

Situation update #2 - 4 February 2024

Highlights

- Overall, the influenza activity was slightly lower in the first two weeks of January as compared to the last few weeks of 2023.
- MoPH together with WHO maintained an effective influenza surveillance system for timely detection of potential novel influenza and monitor the circulating seasonal influenza subtypes.
- Eleven out of the 13 sentinel influenza sites are actively reporting for suspected Severe Acute Respiratory Infections (SARI) and Influenza-like Illness (ILI) cases during this reporting period (refer Map 1).
- A total of 255 suspected SARI and ILI patients were enrolled across all sentinel sites, and specimens were collected for confirmation. The results showed that 86 specimens were positive for seasonal influenza and 3 specimens were positive for SARS-CoV-2.
- There were 77 children aged 0 to 5 years out of the 255 enrolled patients. Of these children, none tested positive for RSV.

Epidemiological and virological surveillance

- Surveillance for ILI and SARI has been enhanced in the country with the aim of improving epidemiologic and virological monitoring of severe influenza-associated diseases.
- According to historical influenza data, the influenza season in Lebanon typically starts from early October and runs to May of the following year. Often, the trend of suspected and confirmed seasonal influenza cases peaks in the months of December and January, and then declines in February.
- In epidemiological weeks 01 and 02, influenza activity continues to decrease based on the available sentinel surveillance data, when compared to previous weeks. The influenza activity and positivity rate peaked in week 51 of 2023 and then a decreasing trend was observed in the last few weeks.
- During this reporting period, a total of 255 patients were enrolled across SARI and ILI sentinel surveillance sites, and specimens were collected. All specimens were sent to the NIC for testing of influenza and SARS-CoV-2, while specimens among children were tested for RSV as well. The outcome of the testing shows that 86 specimens were positive for different types of seasonal influenza viruses and 3 specimens were positive for SARS-CoV-2.
- Of all enrolled ILI and SARI cases, there were 77 children aged 0 to 5 years. Of these children, none of them tested positive for RSV.
- As we entered 2024, positivity rate continued to decrease, reaching 39% in the first week and further dropping to 30% in the second week (Figure 1). Of those positive specimens, seasonal influenza A (H1) remains the dominant circulating type of influenza in Lebanon during this reporting period (*Figure 2*). Of all positive influenza specimens:
 - o 76% tested seasonal influenza A (H1)
 - o 16% tested seasonal influenza A (H3)
 - o 5% tested seasonal influenza B (Victoria)

Epidemiological and virological surveillance continued

- o 2% tested seasonal influenza B (Unsubtyped)
- o 1% co-infection: Influenza A (H1) and Influenza B (Victoria). The corresponding specimen will be forwarded to collab orating center for further testing.
- During this reporting period, one case of co-circulation of influenza A(H1) and SARS-CoV-2 was reported.
- During this reporting period, the majority of positive influenza cases were observed in the 0 to 5 age group (30%), 16 to 50 years age group (27%), followed by the 6 to 15 years age group (21%) (*Figure 3*).

Figure 1: Number of tested specimens by influenza virus subtypes/lineages and percentage of specimens testing positive for influenza viruses in Lebanon from SARI/ILI sites (week 40, 2023 - week 52, 2023)

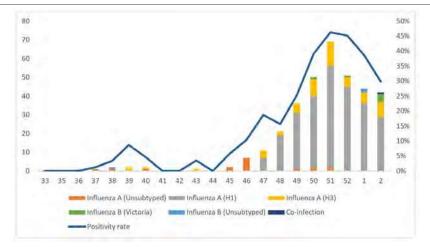


Figure 2: Proportion of influenza types and subtypes/lineages, Lebanon, (weeks 1-2, 2024) from SARI/ILI sites

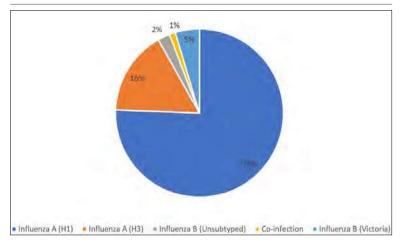
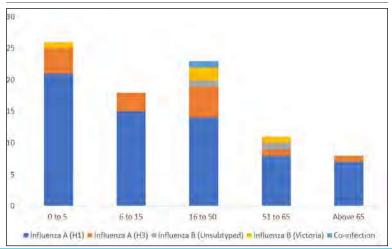


Figure 3: Proportion of influenza types and subtypes/lineages by age group, Lebanon, (weeks 1-2, 2024) from SARI/ILI sites



Map 1: Distribution of SARI and ILI sentinel sites per district across the country



History & current status of Sentinel Influenza Surveillance System in Lebanon

- The SARI surveillance system, initiated in 2015 and operational until early 2020, faced disruption due to the onset of the COVID-19 pandemic. However, SARI surveillance has been resumed in early 2022.
- The ILI surveillance was implemented in Lebanon during the pandemic in November 2020, integrating SARS-CoV-2 within the surveillance system.
- Across the country, there are 13 sentinel sites: 9 ILI and 4 SARI sentinel sites (*Map 1*). Currently, 11 of these sites are active.
- As per the national guideline, sentinel sites are collecting specimens and establishing links to the National Influenza Center (NIC) that is supported by WHO to maintain a high virological surveillance capacity and adequate stock of testing kits.
- Ahead of the 2023/24 influenza season, the Ministry of Public Health (MoPH) in Lebanon received 10,000 doses of seasonal influenza vaccine from the Partnership for Influenza Vaccine Introduction (PIVI) under the Task Force of Global Health (TFGH).
- Lebanon continued to benefit from the Pandemic Influenza Preparedness (PIP) Framework and it is one of the PIP priority countries that receives continuous support from WHO. Lebanon is also receiving financial and technical support from US-CDC to strengthen the influenza surveillance system in the country.

Commitment of MoPH and WHO support

- With the support of WHO, the MoPH organized a series of refresher training sessions for healthcare professionals at designated sentinel sites ahead of the influenza season. These training sessions focused on raising awareness among participants about case enrollment process as well as the procedures for data and specimen collection, following standardized national guidelines.
- WHO and MoPH are thoroughly assessing and reviewing the functionality of designated sentinel sites, the quality of the specimens being collected, the capacities for confirmatory testing, as well as the adequacy and timeliness of the data being reported.
- MoPH consistently advocates for seasonal influenza vaccination within high-risk populations through ongoing health education campaigns.
- WHO is committed to providing ongoing technical and operational support to the MoPH in strengthening influenza surveillance system. This support includes conducting refresher trainings, facilitating specimen transportation, and contributing to the establishment and sustenance of testing capacities at the NIC.

Action points

In recognition of the persistent and dynamic nature of the influenza threat to public health, MoPH and WHO are collaboratively engaged to ensure:

- Continuous support and improvement of the sentinel influenza surveillance system throughout the influenza season, with a particular focus on closely monitoring the co-circulation of influenza and COVID-19.
- Close monitoring of hospital and ICU admission rates for patients suffering severe acute respiratory infections and ensuring adequate hospital supplies.
- Ensuring availability and accessibility of seasonal influenza vaccine among high-risk groups in early days of the season.
- Ensuring integration of testing samples for influenza, SARS-CoV-2, RSV, and other respiratory viruses into existing influenza surveillance systems.
- Continuous advocacy for non-pharmaceutical public health measures to limit the transmission of influenza and other respiratory diseases.
- MoPH and WHO should closely monitor the trends of influenza activity in recent weeks and implement the required preventive measures.

More detailed information on influenza and EMRO guidance can be found at LINK

Acknowledgment The MoPH and WHO acknowledge the financial and technical assistance given by US-CDC, PIP and PIVI in strengthening the surveillance of influenza and other respiratory diseases in Lebanon.

For more information please contact

- Dr. Nada Ghosn, Head of Epidemiological Surveillance Unit (ESUMOH), <u>esu2mohleb@gmail.com</u>
- Dr. Zeina Mohsen, Director at National Influenza Center (RHUH), <u>zeinamohsen@outlook.com</u>
- Mr. Moubadda Assi, National Professional Officer, PIP/EPI, <u>assimo@who.int</u>

Published by the World Health Organization (WHO), Lebanon Country Office, Beirut, Lebanon