

HIGHLIGHTS

Second Face-to-Face Meeting on Global Polio Certification Risk Assessment Portugal, 31 January – 1 February 2019

The Global Commission for Certification of Poliomyelitis Eradication (GCC) at its 18th meeting in October 2018 reviewed the draft risk assessment model and requested the WHO secretariat to work further to address GCC concerns and present results at the next GCC meeting in February 2019.

The second face-to-face meeting between the GCC secretariat and the WHO Regional Offices was convened on 31 January – 1 February 2019 in Portugal. The main objectives of the meeting were:

1. to review the fitness of the current version of the global polio certification risk assessment tool presented during GCC meeting in October 2018;
2. to finalize the guidance document that explains the application of the global certification risk assessment tool and address questions raised by the GCC; and
3. to review usefulness of the risk assessment tool for potential type 3 poliovirus certification.

The global risk assessment is not meant to replace regional risk assessments and will be used by the GCC to monitor the progress of the Member States towards achieving and sustaining polio-free status.

CONTACT US

Expanded Programme on Immunization
Regional Office for the Western Pacific
World Health Organization
P.O. Box 2932, 1000 Manila, Philippines
Phone: +63 2 5288001
Fax: +63 2 5211036, 5260279
Email: wproepidata@who.int
Web: www.who.int/westernpacific

Chart 1. Non-polio AFP rate (per 100 000 persons < 15 years of age), 2016–2018

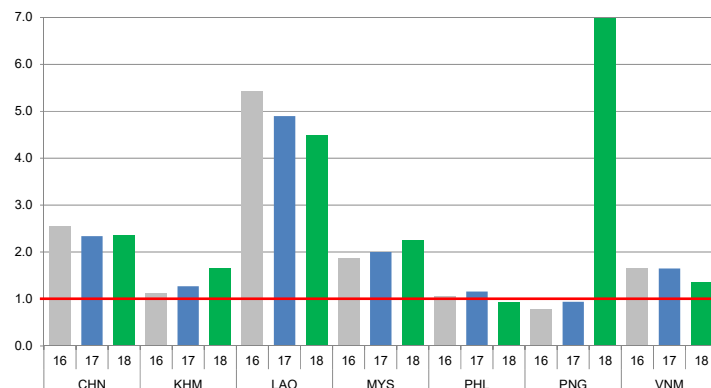


Chart 2. Adequate specimen collection rate, 2016–2018

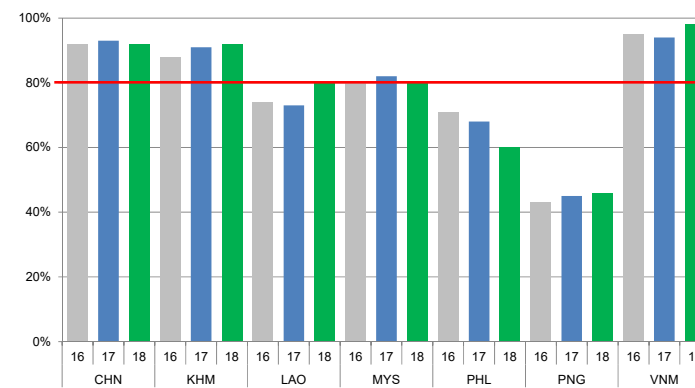


Chart 3. Percentage of reported AFP cases by number of polio vaccination doses, 2018

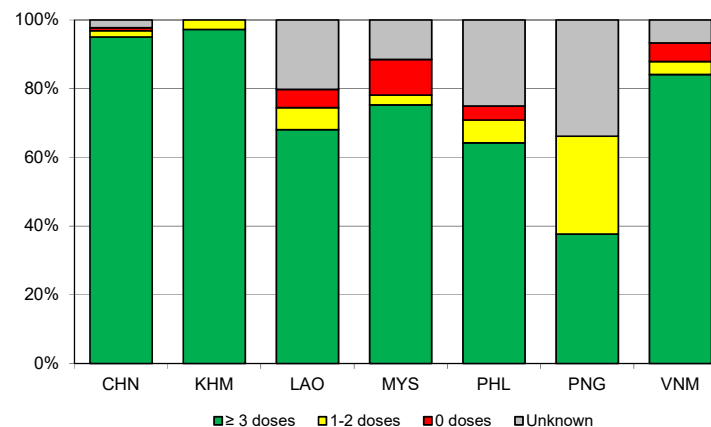
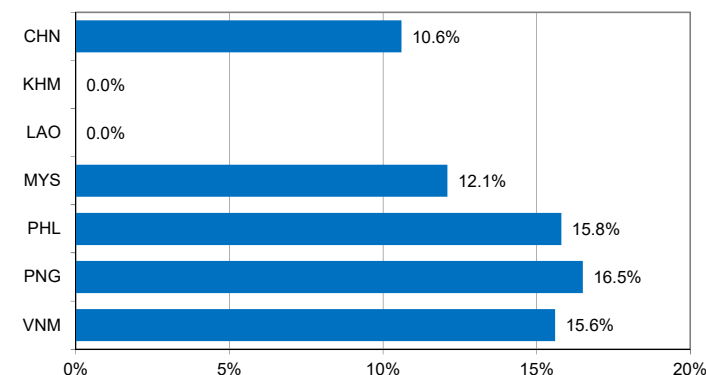


Chart 4. Percentage of reported AFP cases with pending classification > 90 days after onset, 2018



Note: Priority countries were selected for the charts. Official WHO acronyms have been used for abbreviation: CHN (China), KHM (Cambodia), LAO (Lao People's Democratic Republic), MYS (Malaysia), PHL (Philippines), PNG (Papua New Guinea), and VNM (Viet Nam).

Table 1. Classification of AFP cases with onset in 2018 and key surveillance indicators

Country/area	2017		2018							Indicators			Latest report date ⁴	Days since last report ⁵
	Total reported cases	Annual expected cases <15 years of age	Total reported cases	Classification				Pending		Non-polio AFP rate	% with adequate specimens ²	% investigated ≤ 2 days of notification ³		
				Confirmed wild poliovirus	Vaccine-derived poliovirus (VDPV)	Polio-compatible	Discarded (Non-polio)	Total	> 90 days ¹ # (%)					
														≤ 30
Australia	60	46	54	0	0	2	47	5	1 (1.9%)	1.17	46%	89%	16-Jan-19	20
Brunei Darussalam	1	1	2	0	0	0	2	0	0 (0.0%)	2.00	100%	100%	24-Jan-19	-
Cambodia	57	44	73	0	0	0	72	1	0 (0.0%)	1.66	92%	85%	03-Jan-19	33
China	5278	2256	5308	0	1	0	3764	1543	562 (10.6%)	2.35	92%	100%	23-Jan-19	13
China, Hong Kong SAR	15	9	11	0	0	0	10	1	0 (0.0%)	1.22	82%	100%	21-Jan-19	15
China, Macao SAR	2	1	3	0	0	0	2	1	0 (0.0%)	3.00	100%	100%	11-Jan-19	25
Japan	-	161	-	-	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	103	21	94	0	0	0	84	10	0 (0.0%)	4.48	80%	79%	25-Jan-19	11
Malaysia	154	77	174	0	0	0	131	43	21 (12.1%)	2.26	80%	82%	23-Jan-19	13
Mongolia	6	9	6	0	0	0	6	0	0 (0.0%)	0.67	100%	83%	04-Feb-19	-
New Zealand	13	9	10	0	0	0	6	4	3 (30.0%)	1.11	60%	100%	28-Jan-19	8
Papua New Guinea	29	37	284	0	26	12	144	102	47 (16.5%)	6.97	46%	74%	25-Jan-19	11
Philippines	462	338	316	0	0	0	248	68	50 (15.8%)	0.93	60%	94%	31-Jan-19	5
Republic of Korea	68	67	68	0	0	0	61	7	0 (0.0%)	1.01	90%	100%	11-Jan-19	25
Singapore	7	6	13	0	0	0	11	2	0 (0.0%)	2.17	77%	100%	08-Jan-19	28
Viet Nam	385	234	315	0	0	0	235	80	49 (15.6%)	1.35	98%	86%	11-Jan-19	25
Pacific island countries and areas	16	11	13	0	0	0	1	12	9 (69.2%)	1.18	31%	92%	04-Feb-19	1
Total	6656	3327	6744	0	27	14	4824	1879	742 (11.0%)	2.02	88%	97%		

- Number (%) of reported cases pending classification more than 90 days from date of onset of paralysis to date of last report
- Percentage of reported cases with two stool specimens collected 24 hours apart and within 14 days of onset of paralysis
- Percentage of reported cases investigated within two days of notification
- Report date is fixed as soon as all cases for the year have been classified
- Countries are expected to submit data at least once per month to WPRO

	Reached or surpass target
	Nearly reached target 0.5-0.99 for non-polio AFP rate; 60-79% for other indicators
	Substantially below target

Table 2. Laboratory investigation of stool samples from AFP cases with onset in 2018 and key laboratory indicators

Country/area	Polio laboratory	Total no. of AFP cases with specimens	Results of virus isolation for AFP cases								Intratyptic differentiation/ Sequencing laboratory ¹	No. of isolates received	Results of intratyptic differentiation (ITD)/sequencing for virus isolates														
			L2OB positive	L2OB positive + NPEV	NPEV only	Negative	Pending ≤ 14 days	Pending > 14 days	% results reported ≤ 14 days ≥ 80%	% specimens positive for NPEV			Latest report date	Type 1			Type 2			Type 3			NPEV ²	Pending ITD	Discordant pending sequencing	% ITD results reported ≤ 7 days of receipt ≥ 80%	
														Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV					
Australia	VIDRL	44	1	0	1	42	0	0	91%	3%	05-Feb-19	VIDRL	1	0	0	0	0	0	0	0	0	0	1	0	0	0	100%
Brunei Darussalam	VIDRL	2	0	0	0	2	0	0	50%	0%	04-Feb-19	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambodia	NIID	74	0	0	13	61	0	0	93%	15%	18-Jan-19	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China (total)		5243	37	0	376	4739	0	91	98%	6%	23-Jan-19		88	0	24	0	0	0	0	63	1	0	0	0	0	99%	
China, Anhui	Prov. Lab	325	2	0	15	298	0	10	100%	4%		Prov. Lab/CCDC	8	0	3	0	0	0	0	5	0	0	0	0	0	100%	
China, Beijing	Prov. Lab	33	0	0	0	33	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Chongqing	Prov. Lab	67	0	0	2	65	0	0	93%	2%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Fujian	Prov. Lab	181	1	0	13	167	0	0	97%	6%		Prov. Lab/CCDC	1	0	0	0	0	0	0	1	0	0	0	0	0	100%	
China, Gansu	Prov. Lab	113	1	0	6	101	0	5	99%	5%		Prov. Lab/CCDC	2	0	0	0	0	0	0	2	0	0	0	0	0	100%	
China, Guangdong	Prov. Lab	424	2	0	20	398	0	4	92%	4%		Prov. Lab/CCDC	4	0	0	0	0	0	0	4	0	0	0	0	0	100%	
China, Guangxi	Prov. Lab	216	2	0	18	195	0	1	99%	8%		Prov. Lab/CCDC	4	0	3	0	0	0	0	1	0	0	0	0	0	100%	
China, Guizhou	Prov. Lab	192	1	0	14	172	0	5	97%	7%		Prov. Lab/CCDC	2	0	2	0	0	0	0	0	0	0	0	0	0	100%	
China, Hebei	Prov. Lab	291	1	0	38	250	0	2	100%	10%		Prov. Lab/CCDC	2	0	0	0	0	0	0	2	0	0	0	0	0	100%	
China, Heilongjiang	Prov. Lab	89	0	0	4	82	0	3	100%	5%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Henan	Prov. Lab	548	5	0	56	481	0	6	99%	9%		Prov. Lab/CCDC	13	0	5	0	0	0	0	8	0	0	0	0	0	100%	
China, Hubei	Prov. Lab	172	1	0	12	150	0	9	99%	7%		Prov. Lab/CCDC	4	0	2	0	0	0	0	2	0	0	0	0	0	100%	
China, Hunan	Prov. Lab	242	0	0	25	216	0	1	99%	9%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Jiangsu	Prov. Lab	247	8	0	11	208	0	20	100%	5%		Prov. Lab/CCDC	16	0	2	0	0	0	0	13	1	0	0	0	0	100%	
China, Jiangxi	Prov. Lab	174	1	0	12	156	0	5	98%	5%		Prov. Lab/CCDC	3	0	2	0	0	0	0	1	0	0	0	0	0	100%	
China, Jilin	Prov. Lab	59	2	0	9	47	0	1	98%	11%		Prov. Lab/CCDC	8	0	4	0	0	0	0	4	0	0	0	0	0	100%	
China, Neimongol	Prov. Lab	100	2	0	4	94	0	0	98%	4%		Prov. Lab/CCDC	4	0	1	0	0	0	0	3	0	0	0	0	0	100%	
China, Ningxia	Prov. Lab	26	0	0	2	24	0	0	96%	6%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shaanxi	Prov. Lab	96	1	0	2	88	0	5	84%	2%		Prov. Lab/CCDC	1	0	0	0	0	0	0	1	0	0	0	0	0	0%	
China, Shandong	Prov. Lab	408	2	0	26	377	0	3	100%	5%		Prov. Lab/CCDC	3	0	0	0	0	0	0	3	0	0	0	0	0	100%	
China, Shanghai	Prov. Lab	40	0	0	0	40	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shanxi	Prov. Lab	125	1	0	7	117	0	0	98%	4%		Prov. Lab/CCDC	2	0	0	0	0	0	0	2	0	0	0	0	0	100%	
China, Sichuan	Prov. Lab	308	1	0	21	283	0	3	97%	6%		Prov. Lab/CCDC	1	0	0	0	0	0	0	1	0	0	0	0	0	100%	
China, Tianjin	Prov. Lab	22	0	0	0	22	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Xinjiang	Prov. Lab	138	1	0	7	129	0	1	91%	4%		Prov. Lab/CCDC	2	0	0	0	0	0	0	2	0	0	0	0	0	100%	
China, Yunnan	Prov. Lab	262	0	0	35	224	0	3	95%	11%		Prov. Lab/CCDC	1	0	0	0	0	0	0	1	0	0	0	0	0	100%	
China, Zhejiang	Prov. Lab	184	2	0	7	174	0	1	99%	4%		Prov. Lab/CCDC	7	0	0	0	0	0	0	7	0	0	0	0	0	100%	
China, Hainan	Prov. Lab	36	0	0	6	30	0	0	100%	14%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Liaoning	Prov. Lab	85	0	0	3	81	0	1	98%	2%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Qinghai	Prov. Lab	32	0	0	0	31	0	1	100%	0%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Tibet	Prov. Lab	8	0	0	1	6	0	1	85%	8%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hong Kong SAR	PHLC	11	0	0	0	11	0	0	100%	0%	28-Jan-19	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Macao SAR	PHLC	3	0	0	0	3	0	0	100%	0%	24-Dec-18	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Japan	NIID	-	-	-	-	-	-	-	-	-	-	NIID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lao People's Democratic Republic	NIID	114	1	0	8	105	0	0	96%	4%	28-Jan-19	NIID	1	0	0	0	0	0	0	1	0	0	0	0	0	100%	
Malaysia	IMR	148	0	0	8	138	0	2	94%	4%	09-Nov-18	IMR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mongolia	PHI	6	0	0	3	3	0	0	100%	50%	04-Jan-19	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Zealand	IESR	8	0	0	1	7	0	0	100%	13%	25-Jan-19	IESR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Papua New Guinea	VIDRL	290	93	1	18	178	0	0	89%	5%	05-Feb-19	VIDRL	187	0	63	46	0	0	0	0	78	0	0	0	0	100%	
Philippines	RITM	373	5	1	14	353	0	0	95%	3%	09-Jan-19	RITM	7	0	2	0	0	0	0	4	0	0	1	0	100%		
Republic of Korea	NIH	67	0	0	5	62	0	0	99%	7%	11-Jan-19	NIH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Singapore	SGH	13	0	0	2	11	0	0	96%	8%	18-Jan-19	SGH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Viet Nam (North)	NIHE	175	3	0	24	148	0	0	100%	12%	30-Jan-19	NIHE	4	0	2	0	0	0	0	2	0	0	0	0	100%		
Viet Nam (South)	PI	170	4	0	20	136	10	0	100%	13%	02-Jan-19	PI	8	0	2	0	0	0	0	6	0	0	0	0	100%		
Pacific island countries and areas	VIDRL	11	0	0	1	10	0	0	97%	6%	04-Feb-19	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total		6752	144	2	494	6009	10	93	97%	6%			296	0	93	46	0	0	0	0	154	1	1	1	0	100%	

1. CCDC (Chinese Center for Disease Control and Prevention, China); IESR (Institute of Environmental Science and Research, New Zealand); IMR (Institute of Medical Research, Malaysia); NIH (National Institute of Health, Republic of Korea); NIHE (National Institute of Hygiene and Epidemiology, Ha Noi, Viet Nam); NIID (National Institute of Infectious Diseases, Japan); PHI (Public Health Institute, Mongolia); PHLC (Public Health Laboratory Center, China, Hong Kong SAR); PI (Pasteur Institute, Ho Chi Minh, Viet Nam); RITM (Research Institute for Tropical Medicine, Philippines); SGH (Singapore General Hospital); VIDRL (Victorian Infectious Diseases Reference Laboratory, Australia)

2. NPEV growing in L2OB cells

Table 3. Laboratory confirmation of polio isolates from environmental samples in 2017–2018 ¹

Country/area	Intratyptic differentiation lab ²	2017												2018																
		Total number of samples processed	Total number of samples with polio isolates	Polio isolates									NPEV	Pending ITD	Discordant pending sequencing	Total number of samples processed	Total number of samples with polio isolates	Polio isolates									NPEV	Pending ITD	Discordant pending sequencing	
				Type 1			Type 2			Type 3								Type 1			Type 2			Type 3						
				Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV						Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV				
Australia	VIDRL	6	2	0	0	0	0	0	1	0	1	0	4	0	0	17	2	0	2	0	0	0	0	0	0	0	0	12	0	0
China (total)		325	188	0	213	0	0	0	0	0	650	0	1158	0	0	240	154	0	179	0	0	0	1	0	480	2	1161	0	0	
China, Fujian	Prov. Lab/CCDC	53	22	0	8	0	0	0	0	0	42	0	331	0	0	67	46	0	16	0	0	0	0	0	97	1	532	0	0	
China, Gansu	Prov. Lab/CCDC	12	10	0	10	0	0	0	0	0	29	0	18	0	0	9	6	0	2	0	0	0	0	0	8	0	33	0	0	
China, Guangdong	Prov. Lab/CCDC	48	39	0	18	0	0	0	0	0	87	0	108	0	0	48	41	0	27	0	0	0	0	0	102	1	217	0	0	
China, Guangxi	Prov. Lab/CCDC	36	20	0	22	0	0	0	0	0	36	0	94	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Heilongjiang	Prov. Lab/CCDC	42	17	0	12	0	0	0	0	0	34	0	112	0	0	40	21	0	6	0	0	0	0	0	41	0	105	0	0	
China, Shandong	Prov. Lab/CCDC	48	28	0	18	0	0	0	0	0	90	0	272	0	0	27	8	0	13	0	0	0	0	0	36	0	149	0	0	
China, Shanghai	Prov. Lab/CCDC	22	18	0	17	0	0	0	0	0	65	0	51	0	0	8	5	0	3	0	0	0	0	0	7	0	31	0	0	
China, Xinjiang	Prov. Lab/CCDC	36	34	0	108	0	0	0	0	0	267	0	115	0	0	27	27	0	112	0	0	0	1	0	189	0	79	0	0	
China, Yunnan	Prov. Lab/CCDC	28	0	-	-	-	-	-	-	-	-	-	57	0	0	14	0	-	-	-	-	-	-	-	-	-	15	0	0	
Malaysia	IMR	24	0	-	-	-	-	-	-	-	-	-	22	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philippines	RITM	40	8	0	1	0	0	0	0	0	7	0	21	0	0	87	8	0	2	0	0	0	0	0	2	0	24	4	0	
Papua New Guinea	RITM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	23	0	15	7	0	0	0	0	0	21	0	9	0	
Total		395	198	0	214	0	0	0	1	0	658	0	1205	0	0	371	187	0	198	7	0	0	1	0	503	2	1206	4	0	

1. Based on year of collection of sample, if available. Otherwise, based on year of receipt at reference laboratory.

2. CCDC (Chinese Center for Disease Control and Prevention, China); IMR (Institute of Medical Research, Malaysia); RITM (Research Institute for Tropical Medicine, Philippines); VIDRL (Victorian Infectious Diseases Reference Laboratory, Australia)

Table 4. Vaccine-derived poliovirus¹ identified from laboratory testing², 2000–2018

Country/area	2000–2009 ³	2010	2011	2012	2013	2014	2015	2016	2017	2018
Australia									aVDPV2 (1 env)	
Cambodia	2006 - 1 Total - 2									
China	2009 - 1 Total - 27	aVDPV2 (3 AFP + 1 contact + 1 non-AFP) aVDPV3 (1 AFP + 1 non-AFP)	aVDPV1 (1 AFP) aVDPV2 (2 AFP + 1 contact) cVDPV2 (2 AFP) iVDPV2 (1 AFP + 1 non-AFP) iMDPV3 (1 AFP)	aVDPV1 (1 AFP) aVDPV2 (2 AFP) cVDPV2 (2 AFP + 1 contact) iMDPV2 + iMDPV3 (1 AFP)	aVDPV2 (1 non-AFP) iMDPV2 + iMDPV3 (1 AFP)	aVDPV1 (1 non-AFP) aVDPV2 (2 AFP) iMDPV3 (1 AFP)	aVDPV1 (1 AFP) aVDPV2 (1 AFP) iVDPV2 (1 AFP) aVDPV2 (1 env)	aVDPV3 (1 AFP)	aVDPV3 (1 AFP) iMDPV3 (1 AFP) ⁴	aVDPV2 (1 env) iVDPV3 (1 AFP + 1 non-AFP) aVDPV3 (2 env)
China, Hong Kong SAR	2005 - 3									
Japan	2005 - 1 Total - 2									
Lao People's Democratic Republic	2004 - 3						cVDPV1 (8 AFP + 21 contacts)	cVDPV1 (3 AFP + 4 contacts)		
Mongolia	2003 - 1									
Papua New Guinea										cVDPV1 (26 AFP + 8 contacts + 7 env)
Philippines	2001 - 3					aVDPV2 (1 AFP)				
Viet Nam				aVDPV2 (2 AFP)						

1. Prefix letter refers to the VDPV category: "cVDPV" = circulating VDPV, "iVDPV" = immunodeficiency-associated VDPV, "aVDPV" = ambiguous VDPV, "vVDPV" = pending. Suffix number refers to the poliovirus serotype (types 1, 2 or 3).

2. Source of specimens could be AFP cases, contacts, non-AFP cases or environmental

3. Refers to year of last VDPV case, and aggregate total of VDPV cases for 2000-2009

4. Continuous excretion for 4 months; potential immunodeficient person.