

Current major event

Chikungunya in Pakistan

In the reporting week ending on 30th July 2017 (Epidemiological Week 30), 32 new cases of Chikungunya were reported in Pakistan. Since the Chikungunya outbreak started in December 2016, the country has reported a total of 6,946 cases of the disease.

Editorial note

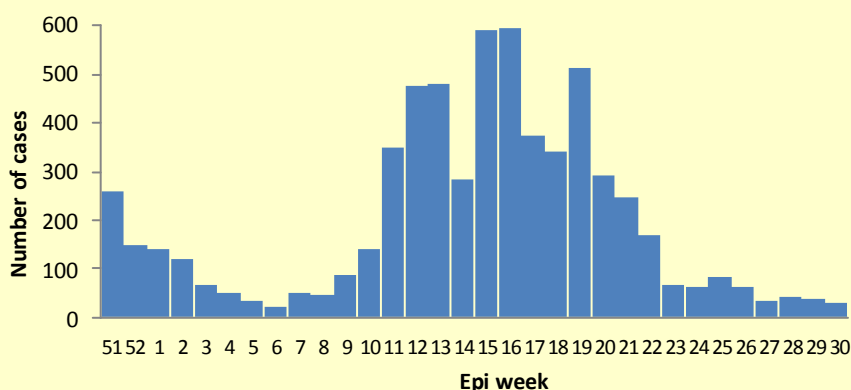
Five of the new cases were reported from the newly affected district of Haripur in Khyber Pukhtunkhwa (KPK) province; 17 of the new cases were reported in Karachi and other parts of Sindh province; and 10 of the cases were reported in Baluchistan. These three provinces have reported most of the cases reported since the outbreak began.

Initially, the outbreak was concentrated in the coastal areas of Sindh, with Karachi as the epi-center, but has since spread to the hinterland of PKK and Baluchistan. Other provinces that have reported at least one case of Chikungunya since the beginning of the outbreak include Azad Kaashmir, Punjab, and FATA. While the peak of disease incidence was observed between the months of April and June 2017, there has been an overall decreasing trend. Nonetheless, pockets of high viral transmission remain, as recently shown in Haripur and other parts of Karachi such as Orangi 20 and Site 02.

Chikungunya is a mosquito-borne viral disease. It can be easily mistaken for other arboviral diseases such as dengue or Zika, since they share many clinical symptoms and are transmitted through a common vector – the *Aedes* mosquito. Chikungunya is self-limiting and has a low mortality rate. However, fatal infections and chronic rheumatic disorders do occur. Therefore, detection and diagnosis of Chikungunya is challenging but critical at the early stages.

No case of Chikungunya had been detected in Pakistan prior to the ongoing outbreak. Even though the vector for the disease is known to be present in country, other factors such as climate

Number of Chikungunya cases in Pakistan, from week 51, 2016 to week 30, 2017



Number of Chikungunya cases in Pakistan between December 2016 and July 2017

Province	No. of Cases
Sindh	4,089
Baluchistan	2,746
KPK	106
Punjab	3
Azad Kashmir	1
FATA	1

change and growing travel and trade across international borders might have contributed to the emergence of this disease in the country as well. Furthermore, the presence of an immunologically naïve local population could contribute to the high susceptibility and prolong disease transmission rates recorded thus far.

Finally, environmental factors that are known to contribute to the occurrence and spread of Chikungunya include warm climates, poor water and sanitation conditions (including open sewers that favor breeding of the mosquito vector), and densely populated urban settings that increase contacts between vectors and humans. Therefore, key outbreak containment measures include vector control to interrupt transmission, enhanced disease and vector surveillance for early detection of cases, vector density monitoring, community awareness and engagement campaigns, and effective case management.

Update on outbreaks in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; **Cholera** in Somalia; **Cholera** in Yemen; **Chikungunya** in Pakistan.

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) [3 (0)]

Chikungunya: 2016-2017

Pakistan [6,946(0)]

MERS-CoV: 2012-2017

Saudi Arabia [1,676 (659), 39.3%]

Cholera: 2016-2017

Somalia [71,663 (1,098), 1.5%]
Yemen [478,894 (1,957), 0.4%]

Lassa Fever: 2017

Nigeria [681(112), 16.4%]

Avian Influenza A (H7N9): 2013-2017

China [1,557 (605), 38.9%]

Dengue fever: 2017

Côte d'Ivoire [736(2), 0.3%]

Wild poliovirus: 2014-2017

Pakistan [383 (0)]
Afghanistan [66 (0)]

Zika Virus Infection: 2015-2017

84 countries and territories have reported transmission so far.