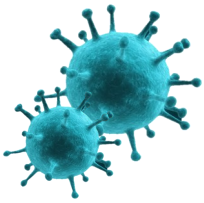
REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

Influenza Surveillance
Bulletin 25 January 2020



Sentinel Severe Acute Respiratory Infection Surveillance

Sentinel Surveillance relies on selection of limited number of hospital sites from both public and private sectors. In each site, one focal person is designated to follow up on case detection, case investigation, specimen collection and data management.

The target case is acute respiratory infection with fever or history of fever (>=38°C), cough, ill within 10 days, and requiring hospitalization. For each detected case, specimens are taken from cases using nasopharyngeal swabs and are sent to the National Influenza Center at Rafic Hariri University Hospital, where PCR testing is performed.

In Lebanon, 8 hospitals are included in sentinel surveillance.

For the season 2018/2019, 867 cases were reported, 74% were tested from which 30% were Influenza positive. Circulating viruses were mainly: AH3N2 (50%) and AH1N1pdm (40%).

For the season 2019/2020 (up to 2019W03), 279 cases were reported, 39% were tested from which 30% were Influenza positive. Circulating viruses were mainly: B Victoria (25 cases), AH1N1pdm (8 cases).

Table 1: Cumulative results from 2018W30 to 2020W02

8 sentinel sites	Season 2018/2019 (2018W30-2019W29)		Season 2019/2020 (2019W30-2020W29)	
	N	%	N	%
SARI cases	867		279	
Tested cases	641	74%	109	39%
Influenza cases	192	30%	33	30%
* **Influenza A**	183	*95%*	8	*24%*
Influenza A(H1N1)pdm	76	*40%*	8	*24%*
Influenza A(H3N2)	96	*50%*	0	*0%*
Influenza A mixte	11	*6%*	0	*0%*
Influenza A(other)	0	*0%*	0	*0%*
* **Influenza B**	9	5%	25	76%
Victoria	7	*1%*	25	*76%*
Yamagata	2	*4%*	0	*0%*

Fig 1: Distribution of all SARI patients and % of positive influenza test by week of admission, 2018W30-2020W03

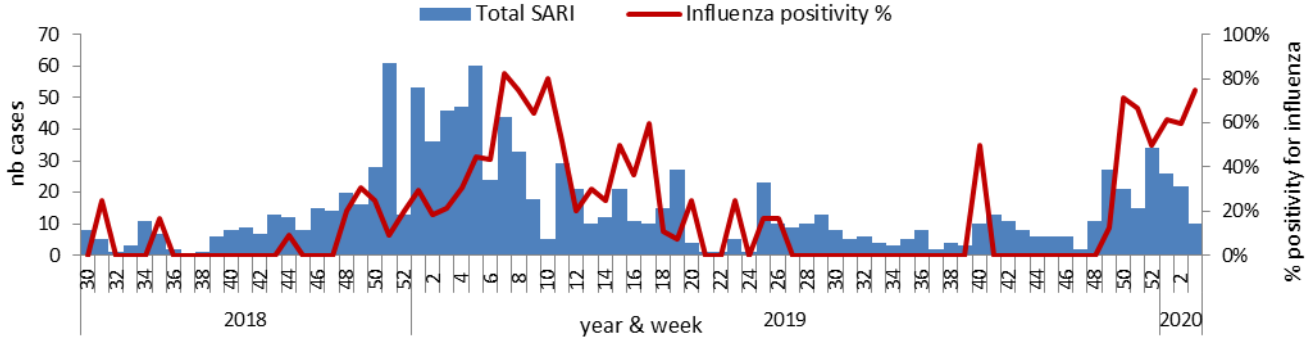
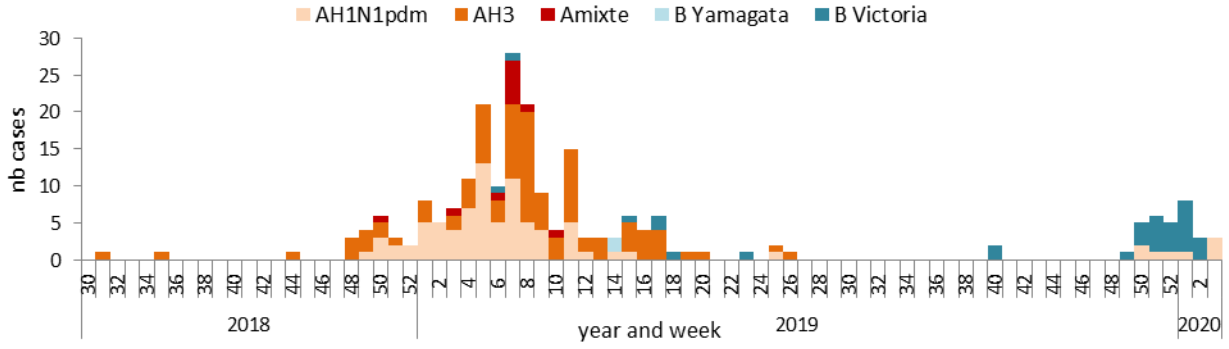


Fig 2: Distribution of Influenza positive patients by week of admission, 2018W30-2020W03



Acknowledgements (Alphabetical order): Ain wa Zein hospital, American University of Beirut Medical Center, Elias Hraoui/Zahleh gov hospital, Hammoud hospital, Khoury Hospital (Zahleh), Notre Dame de Secours hospital, Rafic Hariri University hospital, Saida gov hospital, with support of the World Health Organization.

Severity Influenza Indicators

Summary

The Influenza season 2019/2020, at the week 3 of year 2020, is of high transmissibility, very high impact and low seriousness.

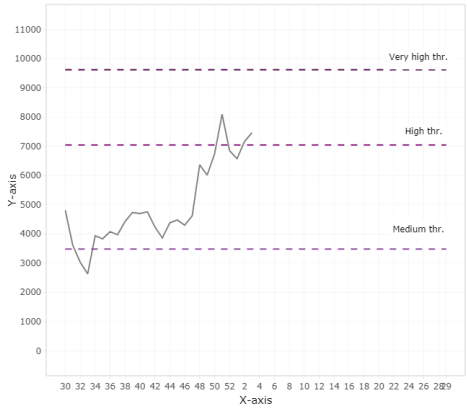
Methodology

PISA refers to Pandemic Influenza Severity Assessment. It aims to assess Influenza severity for both seasonal and pandemic influenza. It is a tool using evidence-based method to compare current Influenza activity to previous Influenza seasons. Three groups of indicators are used: transmissibility (human-to-human transmission), seriousness (severe and mortality), and impact (on society, school or healthcare system). Various sources of surveillance systems are used using the method Moving Epidemic

Transmissibility

Source: Health centers (average=670)

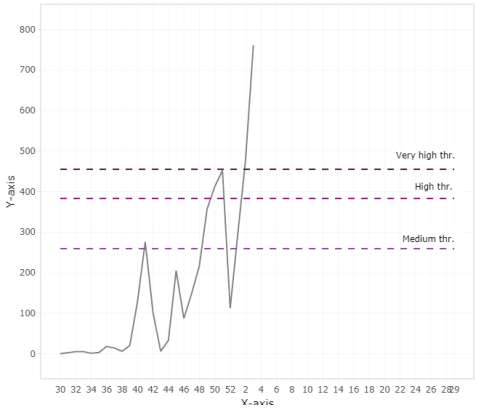
Fig 3: Counts of reported cases with Acute Respiratory Infection, by week, Lebanon, starting 2019W30



Impact

Source: Schools (average=731)

Fig 4: Counts of received medical reports for acute respiratory infection, by week, Lebanon, starting 2019W30



Seriousness

Source: Hospital (average=124)

Fig 5: Counts of deaths with acute respiratory infection among causes of deaths, by week, Lebanon, starting 2019W30

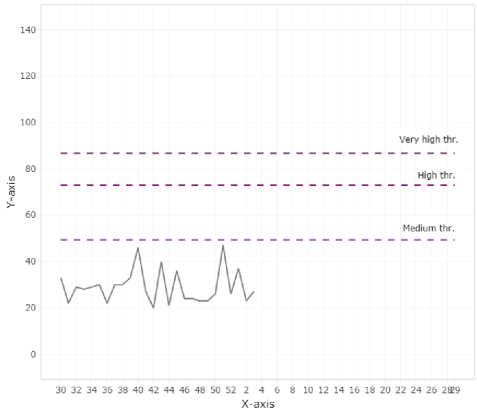
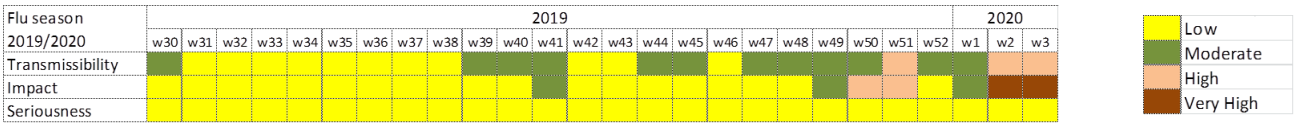


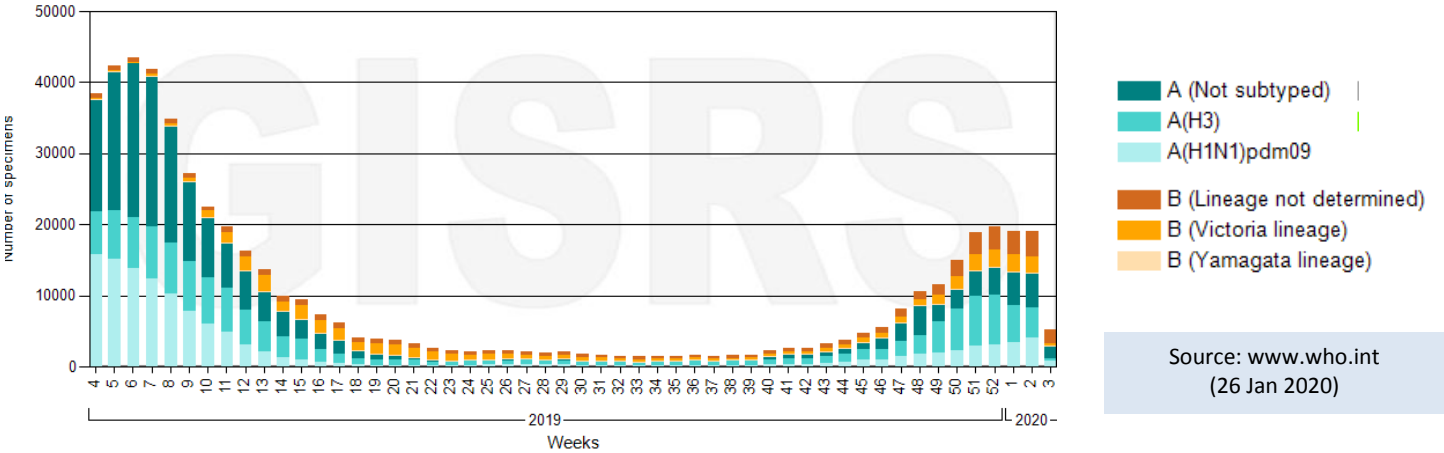
Fig 6: Influenza severity indicator by week, Lebanon, 2019W30-2020W03



Seasonsal Influenza in northern hemisphere

In the northern hemisphere the circulating seasonal influenza for 2019/2020 include: A, AH1N1pdm, AH3, B, and B Victoria.

Fig 7: Distribution of Influenza positive patients by week, northern hemisphere, 2019W04-2020W03



Source: www.who.int
(26 Jan 2020)