# Laboratory Variables for New Polio Weekly Bulletin, 2013

## Table 1. Virus Isolation Results and Indicators.

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|---|---|
| **(a)** Number of specimens from AFP cases | Total number of specimens received from acute flaccid paralysis (AFP) cases with onset of paralysis in the last 52 epidemiological week, to date of the current report (*A high quality stool sample should be obtained for each AFP case, within 14 days of onset of paralysis*). |
| **(b)** Not yet in lab | Number of specimens collected that have not yet been received by the laboratory performing viral isolation. (*They appear in the system with the date of collection but without the date of reception in the laboratory that do the test of viral isolation.*) |
| **(c)** Received ≤14 days | Number of specimens without viral isolation results and that have ≤14 days of reception in the laboratory that tests; c = [a - (e + f + g + h + i)] and the difference between the date of reception and the report is the same or less than 14 days. (*Could be calculated as (Date of weekly report – Date of Reception) ≤14 days and without isolation result*). |
| **(d)** Received >14 days | Number of specimens without viral isolation results and that have more than 14 days of reception in the laboratory that processes; d = [a - (e + f + g + h + i)] and the difference between the date of reception and the date of the report is greater than 14 days. (*Could be calculated as (Date of weekly report – Date of Reception) > 14 days and without isolation result).* |
| **(e)** Only poliovirus | Number of specimens with positive viral isolation results for poliovirus only. *(The previous algorithm reported P1, P2, P3 and mixtures, but the new algorithm only defines if the specimen is positive for any poliovirus),* [Report L20B+]. |
| **(f)** Poliovirus & NPEV | Number of specimens with positive viral isolation results for poliovirus & non-polio enterovirus (NPEV). (*The new algorithm can identify the presence of these viruses concurrently*). [Report L20B+ y NPEV+] |
| **(g)** Only NPEV | Number of specimens with positive viral isolation results for NPEV only. (*The new algorithm can identify positive cultures for non-polio enterovirus*). [Report RD+L20B-]. |
| **(h)** Negative | Number of specimens with negative viral isolation results for poliovirus and NPEV [Report L20B-RD-]; the cellular cultures did not show the presence of these viruses. (*The new algorithm can identify positive cultures for reovirus, adenovirus and other non-polio enterovirus, which are not under surveillance. It is recommended reporting to the system as Negative).* [Report L20B+RD-] |
| **(i)** Inadequate | Number of specimens from AFP cases that are received by the laboratory, but are not adequate for processing (*small quantity, contamination, etc*). |
| **(j)** % Positive specimens for NPEV | Cumulative number of specimens with positive isolation results for NPEV / Total cumulative results of reported isolations; j = [(f + g) / (e + f + g + h + i)], (the result is multiplied by 100). |
| **(k)** Total specimens with results | Total cumulative results of reported isolations k = (e + f + g + h + i). |
| **(l)** Total with reception & result dates | Total cumulative results of reported isolations k = (e + f + g + h + i) that have registered the date of reception in the laboratory that tests for viral isolation and the date of results. |
| **(m)** % Results ≤14 days | Cumulative number of specimens with isolation results within 14 days of reception in the laboratory (calculated according to the difference between the isolation result date – laboratory reception date), / Total reported isolations (e + f + g + h + i), (the result is multiplied by 100). |

## Table 2. Status of Intratypic Differentiation (ITD) Testing for Specimens with Isolated Poliovirus.

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|---|---|
| **(n)**<br>Number of poliovirus isolated | Number of specimens with positive viral isolation results for poliovirus and poliovirus & NPEV; n = ( e + f) |
| **(o)**<br>Sabin P1 | Cumulative number of ITD results reported as Polio 1 vaccine (Sabin 1). |
| **(p)**<br>Sabin P2 | Cumulative number of ITD results reported as Polio 2 vaccine (Sabin 2). |
| **(q)**<br>Sabin P3 | Cumulative number of ITD results reported as Polio 3 vaccine (Sabin 3). |
| **(r)**<br>VDPV P1 | Cumulative number of ITD results reported as vaccine-derived Polio 1 (VDPV1). |
| **(s)**<br>VDPV P2 | Cumulative number of ITD results reported as vaccine-derived Polio 2 (VDPV2). |
| **(t)**<br>VDPV P3 | Cumulative number of ITD results reported as vaccine-derived Polio 3 (VDPV3). |
| **(u)**<br>Wild P1 | Cumulative number of ITD results reported as wild Polio 1 (wild 1). |
| **(v)**<br>Wild P2 | Cumulative number of ITD results reported as wild Polio 2 (wild 2). |
| **(w)**<br>Wild P3 | Cumulative number of ITD results reported as wild Polio 3 (wild 3). |
| **(y)**<br>Pending ITD results | Cumulative number of specimens with positive viral isolation results for poliovirus or poliovirus & NPEV that have not yet reported ITD results. It is calculated as y = [( n ) – z] |
| **(z)**<br>Number of specimens with ITD results | Cumulative total of reported ITD results |
| **(aa)**<br>ITD results with reception or detection and results dates | Cumulative total of reported ITD results (z) that have registered the date of reception or detection* in the laboratory that processes the ITD and the date of ITD results. |
| **(ab)**<br>% ITD results ≤7 days of reception or detection | Cumulative number of specimens with ITD results within 7 days of reception or detection in the laboratory (*calculated according to the difference between the date of ITD results – laboratory reception or detection date)* / Total reported ITD results (z),  (the result is multiplied by 100) |
| **(ac)**<br>% ITD results ≤45 days of onset of paralysis | Cumulative number of specimens with ITD results within 45 days of paralysis onset *(calculated according to the difference between the date of ITD results –date of onset of paralysis)* / Total ITD results  (z),  (the result is multiplied by 100) |
| **(ad)**<br>% ITD results ≤60 days of onset of paralysis | Cumulative number of specimens with ITD results within 60 days of onset of paralysis *(calculated according to the difference between the date of ITD results –date of onset of paralysis)* / Total ITD results (z),  (the result is multiplied by 100) |

\* The date of reception is used if the laboratory that performs the ITD is different from the laboratory that conducts viral isolation. If the same laboratory that does viral isolation also performs the ITD test, then the date of isolation results is used.

**Table No.1**
**Virus isolation results and indicators, last 52 weeks**
**Epidemiological weeks 2012/xx - 2013/xx**

| Country | Lab. | Number of specimens from AFP cases | Virus Isolation Test | | | | | | | | | | | | |
| | | | Pending results | | | With results | | | | | % Positive specimens for NPEV | Timing of isolation results | | |
| | | | Not yet in lab. | Received ≤14 Days | Received >14 Days | Only poliovirus | Poliovirus & NPEV | Only NPEV | Negative | Inade-quate | | Total specimens with results | Total with reception & result dates | % Results ≤ 14 days |
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| **Total** | | | | | | | | | | | | | | |

Only stool specimens from AFP cases < 15 years shown

**Table No.2**
**Status of Intratypic Differentiation (ITD) testing for specimens with isolated poliovirus, last 52 weeks**
**Epidemiological weeks xxxx/xx - xxxx/xx**

| Country | Lab. | Number of poliovirus Isolated | Poliovirus Intratypic Differentiation Results | | | | | | | | | Pending ITD results | ITD Indicators | | | | |
| | | | Sabin | | | VDPV | | | Wild | | | | Number of specimens with ITD results | ITD Results w/ reception or detection and results dates | % ITD results ≤ 7 days of reception or detection | % ITD results ≤ 45 days of onset of paralysis | % ITD results ≤ 60 days of onset of paralysis |
| | | | P1 | P2 | P3 | P1 | P2 | P3 | P1 | P2 | P3 | | | | | | |
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