

NATIONAL WEEKLY INFLUENZA BULLETIN OF THE RUSSIAN FEDERATION

week 19 of 2025 (05.05.25 - 11.05.25)

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 (35.6 per 10 000 of population) was lower than national baseline (89.9) by 60.4%.

Etiology of ILI & ARI. Among 6326 patients investigation 444 (**7.0%**) respiratory samples were positive for influenza, including 75 cases of unsubtyped influenza A in 11 cities, 47 cases of influenza A(H1N1)pdm09 in 17 cities, 14 cases of influenza A(H3N2) in 6 cities and 308 cases of influenza B in 34 cities.

24 influenza viruses were isolated on MDCK cell culture, including 6 cases of influenza A(H1N1)pdm09 in Saint-Petersburg and 18 cases of influenza B in Veliky Novgorod (2), Novosibirsk (1), Saint-Petersburg (15). Since the beginning of the season 920 influenza viruses, including: 421 A(H1N1)pdm09 viruses, 35 - A(H3N2) and 464 influenza B viruses.

Antigenic characterization. Since the beginning of the season 412 influenza have been antigenically characterized by the NICs, including: 221 influenza A(H1N1)pdm09, 24 influenza A(H3N2) and 167 influenza B viruses. 219 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. 23 A(H3N2) strain were 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. 127 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 446 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) were studied in NIC Saint-Petersburg, including: 254 A(H1N1)pdm09 influenza viruses, 10 A(H3N2) influenza viruses and 182 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 **19.9%** (PCR).

In sentinel surveillance system clinical samples from 23 SARI patients were investigated by rRT-PCR for influenza, among them 1 (4.3%) case of influenza B was recognized. Among 23 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 23 SARI samples 3 (13.0%) cases positive for ARVI were detected, including: 1 case of RSV and 2 cases of RhV infection.

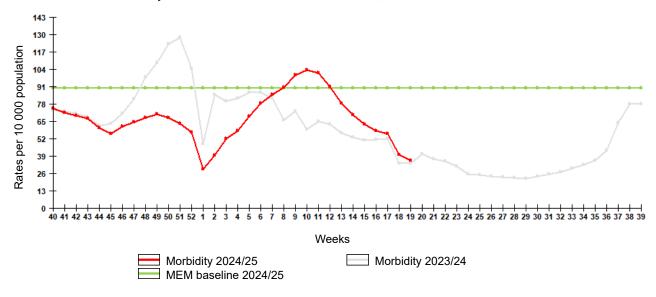
Clinical samples from 8 ILI/ARI patients were investigated by rRT-PCR for influenza, among them 1 (12.5%) case of influenza B was recognized. Among 8 ILI/ARI samples 3 (37.5%) cases of RhV infection were detected. Among 8 ILI/ARI patients no positive cases of coronavirus SARS-CoV-2 recognized.

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 7219 clinical samples were PCR investigated in last week. Among them coronavirus SARS-CoV-2 detected in 32 (0.4%) cases.

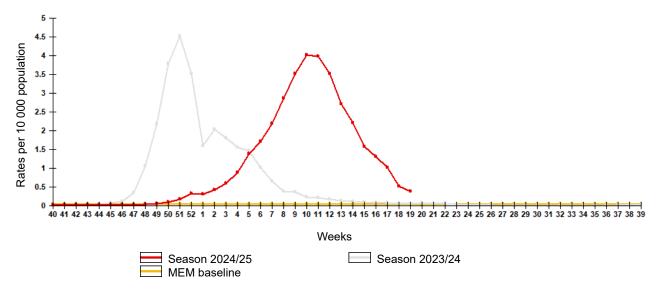
Influenza and ARI morbidity data

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



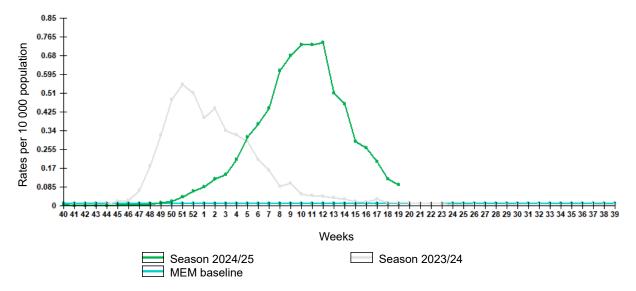
Epidemiological data showed decrease of influenza and other ARI activity in Russia in comparison with previous week. The nationwide ILI and ARI morbidity level (35.6 per 10 000 of population) was lower than national baseline (89.9) by 60.4%.

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 0.38 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 0.095 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 48 RBLs and two WHO NICs. According to these data as a result of 6326 patients investigation 444 (7.0%) respiratory samples were positive for influenza, including 75 cases of unsubtyped influenza A in 11 cities, 47 cases of influenza A(H1N1)pdm09 in 17 cities, 14 cases of influenza A(H3N2) in 6 cities and 308 cases of influenza B in 34 cities.

24 influenza viruses were isolated on MDCK cell culture, including 6 cases of influenza A(H1N1)pdm09 in Saint-Petersburg and 18 cases of influenza B in Veliky Novgorod (2), Novosibirsk (1), Saint-Petersburg (15). Since the beginning of the season 920 influenza viruses, including: 421 A(H1N1)pdm09 viruses, 35 - A(H3N2) and 464 influenza B viruses.

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Susceptibility to antiviral. Since the beginning of the season 2024-2025, the sensitivity of 446 influenza viruses to neuraminidase inhibitors (oseltamivir, zanamivir) were studied in NIC Saint-Petersburg, including: 254 A(H1N1)pdm09 influenza viruses, 10 A(H3N2) influenza viruses and 182 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 19 of 2025

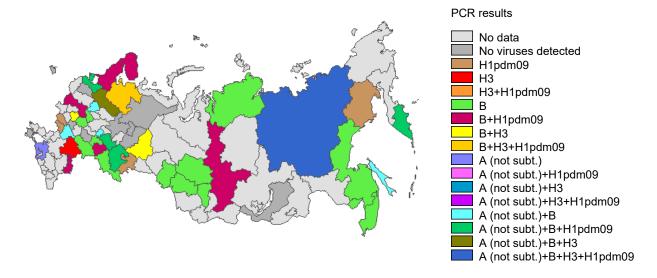


Fig. 5. Monitoring of influenza viruses detection by RT-PCR in Russia, season 2024/25

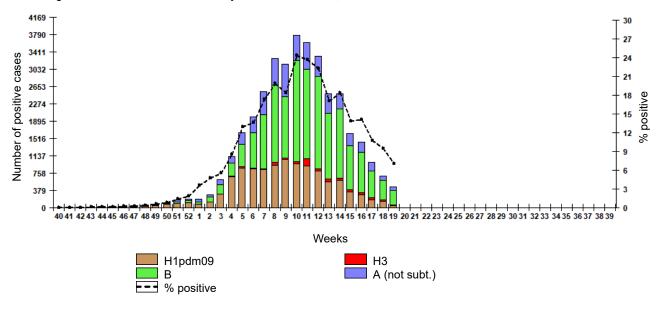
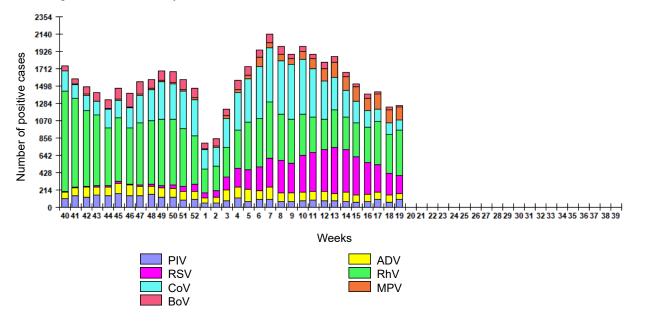


Fig. 6. Monitoring of ARVI detection by RT-PCR in Russia, season 2024/25



ARVI detections. The overall proportion of respiratory samples tested positive for other ARVI (PIV, ADV, RSV, RhV, CoV, MPV, BoV) estimated as **19.9%** of investigated samples by PCR.

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

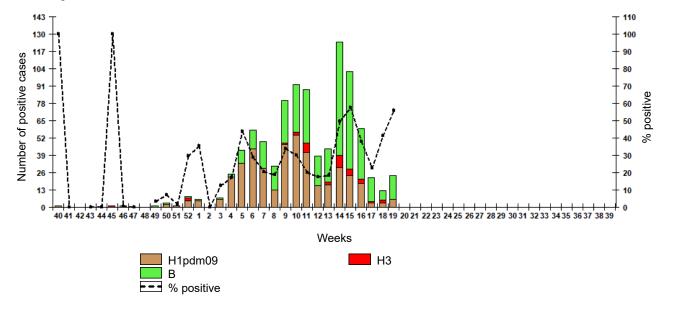


Table 1. Results of influenza and other ARVI detection by RT-PCR in Russia, week 19 of 2025

	Number of specimens / number of positive cases	% positive
	<u>Influenza</u>	
Number of specimens tested for influenza	6326	-
Influenza A (not subt.)	75	1,2%
Influenza A(H1)pdm09	47	0,7%
Influenza A(H3)	14	0,2%
Influenza B	308	4,9%
All influenza	444	7,0%
	Other ARVI	
Number of specimens tested for ARVI	6296	-
PIV	94	1,5%
ADV	73	1,2%
RSV	222	3,5%
RhV	561	8,9%
CoV	121	1,9%
MPV	162	2,6%
BoV	19	0,3%
All ARVI	1252	19,9%
SAR	S-CoV-2 (COVID-19)	
Number of specimens tested for SARS-CoV-2	7219	-
SARS-CoV-2	32	0,4%

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 19 of 2025

	Number of specimens / number of viruses	% isolated viruses
Number of specimens	43	-
Influenza A(H1)pdm09	6	14,0%
Influenza A(H3)	0	0,0%
Influenza B	18	41,9%
All influenza	24	55,8%

Sentinel influenza surveillance

Clinical samples from 23 SARI patients were investigated by rRT-PCR for influenza, among them 1 (4.3%) case of influenza B was recognized. Among 23 SARI patients no positive cases of coronavirus SARS-CoV-2 recognized. Among 23 SARI samples 3 (13.0%) cases positive for ARVI were detected, including: 1 case of RSV and 2 cases of RhV infection.

Among 8 ILI/ARI patients were investigated by rRT-PCR for influenza, among them 1 (12.5%) case of influenza B was recognized. Among 8 ILI/ARI samples 3 (37.5%) cases of RhV infection were detected. Among 8 ILI/ARI patients no positive cases of coronavirus SARS-CoV-2 recognized.

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

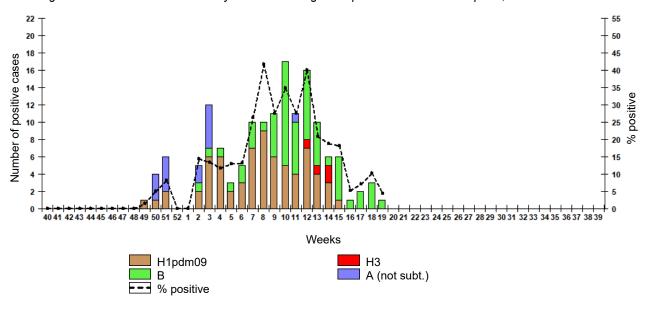


Fig. 10. Monitoring of influenza viruses detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

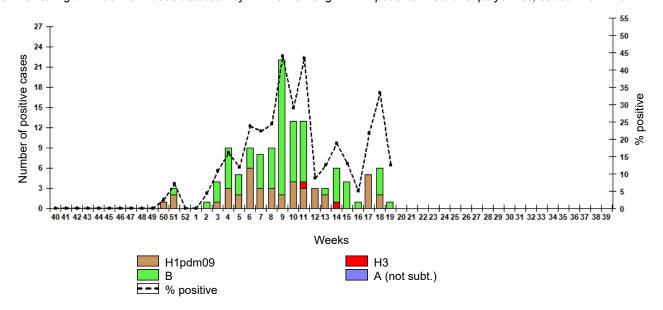


Fig. 11. Monitoring of ARVI detection by RT-PCR among SARI patients in sentinel hospitals, season 2024/25

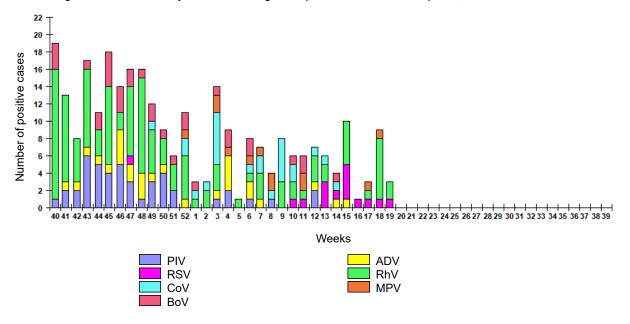


Fig. 12. Monitoring of ARVI detection by RT-PCR among ILI/ARI patients in sentinel polyclinics, season 2024/25

