

Highlights of Polio Fax Bulletin No. 1087 for Week 31 2019

I. Poliovirus Transmission

1. **Endemic countries (PAKISTAN & AFGHANISTAN):** one new wild poliovirus type-1 (WPV1) case and eight new positive environmental samples from Pakistan were reported this week.

a. *Human samples:* One new WPV1 cases reported this week from Pakistan. Total WPV1 cases in 2019 to date are 60 (12 from Afghanistan and 48 from Pakistan). This compares with 17 cases in 2018 in the same period (Afghanistan – 13 and Pakistan – 4).

- Afghanistan:

In 2019 to date, 12 WPV1 cases are reported from Afghanistan. They include five cases from Hilmand province, four cases from Uruzgan province, two from Kandahar province and one from Kunar province. The most recent case has onset of paralysis on 26 May 2019.

- Pakistan:

A new wild poliovirus type-1 case was reported this week from Killa Abdullah district, Balochistan province, with date of onset 2 July 2019. The case is a five month old male child. The child did not receive any OPV doses neither from routine nor from supplementary immunization activities (SIAs). The case was identified as wild by a positive contact.

In 2019 to date, 48 WPV1 cases are from Pakistan. They include 28 from Khyber Pakhtunkhwa (KP), 8 from KP Tribal Districts (KPTD), 5 from Punjab province, 4 from Balochistan province and 3 from Sindh province. The most recent case has onset of paralysis on 11 July 2019.

b. *Environmental samples:* Eight new WPV1 positive environmental samples were reported this week, all from Pakistan.

- Afghanistan: In 2019 to date, there are 26 positive environmental samples with most recent positive sample collected on 24 June 2019.

- Pakistan: The 8 new WPV1 positive environmental samples reported this week include five from Punjab (4 from Lahore and 1 from Rawalpindi districts); and three from Sindh province (2 from Gadap and 1 from Orangi Karachi towns). In 2019 to date, there are 184 positive environmental samples with most recent positive sample collected on 22 July 2019.

2. Outbreak response countries

SOMALIA: No new cVDPV2 or cVDPV3 isolates from human or environmental samples were reported this week.

- In 2019 to date, Somalia has reported three cVDPV2 cases. The most recent reported case has date of onset of paralysis on 8 May 2019.

- In addition, cVDPV2 was isolated from healthy child sample collected during community sampling on 25 May 2019. aVDPV2 was isolated from an environmental sample on 3 February 2019.
- In 2018: Somalia has reported a total of 12 cases due to cVDPVs, which include 5 due to cVDPV2, 6 due to cVDPV3 and 1 due to co-infection of cVDPV2 and cVDPV3. The last cVDPV3 was isolated from a sewage sample from Mogadishu collected on 23 August 2018.

II. Surveillance performance indicators

In 2019, 19 of 22 member states are meeting the global target of both key surveillance indicators, namely non polio AFP rate of 2 per 100,000 children aged below 15 years and percent AFP cases with adequate specimen 80% and above.

- Djibouti has a non-polio AFP rate of 0.5 and percentage of AFP cases with adequate stool specimens of 0%.
- Morocco has a percentage of AFP cases with adequate stool specimens of 77.5%.
- Qatar has a non-polio AFP rate of 1.4 and percentage of AFP cases with adequate stool specimens of 66.7%.
- In Yemen there are AFP cases pending final classification more than 90 days due to delayed lab results because of delay shipment of specimens to reference polio laboratories.

World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

5-Aug-19

Week 31, ending 04 August 2019

Number 1087

Table 1: Acute Flaccid Paralysis (AFP) cases by week of onset

| Country | Reported AFP cases by week of onset - Week (31/19) / Ending on : 04/08/2019 | | | | | | | | | | | | | | |
|------------------|---|----------------|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Total AFP 2017 | Total AFP 2018 | Total AFP to date, 2019 | W20 19 May 19 | W21 26 May 19 | W22 02 Jun 19 | W23 09 Jun 19 | W24 16 Jun 19 | W25 23 Jun 19 | W26 30 Jun 19 | W27 07 Jul 19 | W28 14 Jul 19 | W29 21 Jul 19 | W30 28 Jul 19 | W31 04 Aug 19 |
| Afghanistan | 3094 | 3378 | 2242 | 75 | 80 | 58 | 63 | 87 | 87 | 83 | 77 | 74 | 75 | 53 | 14 |
| Bahrain | 18 | 35 | 11 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Djibouti | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Egypt | 1242 | 1246 | 783 | 23 | 22 | 19 | 18 | 36 | 29 | 20 | 33 | 28 | 23 | 27 | 5 |
| Iran | 820 | 896 | 540 | 19 | 16 | 15 | 19 | 13 | 16 | 15 | 20 | 13 | 8 | 1 | |
| Iraq | 699 | 1023 | 641 | 15 | 16 | 21 | 14 | 29 | 27 | 19 | 30 | 18 | 20 | 12 | |
| Jordan **** | 116 | 115 | 82 | 0 | 3 | 1 | 3 | 2 | 2 | 3 | 0 | 2 | 0 | | |
| Kuwait | 69 | 72 | 25 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| Lebanon **** | 75 | 89 | 52 | 0 | 1 | 2 | 2 | 2 | 1 | 0 | 1 | 2 | 2 | 2 | |
| Libya | 88 | 122 | 45 | 0 | 2 | 0 | 4 | 2 | 0 | 1 | 0 | 1 | 3 | 1 | |
| Morocco | 143 | 212 | 129 | 6 | 5 | 1 | 2 | 5 | 5 | 3 | 3 | 4 | 7 | 3 | 1 |
| Oman | 40 | 28 | 12 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| Pakistan | 10319 | 12276 | 7881 | 277 | 261 | 215 | 233 | 326 | 321 | 262 | 297 | 300 | 230 | 93 | 0 |
| Palestine **** | 43 | 44 | 35 | 0 | 0 | 3 | 3 | 1 | 2 | 0 | 1 | 5 | 0 | 0 | 0 |
| Qatar | 18 | 10 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Saudi Arabia | 276 | 241 | 128 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Somalia | 345 | 353 | 218 | 11 | 6 | 1 | 9 | 9 | 6 | 8 | 8 | 6 | 7 | 4 | 0 |
| Sudan | 570 | 579 | 297 | 5 | 2 | 4 | 5 | 12 | 19 | 11 | 10 | 22 | 8 | 5 | 0 |
| Syria **** | 362 | 362 | 230 | 6 | 4 | 6 | 1 | 9 | 5 | 4 | 8 | 10 | 6 | 4 | 0 |
| Tunisia | 67 | 68 | 40 | 1 | 3 | 4 | 1 | 2 | 2 | 0 | 2 | 0 | 0 | | |
| U.A.E | 58 | 40 | 21 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Yemen | 713 | 730 | 446 | 15 | 11 | 12 | 10 | 16 | 15 | 18 | 28 | 24 | 9 | 0 | |
| Total EMR | 19179 | 21919 | 13862 | 457 | 434 | 366 | 392 | 554 | 541 | 450 | 521 | 510 | 400 | 205 | 20 |

No data = No report received

Table 2: Confirmed polio cases by month of onset

| Country | Total year 2017 | Total year 2018 | 04/08 | | Confirmed polio cases by month of onset | | | | | | | | | | | |
|------------------|-----------------|-----------------|-----------|-----------|---|--------------|---------------|---------------|--------------|---------------|------------|------------|-----------|-----------|-----------|-------------|
| | | | 2018 | 2019 | September 2018 | October 2018 | November 2018 | December 2018 | January 2019 | February 2019 | March 2019 | April 2019 | May 2019 | June 2019 | July 2019 | August 2019 |
| Afghanistan | 14 | 21 | 13 | 12 | 3 | 2 | 1 | 0 | 2 | 1 | 3 | 1 | 5 | | | |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| Djibouti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Iraq | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Jordan **** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| Lebanon **** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Libya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Morocco | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | | | 0 | | | |
| Oman | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pakistan | 8 | 12 | 4 | 48 | 3 | 1 | 0 | 4 | 4 | 2 | 0 | 11 | 11 | 16 | 4 | |
| Palestine **** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | |
| Qatar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Saudi Arabia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | 0 | |
| Somalia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Sudan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Syria **** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Tunisia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| U.A.E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Yemen | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| Total EMR | 22 | 33 | 17 | 60 | 6 | 3 | 1 | 4 | 6 | 3 | 3 | 12 | 16 | 16 | 4 | 0 |

**** UNRWA cases are included with those of country of residence

AFP SURVEILLANCE

Week 31, ending 04 August 2019

5-Aug-19

Number 1087

Table 3: Investigation of AFP cases with paralysis onset in 2018 & 2019 up to Week (31/19) / Ending on : 04/08/2019

| COUNTRY | 2018 | | | | | | | | | | | 2019 | | | | | | | | | | | Latest line List Date | | |
|--------------|----------------------------|-------------------------------|------------------|------------------------|---------------------------|-----------|-----------------------|--|--|-------------------------------|-------------------------------|--------------------|--------------------|----------------------------|---------------------|------------------------|---------------------------|----------|------------|----------------------------------|--|-------------|-----------------------------|--|-------------------------------|
| | AFP | | | | | | | | | Specimen | Wild cases **** | | AFP | | | | | | | | | Specimen | | Wild cases **** | |
| | Total AFP cases onset 2018 | Case classification | | | | | Non polio AFP rate ** | AFP cases pending classification > 90 days from onset of paralysis | AFP cases pending classification and lab > 90 days from onset of paralysis | | % with *** adequate specimens | Wild P1 Poliovirus | Wild P3 Poliovirus | Total AFP cases onset 2019 | Case classification | | | | | Annualized Non polio AFP rate ** | AFP cases pending classification > 90 days from onset of paralysis | | | AFP cases pending classification and lab > 90 days from onset of paralysis | % with *** adequate specimens |
| | | Total Confirmed Polio Cases * | Polio Compatible | Pending Classification | Discarded (non polio AFP) | VDPV | | | | Total Confirmed Polio Cases * | | | | | Polio Compatible | Pending Classification | Discarded (non polio AFP) | VDPV | | | | | | | |
| Afghanistan | 3378 | 21 | 0 | 0 | 3357 | 0 | 16.6 | 0 | 0 | 93.8 | 21 | 0 | 2242 | 12 | 0 | 242 | 1988 | 0 | 18.6 | 17 | 1 | 94.3 | 12 | 0 | 04-08-2019 |
| Bahrain | 35 | 0 | 0 | 0 | 35 | 0 | 12.1 | 0 | 0 | 97.1 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 6.4 | 6 | 6 | 100.0 | 0 | 0 | 04-08-2019 |
| Djibouti | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0.5 | 0 | 0 | 0.0 | 0 | 0 | 29-07-2019 |
| Egypt | 1246 | 0 | 0 | 2 | 1243 | 1 | 3.2 | 2 | 0 | 93.2 | 0 | 0 | 783 | 0 | 0 | 125 | 658 | 0 | 3.5 | 1 | 0 | 87.2 | 0 | 0 | 01-08-2019 |
| Iran | 896 | 0 | 0 | 0 | 894 | 2 | 4.6 | 0 | 0 | 97.0 | 0 | 0 | 540 | 0 | 0 | 27 | 513 | 0 | 4.8 | 0 | 0 | 95.7 | 0 | 0 | 03-08-2019 |
| Iraq | 1023 | 0 | 0 | 0 | 1023 | 0 | 6.7 | 0 | 0 | 89.9 | 0 | 0 | 641 | 0 | 0 | 58 | 583 | 0 | 7.1 | 6 | 0 | 95.0 | 0 | 0 | 02-08-2019 |
| Jordan | 115 | 0 | 0 | 0 | 115 | 0 | 4.1 | 0 | 0 | 100.0 | 0 | 0 | 82 | 0 | 0 | 2 | 80 | 0 | 5.0 | 0 | 0 | 100.0 | 0 | 0 | 21-07-2019 |
| Kuwait | 72 | 0 | 0 | 0 | 72 | 0 | 8.1 | 0 | 0 | 90.3 | 0 | 0 | 25 | 0 | 0 | 0 | 25 | 0 | 4.8 | 0 | 0 | 84.0 | 0 | 0 | 04-08-2019 |
| Lebanon | 89 | 0 | 0 | 0 | 89 | 0 | 4.8 | 0 | 0 | 96.6 | 0 | 0 | 52 | 0 | 0 | 12 | 40 | 0 | 4.7 | 5 | 0 | 88.5 | 0 | 0 | 01-08-2019 |
| Libya | 122 | 0 | 0 | 0 | 122 | 0 | 4.9 | 0 | 0 | 96.7 | 0 | 0 | 45 | 0 | 0 | 6 | 39 | 0 | 3.0 | 0 | 0 | 97.8 | 0 | 0 | 03-08-2019 |
| Morocco | 212 | 0 | 0 | 1 | 211 | 0 | 2.4 | 1 | 0 | 77.8 | 0 | 0 | 129 | 0 | 0 | 56 | 73 | 0 | 2.4 | 30 | 10 | 77.5 | 0 | 0 | 02-08-2019 |
| Oman | 28 | 0 | 0 | 0 | 28 | 0 | 3.2 | 0 | 0 | 92.9 | 0 | 0 | 12 | 0 | 0 | 1 | 11 | 0 | 2.1 | 0 | 0 | 83.3 | 0 | 0 | 28-07-2019 |
| Pakistan | 12276 | 12 | 1 | 0 | 12263 | 0 | 15.7 | 0 | 0 | 87.0 | 12 | 0 | 7881 | 48 | 0 | 742 | 7091 | 0 | 17.0 | 107 | 0 | 89.2 | 48 | 0 | 04-08-2019 |
| Palestine | 44 | 0 | 0 | 0 | 44 | 0 | 2.3 | 0 | 0 | 90.9 | 0 | 0 | 35 | 0 | 0 | 15 | 20 | 0 | 3.1 | 0 | 0 | 100.0 | 0 | 0 | 04-08-2019 |
| Qatar | 10 | 0 | 0 | 0 | 10 | 0 | 2.8 | 0 | 0 | 100.0 | 0 | 0 | 3 | 0 | 0 | 2 | 1 | 0 | 1.4 | 0 | 0 | 66.7 | 0 | 0 | 04-08-2019 |
| Saudi Arabia | 241 | 0 | 0 | 0 | 241 | 0 | 3.0 | 0 | 0 | 95.9 | 0 | 0 | 128 | 0 | 0 | 46 | 82 | 0 | 2.7 | 32 | 4 | 90.6 | 0 | 0 | 01-08-2019 |
| Somalia | 353 | 0 | 0 | 0 | 341 | 12 | 5.5 | 0 | 0 | 97.7 | 0 | 0 | 218 | 0 | 0 | 22 | 193 | 3 | 5.8 | 1 | 0 | 97.7 | 0 | 0 | 04-08-2019 |
| Sudan | 579 | 0 | 0 | 0 | 579 | 0 | 3.2 | 0 | 0 | 97.2 | 0 | 0 | 297 | 0 | 0 | 113 | 184 | 0 | 2.8 | 4 | 3 | 98.0 | 0 | 0 | 04-08-2019 |
| Syria | 362 | 0 | 0 | 0 | 362 | 0 | 4.7 | 0 | 0 | 87.3 | 0 | 0 | 230 | 0 | 0 | 30 | 200 | 0 | 5.0 | 1 | 0 | 85.7 | 0 | 0 | 04-08-2019 |
| Tunisia | 68 | 0 | 0 | 0 | 68 | 0 | 2.6 | 0 | 0 | 80.9 | 0 | 0 | 40 | 0 | 0 | 9 | 30 | 1 | 2.4 | 2 | 2 | 82.5 | 0 | 0 | 24-07-2019 |
| U.A.E | 40 | 0 | 0 | 2 | 38 | 0 | 3.2 | 2 | 1 | 97.5 | 0 | 0 | 21 | 0 | 0 | 5 | 16 | 0 | 2.8 | 1 | 0 | 81.0 | 0 | 0 | 04-08-2019 |
| Yemen | 730 | 0 | 0 | 152 | 578 | 0 | 5.2 | 152 | 129 | 91.6 | 0 | 0 | 446 | 0 | 0 | 441 | 5 | 0 | 5.4 | 268 | 247 | 91.0 | 0 | 0 | 03-08-2019 |
| EMR | 21919 | 33 | 1 | 157 | 21713 | 15 | 8.7 | 157 | 130 | 89.8 | 33 | 0 | 13862 | 60 | 0 | 1966 | 11832 | 4 | 9.3 | 481 | 273 | 90.7 | 60 | 0 | |
| 2017 | 19179 | 22 | 3 | 72 | 19006 | 76 | 7.7 | 72 | 58 | 88.9 | 22 | 0 | | | | | | | | | | | | | |

* Confirmed polio cases refer to wild isolation from AFP cases or from contacts of negative index AFP cases

** Non-polio AFP per 100,000 children <15 years

*** Adequate here refers to two stool specimens collected at least 24 hours apart, within 14 days of paralysis onset and specimens received in the lab in Good Condition

**** AFP cases co infected with P1 and P3 are counted separately as wild isolates

World Health Organization – Regional Office for Eastern Mediterranean
AFP SURVEILLANCE
Week 31, ending 4 August 2019

5-Aug-19
Number 1087

Table 4 (a): Lab results of contacts' samples in EMR, 2018 - 2019

| COUNTRY | 2018 | | | | | | 2019 | | | | | |
|------------|---------------|-------------|-----------|------------|-------------|-------------|---------------|-------------|----------|------------|------------|------------|
| | # OF CONTACTS | LAB RESULTS | | | | | # OF CONTACTS | LAB RESULTS | | | | |
| | | WILD | VDPV | SL | NPEV | PENDING | | WILD | VDPV | SL | NPEV | PENDING |
| AFG | 1009 | 4 | 0 | 52 | 217 | 0 | 670 | 4 | 0 | 28 | 121 | 36 |
| BAH | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DJI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EGY | 495 | 0 | 0 | 11 | 58 | 17 | 309 | 0 | 0 | 7 | 31 | 29 |
| IRN | 145 | 0 | 0 | 3 | 6 | 0 | 103 | 0 | 0 | 2 | 4 | 0 |
| IRQ | 811 | 0 | 0 | 22 | 93 | 9 | 358 | 0 | 0 | 6 | 11 | 21 |
| JOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KUW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LEB | 218 | 0 | 0 | 3 | 16 | 20 | 22 | 0 | 0 | 0 | 3 | 0 |
| LIB | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| MOR | 161 | 0 | 0 | 0 | 9 | 9 | 49 | 0 | 0 | 1 | 0 | 19 |
| OMA | 70 | 0 | 0 | 2 | 16 | 0 | 23 | 0 | 0 | 1 | 8 | 5 |
| PAK | 4200 | 3 | 0 | 207 | 882 | 0 | 2936 | 4 | 0 | 138 | 439 | 169 |
| PAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| QAT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAA | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| SOM | 1051 | 0 | 10 | 49 | 133 | 0 | 661 | 0 | 1 | 13 | 80 | 63 |
| SUD | 350 | 0 | 0 | 3 | 24 | 88 | 191 | 0 | 0 | 0 | 9 | 91 |
| SYR | 670 | 0 | 0 | 8 | 17 | 0 | 498 | 0 | 0 | 10 | 22 | 67 |
| TUN | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 | 0 |
| UAE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| YEM | 1558 | 0 | 0 | 0 | 0 | 1459 | 290 | 0 | 0 | 0 | 0 | 291 |
| EMR | 10747 | 7 | 10 | 360 | 1471 | 1607 | 6122 | 8 | 1 | 206 | 730 | 791 |

Table 4 (B): Most recent wild contacts in EMRO, 2018 - 2019

| Year | Country | Data | |
|-------------------|-------------|------------------------|--------------------------------------|
| | | Count of wild contacts | Date of Most Recent stool collection |
| 2019 | Afghanistan | 4 | 20-Jun-19 |
| | Pakistan | 4 | 21-Jul-19 |
| 2019 Total | | 8 | 21-Jul-19 |
| 2018 | Afghanistan | 4 | 7-Aug-18 |
| | Pakistan | 3 | 12-Oct-18 |
| 2018 Total | | 7 | 12-Oct-18 |

Table 4 (C): Number and distribution by district of -ve index AFP cases identified as wild positive by contact in EMR, 2018-2019

| YEAR | COUNTRY | PROVINCE | DISTRICT | COUNT | First case | Last case |
|-------------------|---------|--|----------------|----------|------------------|------------------|
| 2019 | AFG | HILMAND | MUSAQALAH | 1 | 05-Jun-19 | 05-Jun-19 |
| | | HILMAND | SANGIN | 1 | 06-Mar-19 | 06-Mar-19 |
| | PAK | BALOCHSITAN | KILLABDULLAH | 1 | 02-Jul-19 | 02-Jul-19 |
| | | KHYBER PAKHTUNKHWA (KP) | LAKKIMRWT | 1 | 27-May-19 | 27-May-19 |
| | | KHYBER PAKHTUNKHWA (KP) | TORGHAR | 1 | 25-May-19 | 25-May-19 |
| 2019 Total | | | | 5 | 06-Mar-19 | 02-Jul-19 |
| 2018 | AFG | NANGARHAR | PACHIERAGAM | 1 | 17-Jul-18 | 17-Jul-18 |
| | | URUZGAN | SHAHID-E-HASSA | 1 | 08-Jul-18 | 08-Jul-18 |
| | PAK | KHYBER PAKHTUNKHWA TRIBAL DISTRICTS (KPTD) | BAJOUR | 1 | 01-Sep-18 | 01-Sep-18 |
| | | BALOCHSITAN | DUKKI | 1 | 15-Apr-18 | 15-Apr-18 |
| 2018 Total | | | | 4 | 15-Apr-18 | 01-Sep-18 |

World Health Organization – Regional Office for Eastern Mediterranean
AFP SURVEILLANCE

Week 31, ending 4 August 2019

5-Aug-19
Number 1087

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2019 up to Week (31/2019) / Ending on : (04/08/2019)

| Country | Polio laboratories (ITD / Nucleotide Sequencing (Nucleotide Sequencing performed by EGY, PAK, TUN, CDC and RIVM laboratories)) | AFP cases with specimens | Preliminary virus isolation results of AFP cases | | | | | | Poliovirus intratypic differentiation results # | | | | | | | | | | Indicators | | | | Latest report Date | | | |
|-----------------------|--|-----------------------------|--|------------|-----------|----------|---------------------------|---------------------------|---|-------|------|--------|-------|------|--------|-------|------|--------------------------------|-------------|--------|-------------|-----------------------------------|--------------------|---|--|--|
| | | | Referred for ITD | | NPEV only | Negative | Pending | | Type 1 | | | Type 2 | | | Type 3 | | | Discordant pending sequence | NPEV by PCR | Non-EV | Pending ITD | % specimens positive for NPEV* | | % AFP cases with culture results within 14 days | % AFP cases with ITD results within 7 days | % AFP cases with ITD results within 45 days of onset** |
| | | | L20B+ | L20B+/NPEV | | | received < / = 14 days | received > 14 days ago | Wild | Sabin | VDPV | Wild | Sabin | VDPV | Wild | Sabin | VDPV | | | | | | | | | |
| Afghanistan | RRL Pakistan | 2161 | 141 | 21 | 324 | 1560 | 114 | 1 | 10 | 105 | | | | | | 107 | | 1 | 1 | | 1 | 14% | 99% | 100% | 98% | 04/08/2019 |
| Bahrain | NPL Oman / CDC | | | | | | | | | | | | | | | | | | | | | | | | | 05/08/2019 |
| Djibouti | NPL Kenya / CDC | 1 | | | | | | 1 | | | | | | | | | | | | | | | | | | 29/07/2019 |
| Egypt*** | RRL Egypt | 747 | 30 | 3 | 59 | 604 | 40 | 11 | | 14 | | | | | | 19 | | | 5 | 2 | | 8% | 95% | 100% | 99% | 01/08/2019 |
| Iran | NPL Iran / CDC | 561 | 8 | | 10 | 523 | 17 | 3 | | 2 | | | | | | 5 | | 1 | | | | 3% | 100% | 100% | 99% | 03/08/2019 |
| Iraq | RRL Egypt | 642 | 10 | | 76 | 508 | 40 | 8 | | 4 | | | | | | 5 | | | | | | 11% | 100% | 100% | 71% | 01/08/2019 |
| Jordan | NPL Jordan / RRL EGYPT | 84 | | | 12 | 70 | 2 | 1 | | | | | | | | | | | | | | 14% | 100% | | | 04/08/2019 |
| Kuwait | RRL Kuwait / RIVM | 31 | | | 2 | 24 | | | | | | | | | | | | | | | | 8% | 85% | | 100% | 04/08/2019 |
| Lebanon | NPL Jordan / RRL EGYPT | 50 | 1 | | 4 | 43 | 2 | | | | | | | | | 1 | | | | | | 9% | 100% | 100% | 0% | 04/08/2019 |
| Libya | RRL Tunisia / RIVM | 43 | | | 1 | 41 | | 1 | | | | | | | | | | | | | | 1% | 100% | | 98% | 22/07/2019 |
| Morocco | NPL Morocco / RRL Tunisia | 118 | 1 | | 2 | 107 | 8 | | | | | | | | | 1 | | | | | | 2% | 100% | 100% | 95% | 02/08/2019 |
| Oman | NPL Oman / CDC | 12 | | | 2 | 9 | | 1 | | | | | | | | | | | | | | 21% | 100% | | 100% | 05/08/2019 |
| Pakistan | RRL Pakistan | 7774 | 335 | 37 | 1093 | 5839 | 450 | 11 | 45 | 202 | | | | | | 211 | | | 4 | 1 | 1 | 12% | 100% | 99% | 97% | 04/08/2019 |
| Palestine & UNRWA | | 35 | | | 5 | 29 | | 1 | | | | | | | | | | | | | | 15% | 38% | | 100% | 04/08/2019 |
| Qatar | NPL Oman / CDC | 2 | | | | 2 | | | | | | | | | | | | | | | | 0% | 100% | | 100% | 05/08/2019 |
| Saudi Arabia | NPL Saudi Arabia / CDC | 135 | 4 | | | 123 | | 8 | | | | | | | | 4 | | | | | | 1% | 95% | 100% | 100% | 08/07/2019 |
| Somalia | NPL Kenya / CDC | 218 | 9 | | 42 | 147 | 9 | 11 | | 4 | | | | 3 | | 3 | | | | | 2 | 21% | 16% | | 99% | 04/08/2019 |
| Sudan | NPL Sudan / RRL Egypt | 294 | 5 | | 28 | 154 | 15 | 92 | | 1 | | | | | | 2 | | | | | | 12% | 77% | 100% | 25% | 04/08/2019 |
| Syria | NPL Syria / RRL Egypt | 225 | 12 | | 9 | 183 | 14 | 7 | | 5 | | | | | | 9 | | | | | | 6% | 100% | 100% | 50% | 01/08/2019 |
| Tunisia | RRL Tunisia | 35 | | | 3 | 32 | | | | | | | | | | | | | | | | 11% | 100% | | 100% | 22/07/2019 |
| U.A.E | NPL Oman / CDC | 17 | | | 3 | 14 | | | | | | | | | | | | | | | | 18% | 100% | | 53% | 05/08/2019 |
| Yemen | NPL Kenya / CDC | | | | | | | | | | | | | | | | | | | | | | | | | 03/08/2019 |
| Total EMR 2019 | | 13185 | 556 | 61 | 1675 | 10012 | 711 | 162 | 55 | 337 | | | | 3 | | 367 | | 2 | 10 | 3 | 4 | 12% | 97% | 100% | 98% | |
| Total EMR 2018 | | 20746 | 902 | 90 | 3513 | 16220 | | 17 | 29 | 590 | 3 | | 6 | 6 # | | 628 | 7 # | | 22 | 1 | 3 | 14% | 92% | 99% | 97% | |

* Specimens from all sources including non-AFP cases, excluding environmental samples

Somalia in 2018 so far has a total of 12 cVDPV cases (5 cVDPV2, 6 cVDPV3 & 1 coinfection cVDPV2/cVDPV3)

** This indicator reflects surveillance and laboratory activities

Table 6: Environmental isolate by year and type

| Country | Status | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| AFG | NEGATIVE | 129 | 183 | 274 | 253 | 103 |
| | WILD | 20 | 2 | 42 | 83 | 26 |
| AFG Total | | 149 | 185 | 316 | 336 | 129 |
| EGY | NEGATIVE | 495 | 528 | 522 | 540 | 361 |
| | PENDING | | | | | 70 |
| | VDPV2 | 3 | 1 | | | |
| EGY Total | | 498 | 529 | 522 | 540 | 431 |
| IRN | NEGATIVE | | | 6 | 54 | 36 |
| | PENDING | | | | | 3 |
| | WILD | | | | | 3 |
| IRN Total | | | | 6 | 54 | 42 |
| JOR | NEGATIVE | | 2 | 32 | 36 | 19 |
| | PENDING | | | | | 2 |
| JOR Total | | | 2 | 32 | 36 | 21 |
| LEB | NEGATIVE | | 4 | 27 | 45 | 23 |
| | PENDING | | | | | 5 |
| LEB Total | | | 4 | 27 | 45 | 28 |
| PAK | NEGATIVE | 347 | 462 | 523 | 534 | 222 |
| | PENDING | | | | | 26 |
| | WILD | 79 | 59 | 105 | 139 | 184 |
| | WILD & VDPV2 | 5 | 3 | 1 | | |
| | VDPV2 | 8 | 5 | 4 | | |
| PAK Total | | 439 | 529 | 633 | 673 | 432 |
| SOM | NEGATIVE | | | | 34 | 181 |
| | PENDING | | | | | 4 |
| | VDPV2 | | | 2 | 20 | 1 |
| | VDPV3 | | | | 12 | |
| SOM Total | | | | 36 | 213 | 32 |
| SUD | NEGATIVE | | | | 15 | 23 |
| | PENDING | | | | | 12 |
| SUD Total | | | | | 15 | 35 |
| SYR | NEGATIVE | | | 4 | 102 | 85 |
| | PENDING | | | | | 17 |
| SYR Total | | | | 4 | 102 | 102 |
| Grand Total | | 1086 | 1249 | 1576 | 2014 | 1252 |

Table 7: Environmental Wild/VDPV isolate by site

| Country | COUNTRY | Status | PROVINCE | DISTRICT | Count | First date | Last date | |
|-------------------|------------------|---------------|---------------|------------------|--------------|---------------|---------------|--------|
| 2018 | AFG | WILD | HILMAND | LASHKARGAH | 12 | 8-Jan | 26-Dec | |
| | | | | HIRAT | 1 | 25-Jun | 25-Jun | |
| | | | | KABUL | 3 | 26-Feb | 26-Jun | |
| | | | | KANDAHAR | 42 | 8-Jan | 26-Dec | |
| | | | | KHOST | 1 | 25-Sep | 25-Sep | |
| | | | | KUNAR | 2 | 24-Apr | 25-Sep | |
| | | | | NANGARHAR | 3 | 28-Jan | 25-Oct | |
| | | | | JALALABAD | 19 | 27-Jan | 26-Dec | |
| | | | | AFG Total | 83 | 8-Jan | 26-Dec | |
| | PAK | WILD | BALOCHISTAN | LORALAI | 2 | 17-Mar | 17-Aug | |
| | | | | PISHIN | 1 | 2-Dec | 2-Dec | |
| | | | | QUETTA | 13 | 13-Feb | 20-Dec | |
| | | | | KABDULAH | 8 | 1-Jan | 15-Dec | |
| | | | | ISLAMABAD | 7 | 10-Jan | 10-Nov | |
| | | | | PUNJAB | LAHORE | 12 | 11-Jun | 18-Dec |
| | | | | | RAWALPINDI | 15 | 10-Jan | 14-Dec |
| | | | | | DGKHAN | 2 | 12-Feb | 12-Sep |
| | | | | | SINDH | 1 | 9-Feb | 9-Feb |
| | | | | JACOBABAD | JACOBABAD | 3 | 12-Feb | 12-Sep |
| | | | | | KAMBAR | 3 | 7-Apr | 9-Jul |
| | | | | | KHIBALDIA | 2 | 1-Aug | 4-Sep |
| | | | | | KHIGADAP | 15 | 15-Feb | 11-Dec |
| | | | | | KHIGQBAL | 1 | 13-Sep | 13-Sep |
| | | | | | KHIKORANGI | 1 | 14-Dec | 14-Dec |
| | | | | | KHILANDHI | 3 | 10-Jan | 30-Jul |
| | | | | | KHISITE | 2 | 1-Jan | 3-Sep |
| | | | | KPTD | SUKKUR | 2 | 8-Feb | 9-Nov |
| KHILIAQAT | | | | | 2 | 7-Mar | 7-Nov | |
| KHISADDAR | | | | | 1 | 10-Sep | 10-Sep | |
| BAJOUR | 5 | 19-May | 25-Oct | | | | | |
| KP | WAZIR-S | 2 | 26-Nov | 27-Dec | | | | |
| | BANNU | 4 | 31-Mar | 27-Dec | | | | |
| | KOHAT | 5 | 5-Jan | 27-Sep | | | | |
| | MARDAN | 2 | 15-Oct | 15-Nov | | | | |
| | NOWSHERA | 2 | 18-Sep | 18-Oct | | | | |
| | PESHAWAR | 23 | 10-Jan | 26-Dec | | | | |
| PAK Total | 139 | 1-Jan | 27-Dec | | | | | |
| SOM | VDPV2 | BANADIR | HAMAR WEYN | 11 | 4-Jan | 20-Sep | | |
| | | | HODAN | 2 | 22-Feb | 4-Oct | | |
| | VDPV3 | | HAMAR WEYN | 6 | 11-Feb | 5-Apr | | |
| | | | HODAN | 1 | 1-Feb | 1-Feb | | |
| WABERI | 5 | 8-Mar | 23-Aug | | | | | |
| SOM Total | 32 | 4-Jan | 11-Oct | | | | | |
| 2018 Total | | | | 254 | 1-Jan | 27-Dec | | |
| 2019 | AFG | WILD | HILMAND | LASHKARGAH | 3 | 23-Feb | 25-Apr | |
| | | | | NAHR-E-SARAJ | 3 | 6-Jan | 26-Jan | |
| | | | | KANDAHAR | 15 | 6-Jan | 24-Jun | |
| | | | | NANGARHAR | 5 | 26-Jan | 23-Mar | |
| | AFG Total | 26 | 6-Jan | 24-Jun | | | | |
| | PAK | WILD | BALOCHISTAN | KHUZDAR | 1 | 20-Mar | 20-Mar | |
| | | | | LORALAI | 1 | 17-Mar | 17-Mar | |
| | | | | PISHIN | 3 | 2-Feb | 2-Jul | |
| | | | | QUETTA | 18 | 1-Jan | 1-Jul | |
| | | | | KABDULAH | 8 | 1-Jan | 19-Apr | |
| | | | | ISLAMABAD | 2 | 12-Apr | 2-May | |
| | | | | PUNJAB | FAISALABAD | 2 | 3-Jan | 6-Feb |
| | | | | | LAHORE | 32 | 5-Jan | 18-Jul |
| | | | | | MULTAN | 3 | 18-Feb | 8-May |
| | | | | | RAWALPINDI | 9 | 10-Jan | 22-Jul |
| | | | | | DGKHAN | 1 | 8-Apr | 8-Apr |
| | | | | | SINDH | 2 | 2-May | 3-Jul |
| | | | | | HYDERABAD | 7 | 24-Jan | 10-Jul |
| | | | | | JACOBABAD | 2 | 24-Jan | 12-Feb |
| | | | | | KAMBAR | 3 | 7-Mar | 8-Jul |
| | | | | | KHIBALDIA | 5 | 2-Jan | 11-Jun |
| | | | | KHIGADAP | KHIGADAP | 17 | 8-Jan | 12-Jul |
| | | | | | KHIGQBAL | 5 | 11-Apr | 19-Jun |
| | | | | | KHIKORANGI | 6 | 18-Feb | 17-Jul |
| | | | | | KHILANDHI | 4 | 19-Feb | 16-May |
| | | | | | KHISITE | 7 | 3-Jan | 3-Jul |
| | | | | | SUKKUR | 5 | 23-Jan | 15-May |
| KHILIAQAT | | | | | 5 | 7-Feb | 8-Jul | |
| KHISADDAR | | | | | 7 | 7-Jan | 10-Jul | |
| KPTD | | | | | WAZIR-S | 5 | 22-Jan | 28-May |
| KURRAM | | | | | 1 | 15-Jan | 15-Jan | |
| KP | | | | BANNU | 6 | 28-Jan | 27-Jun | |
| | DIKHAN | 4 | 8-Jan | 11-Jun | | | | |
| | KOHAT | 1 | 27-Feb | 27-Feb | | | | |
| | MARDAN | 4 | 16-Mar | 15-Jun | | | | |
| | PESHAWAR | 8 | 11-Jan | 10-Jul | | | | |
| | PAK Total | 184 | 1-Jan | 22-Jul | | | | |
| SOM | VDPV2 | BANADIR | HODAN | 1 | 3-Feb | 3-Feb | | |
| SOM Total | 1 | 3-Feb | 3-Feb | | | | | |
| IRN | WILD | S & B | IRANSHAHR | 3 | 22-Apr | 20-May | | |
| IRN Total | 3 | 22-Apr | 20-May | | | | | |
| 2019 Total | | | | 214 | 1-Jan | 22-Jul | | |

Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2019 - 04/08/2019

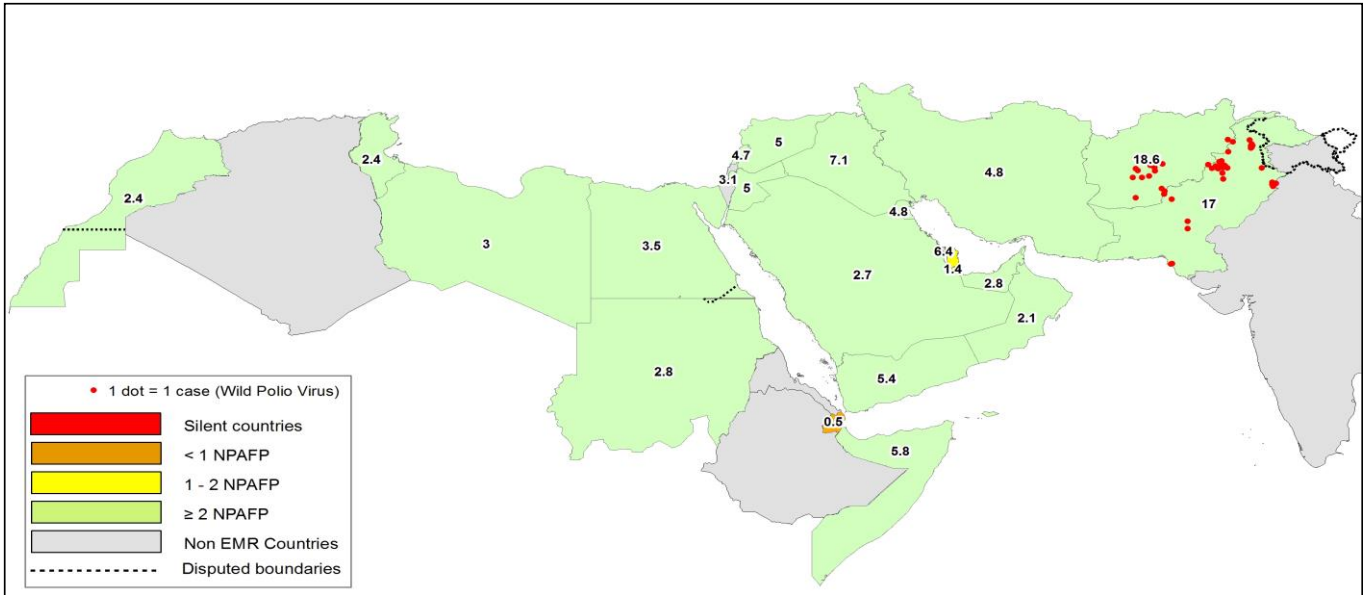


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2019 - 04/08/2019

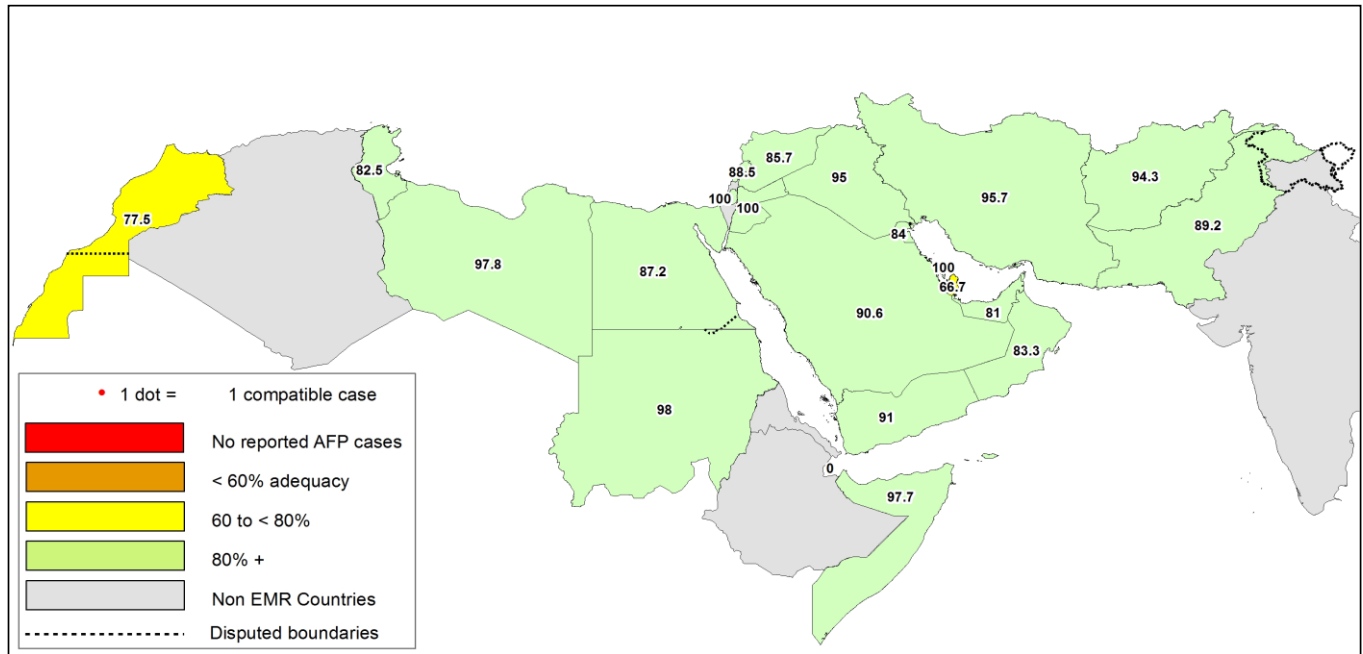


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2018 - 2019

| Year | COUNTRY | Count | First Case | Last Case |
|-------------------|---------|-----------|-----------------|------------------|
| 2018 | AFG | 21 | 1-Jan-18 | 6-Nov-18 |
| | PAK | 12 | 8-Mar-18 | 31-Dec-18 |
| 2018 Total | | 33 | 1-Jan-18 | 31-Dec-18 |
| 2019 | AFG | 12 | 4-Jan-19 | 26-May-19 |
| | PAK | 48 | 15-Jan-19 | 11-Jul-19 |
| 2019 Total | | 60 | 4-Jan-19 | 11-Jul-19 |

Last reported wild Polio P3 from Pakistan with date of onset 18/04/2012

Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2019 - 04/08/2019

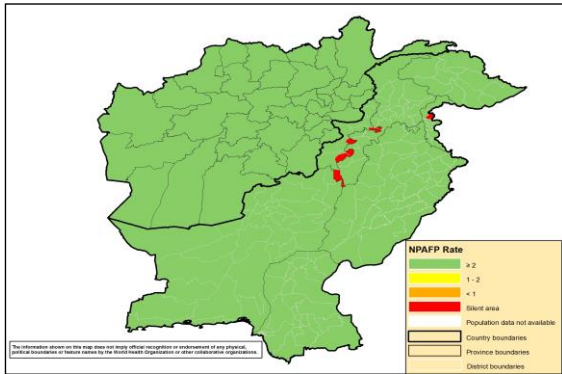


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2019 - 04/08/2019

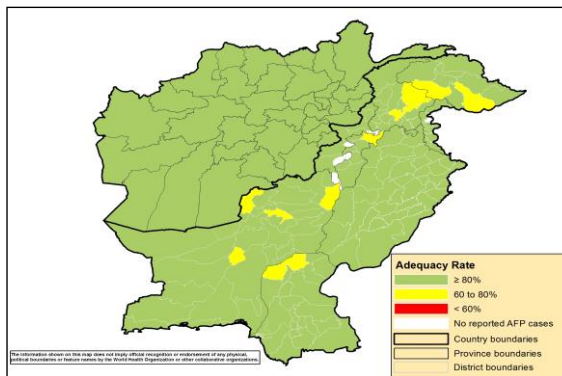
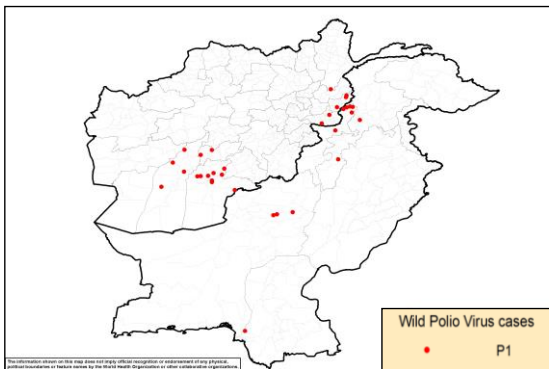
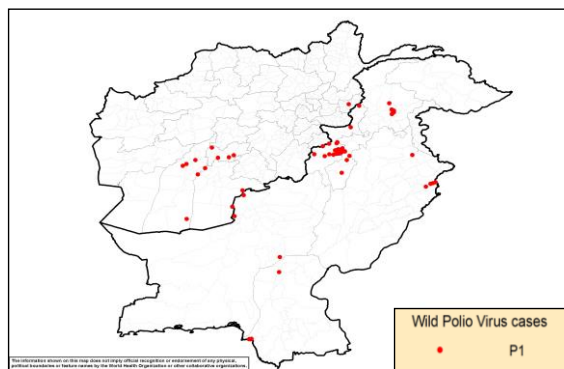


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

5(a) 01/01/2018 - 31/12/2018



5(b) 01/01/2019 - 04/08/2019



World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

Week 31, ending 04 August 2019

5-Aug-19

Number 1087

Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2018-2019

| ONSETYR | PROVINCE | DISTRICT | Count | First case | Last case |
|-------------------|-----------|-----------------|-----------|-----------------|------------------|
| 2018 | HILMAND | NAWZAD | 3 | 1-Sep-18 | 6-Nov-18 |
| | | NAD-E-ALI | 1 | 1-Jun-18 | 1-Jun-18 |
| | URUZGAN | SHAHID-E-HASSAS | 2 | 8-Jul-18 | 9-Oct-18 |
| | NURISTAN | PORUNS | 1 | 26-Sep-18 | 26-Sep-18 |
| | KANDAHAR | MAYWAND | 1 | 24-Sep-18 | 24-Sep-18 |
| | | KANDAHAR | 2 | 11-Aug-18 | 27-Aug-18 |
| | | ARGHANDAB (K) | 1 | 17-Jul-18 | 17-Jul-18 |
| | | SHAHWALIKOT | 3 | 5-Jan-18 | 27-Apr-18 |
| | | KHAKREZ | 1 | 25-Feb-18 | 25-Feb-18 |
| | | SPINBOLDAK | 1 | 6-Jan-18 | 6-Jan-18 |
| | NANGARHAR | PACHIERAGAM | 1 | 17-Jul-18 | 17-Jul-18 |
| | | KAMA | 1 | 1-Jan-18 | 1-Jan-18 |
| | KUNAR | CHAWKAY | 1 | 22-Jun-18 | 22-Jun-18 |
| | | GHAZIABAD | 2 | 14-Feb-18 | 3-Mar-18 |
| 2018 Total | | | 21 | 1-Jan-18 | 6-Nov-18 |
| 2019 | HILMAND | GARMSER | 1 | 26-May-19 | 26-May-19 |
| | | MUSAQALAH | 1 | 5-May-19 | 5-May-19 |
| | | NAWZAD | 1 | 3-Apr-19 | 3-Apr-19 |
| | | WASHER | 1 | 23-Mar-19 | 23-Mar-19 |
| | | SANGIN | 1 | 6-Mar-19 | 6-Mar-19 |
| | URUZGAN | TIRINKOT | 2 | 19-May-19 | 19-May-19 |
| | | CHORA | 1 | 20-Mar-19 | 20-Mar-19 |
| | | SHAHID-E-HASSAS | 1 | 25-Feb-19 | 25-Feb-19 |
| | KUNAR | WATAPUR | 1 | 8-May-19 | 8-May-19 |
| | KANDAHAR | GHORAK | 1 | 12-Jan-19 | 12-Jan-19 |
| | | SPINBOLDAK | 1 | 4-Jan-19 | 4-Jan-19 |
| 2019 Total | | | 12 | 4-Jan-19 | 26-May-19 |

Table 10: Wild Polio cases by district and date of onset of paralysis, Pakistan 2018-2019

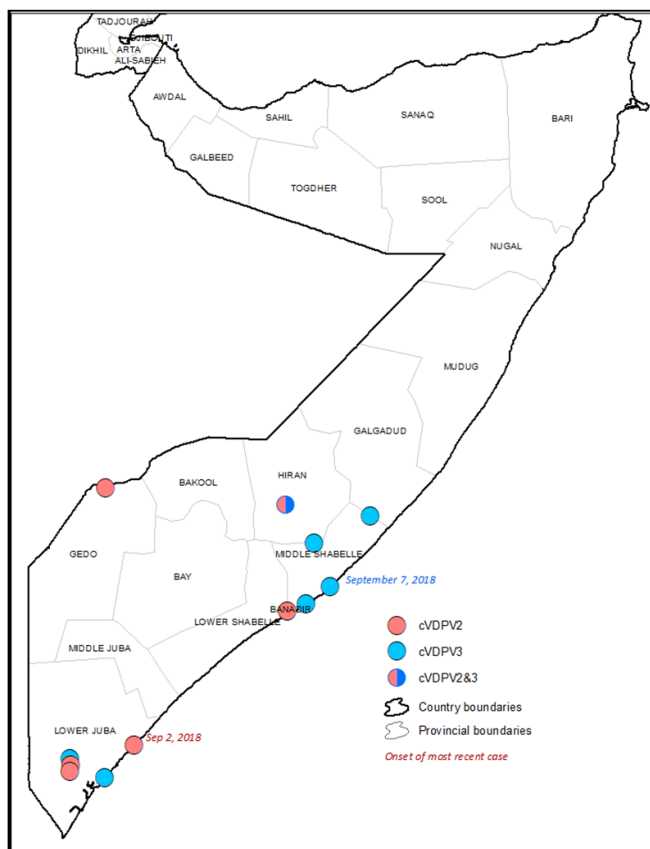
| ONSETYR | PROVINCE | DISTRICT | Count | First case | Last case |
|-------------------|----------------------------|-----------|-----------|------------------|------------------|
| 2018 | KP TRIBAL DISTRICTS (KPTD) | BAJOUR | 5 | 1-Sep-18 | 31-Dec-18 |
| | | KHYBER | 1 | 25-Sep-18 | 25-Sep-18 |
| | KHYBER PAKHTUNKHWA (KP) | LAKKIMRWT | 1 | 16-Dec-18 | 16-Dec-18 |
| | | CHARSADA | 1 | 1-Aug-18 | 1-Aug-18 |
| | SINDH | KHIGADAP | 1 | 22-Sep-18 | 22-Sep-18 |
| | BALUCHISTAN | DUKKI | 3 | 8-Mar-18 | 18-May-18 |
| 2018 Total | | | 12 | 8-Mar-18 | 31-Dec-18 |
| 2019 | KHYBER PAKHTUNKHWA (KP) | BANNU | 18 | 15-Jan-19 | 11-Jul-19 |
| | | LAKKIMRWT | 2 | 27-May-19 | 1-Jul-19 |
| | | TORGHAR | 5 | 25-May-19 | 17-Jun-19 |
| | | SHANGLA | 1 | 18-May-19 | 18-May-19 |
| | | DIKHAN | 1 | 5-May-19 | 5-May-19 |
| | | HANGU | 1 | 20-Jan-19 | 20-Jan-19 |
| | BALUCHISTAN | QUETTA | 1 | 6-Jul-19 | 6-Jul-19 |
| | | KABDULAH | 2 | 9-Jun-19 | 2-Jul-19 |
| | | JAFARABAD | 1 | 28-May-19 | 28-May-19 |
| | PUNJAB | LAHORE | 4 | 20-Jan-19 | 22-Jun-19 |
| | | JHELUM | 1 | 21-Jun-19 | 21-Jun-19 |
| | KP TRIBAL DISTRICTS (KPTD) | WAZIR-N | 6 | 4-Apr-19 | 11-Jun-19 |
| | | KHYBER | 1 | 14-Feb-19 | 14-Feb-19 |
| | | BAJOUR | 1 | 18-Jan-19 | 18-Jan-19 |
| | SINDH | KHIGIQBAL | 1 | 29-Apr-19 | 29-Apr-19 |
| | | LARKANA | 1 | 17-Apr-19 | 17-Apr-19 |
| KHILAYARI | | 1 | 25-Feb-19 | 25-Feb-19 | |
| 2019 Total | | | 48 | 15-Jan-19 | 11-Jul-19 |

Table 11: Circulating VDPV cases and date of onset of paralysis in EMR countries by districts 2018-2019

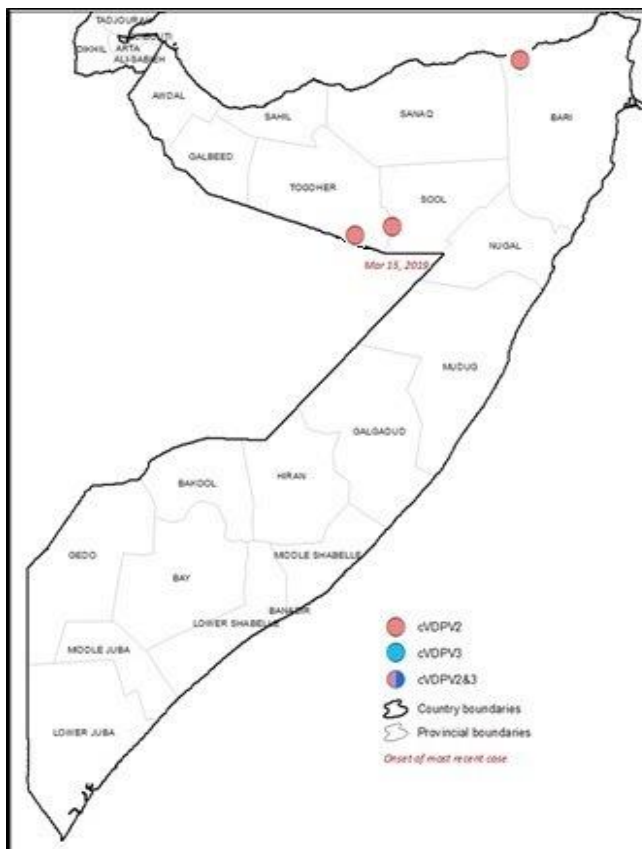
| COUNTRY | YEAR | PROVINCE | DISTRICT | cVDPV2 | | | cVDPV3 | | | |
|---------|-------------------|-----------------|-------------------|--------|------------|------------------|-----------------|------------|------------------|-----------------|
| | | | | Count | First Case | Last Case | Count | First Case | Last Case | |
| SOM | 2019 | BARI | BOSSASO | 1 | 08-May-19 | 08-May-19 | | | | |
| | | TOGDHER | BUHODLE | 1 | 21-Apr-19 | 21-Apr-19 | | | | |
| | | SOOL | LAS ANOD | 1 | 15-Mar-19 | 15-Mar-19 | | | | |
| | Total 2019 | | | | 3 | 15-Mar-19 | 8-May-19 | | | |
| | 2018 | LOWER JUBA | JAMAAME WEST | | 1 | 02-Sep-18 | 02-Sep-18 | | | |
| | | | KISMAYO | | 2 | 29-Jul-18 | 30-Jul-18 | 2 | 4-Jul-18 | 27-Jul-18 |
| | | MIDDLE SHABELLE | RUNINGOD | | | | | 1 | 07-Sep-18 | 07-Sep-18 |
| | | | MAHADAY WARSHEIKH | | | | | 1 | 29-Jun-18 | 29-Jun-18 |
| | | BANADIR | DANYILE | | 1 | 10-Jul-18 | 10-Jul-18 | | | |
| | | HIRAN | BULO BURTI | | 1 | 11-May-18 | 11-May-18 | 1 | 11-May-18 | 11-May-18 |
| | GEDO | DOLO | | 1 | 26-May-18 | 26-May-18 | | | | |
| | Total 2018 | | | | 6 | 11-May-18 | 2-Sep-18 | 7 | 11-May-18 | 7-Sep-18 |

Figure 6: Somalia cVDPV cases by type and district

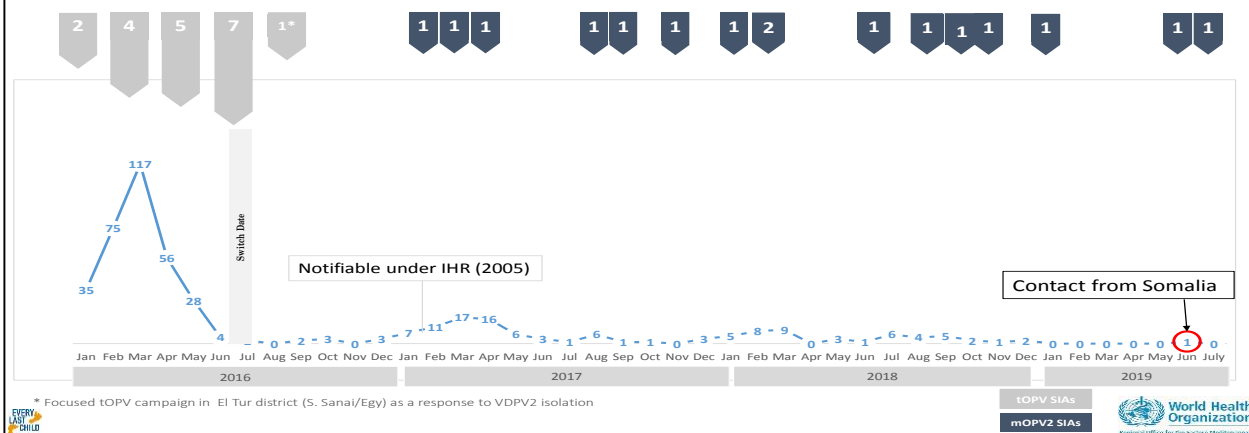
6(a) 01/01/2018 - 31/12/2018



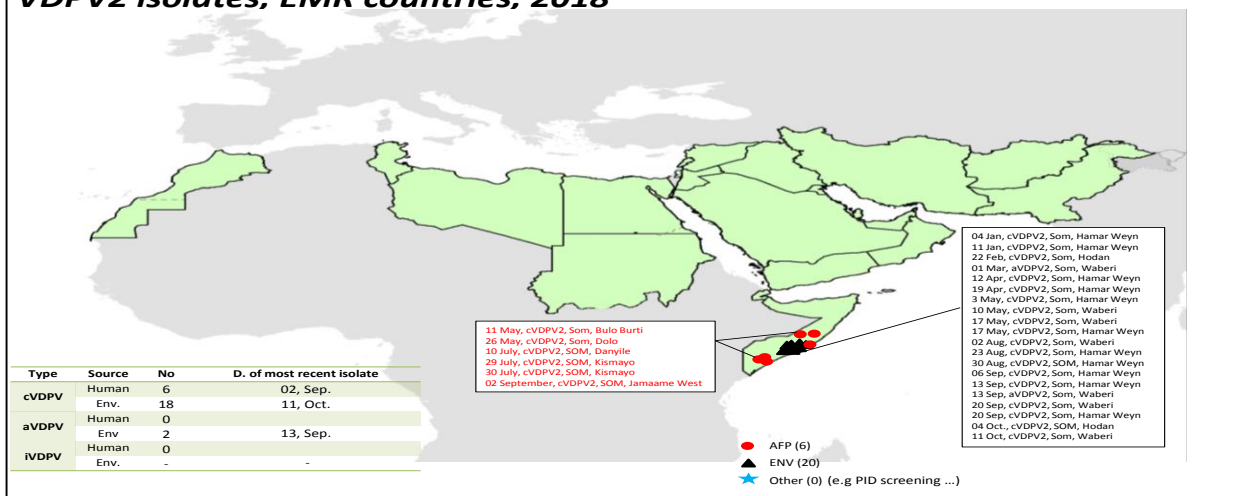
6(b) 01/01/2019 - 04/08/2019



Sabin Like Type-2 Poliovirus Isolates (H & E) EMR, 2016-19



VDPV2 isolates, EMR countries, 2018



VDPV2 isolates, EMR countries, 2019

