Disease outbreaks in Eastern Mediterranean Region (EMR), January to December 2018

A total of 10 outbreaks were reported in the countries of WHO Eastern Mediterranean Region (EMR) during January to December 2018. Some of these outbreaks have reported in the previous year and not been contained.

Editorial note

The Eastern Mediterranean Region (EMR) of WHO has become the epicenter of major complex emergencies, and infectious diseases continue to remain major causes of high morbidity and mortality among the vulnerable populations. In 2018, countries of the EMR Region experienced several major outbreaks from emerging and re-emerging diseases, with some of these turning into explosive outbreaks. The infectious diseases that were reported in the Eastern Mediterranean Region in 2018 include cholera, Crimean-Congo haemorrhagic fever (CCHF), chikungunya, chicken pox (Varicella), dengue fever, diphtheria, extensively drug-resistant typhoid fever, Middle East respiratory syndrome (MERS), travel-associated legionnaire’s disease (TALD) and West Nile fever (See map).

Cholera outbreaks in Yemen has been one of the worst cholera epidemics in recent history. This has resulted in more than 1.3 million cases and over 2,500 deaths by the end of year. In Somalia, cases continued to be reported with 6,705 cases, including 46 deaths since the outbreak started at the end of year 2017. Vector borne diseases have also re-emerged as major public health threats in the Region as well. Sudan has reported an upsurge of cases of chikungunya since July 2018. As of 30 November, a total of 210,110 cases were reported. Afghanistan reported increased number of CCHF cases since May in 2018, with the peak of the outbreak observed during August yielding a total of 482 suspected cases with 59 deaths during the year. Iraq also reported 8 sporadic cases of CCHF including 6 during 2018.

Pakistan has reported six major disease outbreaks this year: chickenpox, extensively drug resistant (XDR) typhoid fever, dengue fever, poliomyelitis, chikungunya and CCHF. The increase of XDR typhoid fever cases has been observed since November 2017 and by December 2018, a total of 5,372 cases were reported. (See table)

Middle East respiratory syndrome coronavirus (MERS-CoV) has continued to circulate in the EMR since 2012. Till December 2018, a total of 1,899 cases were laboratory confirmed with 732 related deaths in Saudi Arabia. In addition United Arab Emirates (UAE) and Oman has also reported the cases of MERS.

In addition to protracted emergencies in the Region, it is plausible that other environmental factors affected the survival, reproduction, and distribution of high threat pathogens, as well as their vectors and hosts. These factors coupled with human population movements and rapid urbanization, specially in poor urban slums, have contributed to increased frequency and severity of outbreaks in the Region in recent time.

The WHO Eastern Mediterranean Regional Office has recently embarked on rolling out a strategic framework for prevention and control of emerging diseases. It is expected that this framework will contribute to early detection, prevention and response to these outbreaks.

Extensively Drug-Resistant (XDR) Typhoid Fever cases reported in Sindh province, Pakistan.

<table>
<thead>
<tr>
<th>Years</th>
<th>Karachi</th>
<th>Hyderabad</th>
<th>Other districts</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>2017</td>
<td>175</td>
<td>488</td>
<td>67</td>
<td>730</td>
</tr>
<tr>
<td>2018</td>
<td>3,334</td>
<td>944</td>
<td>153</td>
<td>6,431</td>
</tr>
<tr>
<td>Grand total</td>
<td>3,709</td>
<td>1,443</td>
<td>220</td>
<td>5,372</td>
</tr>
</tbody>
</table>

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; cholera in Somalia; cholera in Yemen; West Nile fever in Tunisia.

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) [585 (356), 60.85%]

- **Yellow fever : 2018**
  - Nigeria [3,902 (73), 1.87%]

- **Cholera: 2017-2018**
  - Somalia [6,705 (46), 0.68%]
  - Yemen [1,371,328 (2,791), 0.20%]
  - Tanzania [4,669 (84), 1.79%]

- **Diphtheria: 2018**
  - Yemen [2,810 (161), 5.72%]
  - Bangladesh [8,339 (44), 0.52%]

- **MERS: 2012-2018**
  - Saudi Arabia [1,899 (732), 38.5%]

- **West Nile fever: 2018**
  - Tunisia [377 (2), 0.53%]