Key highlights

- No new cases of cVDPV2 were reported this week. The total number of cVDPV2 cases remains 63. All confirmed cases to date have had onset of paralysis before 25 August, 2017
- IPV activities aimed at reaching children aged 2-23 months are ongoing. IPV will be offered alongside bOPV as part of the Sub-National Immunization Days (SNIDs) in 6 (six) districts of Damascus and 200 hotels in the city, 3 (three) areas of Rural Damascus, 2 (two) districts of Homs and 1 (one) district of Aleppo with large IDP populations from Deir Ez-Zor
- Almost 3,000 children under 5 (five) have received all routine immunization antigens in newly accessible areas of Deir Ez-Zor city between 7-10 November in opportunistic vaccination activities
- A joint mission between the World Health Organization and the local Health Authority to visit newly accessible areas of Aleppo was conducted this week. The mission also met with the Aleppo University Hospital and Aleppo Pediatric Association to advocate for AFP surveillance and to support ongoing immunization activities to reach IDPs from infected areas
- The Advisory Group on mOPV2 vaccine provision met this week to review the revised risk assessment for Syria cVDPV2 outbreak and discuss contingency plans for outbreak response. The group endorsed, in principle, the proposal to preposition approximately 1 million doses mOPV2 in Damascus (pending receipt of formal vaccine request from the Ministry of Health) to enable rapid response in the event of any ongoing outbreak response activities

Summary

New cVDPV2 cases this week: 0
Total number of cVDPV2 cases: 63
Outbreak grade: 3

Infected governorates and districts

<table>
<thead>
<tr>
<th>Governorate</th>
<th>District</th>
<th>Number of cVDPV2 cases to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deir Ez-Zor</td>
<td>Mayadeen</td>
<td>51</td>
</tr>
<tr>
<td>Deir Ez-Zor</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Boukamal</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Raqqa</td>
<td>Tell Abyad</td>
<td>1</td>
</tr>
<tr>
<td>Thawra</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Homs</td>
<td>Tadmour</td>
<td>1</td>
</tr>
</tbody>
</table>

Index case

Location: Mayadeen district, Deir Ez-Zor governorate
Onset of paralysis: 3 March 2017, age: 22 months, vaccination status: 2 OPV doses/zero IPV

Most recent case (by date of onset)

Location: Mayadeen, Deir Ez-Zor governorate
Onset of paralysis: 25 August, age: 9 months, vaccination status: 1 OPV/zero IPV

Characteristics of the cVDPV2 cases

- Median age: 15 months
- Gender ratio male-female: 4:7
- Vaccination status of the cases:
  - IPV: 11 cases (17%) received IPV
  - OPV: 40% zero dose, 43% have received 1-2 doses

Distribution of non-polio AFP (NPAFP) and circulating vaccine-derived poliovirus type-2 (cVDPV2), Deir Ez-Zor, Raqqa and Homs governorates, 2017

<table>
<thead>
<tr>
<th>Gov.</th>
<th>Deir Ez-Zor</th>
<th>Raqqa</th>
<th>Homs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mth</td>
<td>NPAFP</td>
<td>cVDPV2</td>
<td>NPAFP</td>
</tr>
<tr>
<td>Jan</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Feb</td>
<td>11</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Mar</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Apr</td>
<td>7</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>May</td>
<td>13</td>
<td>16</td>
<td>2</td>
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<tr>
<td>Jun</td>
<td>8</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Jul</td>
<td>9</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Aug</td>
<td>24</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Sep</td>
<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Oct</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>60</td>
<td>20</td>
</tr>
</tbody>
</table>
Immunization response

- Since the beginning of the cVDPV2 outbreak in Syria, two outbreak response rounds utilizing mOPV2 have been completed in both Deir Ez-Zor (22 – 27 July & 22 – 28 August) and Raqqa (12 – 18 August & 7 – 13 October) governorates.

- In addition to focused mOPV2 campaigns, a single dose of IPV has been offered to children 2-23 months in all districts of Deir Ez-Zor and Raqqa, except Tell Abyad district, Raqqa. Additional IPV immunization activities to boost the immunity of children aged between 2-23 months have been carried out in high risk areas of Aleppo, Idlib and Hama governorates.

Additional risk mitigation strategies

- IPV will be offered to children aged 2-23 months in 6 (six) districts of Damascus and 200 hotels in the city, 3 (three) areas of Rural Damascus, 2 (two) district of Homs and 1 (one) district of Aleppo in the upcoming Sub-National Immunization Days (SNIDs) targeting children under five with bOPV. The campaign is planned to begin on November 19.

- Communication plans for the areas included in the bOPV/IPV SNIDs are being developed and strengthened to ensure high awareness among caregivers of the upcoming campaigns.

- Almost 3,000 children under 5 (five) have received all routine immunization antigens in newly accessible areas of Deir Ez-Zor city between 7-10 November and 9,491 children aged 2-23 months were vaccinated with IPV in 34 high risk villages in Deir Ez-Zor governorate during the first week of October in opportunistic vaccination activities.

- Routine Immunization services are being restored and opened in some districts of Raqqa and Aleppo governorates. 14 health facilities offering routine immunization have been re-activated in Raqqa and Thawra districts, Raqqa and 79 centers were activated in Aleppo governorate out of total 237.

- An 80 person training on the assessment of cold chain will be conducted in November in Damascus. Assessment of cold chain of all health facilities in all accessible governorates is planned for early December.

- A joint mission between the World Health Organization and the local Health Authority to visit newly accessible areas of Aleppo was conducted this week. The mission also met with the Aleppo University Hospital and Aleppo Pediatric Association to advocate for enhanced AFP surveillance and to support ongoing immunization activities to reach IDPs from the outbreak zone.

Regional response

- Outbreak response teams continue to contingency plan for potential breakthrough cases in known outbreak zones or spread of virus to new areas of the country. The plans aim to ensure that the programme is able to respond as quickly as possible if any further transmission of poliovirus is detected in Syria.

Coordination and surge support

- WHO and UNICEF continue to deploy additional human resources (surge support) to both hubs (Gaziantep and Damascus) since the start of the outbreak. WHO-UNICEF joint Emergency Operations Centres (EOCs) in both hubs in collaboration with partners continue to monitor the outbreak situation, exchange information, and assist in the response.

Surveillance summary

- In 2017, Syria and all governorates but four, are meeting both key indicators for AFP surveillance: 3* or more non-polio AFP cases per 100,000 children below 15 years of age, and 80 percent or above AFP cases with adequate specimens. Deir Ez-Zor (76%), Raqqa (74%), Rural Damascus (74%) and Swieda (63%) are missing the 80% target for stool adequacy. (*NB: In an outbreak setting, the target is 3 or more non-polio AFP cases per 100,000 children below 15 years)

- Work continues to support the upgrade of laboratory facilities, expansion of environmental surveillance and training of laboratory and field staff. WHO has provided the equipment and renovations are ongoing to enable the room for receiving specimens to be ready in the next week. Training for Lab staff will be conducted in early December to enable full implementation of new processes before the end of 2017.
• Orientation sessions to inform local NGO partners and private sector of the ongoing outbreak response efforts continues in Dara, Qunietra, Sweida governorates and in areas of Rural Damascus and Damascus. As part of these efforts, the Aleppo Pediatric Association is involved in media activities to promote upcoming vaccination activities and the importance of immunization

• Supplementary surveillance strategies, including taking stool samples from healthy children, continues to further strengthen surveillance sensitivity across the country. Since the start of the outbreak 228 healthy children samples have been processed by the lab. Of the total number of healthy children sampled 177 have returned negative and 31 are pending in the lab

• The total number of AFP cases detected in Deir Ez-Zor governorate since the beginning of 2017 is 149 (111 from Mayadeen, 11 from Deir Ez-Zor, and 27 from Boukamal districts). Raqqa governorate has reported 21 AFP cases (9 from Raqqa, 10 from Tell Abyad, and 2 from Thawra districts). Homs governorate has reported 42 AFP cases (21 from Homs city, 18 from Rastan, 1 from Tadmour and 2 from Talkalakh districts)

• 14 polio-virus type-2 isolates are currently pending genomic sequencing (1 from Menibij, Aleppo district, Aleppo governorate; 4 from Boukamal district, 9 from Mayadeen district, Deir Ez-Zor governorate)
EPI Curve of AFP cases by classification, 2017 (up to 14 November 2017)

Syria

Deir Ez-Zor

Raqqa

Homs

Data as of 14 November 2017
Relevant links

- Global Polio Eradication Initiative (GPEI) website, updated weekly
- Responding to an outbreak of VDPV video
- What is vaccine-derived polio?
- GPEI factsheet—VDPV

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