Summary
New cVDPV2 cases this week: 0
Total number of cVDPV2 cases: 74
Outbreak grade: 3

Infected governorates and districts

<table>
<thead>
<tr>
<th>Governorate</th>
<th>District</th>
<th>Number of cVDPV2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deir Ez-Zor</td>
<td>Mayadeen</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Deir Ez-Zor</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Boukamal</td>
<td>12</td>
</tr>
<tr>
<td>Raqqa</td>
<td>Tell Abyad</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thawra</td>
<td>1</td>
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<tr>
<td>Homs</td>
<td>Tadmour</td>
<td>1</td>
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</tbody>
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Index case
Location: Mayadeen district, Deir Ez-Zor governorate
Onset of paralysis: 3 March 2017, age: 22 months, vaccination status: 2 OPV/zero IPV

Most recent case (by date of onset)
Location: Boukamal, Deir Ez-Zor governorate
Onset of paralysis: 21 September 2017, age: 5 months, vaccination status: zero OPV/zero IPV

 Characteristics of the cVDPV2 cases
Median age: 15 months; gender: approximately two thirds of cases are female; vaccination status of the cases: IPV: 11 cases (15%) received IPV / OPV: 41% zero dose, 42% 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 2017-2018

<table>
<thead>
<tr>
<th>Gov.</th>
<th>Deir Ez-Zor</th>
<th>Raqqa</th>
<th>Homs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>cVDPV2</td>
<td>NPAFP</td>
<td>cVDPV2</td>
</tr>
<tr>
<td>Jan’17</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Feb’17</td>
<td>11</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Mar’17</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Apr’17</td>
<td>7</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>May’17</td>
<td>13</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Jun’17</td>
<td>8</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Jul’17</td>
<td>8</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Aug’17</td>
<td>12</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>Sep’17</td>
<td>2</td>
<td>5</td>
<td>3</td>
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<tr>
<td>Oct’17</td>
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<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Nov’17</td>
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<tr>
<td>Dec’17</td>
<td>9</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Jan’18</td>
<td>18</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Feb’18</td>
<td>12</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Mar’18</td>
<td>10</td>
<td>9</td>
<td>5</td>
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<tr>
<td>Apr’18</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>May’18</td>
<td>14</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Jun’18</td>
<td>8</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Jul’18</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>71</td>
<td>53</td>
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Key highlights
- No new cases of cVDPV2 have been reported in 2018. The last reported case of circulating vaccine-derived poliovirus (cVDPV2) is from Boukamal district, Deir Ez-Zor governorate with a date of onset of paralysis of 21 September 2017. The total number of cVDPV2 cases recorded during the outbreak remains 74.
- Efforts to enhance surveillance for polioviruses continue. A new environmental surveillance site has been established in Mayadeen district of Deir Ez-Zor governorate, the epicenter of the outbreak. This takes the total number of environmental surveillance sites in Syria to 11.
- Efforts to strengthen the Expanded Programme on Immunization to maintain high population immunity are ongoing. 86 routine immunization fixed centers in Idleb, Hama and Aleppo governorates have been restored.
- In addition, the polio programme is supporting an ongoing measles immunization campaign. More than 1.2 million children aged 7 months to six years are reported vaccinated in six governorates.
- A workshop detailing interpersonal communications (IPC) was held for 20 surveillance officers from 13 governorates to encourage the use of social data in the documentation and reporting of acute flaccid paralysis (AFP) cases.

Immunization
- Since March 2018 areas in six governorates (Rural Damascus, Damascus, Homs, Hama, Dara and Qunietra) have become accessible for routine vaccination, except 16 localities in Hama.
In the first six months of 2018

- In these newly accessible areas some children have received vaccination for the first time: almost 600 children under five years were vaccinated in northern rural Hama, around 6,000 children under five years were reached in north Rural Homs, in Qunitera 1,300 children under five have been reached and in Rural Damascus more than 33,000 children under five years were reported vaccinated with all antigens.

- In Dara, a total of 780 children under five years were checked in internally displaced persons (IDP) camps and only 20 children were found partially vaccinated and received the missed doses.

- Three mass immunization rounds utilizing mOPV2 were implemented in Deir Ez-Zor, Hasakah and Raqqa governorates and Tadmour district of Homs governorate between July 2017 and January 2018. A total of 1,428,052 children were reported vaccinated.

- Additional targeted immunization activities with IPV were also carried out to reach children aged 2-23 months in infected and high risk areas of Deir Ez-Zor, Raqqa, Aleppo, Idlib, Hama and Homs governorates and areas of Damascus, Rural Damascus and Hasakah. A total of 342,561 children 2-23 months were reported vaccinated with IPV in three rounds.

**Communication for development (C4D)**

- UNICEF C4D worked with community leaders, mothers and religious influencers to ensure communities had access to information about the dates and locations for the fixed site measles campaign, while promoting messages around the importance of vaccination. Physicians and key health workers were sensitized through 57 visits across seven governorates.

- Fifty focus group discussions (FGDs) have been held across the country to better understand current attitudes to polio and routine immunization, in response to recent OBRA recommendations.

**Cold Chain**

- Cold Chain equipment including refrigerated vehicles for transportation of vaccines inside Syria, Solar Direct Drive (SDD) refrigeration systems to 20 Primary Health Care (PHCs) centres and five cold rooms will be provided by end of 2018 through GAVI support.

**Surveillance**

- In 2018, Syria and all governorates but one 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. Raqqa (77%) *(NB: In an outbreak setting, the target is 3 or more non-polio AFP cases per 100,000 children below 15 years).

- The proportion of children aged 6-35 months (presenting as AFP cases) that have been vaccinated with 4 or more OPV doses has increased to 72% (in week 29, 2018) compared to 40% in the same period in 2017.

- Supplementary surveillance activities including healthy children sampling and environmental surveillance continue. Environmental samples are being tested weekly from sites in Damascus, Deir Ez-Zor, Aleppo, Raqqa, Homs, Lattika, Rural Damascus and Hama. There has been no isolation of VDPV2 (out of 36 samples of which results are known) in samples taken since environmental surveillance was established in December 2017. 593 healthy children have been sampled since the start of the outbreak (414 in 2017, 179 to date in 2018).

- Internal surveillance reviews of silent districts (those districts that have not reported AFP cases in 2018) are being carried out. Fourteen out of 106 districts were identified as silent, field investigation into the reasons are ongoing.

- Seventy-five physicians have been oriented on AFP surveillance in three sessions at the Pediatric University Hospital in Damascus in July.

- More than 20 expanded programme on immunization (EPI) staff from newly accessible areas in Raqqa, Deir Ez-Zor, Hama and Homs have been trained on AFP surveillance to help strengthen routine immunization activities.

**Outbreak Response Assessment**

- An independent outbreak response assessment (OBRA) was conducted in April, 2018 to appraise the quality of response and guide the program on way forward.

- WHO and UNICEF continue to support the implementation of the recommendations of the assessment and provide technical and human resource support to the outbreak response through joint Emergency Operations Centers (EOCs) in both Damascus and Gaziantep hubs.
EPI Curve of AFP cases by classification, (up to 24 July 2018)

Syria

- DZ Round 2 mOPV2 & IPV
- Raqqa Round 1 mOPV2
- DZ Round 1 mOPV2
- Raqqa Round 2 mOPV2 & IPV
- Hasakeh, Aleppo, Damascus and Homs (Tadmor) Round 2 IPV
- DZ, Raqqa, Hasakeh and Homs (Tadmor) Round 1 mOPV2

Deir Ez-Zor

- mOPV2 Round (22 - 27 Jul)
- mOPV2 & IPV Round (22 - 28 Aug)
- mOPV2 Round (14 - 20 Jan)

Raqqa

- mOPV2 Round (12 - 18 Aug)
- mOPV2 & IPV Round (7 - 13 Oct)
- mOPV2 Round (16 - 20 Jan)

Homs

- (Tadmor) Round 2 IPV (4 - 8 Feb)
- (Tadmor) mOPV2 Round (14 - 13 Jan)

Legend:
- cVDPV2
- Compatible
- SL2
- PV2 pending sequencing
- Pending lab results
- En route to lab
- Pending classification
- Discarded
Vaccination status (OPV) NPAFP cases aged 6-59 months (up to 24 July 2018)

Relevant links

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

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