI 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 11120 clinical samples were PCR investigated in last week. Among them coronavirus SARS-CoV-2 detected in 56 (0.5%) cases.

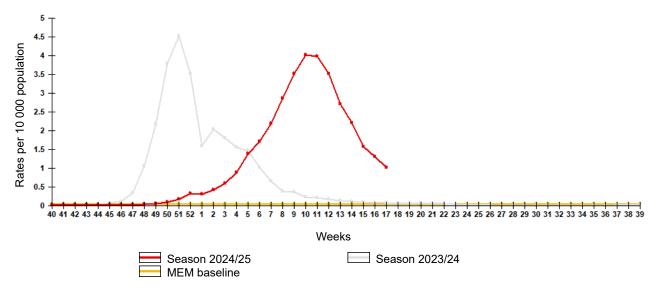
Influenza and ARI morbidity data

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



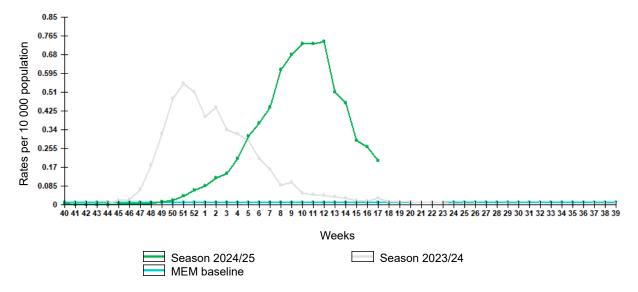
Epidemiological data showed decrease of influenza and other ARI activity in Russia in comparison with previous week. The nationwide ILI and ARI morbidity level (55.8 per 10 000 of population) was lower than national baseline (89.9) by 37.9%.

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 1.02 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 decreased comparing to previous week and amounted to 0.20 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 8996 patients investigation 965 (**10.7%**) respiratory samples were positive for influenza, including 192 cases of unsubtyped influenza A in 9 cities, 154 cases of influenza A(H1N1)pdm09 in 28 cities, 42 cases of influenza A(H3N2) in 13 cities and 577 cases of influenza B in 42 cities.

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Susceptibility to antiviral. Since the beginning of the season 2024-2025, the sensitivity of 359 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) was studied in NIC Saint-Petersburg, including: 204 A(H1N1)pdm09 influenza viruses, 10 A(H3N2) influenza viruses and 145 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 17 of 2025

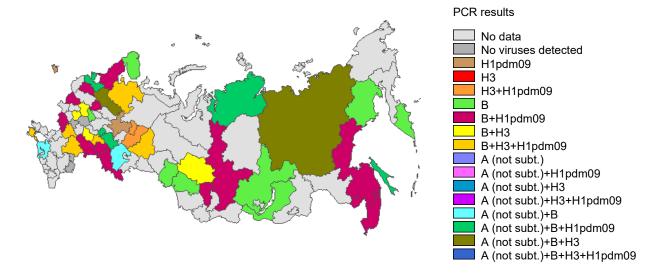


Fig. 5. Monitoring of influenza viruses detection by RT-PCR in Russia, season 2024/25

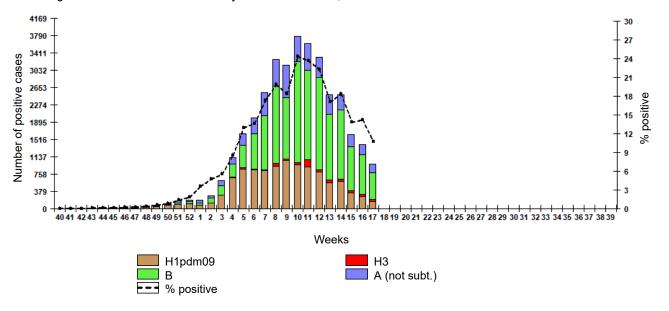
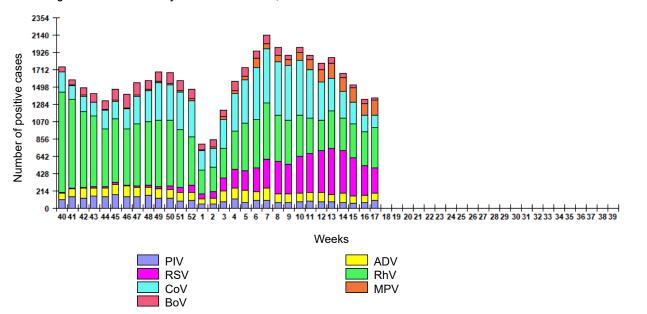


Fig. 6. Monitoring of ARVI detection by RT-PCR in Russia, season 2024/25



ARVI detections. The overall proportion of respiratory samples tested positive for other ARVI (PIV, ADV, RSV, RhV, CoV, MPV, BoV) estimated as **15.2%** of investigated samples by PCR.

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

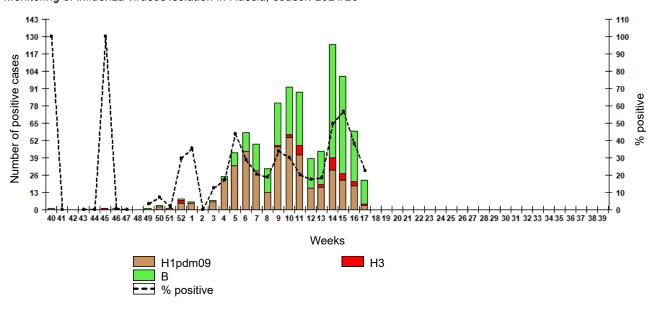


Table 1. Results of influenza and other ARVI detection by RT-PCR in Russia, week 17 of 2025

	Number of specimens / number of positive cases	% positive
	<u>Influenza</u>	
Number of specimens tested for influenza	8996	-
Influenza A (not subt.)	192	2,1%
Influenza A(H1)pdm09	154	1,7%
Influenza A(H3)	42	0,5%
Influenza B	577	6,4%
All influenza	965	10,7%
	Other ARVI	
Number of specimens tested for ARVI	8913	-
PIV	94	1,1%
ADV	91	1,0%
RSV	312	3,5%
RhV	498	5,6%
CoV	148	1,7%
MPV	184	2,1%
BoV	26	0,3%
All ARVI	1353	15,2%
SAR	S-CoV-2 (COVID-19)	•
Number of specimens tested for SARS-CoV-2	11120	-
SARS-CoV-2	56	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 17 of 2025

	Number of specimens / number of viruses	% isolated viruses	
Number of specimens	98	-	
Influenza A(H1)pdm09	3	3,1%	
Influenza A(H3)	1	1,0%	
Influenza B	18	18,4%	
All influenza	22	22,4%	

Sentinel influenza surveillance

Clinical samples from 28 SARI patients were investigated by rRT-PCR for influenza, among them 2 (7.1%) cases of influenza B were recognized. Among 28 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 28 SARI samples 3 (10.7%) cases positive for ARVI were detected, including: 1 cases of RSV, 1 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

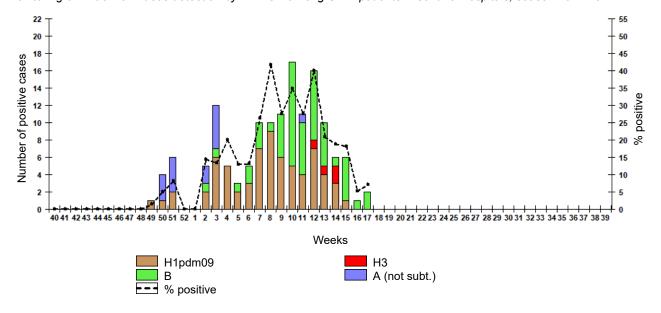


Fig. 10. Monitoring of influenza viruses detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

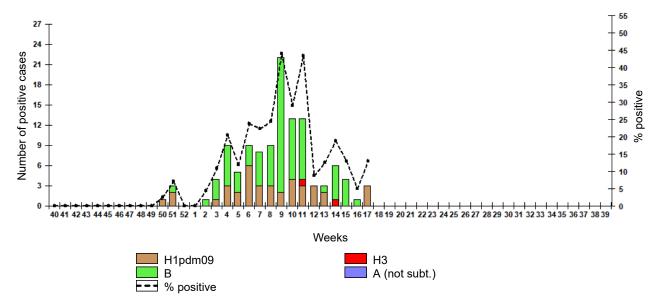


Fig. 11. Monitoring of ARVI detection by RT-PCR among SARI patients in sentinel hospitals, season 2024/25

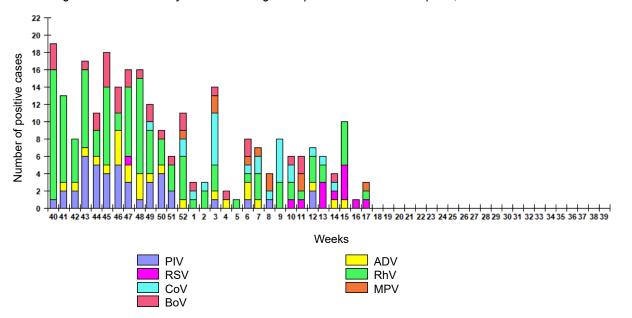


Fig. 12. Monitoring of ARVI detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

