

Current major event

Influenza: Burden of disease estimation in Saudi Arabia

On July 2018, the Ministry of Health of Saudi Arabia conducted a three-day workshop on the estimation of the influenza burden using Severe Acute Respiratory Infections (SARI) surveillance data. During the workshop, 12 participants from different regions of the country were trained by influenza experts from Infection Hazard Management unit (IHM) of WHO Regional office for Eastern Mediterranean Region (EMRO).

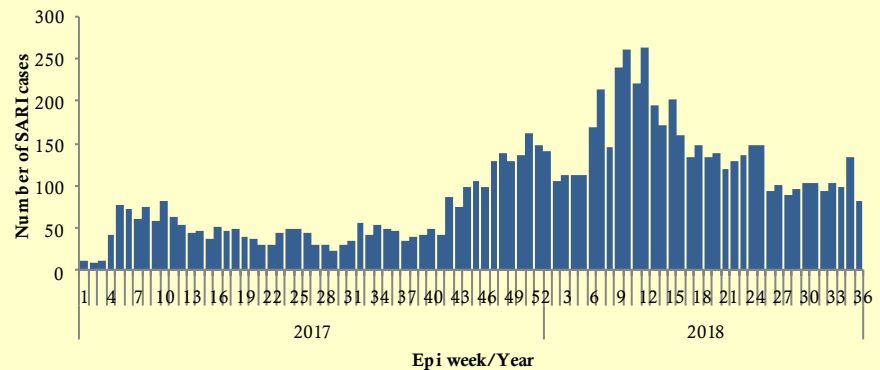
Editorial note

Acute respiratory tract infections (ARTIs) are a major cause of morbidity and mortality globally; every year millions of children under the age of 5 years die from acute respiratory infections including influenza.

Saudi Arabia faces risks from ARTIs owing to its hosting one of the biggest and perpetual religious mass gatherings in the world- the hajj. This event poses an increased risk of transmission of respiratory infections amongst the pilgrims who travel to Saudi Arabia every year for hajj and Umrah. The overcrowding conditions in which the pilgrims perform their religious rituals are conducive for transmission of respiratory infections. Furthermore, the emergence and continued transmission of MERS-CoV and its associated high mortality rates (35–40%) imply that acute respiratory diseases having an epidemic potentials represent a substantial public health risk.

The ministry of health of Saudi Arabia continues to make concerted efforts to strengthen its national capacities for monitoring and early detection of epidemic prone and emerging respiratory pathogens including influenza and other respiratory viruses. In 2014, the country implemented a special surveillance system for MERS-CoV using an electronic platform. In 2017, the ministry of health of Saudi Arabia established sentinel surveillance system for Severe Acute Respiratory Infections (SARI) and Influenza Like Illnesses (ILI). Since the establishment of influenza surveillance system, a total of 8,329 SARI enrolled cases including 1,251 positive cases were reported from 51 sentinel sites (*please see the graph*). Those sentinel sites are distributed throughout the 13 regions of the country (*please see the table*).

SARI and ILI cases from Saudi Arabia reported to EMFLU, 2017-2018*



* up to week 36/2018

Sentinel sites established for SARI in Saudi Arabia

Region	Total
Al Bahah	2
Al Hadud As Shamaliyah	3
Al Jawf	5
Al Madinah Al Munawwarah	2
Al-Qassim	3
Ar Riyadh	5
As Sharqiyah	7
Asir	4
Hayil	2
Jazan	3
Makkah Al Mukarramah	10
Najran	3
Tabuk	2
Total	51

In 2018, the ministry of health of Saudi Arabia initiated a national influenza disease burden estimation by undertaking a disease burden estimation study with support from WHO. The national influenza disease burden estimation plays an important role in setting policies for prevention and control of influenza as such studies identify the burden associated with influenza-associated illness, seasonality and also the high-risk age groups.

In the recent past, the importance of estimating the burden of influenza has been emphasized. From 2014 to date, seven countries in the WHO Eastern Mediterranean Region have completed this exercise. Others such as Saudi Arabia has started the study while some others are in the planning stages for the study. An understanding of the national and regional burden of influenza-associated illness can help the countries to identify the risk, seasonality, if any, and the groups in general population who are at high risk of contracting the infection. Such information helps in defining strategies for prevention and control through implementing appropriate public health interventions.

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **Diphtheria** in Yemen.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza: 2006-2017

Egypt (A/H5N1)	[359 (122), 34%]
Egypt (A/H9N2)	[4 (0)]

Ebola virus disease (EVD): 2018

Democratic Republic of Congo (DRC)	[131 (90), 68.7%]
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Rift Valley fever : 2018

Kenya	[95 (11), 11.6%]
Uganda	[23 (8), 34.8%]

Cholera: 2017-2018

Somalia	[6 245 (42), 0.7%]
Yemen	[1 125 189 (2 326), 0.2%]
Tanzania	[3 616 (68), 1.9%]

Diphtheria: 2018

Yemen	[1 904 (98), 5.1%]
Bangladesh	[8 140 (44), 0.5%]

MERS: 2012-2018

Saudi Arabia	[1 871 (724), 38.6%]
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Yellow Fever: 2017-2018

Brazil	[1 266 (415), 32.7%]
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