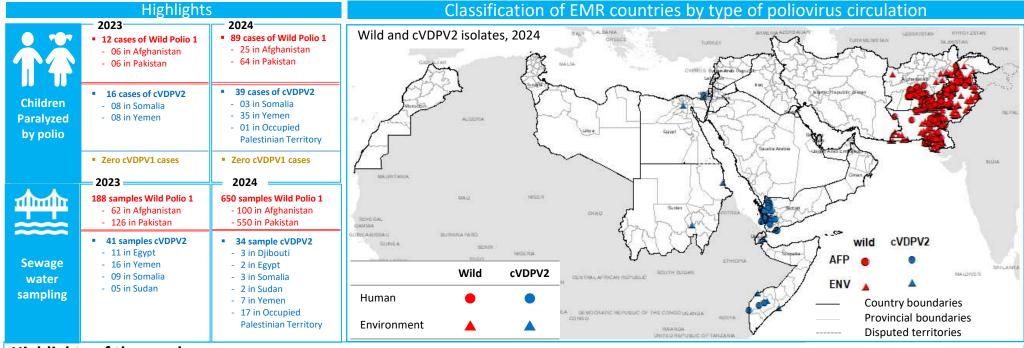


EMR Polio Bulletin

World Health Organization - Regional Office for Eastern Mediterranean Issue No. 1368, Week 51 (ending on 22/12/2024)



Highlights of the week

Wild Poliovirus

- One new WPV1 case was reported this week from Pakistan. The new case is from Jacobabad district of Sindh province with a date of onset of October 24, 2024. The total WPV1 case count for 2024 to date is 89 (25 from Afghanistan and 64 from Pakistan). In 2023, the total case count remains at 12 (6 from Afghanistan and 6 from Pakistan).
- Twenty new WPV1 environmental samples (ES) were reported this week: 11 from Pakistan and 9 from Afghanistan. In Pakistan, the ES were collected from Balochistan province (1 each from Sibi, Noshki, Lasbela, Khuzdar, Gwadar, Dukki, and Hub districts), Khyber Pakhtunkhwa province (2 from Bannu and 1 from Dera Ismail Khan districts), and Punjab province (1 from Lahore), with collection dates ranging between 18th and 30th November 2024. In Afghanistan, the samples were collected from Helmand province (1 each from Nahre-Saraj and Lashkargah), Kandahar province (4 from Kandahar city/district), and 1 each from Laghman province (Mehtarlam District), Nangarhar province (Behsud District), and Uruzgan (Tirinkot District), with collection dates ranging between 23rd and 25th November 2024. The total ES count to date in 2024 is 650 (100 from Afghanistan and 550 from Pakistan), compared to 188 in 2023 (62 from Afghanistan and 126 from Pakistan).

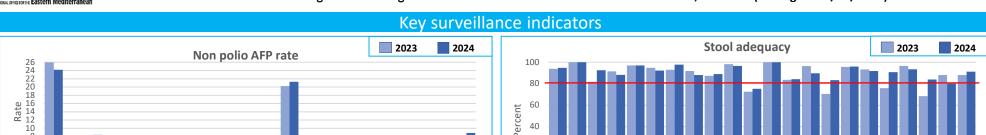
Vaccine derived poliovirus (VDPV)

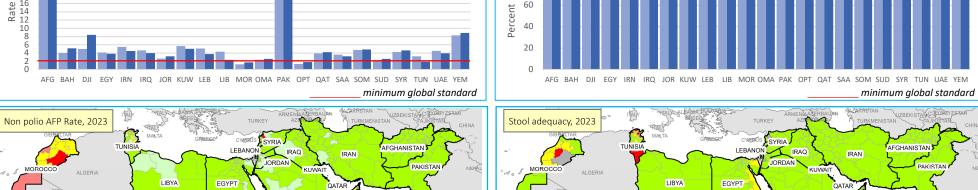
- No new cVDPV cases reported this week. The cVDPV2 cases count in 2024 to date remains 39 (35 from Yemen, 3 from Somalia, and 1 from Occupied Palestinian Territory). In 2023, the count remains 16 (8 each from Somalia and Yemen)
- No new cVDPV2 positive ES reported this week. The cVDPV2 positives ES in 2024 to date is 34 (17 from the Occupied Palestinian Territory, 7 from Yemen, 3 each from Somalia and Djibouti, and 2 each from Sudan and Egypt). In 2023, the count remains 41 (16 from Yemen, 11 from Egypt, 9 from Somalia, and 5 from Sudan).

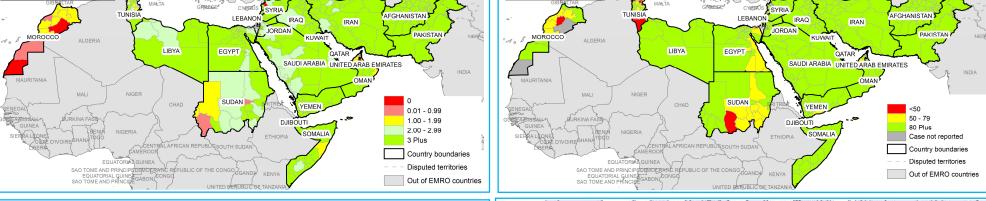


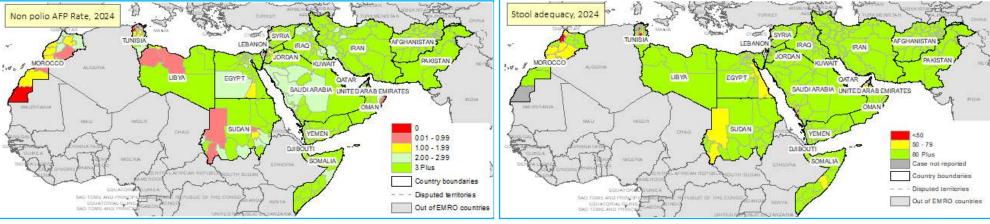
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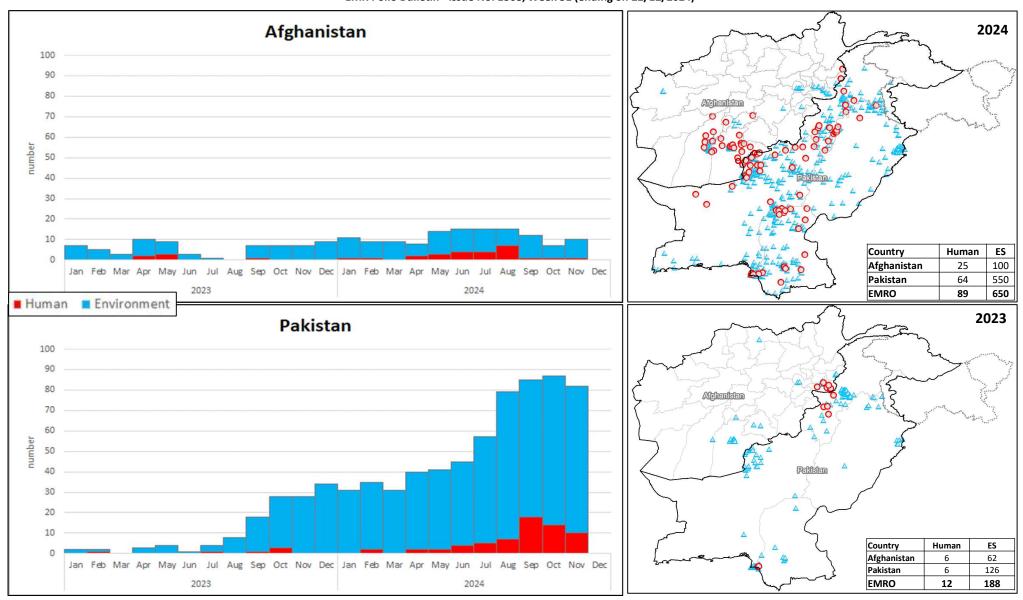








WPV1 Positive isolates from Afghanistan and Pakistan by source



Virus isolation by country, last 12 months (22 December 2023, to 22 December 2024)

| Source / Virus type | AFG | DJI | PAK | EGY | SOM | SUD | YEM | Total |
|---------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Human (AFP only) | 25 | | 64 | | 3 | 1 | 36 | 129 |
| Wild | 25 | | 64 | | | | | 89 |
| cVDPV2 | | | | | 3 | | 36 | 39 |
| VDPV2 | | | | | | 1 | | 1 |
| Environment | 105 | 3 | 550 | 5 | 3 | 5 | 7 | 678 |
| Wild | 105 | | 550 | | | | | 655 |
| cVDPV2 | | 3 | | 5 | 3 | 2 | 7 | 20 |
| VDPV2 | | | | | | 3 | | 3 |
| Total | 130 | 3 | 614 | 5 | 6 | 6 | 43 | 807 |

Confirmed Wild Polio 1 Cases by month of onset

| Country | Total year 2022 | Total year 2023 | 22 | Dec. | | | | Confir | med Wil | | 1 Cases)24 | by mon | th of on | set | Recent most | | | |
|-------------------------------------|--------------------|--------------------|------|------|-----|-----|-----|--------|---------|-----|----------------|--------|----------|-----|----------------|-----|-----------|--|
| Country | Total 20 | Total 20 | 2023 | 2024 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Case | |
| Afghanistan | 2 | 6 | 6 | 25 | 1 | 1 | 0 | 2 | 3 | 4 | 4 | 7 | 1 | 1 | 1 | | 05-Nov-24 | |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Djibouti | 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 | 0 | | | | |
| Iraq | 0 | 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 | 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 | | | | | |
| Morocco | 0 | 0 | 0 | 0 | 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 | 20 | 6 | 6 | 64 | 0 | 2 | 0 | 2 | 2 | 4 | 5 | 7 | 18 | 14 | 10 | | 29-Nov-24 | |
| Occupied Palestinian Territory **** | 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 | 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 | | | | | | | | | | | |
| 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 | 0 | 0 | | | | | |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Yemen | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | | | | | | | | | | |
| EMR | 22 | 12 | 12 | 89 | 1 | 3 | 0 | 4 | 5 | 8 | 9 | 14 | 19 | 15 | 11 | 0 | 29-Nov-24 | |

^{****} UNRWA cases are included with those of country of residence

Investigation of AFP cases with paralysis onset in 2023 & 2024

| | | | | | 2024 | | | | | 2023 | | | | | | | | | | | |
|--------------------------------|-----------|----------------------------------|------------------|---------------------------------|------|---|---|----------------------------------|---------------------------|-----------|-------------------------------------|------------------|---------------------------------|-------------|---|---|----------------------------------|---------------------------|----------------|--|--|
| | | Case classification Survei | | | | | | | e indicators | | | | Case cla | ssification | | | Surveilland | e indicators | Line List | | |
| COUNTRY | AFP cases | Total Confirmed WPV1 Polio Cases | Polio Compatible | (non polio Discarded AFP) | ADbA | Pending classification > 90 days from onset | Pending LAB classification > 90 days from onset | Annualized Non polio AFP rate | % with adequate specimens | AFP cases | Total Confirmed WPV1 Polio Cases | Polio Compatible | (non polio Discarded AFP) | Adda | Pending classification > 90 days from onset | Pending LAB classification > 90 days from onset | Annualized Non polio AFP rate | % with adequate specimens | Date of latest | | |
| Afghanistan | 5470 | 25 | 0 | 5218 | 0 | 2 | 0 | 24.21 | 95 | 5856 | 6 | 0 | 5850 | 0 | 0 | 2 | 25.98 | 94 | 22-Dec-24 | | |
| Bahrain | 15 | 0 | 0 | 5 | 0 | 7 | 0 | 5.15 | 100 | 12 | 0 | 0 | 12 | 0 | 0 | 0 | 4.01 | 100 | 22-Dec-24 | | |
| Djibouti | 27 | 0 | 0 | 20 | 0 | 2 | 2 | 8.42 | 93 | 22 | 0 | 0 | 22 | 0 | 0 | 0 | 4.99 | 82 | 22-Dec-24 | | |
| Egypt | 1570 | 0 | 0 | 1369 | 0 | 28 | 1 | 3.81 | 88 | 1714 | 0 | 0 | 1714 | 0 | 0 | 0 | 4.16 | 91 | 19-Dec-24 | | |
| Iraq | 701 | 0 | 0 | 650 | 0 | 4 | 0 | 4.00 | 92 | 820 | 0 | 0 | 820 | 0 | 0 | 0 | 4.66 | 95 | 20-Dec-24 | | |
| Islamic Republic of Iran | 925 | 0 | 0 | 913 | 0 | 1 | 0 | 4.48 | 97 | 1150 | 0 | 0 | 1150 | 0 | 0 | 0 | 5.49 | 97 | 21-Dec-24 | | |
| Jordan | 141 | 0 | 0 | 129 | 0 | 0 | 0 | 3.21 | 98 | 116 | 0 | 0 | 116 | 0 | 0 | 0 | 2.68 | 93 | 19-Dec-24 | | |
| Kuwait | 42 | 0 | 0 | 40 | 0 | 0 | 0 | 5.05 | 88 | 49 | 0 | 0 | 49 | 0 | 0 | 0 | 5.69 | 92 | 12-Dec-24 | | |
| Lebanon | 64 | 0 | 0 | 54 | 0 | 5 | 0 | 3.75 | 89 | 79 | 0 | 0 | 79 | 0 | 0 | 0 | 5.11 | 87 | 01-Dec-24 | | |
| Libya | 60 | 0 | 0 | 50 | 0 | 1 | 1 | 2.37 | 97 | 113 | 0 | 0 | 113 | 0 | 0 | 0 | 4.32 | 98 | 03-Dec-24 | | |
| Morocco | 186 | 0 | 0 | 93 | 0 | 45 | 1 | 1.74 | 75 | 150 | 0 | 0 | 150 | 0 | 0 | 0 | 1.28 | 73 | 15-Dec-24 | | |
| Oman | 33 | 0 | 0 | 31 | 0 | 0 | 0 | 2.58 | 100 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 2.38 | 100 | 19-Dec-24 | | |
| Pakistan | 20397 | 64 | 0 | 19379 | 0 | 140 | 76 | 21.27 | 84 | 19773 | 6 | 0 | 19765 | 0 | 2 | 4 | 20.22 | 84 | 22-Dec-24 | | |
| Occupied Palestinian Territory | 39 | 0 | 0 | 20 | 1 | 6 | 0 | 1.82 | 90 | 28 | 0 | 0 | 28 | 0 | 0 | 0 | 1.35 | 96 | 15-Dec-24 | | |
| Qatar | 18 | 0 | 0 | 15 | 0 | 0 | 0 | 4.23 | 83 | 17 | 0 | 0 | 17 | 0 | 0 | 0 | 3.91 | 71 | 22-Dec-24 | | |
| Saudi Arabia | 250 | 0 | 0 | 185 | 0 | 2 | 0 | 3.23 | 96 | 301 | 0 | 0 | 301 | 0 | 0 | 0 | 3.60 | 96 | 15-Dec-24 | | |
| Somalia | 442 | 0 | 0 | 425 | 3 | 0 | 0 | 4.88 | 92 | 433 | 0 | 0 | 425 | 8 | 0 | 0 | 4.75 | 93 | 22-Dec-24 | | |
| Sudan | 536 | 0 | 0 | 339 | 1 | 48 | 28 | 2.60 | 91 | 473 | 0 | 0 | 473 | 0 | 0 | 0 | 2.28 | 76 | 22-Dec-24 | | |
| Syrian Arab Republic | 352 | 0 | 0 | 327 | 0 | 1 | 0 | 4.63 | 93 | 332 | 0 | 0 | 332 | 0 | 0 | 0 | 4.27 | 97 | 21-Dec-24 | | |
| Tunisia | 56 | 0 | 0 | 45 | 0 | 0 | 0 | 1.88 | 84 | 95 | 0 | 0 | 95 | 0 | 0 | 0 | 3.20 | 68 | 22-Dec-24 | | |
| United Arab Emirates | 55 | 0 | 0 | 47 | 0 | 2 | 0 | 3.94 | 80 | 67 | 0 | 0 | 67 | 0 | 0 | 0 | 4.54 | 88 | 12-Dec-24 | | |
| Yemen | 1442 | 0 | 1 | 583 | 35 | 508 | 493 | 8.86 | 91 | 1331 | 0 | 0 | 1322 | 9 | 0 | 0 | 8.27 | 88 | 12-Dec-24 | | |
| EMR POL | 32821 | 89 | | 29937 | 40 | 802 | 602 | 11.42 | 88 | 32961 | 12 | | | | | | | | | | |

^{*} 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, with 14 days of paralysis onset and specimens received in the lab in 'Good Condition'

^{****} Includes all VDPV cases. Further details available in page (8)

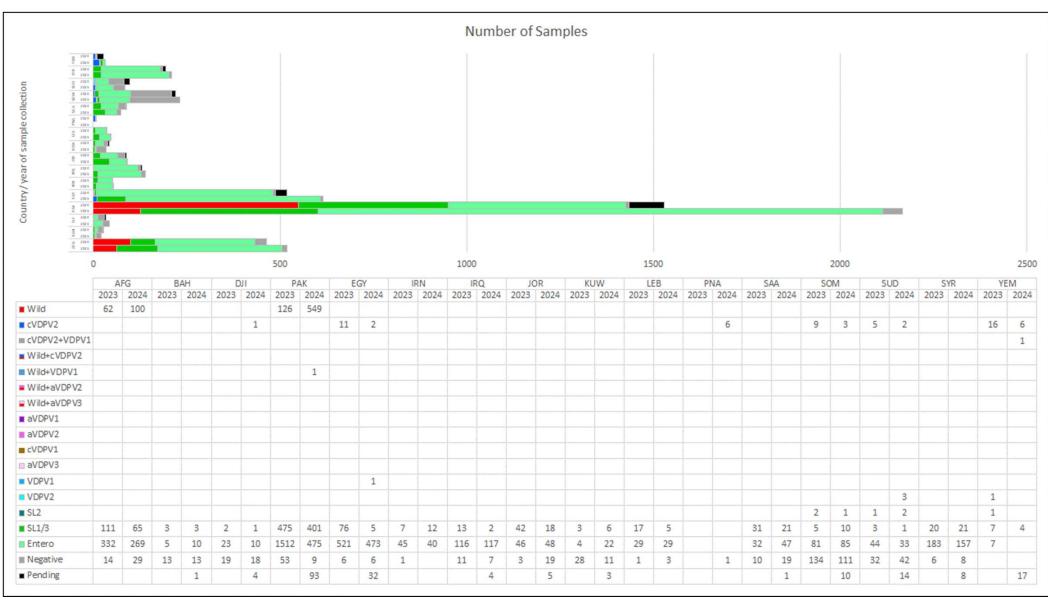
Laboratory investigation of AFP cases with paralysis onset in 2024

| | Polio laboratories | | Prelin | ninary vir | us isolati | on result | s of AFP | cases | | | | F | oliovir | us intr | atypic o | lifferer | ntiation | results | | | | | Indica | itors | | |
|-----------------|---|--------------------------|---------|------------|------------|-----------|---------------------------------|-----------------------------------|------|--------|------|------|---------|---------|----------|----------|----------|-----------------------------|-------------|--------|-------------|-----|--------|-------|------|-----------------|
| | ITD / nucleotide Sequencing | _ | Referre | d for ITD | | | Pen | ding | | Type 1 | | - 1 | Type 2 | | | Type 3 | | В | NPEV by PCR | | | | | | | Date |
| Country | Sequencing performed by CDC and RIVM laboratories | AFP cases with specimens | L20B+ | L20B+/NPEV | NPEV only | Negative | received within last 14 days | received more than 14 days ago | PIIM | Sabin | VDPV | Mild | Sabin | VDPV | Mild | Sabin | VDPV | Discordent pending sequence | | Non-EV | Pending ITD | | | | | Latest report D |
| Afghanistan | RRL Pakistan | 5436 | 284 | 27 | 757 | 4177 | 145 | 3 | 18* | 189 | | | | | | 205 | | | | | | 11% | 94% | 100% | 90% | 22-12-24 |
| Bahrain | PNL Oman / CDC | 15 | 1 | | 1 | 13 | | | | 1 | | | | | | 1 | | | | | | 7% | 100% | 100% | 93% | 19-12-24 |
| Djibouti | PNL Kenya / CDC | 26 | | | 3 | 17 | | 6 | | | | | | | | | | | | | | 15% | 25% | | 90% | 13-12-24 |
| Egypt | RRL Egypt | 1491 | 13 | 1 | 155 | 1240 | 76 | 6 | | 7 | | | | | | 8 | | | 1 | | | 9% | 95% | 100% | 99% | 19-12-24 |
| Iran | PNL Iran / CDC | 967 | 10 | | 13 | 921 | 23 | | | 3 | | | | | | 9 | | | | | | 1% | 100% | 100% | 99% | 21-12-24 |
| Iraq | PNL Iraq, RRL Egypt | 280 | 10 | j | 34 | 200 | | 36 | | 3 | | | | | | 8 | | | | | | 13% | 100% | 100% | 99% | 13-12-24 |
| Jordan | PNL Jordan, RRL Egypt | 137 | 6 | | 24 | 106 | | 1 | | 1 | | | | | | 1 | | | | 4 | 1 | 16% | 90% | 60% | 99% | 22-12-24 |
| Kuwait | RRL Kuwait / RIVM | 44 | 2 | | 1 | 40 | 1 | | | | | | | | | | | | | | 2 | 1% | 93% | | 100% | 19-12-24 |
| Lebanon | NPL Syria RRL Egypt | 60 | | | 1 | 57 | | 2 | | | | | | | | | | | | | | 2% | 100% | | | 30-11-24 |
| Libya | RRL Tunisia / RIVM | 49 | | | 1 | 48 | | | | | | | | | | | | | | | | 2% | 100% | | 45% | 20-12-24 |
| Morocco | PNL Morocco, RRL Tunisia | 153 | | | 2 | 138 | | 13 | | | | | | | | | | | | | | 1% | 99% | | 97% | 20-12-24 |
| Oman | PNL Oman / CDC | 33 | 1 | | | 31 | 1 | | | | | | | | | 1 | | | | | | 5% | 78% | 100% | 100% | 19-12-24 |
| Pakistan | RRL Pakistan / CDC | 19849 | 776 | 44 | 2825 | 15706 | 430 | 49 | 48* | 467 | | | | | | 534 | | | | | | 11% | 95% | 100% | 96% | 22-12-24 |
| Palestine & UNR | WA | 41 | 2 | 1 | 8 | 24 | | 7 | | | | | 1 | 1 | | | | | 1 | 1 | | 25% | 44% | 100% | 85% | 15-12-24 |
| Qatar | RRL Oman / CDC | 17 | 1 | | | 16 | | | | | | | | | | 1 | | | | | | 0% | 100% | 100% | 100% | 19-12-24 |
| Saudi Arabia | PNL Saudi Arabia / CDC | 219 | 4 | | 9 | 194 | | 12 | | 2 | | | | | | 1 | | | | 1 | | 4% | 91% | 75% | 100% | 05-12-24 |
| Somalia | PNL Kenya / CDC | 434 | 18 | | 56 | 354 | 1 | 5 | | 7 | | | | 9 | | 7 | | | | | | 13% | 3% | | 90% | 13-12-24 |
| Sudan | PNL Sudan, RRL Egypt | 444 | 7 | | 90 | 317 | 29 | | | 2 | | | 1 | 1 | | 1 | | | 2 | | | 20% | 94% | 100% | 23% | 19-12-24 |
| Syria | PNL Syria, RRL Egypt | 337 | 6 | | 19 | 303 | | 9 | | | | | | | | | | | | | | 5% | 99% | | | 30-11-24 |
| Tunisia | RRL Tunisia | 61 | | | 4 | 54 | 3 | | | | | | | | | | | | | | | 5% | 100% | | 98% | 20-12-24 |
| U.A.E | PNL Oman / CDC | 45 | | | 3 | 42 | | | | | | | | | | | | | | | | 5% | 49% | | 22% | 19-12-24 |
| Yemen | PNLs Oman, Jordan & Kenya, RRL Egypt | 617 | 42 | 2 | 109 | 464 | | 1 | | 5 | | | 1 | 34** | | 6 | | | | | | 17% | 13% | 95% | 14% | 19-12-24 |
| | Total EMR 2023 | 30755 | 1183 | 75 | 4115 | 24462 | 709 | 150 | 89* | 687 | | | 3 | 45** | | 783 | | | 4 | 6 | 3 | 11% | 92% | 100% | 92% | |
| | Total EMR 2024 | 32172 | 1012 | 81 | 5433 | 26509 | | 30 | 12* | 656 | | | 8 | 22 | | 766 | | | 4 | 3 | 1 | 12% | 90% | 100% | 92% | |

^{*} In 2024 – Twenty-Two WPV1 cases (7 from Afghanistan and 15 from Pakistan) are confirmed due to positive contact (Index cases were negative for WPV1) In 2023 - Two WPV1 cases are confirmed due to positive contacts (Index cases were negative for WPV1)

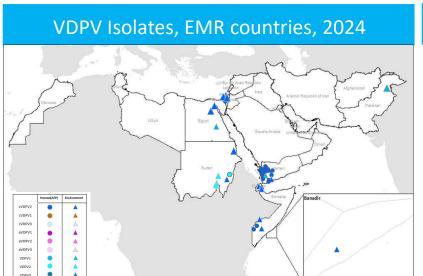
^{**} In 2024 – One cVDPV2 case was confirmed due to two positive contacts (Index case was negative for cVDPV2)

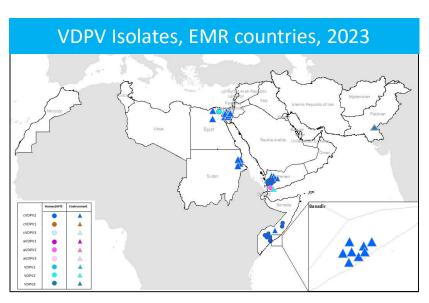
Environmental Surveillance Isolation by Classification



VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1368 Week 51 (ending on 22/12/2024)





VDPVs isolated from 2019-2024 Isolate **EMR** AFP cases(Human) Contacts(Human) Environment Other Sources (Healthy Children) Country type Most recent Afghanistan 307 43 09-07-21 23-06-21 12 20-10-24 Djibouti 01-08-24 Egypt 20-02-21 Iran 3 1 cVDPV2 Pakistan 22 135 8 23-04-21 38 | 135 | 35 11-08-21 1 25-07-24 04-11-24 Somalia 8 3 05-06-24 12-03-24 14-05-24 10-03-22 24-08-20 Sudan Yemen 66 162 8 35 16-09-24 23 40 1 2 09-03-24 13 26 16 25-06-24 cVDPV1 Yemen 1 31 3 27-03-21 10-07-19 cVDPV3 Somalia 07-09-18 30-06-18 23-08-18 22-02-21 Afghanistan 16-07-20 Egypt aVDPV1 Pakistan 10-02-21 1 26-01-20 20-07-21 1 Yemen 01-01-22 75 15 1 14-02-22 Afghanistan 3 1 1 2 3 25-07-21 14-06-21 1 67 7 4 13-04-23 Egypt 23-09-21 aVDPV2 Pakistan 7 8 24-09-21 8 19 1 3 22 37 1 15-02-22 01-09-22 1 22-08-22 03-02-19 Somalia 3 05-09-23 1 09-12-21 Yemen Afghanistan 1 23-06-20 aVDPV3 Egypt 2 30-09-20 05-04-21 15-01-20 21-09-24 Egypt VDPV1 Pakistan 14-02-24 20-03-24 Yemen Egypt 17-07-23 1 04-02-22 Iran 2 25-05-22 Jordan VDPV2 1 Somalia 01-09-22 22-04-22 1 24-05-24 25-10-24 Sudan 3 2 27-05-23 VDPV3 Pakistan 14-02-23

Important links

EMR Polio Bulletin - Issue No. 1367, Week 50 (ending on 15/12/2024)

Important Links

- Global Polio Eradication Initiative
- IMST Outbreak Response Dashboard
- nOPV2 Tracker
- Pol-MIS (restricted to registered users)
- Containment (restricted to registered users)
- Certification (e-ACR) (restricted to registered users)