

Current major event

Measles outbreak in Lebanon

Since January 2019, the Ministry of Public Health (MoPH), Republic of Lebanon is reporting a continuous surge of measles cases. Between January 1 and 6 October, a total of 1,071 suspected measles cases were reported from all governorates. Majority of cases were reported from North (576) and Beqaa (334) governorates. The most affected age groups are children <1 year to 9 years of age (898), followed by adults >25 years of age (69). Moreover, 519 cases identified were unvaccinated (*See table*).

Editorial note

Measles remains one of the most contagious viral diseases with a significant public health impact, particularly amongst children. Most measles-related deaths are caused by severe complications including otitis media, blindness, encephalitis, diarrhea and pneumonia.

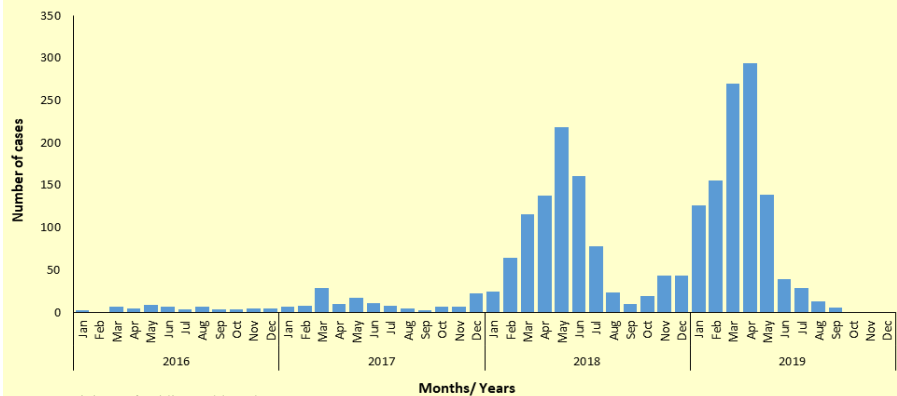
In Lebanon, measles outbreaks continue to occur in periodic cycles of 4-5 years. Between 2003 and 2007, annual epidemic waves were observed with recurring outbreaks every 2 years in North Lebanon.

Lebanon has had persistent suboptimal population immunity over the past 10 years as documented through the WHO-UNICEF coverage estimations. The highest vaccination coverage of MCV2 recorded during the last 19 years was in 2009, with 75% national coverage. The vaccination coverage has however dropped to 63% for the last five years. Its important to note that Lebanon is hosting large number of Syrian refugees which already overwhelmed the existing public health services.

Lebanon has immunity gaps at district level: out of 26 districts, only five (19%) districts reached $\geq 95\%$ coverage for MCV1 in 2018. There is also potential under-reporting of sub-clinical measles cases as 71% of cases are reported from hospitals. In 2019 data noted that 79% cases occurred among Lebanese and 14% among Syrians living in Lebanon.

Since 2016, a continuous surge in the reported cases can be seen (*See graph*). The annual distribution of the cases has a similar pattern; starting its rise at the end of a year and getting to peak in the months of March to May of the following year. In 2018, a total of 936 cases were reported with the most affected governorates being Beqaa (566), Mount Lebanon (206) and North (108). The pattern of the reported cases during 2019 has slightly

Measles cases reported from Lebanon, 2016 to 05 October 2019



Source: Ministry of Public Health, Lebanon

Distribution of measles cases by age groups and vaccination status-2019

Age group	Cases	Vaccinated	Unvaccinated	Unspecified
< 1 year	173	16	114	43
1-4 years	476	78	4	146
5-9 years	249	67	99	83
10-14 years	29	8	8	13
15-24 years	19	4	6	9
25+ years	96	5	26	63
Unknown	29	4	12	13
Total	1071	182	519	370

changed with regards to governorates, with a majority of the cases being reported from North (576) and Beqaa (334) governorates. The number of cases are also increased significantly (1071) and more case are still be expected to be reported before the end of 2019.

The Lebanon Ministry of Public Health in coordination with WHO and partners are implementing response activities to overcome the situation including measles vaccination campaigns targeting children. MoPH is continuing its great efforts to control the outbreak, whilst strengthening national capacities to prevent future outbreaks.

Measles is almost entirely preventable through two doses of a safe and effective vaccine. In the current situation, its imperative to implement nation-wide supplementary immunization campaigns to address immunity gaps and interrupt transmission, in addition to increasing social mobilization activities to enhance acceptance and participation of the local communities in the campaigns.

Update on outbreaks

in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **cholera** in Sudan ; **Multi drug-resistant typhoid fever** in Pakistan.

Current public health events of concern

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

Avian influenza: 2006-2017

Egypt (A/H5N1) [359 (122), 33.98%]

Egypt (A/H9N2) [4 (0)]

Ebola virus disease (EVD): 2018-2019

Democratic Republic of Congo [3 188 (2 129), 66.78%]
(DRC)

Cholera: 2017-2019

Somalia [8 753 (46) , 0.53%]

Yemen [2 014 110 (3 588), 0.18%]

Diphtheria: 2018-2019

Yemen [3 906 (218), 5.58%]

Bangladesh [8 779 (45), 0.51%]

MERS: 2012-2019

Saudi Arabia [2 073 (772), 37.24%]

Multidrug-resistant typhoid fever: 2016-2019

Pakistan [10 825 (0)]