cVDPV2 isolates in Deir Ez-Zor and Raqqa governorates, Syria, 2017

Highlights

- Seventeen (17) cases of circulating vaccine-derived poliovirus type-2 (cVDPV2) have now been confirmed in Syria—16 cases are from Mayadeen district, Deir Ez-Zor governorate, and 1 case from Raqqa district, Raqqa governorate. The most recent case had onset of paralysis on 23 May.
- The total number of acute flaccid paralysis (AFP) cases detected in Deir Ez-Zor governorate since the beginning of 2017 is 65 (54 from Mayadeen; 6 from Deir Ez-Zor and 5 from Boukamal). Raqqa governorate has reported 10 AFP cases (5 each from Raqqa and Talabyad) since the beginning of the year.

Response

- The Syrian Ministry of Health together with WHO, UNICEF and other health actors are planning to conduct two immunization rounds in Deir Ez-Zor with monovalent oral polio vaccine type-2 (mOPV2), targeting 328,000 children under five years of age. Inactivated polio vaccine (IPV) will be used in the second round targeting 114,500 children aged between 2-24 months.
- Response task forces have been formed in the Damascus and Gaziantep hubs. Both hubs have prepared vaccination campaign micro-plans.
- Following recommendation by the mOPV Global Advisory Group, the request for mOPV2 vaccine use has been approved by WHO’s Director General.
- Vaccine procurement is in progress. Vaccines will be shipped to Damascus as soon as required documentation is completed (expected within one week).
- Production of communication/social mobilization materials is in progress.

Summary

New cVDPV cases this week: 11
Total number of cVDPV cases: 17
Outbreak grade: 3

Index case

Onset of paralysis: 3 March 2017
Location: Mayadeen, Deir Ez-Zor
Age: 22 months
Vaccination status: 2 OPV doses
22 nt divergence from Sabin

Most recent cases

Mayadeen
Onset of paralysis: 23 May 2017, age: 10 months, vaccination status: zero OPV/IPV doses, 27 nt divergence from Sabin

Raqqa
Onset of paralysis: 3 May 2017, age: 14 months, vaccination status: 4 OPV doses and one IPV

Extent of outbreak

Mayadeen and Raqqa districts
Newly infected area: Raqqa

Immunization response

First round expected to commence at latest by 8 July 2017

Characteristics of the cVDPV2 cases

Median age: 14 months
Gender ratio male-female: 1:2
Vaccination status of the cases:
- IPV: 3 cases (18%) received IPV
- OPV: 63% zero dose, 25% have received 1-2 doses

Distribution of NPAFP and VDPV2, Deir Ez-Zor and Raqqa governorates, 2017

<table>
<thead>
<tr>
<th>Month</th>
<th>NPAFP</th>
<th>VDPV2</th>
<th>NPAFP</th>
<th>VDPV2</th>
</tr>
</thead>
<tbody>
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<tr>
<td>May</td>
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<td>11</td>
<td>2</td>
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<tr>
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<td>5</td>
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<tr>
<td>Total</td>
<td>65</td>
<td>16</td>
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EPI Curve NPAFP & VDPV2 Cases, 2015-2017

Syria

Deir Ez-Zor Gov

Raqqah Gov

Vaccination status

Vaccination status (OPV+IPV) of NPAFP* cases 6-59m
Deir Ez-Zor governorate

Vaccination status (OPV+IPV) of NPAFP* cases 6-59m
Deir Ez-Zor governorate

* VDPV2 cases are included
**Immunization response activities**

- Upon isolation of the first VDPV2 and before confirmation of virus circulation, a local routine Expanded Programme on Immunization (EPI) activity was conducted in Deir Ez-Zor — a total of 80,750 children under five years of age were vaccinated with bivalent oral polio vaccine (bOPV), and 28,676 children aged between 3-23 months were vaccinated using IPV.

- Two immunization rounds are planned for early July and August targeting children <5 years in Deir Ez-Zor governorate and in the southern part of Shadadi district in Hasaka governorate.

- An immunization response in Raqqa is still under discussion due to the current military operation.

**First round**

- Vaccine: mOPV2

- Total target: 328,00 (196,000 resident children and 110,000 refugee children in Deir Ez-Zor governorate, and 22,000 children in Shadadi).

- A total of 355 vaccination teams and 61 supervisors are on standby for this activity. Campaign strategy is house to house in the affected villages and fixed posts in other areas. There are 5 vaccine distribution centers with adequate cold chain in Bokama, Hajien, Husienieh, Mayadeen, and Sor. These centers will distribute vaccine to all supervisors and collect empty vials on a daily basis. A special monitoring format has been developed to record vials distributed, used and empty vials returned. Forms will be completed at all levels on a daily basis and WHO will provide a daily summary to Damascus.

- WHO is negotiating for permission to implement intra-campaign and post-campaign monitoring through partners.

**Other activities**

- A coordination mechanism has been established at regional level between WHO EMRO and UNICEF MENARO.

- Coordination among national authority and partners to complete the investigation and preparation for response is ongoing.

- Risk assessment has been discussed with the mOPV2 Global Advisory Group. The group has approved the use of mOPV2 in Deir Ez-Zor as per the Syrian government response plan. A total of 754,400 mOPV2 doses has been requested for the two campaign rounds and a total of 135,110 IPV doses for the second round. MoH has committed to waive all regular customs restrictions to import the mOPV vaccine. UNICEF is in the process of procuring and shipping the vaccine to Damascus through Beirut airport.

- MoH conducted two workshops for all surveillance officers and EPI managers in all governorates to brief staff on the current situation, and to map high risk areas and vulnerable groups.

- Gaziantep hub has initiated negotiation with local authority to gain approval to contribute in the Deir Ez-Zor immunization response.

- A field investigation of the Raqqa case is being initiated by the Gaziantep hub.

**C4D activities**

- C4D messages on vaccines and the immunization campaign have been prepared based on field reports from Deir Ez-Zor and shared with MoH. A total 80,000 brochures and 12,000 posters have been printed. Materials are being shipped to Deir Ez-Zor and will be shared with authorities on the ground before use in the field.

- UNICEF with support of WHO is recruiting 250 social mobilizers and 55 influencers/leaders, to disseminate communications materials at household level. Megaphones will be used for campaign announcements. Activities are subject to approval by the authorities in field.

- A training programme for community mobilizers and an Interpersonal Communication Guide has been modified and printed. Copies will be sent to Deir Ez-Zor and for use by C4D campaign team leaders.

- Daily campaign monitoring and reporting forms have been developed with a focus on reasons for non-vaccination and refusal. Daily reports will guide case-by-case follow up as well as message modification.
**Challenges**

Potential escalation in active conflict/s and shifts in power on the ground could result in:

- inability to dispatch the vaccine to health facilities
- inability to conduct house to house vaccination
- compromised safety of vaccinators and/or vaccinators becoming unreachable
- loss of mOPV2 vials and damage to cold chain
- inability to conduct necessary vaccinator training, e.g. social mobilization

Vaccine refusal has been a considerable challenge in Deir Ez-Zor in the past. Some families are very reluctant to have their children vaccinated with IPV. C4D is working to address this issue.

**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](#)