

# AFP Surveillance Bulletin - India

Report for week 11, ending 16 March 2019

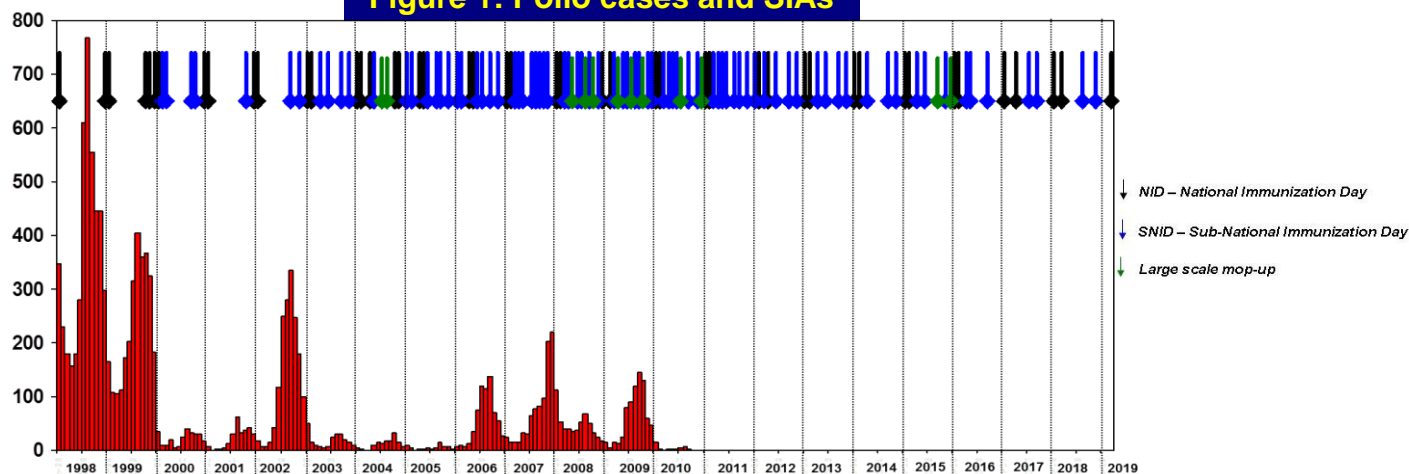
**Table 1: AFP cases by month of paralysis onset, last 13 months**

| State/UT's       | Total AFP cases in 2018 | AFP cases as on week 11, 2018 | AFP cases as on week 11, 2019 | Mar-18      | Apr-18      | May-18      | Jun-18      | Jul-18      | Aug-18      | Sep-18      | Oct-18      | Nov-18      | Dec-18      | Jan-19      | Feb-19      | Mar-19     |
|------------------|-------------------------|-------------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| A&N ISLANDS      | 8                       | 2                             | 1                             | 2           | 0           | 2           | 0           | 0           | 1           | 0           | 1           | 0           | 0           | 1           | 0           | 0          |
| ANDHRA PRADESH   | 419                     | 73                            | 65                            | 31          | 31          | 42          | 24          | 35          | 40          | 32          | 37          | 32          | 43          | 39          | 22          | 4          |
| ARUNACHAL PR.    | 10                      | 0                             | 4                             | 2           | 0           | 0           | 0           | 0           | 1           | 0           | 0           | 5           | 2           | 4           | 0           | 0          |
| ASSAM            | 270                     | 44                            | 37                            | 25          | 18          | 24          | 28          | 29          | 15          | 22          | 17          | 15          | 35          | 23          | 13          | 1          |
| BIHAR            | 7062                    | 1220                          | 943                           | 557         | 456         | 540         | 581         | 619         | 608         | 690         | 734         | 607         | 501         | 439         | 419         | 85         |
| CHANDIGARH       | 55                      | 8                             | 9                             | 6           | 5           | 3           | 1           | 4           | 5           | 8           | 7           | 3           | 5           | 8           | 1           | 0          |
| CHHATTISGARH     | 246                     | 50                            | 42                            | 17          | 18          | 15          | 20          | 17          | 22          | 27          | 22          | 15          | 23          | 26          | 15          | 1          |
| D&N HAVELI       | 3                       | 0                             | 0                             | 1           | 0           | 1           | 0           | 0           | 0           | 1           | 0           | 0           | 0           | 0           | 0           | 0          |
| DAMAN & DIU      | 4                       | 2                             | 1                             | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 1           | 1           | 0           | 1           | 0          |
| DELHI            | 688                     | 113                           | 136                           | 54          | 58          | 70          | 48          | 51          | 52          | 64          | 56          | 63          | 64          | 82          | 45          | 9          |
| GOA              | 25                      | 2                             | 8                             | 0           | 1           | 1           | 4           | 2           | 1           | 3           | 3           | 1           | 5           | 4           | 3           | 1          |
| GUJARAT          | 938                     | 184                           | 164                           | 96          | 75          | 67          | 82          | 92          | 83          | 78          | 56          | 50          | 69          | 76          | 81          | 7          |
| HARYANA          | 818                     | 125                           | 98                            | 49          | 48          | 51          | 54          | 59          | 67          | 95          | 111         | 75          | 66          | 65          | 33          | 0          |
| HIMACHAL PRADESH | 74                      | 23                            | 12                            | 5           | 6           | 3           | 3           | 3           | 8           | 4           | 2           | 10          | 6           | 7           | 3           | 2          |
| JAMMU & KASHMIR  | 209                     | 32                            | 16                            | 22          | 20          | 19          | 18          | 14          | 22          | 20          | 8           | 15          | 17          | 14          | 2           | 0          |
| JHARKHAND        | 870                     | 124                           | 156                           | 83          | 63          | 64          | 63          | 72          | 88          | 78          | 98          | 69          | 63          | 92          | 58          | 6          |
| KARNATAKA        | 850                     | 99                            | 139                           | 53          | 48          | 81          | 62          | 96          | 87          | 82          | 97          | 62          | 83          | 78          | 55          | 6          |
| KERALA           | 301                     | 53                            | 61                            | 25          | 23          | 26          | 23          | 33          | 36          | 19          | 20          | 21          | 23          | 32          | 28          | 1          |
| LAKSHADWEEP      | 0                       | 0                             | 0                             | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0          |
| MADHYA PRADESH   | 1865                    | 294                           | 238                           | 128         | 130         | 161         | 160         | 175         | 181         | 168         | 185         | 152         | 127         | 113         | 113         | 12         |
| MAHARASHTRA      | 1920                    | 308                           | 217                           | 144         | 146         | 157         | 145         | 190         | 231         | 185         | 146         | 113         | 110         | 118         | 91          | 8          |
| MANIPUR          | 31                      | 1                             | 6                             | 2           | 0           | 3           | 6           | 3           | 3           | 4           | 5           | 1           | 3           | 5           | 1           | 0          |
| MEGHALAYA        | 20                      | 4                             | 0                             | 2           | 2           | 2           | 2           | 2           | 2           | 0           | 2           | 1           | 1           | 0           | 0           | 0          |
| MIZORAM          | 32                      | 3                             | 0                             | 3           | 1           | 0           | 3           | 3           | 5           | 4           | 4           | 6           | 2           | 0           | 0           | 0          |
| NAGALAND         | 13                      | 0                             | 4                             | 1           | 0           | 1           | 3           | 2           | 0           | 1           | 1           | 1           | 0           | 3           | 1           | 0          |
| ODISHA           | 956                     | 137                           | 150                           | 60          | 76          | 57          | 65          | 101         | 106         | 98          | 113         | 63          | 86          | 77          | 61          | 12         |
| PONDICHERRY      | 25                      | 3                             | 1                             | 2           | 1           | 2           | 0           | 6           | 3           | 1           | 0           | 5           | 3           | 0           | 1           | 0          |
| PUNJAB           | 519                     | 111                           | 156                           | 31          | 23          | 29          | 24          | 39          | 40          | 46          | 57          | 45          | 59          | 96          | 57          | 3          |
| RAJASTHAN        | 1607                    | 240                           | 256                           | 119         | 124         | 167         | 138         | 128         | 137         | 145         | 137         | 120         | 133         | 135         | 115         | 6          |
| SIKKIM           | 5                       | 0                             | 3                             | 1           | 0           | 1           | 0           | 0           | 0           | 0           | 0           | 2           | 1           | 1           | 2           | 0          |
| TAMIL NADU       | 816                     | 134                           | 130                           | 92          | 57          | 73          | 53          | 91          | 67          | 45          | 56          | 81          | 70          | 64          | 66          | 0          |
| TELANGANA        | 368                     | 48                            | 76                            | 24          | 21          | 24          | 30          | 29          | 28          | 28          | 34          | 51          | 48          | 51          | 24          | 1          |
| TRIPURA          | 25                      | 2                             | 3                             | 4           | 1           | 4           | 3           | 1           | 3           | 4           | 1           | 0           | 0           | 1           | 2           | 0          |
| UTTAR PRADESH    | 12939                   | 1728                          | 1998                          | 812         | 777         | 948         | 1117        | 1081        | 1186        | 1713        | 1456        | 1165        | 985         | 942         | 926         | 130        |
| UTTARAKHAND      | 255                     | 32                            | 66                            | 20          | 12          | 18          | 20          | 23          | 14          | 28          | 27          | 33          | 24          | 22          | 41          | 3          |
| WEST BENGAL      | 2172                    | 339                           | 286                           | 164         | 162         | 156         | 167         | 215         | 264         | 247         | 174         | 149         | 125         | 126         | 138         | 22         |
| <b>TOTAL</b>     | <b>36418</b>            | <b>5538</b>                   | <b>5482</b>                   | <b>2637</b> | <b>2403</b> | <b>2812</b> | <b>2947</b> | <b>3215</b> | <b>3406</b> | <b>3940</b> | <b>3667</b> | <b>3032</b> | <b>2783</b> | <b>2744</b> | <b>2418</b> | <b>320</b> |

"0" means that report was received but no cases were identified

Data from weekly case based reports

**Figure 1: Polio cases and SIAs**



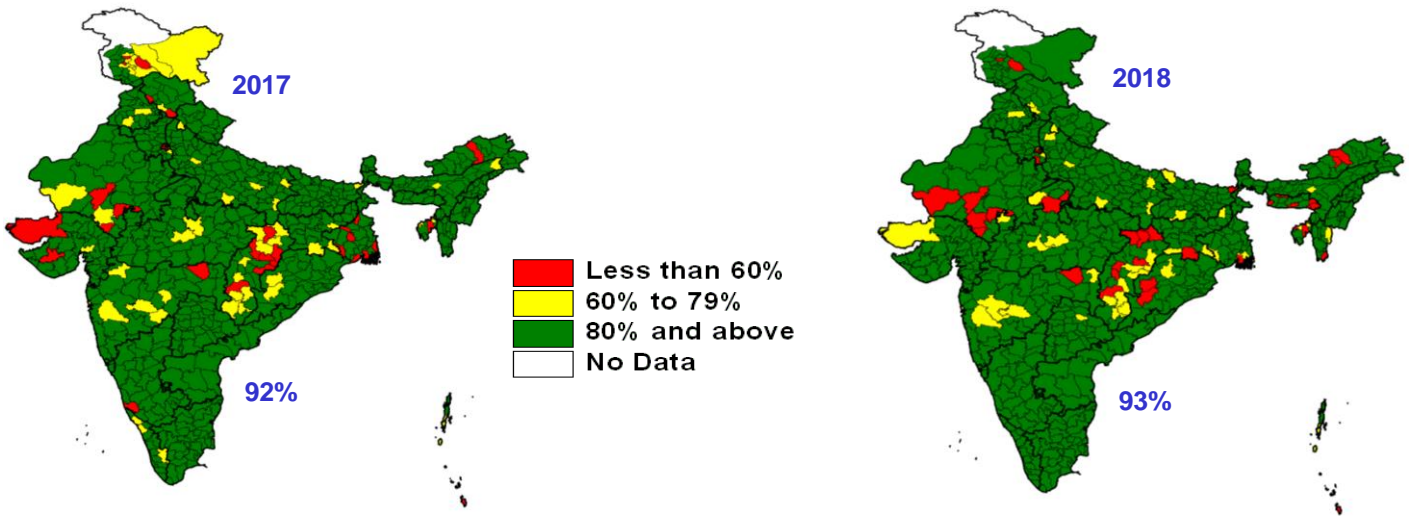
**Table 2: AFP cases key surveillance indicators, 2017 - 2019**

| State/UT's       | 2017         |          |            |                              |          |           | 2018         |          |            |                              |             |             | 2019        |          |            |                              |             |           |
|------------------|--------------|----------|------------|------------------------------|----------|-----------|--------------|----------|------------|------------------------------|-------------|-------------|-------------|----------|------------|------------------------------|-------------|-----------|
|                  | #            | VDPV     | Compatible | Discarded<br>(non-polio AFP) | Pending  |           | #            | VDPV     | Compatible | Discarded<br>(non-polio AFP) | Pending     |             | #           | VDPV     | Compatible | Discarded<br>(non-polio AFP) | Pending     |           |
|                  |              |          |            |                              | Total    | > 90 Days |              |          |            |                              | Total       | > 90 Days   |             |          |            |                              | Total       | > 90 Days |
| A&N ISLANDS      | 2            | 0        | 0          | 2                            | 0        | 0         | 8            | 0        | 0          | 8                            | 0           | 0           | 1           | 0        | 0          | 0                            | 1           | 0         |
| ANDHRA PRADESH   | 339          | 0        | 0          | 339                          | 0        | 0         | 419          | 0        | 0          | 399                          | 20          | 16          | 65          | 0        | 0          | 42                           | 23          | 0         |
| ARUNACHAL PR.    | 11           | 0        | 0          | 11                           | 0        | 0         | 10           | 0        | 0          | 10                           | 0           | 0           | 4           | 0        | 0          | 3                            | 1           | 0         |
| ASSAM            | 308          | 0        | 3          | 305                          | 0        | 0         | 270          | 0        | 0          | 263                          | 7           | 6           | 37          | 0        | 0          | 32                           | 5           | 0         |
| BIHAR            | 8416         | 0        | 10         | 8406                         | 0        | 0         | 7062         | 0        | 1          | 6891                         | 170         | 154         | 943         | 0        | 0          | 598                          | 345         | 0         |
| CHANDIGARH       | 63           | 0        | 0          | 63                           | 0        | 0         | 55           | 0        | 0          | 55                           | 0           | 0           | 9           | 0        | 0          | 9                            | 0           | 0         |
| CHHATTISGARH     | 332          | 0        | 0          | 332                          | 0        | 0         | 246          | 0        | 0          | 226                          | 20          | 16          | 42          | 0        | 0          | 25                           | 17          | 0         |
| D&N HAVELI       | 7            | 0        | 0          | 7                            | 0        | 0         | 3            | 0        | 0          | 3                            | 0           | 0           | 0           | 0        | 0          | 0                            | 0           | 0         |
| DAMAN & DIU      | 12           | 0        | 0          | 12                           | 0        | 0         | 4            | 0        | 0          | 4                            | 0           | 0           | 1           | 0        | 0          | 0                            | 1           | 0         |
| DELHI            | 707          | 0        | 0          | 707                          | 0        | 0         | 688          | 0        | 0          | 635                          | 53          | 43          | 136         | 0        | 0          | 98                           | 38          | 0         |
| GOA              | 27           | 0        | 0          | 27                           | 0        | 0         | 25           | 0        | 0          | 22                           | 3           | 3           | 8           | 0        | 0          | 4                            | 4           | 0         |
| GUJARAT          | 993          | 0        | 1          | 992                          | 0        | 0         | 938          | 0        | 0          | 901                          | 37          | 34          | 164         | 0        | 0          | 117                          | 47          | 0         |
| HARYANA          | 964          | 0        | 0          | 964                          | 0        | 0         | 818          | 0        | 0          | 784                          | 34          | 30          | 98          | 0        | 0          | 76                           | 22          | 0         |
| HIMACHAL PRADESH | 83           | 0        | 0          | 83                           | 0        | 0         | 74           | 0        | 0          | 71                           | 3           | 3           | 12          | 0        | 0          | 9                            | 3           | 0         |
| JAMMU & KASHMIR  | 301          | 0        | 0          | 301                          | 0        | 0         | 209          | 0        | 0          | 207                          | 2           | 1           | 16          | 0        | 0          | 15                           | 1           | 0         |
| JHARKHAND        | 909          | 0        | 0          | 909                          | 0        | 0         | 870          | 0        | 0          | 813                          | 57          | 50          | 156         | 0        | 0          | 113                          | 43          | 0         |
| KARNATAKA        | 663          | 0        | 1          | 662                          | 0        | 0         | 850          | 0        | 0          | 811                          | 39          | 34          | 139         | 0        | 0          | 96                           | 43          | 0         |
| KERALA           | 313          | 0        | 0          | 313                          | 0        | 0         | 301          | 0        | 0          | 295                          | 6           | 4           | 61          | 0        | 0          | 55                           | 6           | 0         |
| LAKSHADWEEP      | 0            | 0        | 0          | 0                            | 0        | 0         | 0            | 0        | 0          | 0                            | 0           | 0           | 0           | 0        | 0          | 0                            | 0           | 0         |
| MADHYA PRADESH   | 1755         | 0        | 1          | 1754                         | 0        | 0         | 1865         | 0        | 1          | 1772                         | 92          | 86          | 238         | 0        | 0          | 116                          | 122         | 0         |
| MAHARASHTRA      | 2284         | 0        | 1          | 2283                         | 0        | 0         | 1920         | 0        | 0          | 1796                         | 124         | 110         | 217         | 0        | 0          | 109                          | 108         | 0         |
| MANIPUR          | 33           | 0        | 0          | 33                           | 0        | 0         | 31           | 0        | 0          | 30                           | 1           | 0           | 6           | 0        | 0          | 6                            | 0           | 0         |
| MEGHALAYA        | 27           | 0        | 0          | 27                           | 0        | 0         | 20           | 0        | 0          | 19                           | 1           | 0           | 0           | 0        | 0          | 0                            | 0           | 0         |
| MIZORAM          | 30           | 0        | 0          | 30                           | 0        | 0         | 32           | 0        | 0          | 30                           | 2           | 1           | 0           | 0        | 0          | 0                            | 0           | 0         |
| NAGALAND         | 11           | 0        | 0          | 11                           | 0        | 0         | 13           | 0        | 0          | 12                           | 1           | 1           | 4           | 0        | 0          | 3                            | 1           | 0         |
| ODISHA           | 1225         | 0        | 1          | 1224                         | 0        | 0         | 956          | 0        | 0          | 922                          | 34          | 25          | 150         | 0        | 0          | 97                           | 53          | 0         |
| PONDICHERRY      | 11           | 0        | 0          | 11                           | 0        | 0         | 25           | 0        | 0          | 25                           | 0           | 0           | 1           | 0        | 0          | 0                            | 1           | 0         |
| PUNJAB           | 696          | 0        | 0          | 696                          | 0        | 0         | 519          | 0        | 0          | 491                          | 28          | 27          | 156         | 0        | 0          | 133                          | 23          | 0         |
| RAJASTHAN        | 1885         | 0        | 1          | 1884                         | 0        | 0         | 1607         | 0        | 0          | 1533                         | 74          | 69          | 256         | 0        | 0          | 193                          | 63          | 0         |
| SIKKIM           | 6            | 0        | 0          | 6                            | 0        | 0         | 5            | 0        | 0          | 5                            | 0           | 0           | 3           | 0        | 0          | 3                            | 0           | 0         |
| TAMIL NADU       | 549          | 0        | 0          | 549                          | 0        | 0         | 816          | 0        | 0          | 808                          | 8           | 8           | 130         | 0        | 0          | 85                           | 45          | 0         |
| TELANGANA        | 248          | 0        | 0          | 248                          | 0        | 0         | 368          | 0        | 0          | 340                          | 28          | 19          | 76          | 0        | 0          | 39                           | 37          | 0         |
| TRIPURA          | 51           | 0        | 0          | 51                           | 0        | 0         | 25           | 0        | 0          | 22                           | 3           | 3           | 3           | 0        | 0          | 0                            | 3           | 0         |
| UTTAR PRADESH    | 13114        | 0        | 14         | 13100                        | 0        | 0         | 12939        | 0        | 4          | 12491                        | 444         | 394         | 1998        | 0        | 0          | 1446                         | 552         | 0         |
| UTTARAKHAND      | 274          | 0        | 1          | 273                          | 0        | 0         | 255          | 0        | 0          | 237                          | 18          | 14          | 66          | 0        | 0          | 53                           | 13          | 0         |
| WEST BENGAL      | 2478         | 0        | 3          | 2475                         | 0        | 0         | 2172         | 0        | 2          | 2117                         | 53          | 42          | 286         | 0        | 0          | 214                          | 72          | 0         |
| <b>TOTAL</b>     | <b>39127</b> | <b>0</b> | <b>37</b>  | <b>39090</b>                 | <b>0</b> | <b>0</b>  | <b>36418</b> | <b>0</b> | <b>8</b>   | <b>35048</b>                 | <b>1362</b> | <b>1193</b> | <b>5482</b> | <b>0</b> | <b>0</b>   | <b>3789</b>                  | <b>1693</b> | <b>0</b>  |

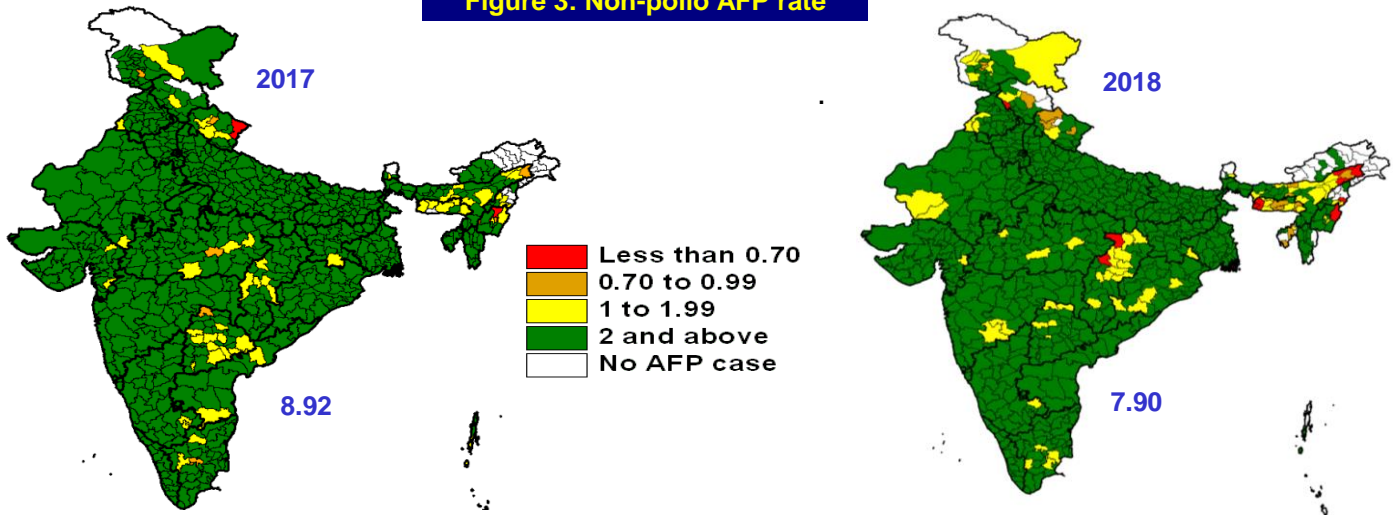
**Table 3: AFP cases key surveillance indicators, 2017 - 2019**

| State/UT's       | 2017                    |                    |                             |                     | 2018                    |                    |                             |                     | 2019                    |                    |                             |                     |
|------------------|-------------------------|--------------------|-----------------------------|---------------------|-------------------------|--------------------|-----------------------------|---------------------|-------------------------|--------------------|-----------------------------|---------------------|
|                  | Surveillance Indicators |                    |                             |                     | Surveillance Indicators |                    |                             |                     | Surveillance Indicators |                    |                             |                     |
|                  | Annualized Rates        |                    | Specimen                    |                     | Annualized Rates        |                    | Specimen                    |                     | Annualized Rates        |                    | Specimen                    |                     |
|                  | AFP rate                | Non-polio AFP rate | % with 2 spec. w/in 14 days | % with any specimen | AFP rate                | Non-polio AFP rate | % with 2 spec. w/in 14 days | % with any specimen | AFP rate                | Non-polio AFP rate | % with 2 spec. w/in 14 days | % with any specimen |
| A&N ISLANDS      | 2.11                    | 2.11               | 100                         | 100                 | 8.25                    | 8.25               | 100                         | 100                 | 4.87                    | 0.00               | 0                           | 100                 |
| ANDHRA PRADESH   | 2.57                    | 2.57               | 86                          | 96                  | 3.17                    | 3.02               | 79                          | 95                  | 2.32                    | 1.50               | 94                          | 98                  |
| ARUNACHAL PR.    | 1.74                    | 1.74               | 82                          | 100                 | 1.49                    | 1.49               | 90                          | 100                 | 2.82                    | 2.11               | 75                          | 100                 |
| ASSAM            | 2.56                    | 2.53               | 94                          | 99                  | 2.20                    | 2.15               | 93                          | 98                  | 1.43                    | 1.24               | 97                          | 100                 |
| BIHAR            | 17.65                   | 17.63              | 89                          | 98                  | 14.34                   | 14.00              | 88                          | 98                  | 9.05                    | 5.74               | 88                          | 97                  |
| CHANDIGARH       | 13.64                   | 13.64              | 89                          | 100                 | 11.70                   | 11.70              | 96                          | 98                  | 9.05                    | 9.05               | 100                         | 100                 |
| CHHATTISGARH     | 2.99                    | 2.99               | 73                          | 96                  | 2.24                    | 2.06               | 67                          | 95                  | 1.81                    | 1.08               | 69                          | 88                  |
| D&N HAVELI       | 8.05                    | 8.05               | 86                          | 100                 | 3.33                    | 3.33               | 100                         | 100                 | 0.00                    | 0.00               | NA                          | NA                  |
| DAMAN & DIU      | 15.58                   | 15.58              | 100                         | 100                 | 6.90                    | 6.90               | 100                         | 100                 | 8.15                    | 0.00               | 0                           | 100                 |
| DELHI            | 12.72                   | 12.72              | 83                          | 97                  | 11.80                   | 10.89              | 80                          | 97                  | 11.03                   | 7.94               | 84                          | 96                  |
| GOA              | 6.46                    | 6.46               | 74                          | 96                  | 5.90                    | 5.19               | 60                          | 96                  | 8.92                    | 4.46               | 75                          | 100                 |
| GUJARAT          | 5.02                    | 5.02               | 83                          | 95                  | 4.93                    | 4.73               | 82                          | 95                  | 4.07                    | 2.91               | 89                          | 98                  |
| HARYANA          | 8.58                    | 8.58               | 85                          | 98                  | 7.14                    | 6.84               | 85                          | 99                  | 4.04                    | 3.14               | 80                          | 95                  |
| HIMACHAL PRADESH | 4.02                    | 4.02               | 84                          | 98                  | 3.53                    | 3.38               | 84                          | 99                  | 2.70                    | 2.03               | 92                          | 92                  |
| JAMMU & KASHMIR  | 5.44                    | 5.44               | 93                          | 100                 | 3.74                    | 3.70               | 96                          | 99                  | 1.35                    | 1.27               | 94                          | 100                 |
| JHARKHAND        | 7.33                    | 7.33               | 79                          | 96                  | 6.77                    | 6.33               | 77                          | 96                  | 5.74                    | 4.16               | 82                          | 97                  |
| KARNATAKA        | 3.76                    | 3.75               | 82                          | 97                  | 4.74                    | 4.52               | 83                          | 97                  | 3.66                    | 2.53               | 83                          | 97                  |
| KERALA           | 3.63                    | 3.63               | 91                          | 100                 | 3.47                    | 3.40               | 90                          | 99                  | 3.33                    | 3.00               | 98                          | 100                 |
| LAKSHADWEEP      | 0.00                    | 0.00               | NA                          | NA                  | 0.00                    | 0.00               | NA                          | NA                  | 0.00                    | 0.00               | NA                          | NA                  |
| MADHYA PRADESH   | 5.38                    | 5.38               | 81                          | 97                  | 5.62                    | 5.34               | 81                          | 97                  | 3.39                    | 1.65               | 82                          | 98                  |
| MAHARASHTRA      | 6.85                    | 6.85               | 83                          | 98                  | 5.69                    | 5.32               | 81                          | 98                  | 3.04                    | 1.53               | 76                          | 92                  |
| MANIPUR          | 2.51                    | 2.51               | 97                          | 100                 | 2.90                    | 2.81               | 94                          | 97                  | 2.66                    | 2.66               | 100                         | 100                 |
| MEGHALAYA        | 1.85                    | 1.85               | 85                          | 100                 | 1.33                    | 1.26               | 80                          | 100                 | 0.00                    | 0.00               | NA                          | NA                  |
| MIZORAM          | 6.59                    | 6.59               | 80                          | 100                 | 7.31                    | 6.85               | 72                          | 100                 | 0.00                    | 0.00               | NA                          | NA                  |
| NAGALAND         | 1.51                    | 1.51               | 73                          | 91                  | 1.99                    | 1.84               | 62                          | 85                  | 2.90                    | 2.17               | 100                         | 100                 |
| ODISHA           | 9.38                    | 9.37               | 88                          | 99                  | 7.32                    | 7.06               | 86                          | 99                  | 5.43                    | 3.51               | 82                          | 95                  |
| PONDICHERRY      | 3.41                    | 3.41               | 91                          | 100                 | 7.65                    | 7.65               | 96                          | 100                 | 1.45                    | 0.00               | 100                         | 100                 |
| PUNJAB           | 9.00                    | 9.00               | 84                          | 97                  | 6.62                    | 6.26               | 80                          | 96                  | 9.41                    | 8.02               | 91                          | 99                  |
| RAJASTHAN        | 7.63                    | 7.63               | 83                          | 97                  | 6.39                    | 6.10               | 85                          | 96                  | 4.81                    | 3.63               | 88                          | 97                  |
| SIKKIM           | 2.62                    | 2.62               | 83                          | 100                 | 2.16                    | 2.16               | 100                         | 100                 | 6.11                    | 6.11               | 100                         | 100                 |
| TAMIL NADU       | 3.11                    | 3.11               | 95                          | 99                  | 4.61                    | 4.56               | 94                          | 99                  | 3.47                    | 2.27               | 97                          | 100                 |
| TELANGANA        | 2.36                    | 2.36               | 72                          | 96                  | 3.57                    | 3.30               | 69                          | 97                  | 3.49                    | 1.79               | 72                          | 100                 |
| TRIPURA          | 3.96                    | 3.96               | 86                          | 100                 | 2.51                    | 2.20               | 92                          | 100                 | 1.42                    | 0.00               | 0                           | 100                 |
| UTTAR PRADESH    | 14.72                   | 14.70              | 86                          | 98                  | 14.26                   | 13.76              | 84                          | 97                  | 10.41                   | 7.53               | 88                          | 97                  |
| UTTARAKHAND      | 6.09                    | 6.06               | 84                          | 98                  | 5.56                    | 5.17               | 74                          | 95                  | 6.80                    | 5.46               | 88                          | 95                  |
| WEST BENGAL      | 8.05                    | 8.04               | 91                          | 99                  | 7.03                    | 6.85               | 91                          | 99                  | 4.37                    | 3.27               | 91                          | 99                  |
| <b>TOTAL</b>     | <b>8.93</b>             | <b>8.92</b>        | <b>86</b>                   | <b>98</b>           | <b>8.21</b>             | <b>7.90</b>        | <b>85</b>                   | <b>98</b>           | <b>5.84</b>             | <b>4.04</b>        | <b>87</b>                   | <b>97</b>           |

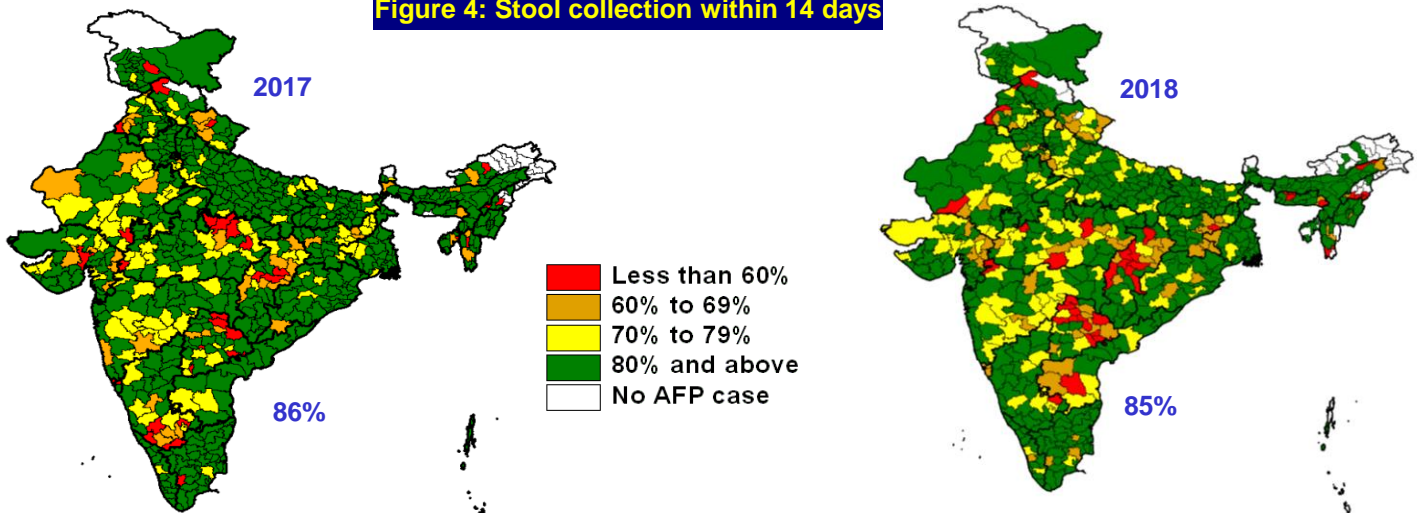
**Figure 2: Timeliness of Reporting Units**



**Figure 3: Non-polio AFP rate**



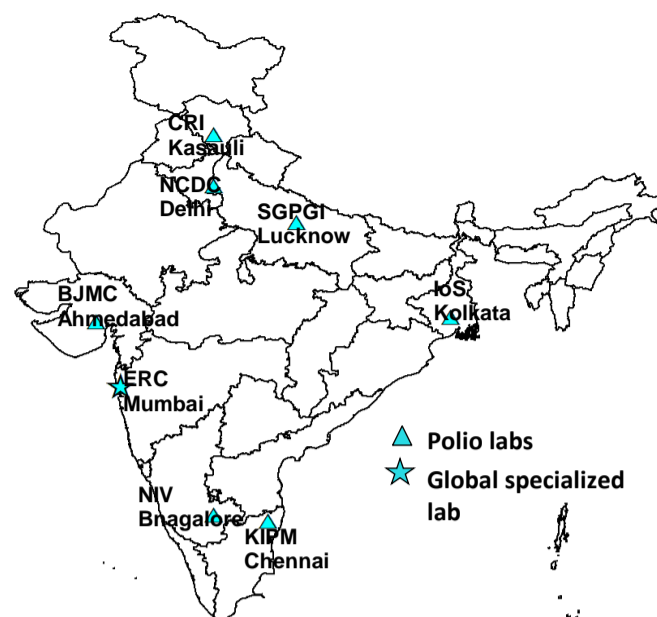
**Figure 4: Stool collection within 14 days**



**Table 4: Primary isolation results of AFP cases**

| 2019               |  |   |   |            |                        |                             |          |                                     |
|--------------------|--|---|---|------------|------------------------|-----------------------------|----------|-------------------------------------|
| Polio Laboratories | Number of AFP cases with stool specimens | Number of AFP cases with laboratory result as |   |            |                        | Number of cases pending for |          | Number of specimens received by lab |
|                    |  | Culture positive for poliovirus               | Culture positive for polio virus and NPEV | NPEV       | No polio virus or NPEV | <=14 days                   | >14 days |                                     |
|                    |  |   |   |            |                        |                             |          |                                     |
| BJMC, Ahmedabad    | 696                                      | 11  | 0   | 39         | 519                    | 127                         | 0        | 1374                                |
| NIV, Bangalore     | 455                                      | 2   | 1   | 39         | 332                    | 81                          | 0        | 899                                 |
| ERC, Mumbai        | 277                                      | 3   | 0   | 30         | 244                    | 0                           | 0        | 553                                 |
| IoS, Kolkata       | 643                                      | 3   | 0   | 31         | 565                    | 44                          | 0        | 1286                                |
| NCDC, Delhi        | 905                                      | 5   | 0   | 62         | 838                    | 0                           | 0        | 1805                                |
| CRI, Kasauli       | 225                                      | 0   | 0   | 11         | 200                    | 14                          | 0        | 453                                 |
| KIPM, Chennai      | 382                                      | 1   | 0   | 29         | 338                    | 14                          | 0        | 752                                 |
| SGPGI, Lucknow     | 1031                                     | 5   | 0   | 67         | 849                    | 110                         | 0        | 2059                                |
| <b>TOTAL</b>       | <b>4614</b>                              | <b>30</b>                                     | <b>1</b>                                  | <b>308</b> | <b>3885</b>            | <b>390</b>                  | <b>0</b> | <b>9181</b>                         |

**Figure 5: Polio laboratory network**



| 2018               |  |   |   |             |                        |                             |          |                                     |
|--------------------|--|---|---|-------------|------------------------|-----------------------------|----------|-------------------------------------|
| Polio Laboratories | Number of AFP cases with stool specimens | Number of AFP cases with laboratory result as |   |             |                        | Number of cases pending for |          | Number of specimens received by lab |
|                    |  | Culture positive for poliovirus               | Culture positive for polio virus and NPEV | NPEV        | No polio virus or NPEV | <=14 days                   | >14 days |                                     |
|                    |  |   |   |             |                        |                             |          |                                     |
| BJMC, Ahmedabad    | 4721                                     | 191   | 27  | 942         | 3561                   | 0                           | 0        | 9447                                |
| NIV, Bangalore     | 3105                                     | 104   | 13  | 816         | 2172                   | 0                           | 0        | 6229                                |
| ERC, Mumbai        | 3716                                     | 113   | 11  | 801         | 2791                   | 0                           | 0        | 7435                                |
| IoS, Kolkata       | 4996                                     | 155   | 12  | 847         | 3982                   | 0                           | 0        | 9988                                |
| NCDC, Delhi        | 6140                                     | 143   | 15  | 857         | 5125                   | 0                           | 0        | 12267                               |
| CRI, Kasauli       | 1778                                     | 19  | 1   | 201         | 1557                   | 0                           | 0        | 3563                                |
| KIPM, Chennai      | 3773                                     | 82  | 4   | 625         | 3062                   | 0                           | 0        | 7533                                |
| SGPGI, Lucknow     | 7237                                     | 136   | 16  | 1295        | 5790                   | 0                           | 0        | 14708                               |
| <b>TOTAL</b>       | <b>35466</b>                             | <b>943</b>                                    | <b>99</b>                                 | <b>6384</b> | <b>28040</b>           | <b>0</b>                    | <b>0</b> | <b>71170</b>                        |

**Table 5: Intratypic differentiation (ITD) of isolates from AFP cases**

| 2019               |                                      |  |          |          |          |                    |          |          |           |          |          |          |             |                 |          |                             |           |          |
|--------------------|--------------------------------------|--|----------|----------|----------|--------------------|----------|----------|-----------|----------|----------|----------|-------------|-----------------|----------|-----------------------------|-----------|----------|
| Polio Laboratories | Number of AFP cases referred for ITD | Number of AFP cases with ITD result as |          |          |          |                    |          |          |           |          |          |          |             |                 |          | Number of cases pending for |           |          |
|                    |                                      | Wild poliovirus                        |          |          |          | Vaccine poliovirus |          |          |           | VDPV     |          |          | NPEV by PCR | Non enterovirus | Negative | <=7 days                    | 8-14 days | >14 days |
|                    |                                      | Type 1                                 | Type 2   | Type 3   | Mix      | Type 1             | Type 2   | Type 3   | Mix       | Type 1   | Type 2   | Type 3   |             |                 |          |                             |           |          |
| BJMC, Ahmedabad    | 11                                   | 0                                      | 0        | 0        | 0        | 1                  | 0        | 2        | 6         | 0        | 0        | 0        | 2           | 0               | 0        | 0                           | 0         | 0        |
| NIV, Bangalore     | 3                                    | 0                                      | 0        | 0        | 0        | 2                  | 0        | 1        | 0         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| ERC, Mumbai        | 3                                    | 0                                      | 0        | 0        | 0        | 0                  | 0        | 2        | 0         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 1         | 0        |
| IoS, Kolkata       | 3                                    | 0                                      | 0        | 0        | 0        | 1                  | 0        | 0        | 2         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| NCDC, Delhi        | 5                                    | 0                                      | 0        | 0        | 0        | 0                  | 0        | 2        | 2         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 1         | 0        |
| CRI, Kasauli       | 0                                    | 0                                      | 0        | 0        | 0        | 0                  | 0        | 0        | 0         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| KIPM, Chennai      | 1                                    | 0                                      | 0        | 0        | 0        | 1                  | 0        | 0        | 0         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| SGPGI, Lucknow     | 5                                    | 0                                      | 0        | 0        | 0        | 0                  | 0        | 2        | 1         | 0        | 0        | 0        | 0           | 1               | 0        | 1                           | 0         | 0        |
| <b>TOTAL</b>       | <b>31</b>                            | <b>0</b>                               | <b>0</b> | <b>0</b> | <b>0</b> | <b>5</b>           | <b>0</b> | <b>9</b> | <b>11</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>2</b>    | <b>1</b>        | <b>0</b> | <b>3</b>                    | <b>0</b>  | <b>0</b> |

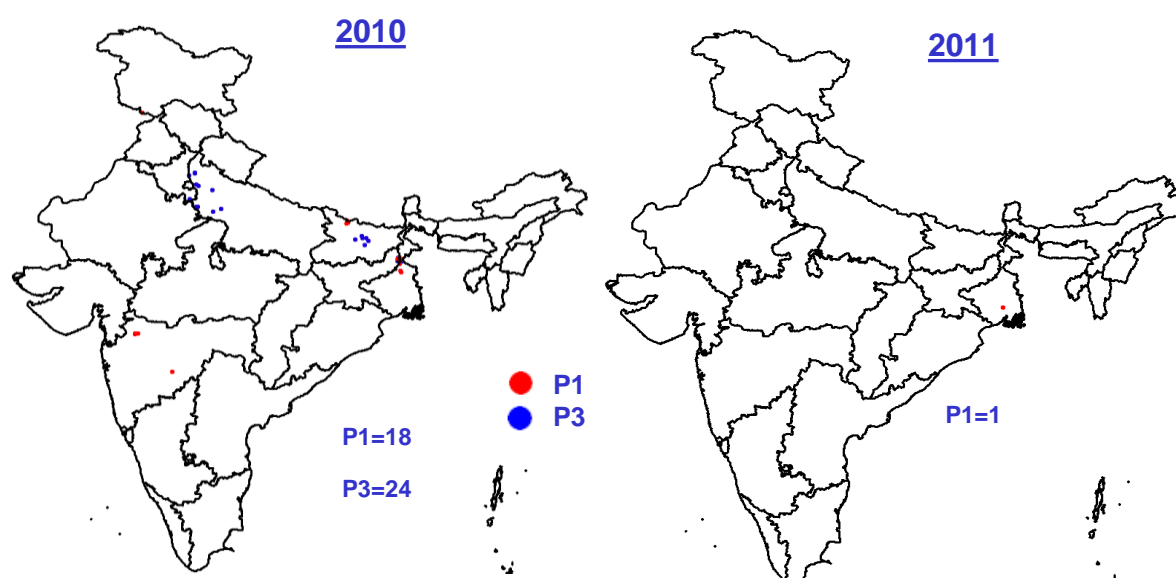
| 2018               |                                      |  |          |          |          |                    |          |            |            |          |          |          |             |                 |          |                             |           |          |
|--------------------|--------------------------------------|--|----------|----------|----------|--------------------|----------|------------|------------|----------|----------|----------|-------------|-----------------|----------|-----------------------------|-----------|----------|
| Polio Laboratories | Number of AFP cases referred for ITD | Number of AFP cases with ITD result as |          |          |          |                    |          |            |            |          |          |          |             |                 |          | Number of cases pending for |           |          |
|                    |                                      | Wild poliovirus                        |          |          |          | Vaccine poliovirus |          |            |            | VDPV     |          |          | NPEV by PCR | Non enterovirus | Negative | <=7 days                    | 8-14 days | >14 days |
|                    |                                      | Type 1                                 | Type 2   | Type 3   | Mix      | Type 1             | Type 2   | Type 3     | Mix        | Type 1   | Type 2   | Type 3   |             |                 |          |                             |           |          |
| BJMC, Ahmedabad    | 219                                  | 0                                      | 0        | 0        | 0        | 50                 | 0        | 70         | 93         | 0        | 0        | 0        | 6           | 0               | 0        | 0                           | 0         | 0        |
| NIV, Bangalore     | 117                                  | 0                                      | 0        | 0        | 0        | 29                 | 0        | 42         | 40         | 0        | 0        | 0        | 6           | 0               | 0        | 0                           | 0         | 0        |
| ERC, Mumbai        | 124                                  | 0                                      | 0        | 0        | 0        | 30                 | 0        | 41         | 34         | 0        | 0        | 0        | 19          | 0               | 0        | 0                           | 0         | 0        |
| IoS, Kolkata       | 167                                  | 0                                      | 0        | 0        | 0        | 48                 | 0        | 48         | 60         | 0        | 0        | 0        | 10          | 1               | 0        | 0                           | 0         | 0        |
| NCDC, Delhi        | 157                                  | 0                                      | 0        | 0        | 0        | 41                 | 0        | 71         | 43         | 0        | 0        | 0        | 2           | 0               | 0        | 0                           | 0         | 0        |
| CRI, Kasauli       | 20                                   | 0                                      | 0        | 0        | 0        | 5                  | 0        | 6          | 9          | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| KIPM, Chennai      | 85                                   | 0                                      | 0        | 0        | 0        | 23                 | 0        | 31         | 31         | 0        | 0        | 0        | 0           | 0               | 0        | 0                           | 0         | 0        |
| SGPGI, Lucknow     | 153                                  | 0                                      | 0        | 0        | 0        | 45                 | 1        | 56         | 49         | 0        | 0        | 0        | 1           | 0               | 1        | 0                           | 0         | 0        |
| <b>TOTAL</b>       | <b>1042</b>                          | <b>0</b>                               | <b>0</b> | <b>0</b> | <b>0</b> | <b>271</b>         | <b>1</b> | <b>365</b> | <b>359</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>44</b>   | <b>1</b>        | <b>1</b> | <b>0</b>                    | <b>0</b>  | <b>0</b> |



**Table 6: Most recent Wild Polio Virus case by State**

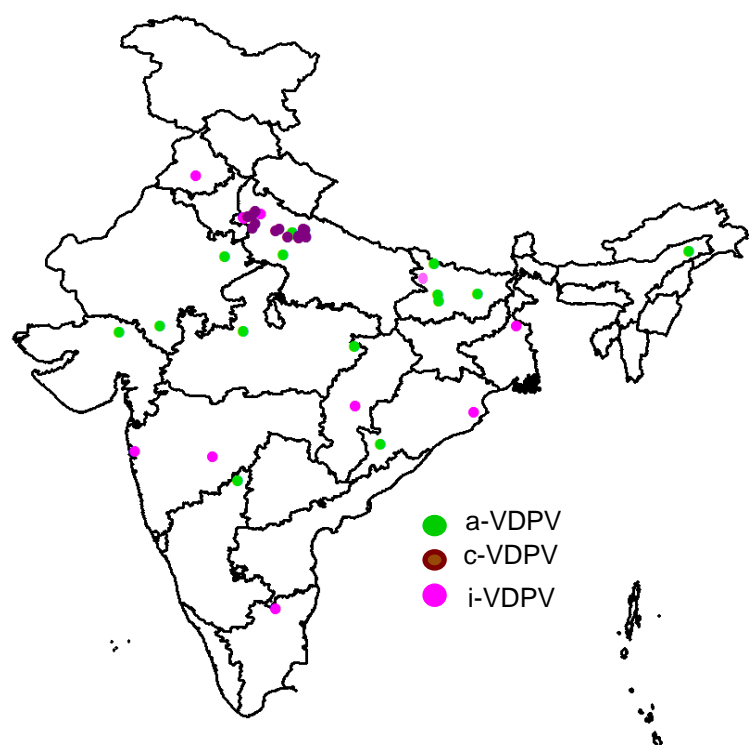
| State             | Date of most recent polio case | Type  |
|-------------------|--------------------------------|-------|
| West Bengal       | 13-Jan-11                      | P1    |
| Jharkhand         | 22-Oct-10                      | P3    |
| Maharashtra       | 16-Sep-10                      | P1    |
| Bihar             | 01-Sep-10                      | P1    |
| Uttar Pradesh     | 21-Apr-10                      | P3    |
| Jammu & Kashmir   | 07-Feb-10                      | P1    |
| Haryana           | 13-Jan-10                      | P3    |
| Rajasthan         | 27-Nov-09                      | P3    |
| Uttarakhand       | 06-Nov-09                      | P3    |
| Himachal Pradesh  | 17-Oct-09                      | P3    |
| Punjab            | 13-Oct-09                      | P3    |
| Delhi             | 28-Jun-09                      | P3    |
| Madhya Pradesh    | 04-Aug-08                      | P3    |
| Odisha            | 22-Jul-08                      | P3    |
| Andhra Pradesh    | 16-Jul-08                      | P3    |
| Assam             | 09-Jun-08                      | P1    |
| Karnataka         | 03-Nov-07                      | P3    |
| Gujarat           | 16-Mar-07                      | P1    |
| Telangana         | 03-Jul-07                      | P1    |
| Chandigarh        | 02-Aug-06                      | P1    |
| Tamil Nadu        | 18-Feb-04                      | P1    |
| Chhattisgarh      | 18-Jul-02                      | P1    |
| Kerala            | 29-Sep-00                      | P1    |
| Pondicherry       | 26-Nov-98                      | P1    |
| Goa               | 28-Oct-98                      | P1    |
| Daman & Diu       | 22-Oct-98                      | P1    |
| D & N Haveli      | 31-Jan-98                      | P1    |
| Nagaland          | 10-Dec-97                      | P1&P3 |
| Meghalaya         | 15-Oct-97                      | P1    |
| Tripura           | 10-Oct-97                      | P1    |
| A&N Islands       | Before 1997                    |       |
| Arunachal Pradesh | Before 1997                    |       |
| Lakshadweep       | Before 1997                    |       |
| Manipur           | Before 1997                    |       |
| Mizoram           | Before 1997                    |       |
| Sikkim            | Before 1997                    |       |

**Figure 6: Wild Polio cases, India**



| Month        | 1998        | 1999        | 2000       | 2001       | 2002        | 2003       | 2004       | 2005      | 2006       | 2007       | 2008       | 2009       | 2010      | 2011     | 2012     | 2013     | 2014     | 2015     | 2016     | 2017     | 2018     | 2019     |
|--------------|-------------|-------------|------------|------------|-------------|------------|------------|-----------|------------|------------|------------|------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| January      | 112         | 36          | 36         | 7          | 18          | 51         | 4          | 10        | 8          | 24         | 112        | 14         | 16        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| February     | 32          | 22          | 10         | 1          | 8           | 16         | 3          | 5         | 9          | 14         | 53         | 5          | 3         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| March        | 42          | 11          | 10         | 3          | 7           | 9          | 1          | 1         | 8          | 14         | 40         | 16         | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| April        | 26          | 8           | 20         | 3          | 16          | 7          | 1          | 2         | 13         | 14         | 40         | 13         | 2         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| May          | 49          | 39          | 6          | 4          | 42          | 5          | 9          | 2         | 36         | 32         | 34         | 24         | 2         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| June         | 118         | 69          | 8          | 13         | 117         | 7          | 14         | 6         | 76         | 30         | 38         | 79         | 2         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| July         | 324         | 142         | 25         | 30         | 251         | 25         | 13         | 3         | 121        | 64         | 53         | 89         | 5         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| August       | 418         | 187         | 39         | 62         | 280         | 29         | 18         | 6         | 114        | 78         | 67         | 119        | 7         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| September    | 283         | 193         | 32         | 33         | 334         | 30         | 18         | 14        | 137        | 82         | 49         | 145        | 3         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| October      | 170         | 195         | 31         | 38         | 247         | 20         | 32         | 7         | 71         | 98         | 32         | 129        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| November     | 226         | 155         | 31         | 43         | 180         | 16         | 14         | 7         | 55         | 203        | 24         | 60         | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| December     | 134         | 69          | 17         | 31         | 100         | 10         | 7          | 3         | 28         | 221        | 17         | 48         | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>Total</b> | <b>1934</b> | <b>1126</b> | <b>265</b> | <b>268</b> | <b>1600</b> | <b>225</b> | <b>134</b> | <b>66</b> | <b>676</b> | <b>874</b> | <b>559</b> | <b>741</b> | <b>42</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

**Figure 7: Vaccine-derived Poliovirus in AFP cases, India, 2009 - 2019**



| Year         | type 1   |          | type 2    |           |          | type 3   |
|--------------|----------|----------|-----------|-----------|----------|----------|
|              | a        | i        | a         | c         | i        | i        |
| 2009         | 1        | 1        | 4         | 15        |          |          |
| 2010         |          |          | 1         | 3         | 1        |          |
| 2011         |          |          | 4         |           | 2        | 1        |
| 2012         |          |          |           |           | 1        |          |
| 2013         |          |          | 2         |           | 3        |          |
| 2014         |          |          | 3         |           |          |          |
| 2015         |          |          | 1         |           | 1        |          |
| 2016         |          |          |           |           | 1        |          |
| 2017         |          |          |           |           |          |          |
| 2018         |          |          |           |           |          |          |
| 2019         |          |          |           |           |          |          |
| <b>Total</b> | <b>1</b> | <b>1</b> | <b>15</b> | <b>18</b> | <b>9</b> | <b>1</b> |

