Introduction

In this issue, a general overview of outbreaks that occurred within the WHO African Region in January 2012 is provided as well as a summary of ongoing outbreaks as reported by Member States.

Overview of reported outbreaks in WHO African Region

Based on data received from the Early Warning System through the Event Management System, 11 public health events were reported to the Regional Office covering the period 01 January - 02 February 2012. The distribution of these events by country is given in Figure 1 and 2 below.

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Event reported in 2012

Fig. 1. Distribution of diseases/conditions in the WHO African Region (01 January — 02 February 2012)

Fig. 2. Geographic distribution of diseases/conditions in the WHO African Region (01 January — 02 February 2012)
Cholera

In January 2012, a total number of 3,469 cases and 42 deaths were reported from 12 countries in the region resulting in a case fatality rate of 1.2%. DR Congo accounted for 71% (2,462 / 3,469) of the total number of cases and 59% (25 / 42) of the total number of deaths recorded (Fig. 3 and 4).

Fig. 3. Geographic distribution of cholera cases in the WHO African Region (January 2012)

Fig. 4. Distribution of cholera cases and deaths by country in the WHO African Region (January 2012)
Meningitis

In January 2012, a total of 951 cases and 94 deaths have been reported from 11 countries. The overall CFR was 8.9%. Seven districts from 4 countries experienced meningitis outbreak during the period under review.

<table>
<thead>
<tr>
<th>Country</th>
<th>Cases</th>
<th>Deaths</th>
<th>CFR%</th>
<th>Districts experienced epidemics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>71</td>
<td>10</td>
<td>14.1%</td>
<td>1</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>354</td>
<td>49</td>
<td>13.8%</td>
<td>1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>45</td>
<td>3</td>
<td>6.7%</td>
<td>0</td>
</tr>
<tr>
<td>Chad</td>
<td>179</td>
<td>9</td>
<td>5.0%</td>
<td>4</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>64</td>
<td>11</td>
<td>17.2%</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>28</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Ghana</td>
<td>62</td>
<td>3</td>
<td>4.8%</td>
<td>1</td>
</tr>
<tr>
<td>Mali</td>
<td>32</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Niger</td>
<td>32</td>
<td>3</td>
<td>9.4%</td>
<td>0</td>
</tr>
<tr>
<td>Nigeria</td>
<td>43</td>
<td>1</td>
<td>2.3%</td>
<td>0</td>
</tr>
<tr>
<td>Togo</td>
<td>41</td>
<td>5</td>
<td>12.2%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>951</td>
<td>94</td>
<td>8.9%</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 1. Distribution of meningitis cases and deaths in the WHO African Region (January 2012)

The most prevailing pathogens identified in districts that have crossed the epidemic threshold were Neisseria meningitis and Streptococcus pneumonia. Out of the 51 confirmed Neisseria meningitis, the most frequent serogroup (germ) was Nm W135 (71%, n=36) followed by Nm A (25%, n=13). NmA cases in Chad have been registered in districts that have not yet introduced MenAfriVac.

In response to these outbreaks, WHO in collaboration with partners supported the Ministries of Health in enhancing surveillance, planning and conducting reactive vaccination campaigns and ensuring that appropriate messages targeting the population were disseminated.
**Ongoing outbreaks**

1. **Lassa Fever in Nigeria**

The Federal Ministry of Health has notified the WHO Country Office of an outbreak of Lassa fever in 9 States of the country. Between weeks 01 and 05, 2012 a total of 176 cases have been reported including 18 deaths (CFR 10.2%). 81% (144/176) of the cases and 61% (11/18) of the deaths were reported from Ido state. All cases were hospitalized. A total of 44 cases had laboratory confirmation (PCR) at the Institute of Lassa Fever Research and Control (ILFRC) at Irrua, Edo State of Nigeria and the Lagos University Teaching Hospital Virology laboratory. The clinical presentations of the cases include sudden onset of high grade fever persisting despite anti-malarial and anti-typhoid treatments, body pains, vomiting, and mucosal bleeding.

![Fig. 6. Geographic distribution of Lassa Fever in Nigeria, 2012](image)

![Fig. 7. Distribution of cases by state](image)

Rapid response teams comprising Ministry of Health, Local Government health departments and WHO officials are investigating the outbreaks. Case management, contact tracing, active surveillance, clinician sensitization and community health education on preventive measures are ongoing.
2. Typhoid in Zimbabwe

Since 10 October 2011 Harare City has been experiencing an outbreak of Typhoid Fever. As of 5 February 2012, a total of 2,697 cases have been reported of which 60 were laboratory confirmed. From 1 January 2012 to 9 February 2012, a total 1,605 cases were reported. 285 cases have been reported during the reporting epidemiological week 5 (week ending at February 5, 2012). The most affected suburbs were Kuwadzana, Dzivarasekwa and Marlborough. The distribution of cumulative cases by place of residence is shown in Figure 8.

The following preventive and control measures are being implemented by the Ministry of Health with support from WHO and other partners: coordination meeting with thematic committees and partners, social mobilization activities, investigation and contact tracing, water quality monitoring and case management.
3. Meningitis in Cote d’Ivoire

The Ministry of Health in Cote d’Ivoire has reported an outbreak of meningococcal meningitis in Central and Northern parts of the country.

Between 8th and 30th January 2012, a total of 37 cases including 10 deaths were reported in Tengréla and 27 cases with 3 deaths from Kouto districts. Other districts reporting suspected cases are Bouaké northeast (8 cases, 5 deaths) and Kani (2 cases, 2 deaths).

The Institut Pasteur in Abidjan confirmed the presence of *Neisseria meningitidis* W135 from samples collected in Tengréla and Kouto districts; while *streptococcus pneumoniae* was isolated in samples from Bouaké northeast. More laboratory samples are being tested from districts reporting suspected cases for characterisation.

An ICG request submitted by national authorities for 300,000 doses of Meningitis Vaccine W135 (including devices) has been approved and mass vaccination campaigns in the 2 epidemic districts i.e. Tengréla (total population - 93,583) and Kouto (total population – 121,897) are planned for February 20, 2012.

WHO Country Office has been working with the health authorities in strengthening epidemiological surveillance; distribution of supplies, refresher training of health workers on case management and other technical support to respond to the outbreak.
4. Cholera in Angola

Angola is experiencing an outbreak of cholera which started in the second week of December. Between 9 January and 12 February, a total of 411 cases including 28 deaths have been reported (CFR =7%) from six provinces; Luanda Norte being the most affected province with over 76% of the cases (n=314 cases) and 82% of deaths (n=23 deaths). Other affected provinces are Zaire (59 cases, 2 deaths), Malange (21 cases, 0 deaths), Luanda Sul (9 cases, 3 deaths), Bié (6 cases, 2 deaths), and Luanda (2 cases, 0 deaths). The outbreak is mainly occurring in the districts bordering DR Congo.

In line with the Memorandum of Understanding on cross border public health issues signed between the Ministers of Health of Angola, Republic of Congo, DR Congo, Namibia and Zambia, preventive and control measures are being implemented by national authorities from Angola and DR Congo. These include rapid exchange of information, management of cases, increased public health awareness and on-site training.

Given that most of the deaths occur in the community, more efforts are needed to reduce the CFR which is currently very high (above 1%).

Fig. 11. Geographic distribution of Cholera in Angola

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5. Cholera in Malawi

Malawi continues to report cases of cholera since 25 October 2011. As of February 10, 2012, a total of 187 cases and 2 deaths were reported from the following four districts: Chikwawa, Nsanje, Blantyre and Thyolo. The CFR is 1.1%. Of the 187 cases, 49% were from Chikwawa, 45% from Nsanje, 5% from Thyolo and 1% from Blantyre. Preventive and control measures are ongoing.

Fig. 12. Geographic distribution of Anthrax in Zimbabwe, November, 2011

WHO in collaboration with other partners continues to provide technical support to the Ministry of Health in the affected states in the areas of active surveillance, investigation of new cases, providing diagnostic support, training and re-training of clinicians, and coordination of other partners.
6. Cholera in Guinea

The Ministry of Health in Guinea has reported to WHO an outbreak of cholera in Khounyiand Youlayé Maférinya in the Prefecture of Forécariah. The affected village has an estimated population of 3,000 inhabitants and is located on the border with Sierra Leone. The occupants are fishermen from Sierra Leone and Guinea.

The onset of the index case was February 2, 2012. Between 2\textsuperscript{nd} and 14\textsuperscript{th} February 2012, a cumulative number of 89 cases including 10 deaths (CFR=10.2\%) have been reported. Two of the 5 stool samples tested from the National Institute of Public Health confirmed \textit{Vibrio cholerae O1} serotype Ogawa.

![Image of Guinea map with affected districts highlighted]

**Fig. 13. Geographic distribution of Cholera in Guinea**

Actions being undertaken to control the outbreak include enhanced surveillance through active case search; case management in cholera treatment centre; disinfection of households of cases; community awareness; distribution of chlorine for household treatment of drinking water; and communal cleaning of the affected village through community participation. The main challenges for controlling the outbreak are very low latrine coverage, insufficient potable water and difficulties in accessing the affected areas (canoes are used to access the fishing villages).

WHO convened an emergency health cluster coordination meeting to brief the partners and jointly plan and harmonise the response activities. WHO will continue to provide support to Guinea in responding to the cholera outbreak.
7. Nodding disease in Uganda

The Uganda Ministry of Health reported a mysterious disease condition, referred to as “Nodding Syndrome”, being reported in the Northern Uganda districts of Kitgum, Pader and Lamwo. The condition was first noticed in Kitgum district in 2003, and described as a progressive disease characterized by nodding of the head, mental retardation and stunted growth. The investigations revealed that the disease was a new type of epilepsy that was reported to have affected at least 3,000 children in the districts of Kitgum, Lamwo and Pader in Northern Uganda. As of February 14, it is estimated that a total to 3,094 suspected cases with 170 deaths have occurred.

The disease is mainly affecting children aged 5 to 15 years, with 54% of the affected children being males. Most of the affected children (93%) live in areas where Onchocerciasis (River Blindness) is prevalent. The disease presentation suggests that this is possibly a new type of epilepsy that is characterized by head nodding episodes that consist of repetitive dropping forward of the head. There is deterioration of brain function in some of the victims, and malnutrition with growth retardation; many children have dropped out of school.

The Ministry of Health with support from WHO, CDC and other partners conducted epidemiological investigations in 2009 and 2010. These investigations enabled exclusion of possible etiological agents such as infectious, toxic, or nutritional factors; however the cause of the illness remains unclear. The association between Onchocerciasis and Nodding Syndrome requires further investigation. A modest deficiency of vitamin B6 and deficiencies of other micronutrients (Vitamin A, Selenium and Zinc) was found in most cases. Investigations to date reveal that Nodding Syndrome is not transmissible person to person. The patients can be effectively treated with anti-epileptic drugs; however, further investigations into the cause of the disease and pathogenesis are planned. The MOH and partners developed a response plan to Nodding Syndrome which includes: case management to prevent deterioration of the cases, bi-annual mass treatment of Onchocerciasis, strengthening surveillance, and multivitamin and multi-nutrient supplementation. A request for additional technical and financial support have been submitted by the MOH to WHO/AFRO.
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