This Week

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Polio this week as of 5 June 2019

- This week the world’s largest conference on gender equality and the health, rights, and wellbeing of girls and women is happening in Vancouver, Canada. Women are truly delivering a polio-free world. The GPEI proudly recognizes women’s valuable contributions in the fight against polio. For more information on women on the frontlines, please see http://polioeradication.org/gender-and-polio/women-on-the-frontlines-of-polio-eradication/

- In Papua New Guinea, a GPEI Outbreak Response Assessment reviewed the impact of current outbreak response and concluded that overall strong response had been implemented. Commending national and subnational public health authorities and health workers on their efforts, the Assessment team underscored the need on now filling any residual subnational surveillance and immunity gaps. See ‘Papua New Guinea’ section below for more.

- On 4 June, The Lancet published the results of the first in-human, Phase 1 clinical trial for nOPV2 – a key first step toward determining the potential for a novel type-2 oral polio vaccine that would provide the same level of protection against type-2 poliovirus as OPV without the same risk of reverting into cVDPV2 in under-immunized populations. These initial results are promising, and suggest the vaccine is safe and immunogenic in adults; further clinical trial results will be important to evaluate nOPV as a potential tool to sustain a world free from all types of polioviruses.

- The GPEI Semi-Annual Status Report covering the reporting period July–December 2018 is available online, reporting against
the major objectives of the Polio Endgame Plan 2013–2018. The GPEI will continue to publish its Semi-Annual Status Reports, to track progress against the newly-launched Polio Endgame Strategy 2019–2023.

- Summary of new viruses this week: Afghanistan – one new wild poliovirus type 1 (WPV1) case; Pakistan – two new WPV1 cases and 16 WPV1-positive environmental samples; Niger – one cVDPV2 case; and, Nigeria – one cVDPV2-positive environmental sample. See country sections below for more details.

## Wild poliovirus type 1 and Circulating vaccine-derived poliovirus cases

<table>
<thead>
<tr>
<th>Total cases</th>
<th>Year-to-date 2019</th>
<th></th>
<th>Year-to-date 2018</th>
<th></th>
<th>Total in 2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
<td>cVDPV</td>
</tr>
<tr>
<td>Globally</td>
<td>29</td>
<td>12</td>
<td>12</td>
<td>16</td>
<td>33</td>
<td>104</td>
</tr>
<tr>
<td>— in endemic countries</td>
<td>29</td>
<td>8</td>
<td>12</td>
<td>2</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>— in non-endemic countries</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>70</td>
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</table>

## Case breakdown by country

<table>
<thead>
<tr>
<th>Countries</th>
<th>Year-to-date 2019</th>
<th></th>
<th>Year-to-date 2018</th>
<th></th>
<th>Total in 2018</th>
<th></th>
<th>Onset of paralysis of most recent case</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
<td>cVDPV</td>
<td>WPV</td>
<td>cVDPV</td>
<td></td>
</tr>
<tr>
<td>afghanistan</td>
<td>8</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>21</td>
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<td></td>
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<tr>
<td>democratic republic of the congo</td>
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<td>1</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>20</td>
<td></td>
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<tr>
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<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Countries</td>
<td>Year-to-date 2019 WPV</td>
<td>Year-to-date 2018 WPV</td>
<td>Total in 2018 WPV</td>
<td>Total in 2018 cVDPV</td>
<td>Onset of paralysis of most recent case WPV</td>
<td>Onset of paralysis of most recent case cVDPV</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
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<td>-------------------</td>
<td>---------------------</td>
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<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>niger</td>
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<td>1</td>
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<td>10</td>
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<tr>
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<td>NA</td>
<td>29–Mar-2019</td>
</tr>
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<td>3</td>
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<td>12</td>
<td>0</td>
<td>19–May-2019</td>
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<tr>
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<td>26</td>
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<td>18–Oct-2018</td>
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<tr>
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<td>2</td>
<td>0</td>
<td>4</td>
<td>12</td>
<td>NA</td>
<td>21–April-2019</td>
</tr>
</tbody>
</table>

NA: Onset of paralysis in most recent case is prior to 2017. Figures exclude non-AFP sources. In 2018, cVDPV includes all three serotypes 1, 2 and 3.
For Somalia: 1 cVDPV2 and cVDPV3 isolated from one AFP case.
cVDPV definition: see document “Reporting and classification of vaccine-derived polioviruses” at [pdf](#).

**Weekly country updates as of 5 June 2019**

**Afghanistan**

- One new wild poliovirus type 1 (WPV1) case was reported in the past week, from Kunar province, with onset of paralysis on 8 May, bringing the total number of WPV1 cases for 2019 to eight.
- Read the latest polio update from **Afghanistan** to see information on cases, surveillance and vaccination campaigns.
Pakistan

- Two wild poliovirus type 1 (WPV1) cases were reported in the past week, from Bannu district, Khyber Pakhtunkhwa province (with onset of paralysis on 14 and 19 May), bringing the total number of WPV1 cases in 2019 to 21.
- Sixteen WPV1–positive environmental samples were reported in the past week, all collected in May, from different provinces across the country (Sindh, Balochistan, Khyber Pakhtunkhwa and Punjab).
- Read the latest polio update from Pakistan to see information on cases, surveillance and vaccination campaigns.

Nigeria

- One circulating vaccine–derived poliovirus type 2 (cVDPV2)–positive environmental sample was reported in the past week, from Kwara state, collected on 27 April. There are eight cVDPV2 cases reported in 2019 so far. The total number of cVDPV2 cases in 2018 remains 34.
- No cases of wild poliovirus type 1 (WPV1) has been reported in the country since the one detected from Borno State with a date of onset of paralysis on 21 August 2016.
- Recent confirmation of spread of the cVDPV2 outbreak, both within Nigeria and internationally, underscores the urgent need to fill remaining vaccination gaps in the ongoing outbreak response, and to optimize the geographic extent and operational quality of monovalent OPV type 2 (mOPV2) response.
- At the same time, outbreak response to WPV1 continues, including efforts to address surveillance and immunity gaps in parts of Borno State.
- Read our Nigeria country page to see information on surveillance and vaccination campaigns.

Lake Chad Basin

- In Cameroon, a circulating vaccine–derived poliovirus type 2 (cVDPV2) was detected from an environmental sample collected on 20 April 2019 in Extreme Nord. The virus was detected in an
environmental sample only – no associated cases of paralysis have been detected.

- The affected province borders Borno, Nigeria, and genetic sequencing confirms it is related to cVDPV2 circulating in neighbouring Nigeria. This outbreak originated in Jigawa state and had previously spread to other areas of Nigeria, as well as internationally to the Republic of Niger.
- Cameroon had already been participating in outbreak response to the Nigeria cVDPV2 across the Lake Chad subregion.
- The Ministry of Health and local health authorities are undertaking a detailed investigation and the partners of the Global Polio Eradication Initiative (GPEI) are providing support as required.
- This event further underlines the risk of renewed international spread of cVDPV2 across the Lake Chad Basin.
- In Niger, one new cVDPV2 case was reported in the past week, from Diffa province, with onset of paralysis on 3 April. It is the first cVDPV2 case from the country in 2019 and the total number of cVDPV2 cases in 2018 remains ten. The outbreak is genetically-linked to the cVDPV2 outbreak originating in Jigawa, Nigeria.
- Acute flaccid paralysis surveillance and routine immunization across the country with focus on the infected provinces and the provinces at the international borders with Nigeria are being reinforced.
- Active case finding for additional AFP cases is continuing, and additional surveillance measures such as increasing the frequency and extent of environmental surveillance and community sampling of healthy individuals is being expanded.

**Central Africa**

- No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported this week in the Democratic Republic of the Congo (DR Congo). So far, one cVDPV case has been reported in DR Congo in 2019. The total number of cVDPV2 cases reported in 2018 is 20. DR Congo is currently affected by four separate cVDPV2 outbreaks, in the provinces of Haut Katanga; Mongala; Haut Lomami/Tanganika/Haut Katanga/Ituri and Kasai.
- Read our [Democratic Republic of the Congo country page](polioeradication.org/polio-today/polio-how-this-week) to see information on surveillance and vaccination campaigns.
• Learn more about vaccine-derived polioviruses through this short animation or this ‘Coffee with Polio Experts’ video.

**Horn of Africa**

• The Horn of Africa is affected by separate outbreaks of cVDPV2 and type 3 (cVDPV3), reporting both AFP cases and environmental positive samples.
• Somalia has reported a total of 14 cVDPV cases (seven type 2, six type 3 and one coinfection of both type 2 and type 3) since the beginning of the outbreaks.
• The most recent cVDPV3 virus was from an AFP case from Runingod district, Middle Shabelle province with an onset date of paralysis on 7 September 2018.
• Circulating VDPV2 has also been detected during 2018 in one environmental sample in Kenya collected on 21 March 2018.
• Outbreak response to both virus types is currently being implemented in line with internationally-agreed guidelines. Large-scale supplementary immunization activities (SIAs) have been implemented in Banadir, Lower Shabelle and Middle Shabelle regions, Somalia.
• WHO and partners continue to support local public health authorities across the Horn of Africa in conducting field investigations and risk assessments.
• Read our [Somalia country page](#) and [Kenya country page](#) to see information on surveillance and vaccination campaigns.
• Learn more about vaccine-derived polioviruses through this short animation or this ‘Coffee with Polio Experts’ video.

**Papua New Guinea**

• No new cases of circulating vaccine-derived poliovirus type 1 (cVDPV1) were reported this week. The total number of cases in 2018 remains 26.
• The most recent cVDPV1 virus was isolated from an environmental sample collected in the National Capital district on 6 November 2018.
• A GPEI Outbreak Response Assessment reviewed the impact of current outbreak response and concluded that overall strong response had been implemented. Commending national and
subnational public health authorities and health workers on their efforts, the Assessment team underscored the need on now filling any residual subnational surveillance and immunity gaps.

- The team reviewed all aspects of the response, and noted significant efforts and improvements, including on service delivery, surveillance strengthening, data analysis, cold chain/reverse cold chain refurbishment, vaccine acceptance and community engagement, health worker engagement, collaboration with neighbouring Indonesia and outreach to remote areas/communities. In particular, the group noted the strong collaboration between outbreak response and strengthening of routine immunization, including through systematic collaboration with Gavi, the Vaccine Alliance, and highlighted that this model of working should be replicated in other outbreak settings.
- Read our Papua New Guinea country page to see information on surveillance and vaccination campaigns.

**Mozambique**

- No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported this week. The total number of cases in 2018 remains one.
- In addition to the confirmed case, the same virus was also isolated from two healthy community contacts, reported on 10 and 17 December 2018.
- The GPEI and partners are working with country counterparts to support the local public health authorities in conducting a field investigation (clinical, epidemiological and immunological) and thorough risk assessment to discuss planning and implementation of immunization and outbreak response.
- Read our Mozambique country page to see information on cases, surveillance and response to the developing outbreak.

**Indonesia**

- No circulating vaccine-derived poliovirus type 1 (cVDPV1) cases were reported this week.
- In total, three genetically-linked circulating vaccine-derived poliovirus type 1 (cVDPV1) isolates were detected from Papua province: a cVDPV1 from an acute flaccid paralysis (AFP) case,
onset of paralysis on 27 November 2018, and two cVDPV1 isolates from healthy community contacts, collected on 24 January and 13 February 2019. This outbreak is not linked to the cVDPV1 currently affecting neighbouring Papua New Guinea.

- Learn more about vaccine-derived polioviruses through this short animation or this ‘Coffee with Polio Experts’ video.
- Read the latest polio update from Indonesia to see information on surveillance and vaccination campaigns.
- Learn more about the cVDPV1 outbreak in Indonesia.

**Iran**

- No WPV1-positive environmental samples were reported in the past week. In total, two WPV1-positive environmental samples have been reported in 2019, both from Sistan and Balochistan province. The isolated viruses have been detected in environmental samples only, and genetic sequencing confirms they are linked to WPV1 circulating in Karachi, Pakistan.
- The Ministry of Health and local health authorities are undertaking a detailed investigation and the partners of the Global Polio Eradication Initiative (GPEI) are on standby to provide support as required. An immediate risk assessment suggests that this event has limited public health implications, given Iran’s very high levels of routine immunization coverage and strong disease surveillance. However, this event further underlines the risk of international spread of WPV1 from Pakistan/Afghanistan.