

HIGHLIGHTS

2017 in Review: Working Toward A Polio-free Future

The year's end offers the chance to reflect on the polio programme's milestones and challenges in 2017, and look ahead to what we can achieve in the coming year. 2017 reported the fewest wild polio cases in history — a total of 17 cases, or a 50% reduction from the year before—with these cases occurring in just two countries: Afghanistan and Pakistan. Yet the need to reach every last child is more important than ever, as demonstrated by surveillance gaps in Nigeria and outbreaks of vaccine-derived polio in Syria and the Democratic Republic of the Congo.

From programme strategies that helped protect progress and overcome obstacles, to commitments from donors and partners, 2017 demonstrated the resolve required to achieve a polio-free future. Accelerating progress in the new year and ending polio for good will require maintaining these political and financial commitments as well as building upon the programme's efforts to find the virus wherever it exists.

More stories and information are available at:

<http://polioeradication.org/news-post/working-toward-a-polio-free-future-2017-in-review/>



WHO/S. Ramo

Happy and prosperous, polio-free 2018!
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Chart 1. Non-polio AFP rate (per 100 000 persons < 15 years of age), 2015–2017

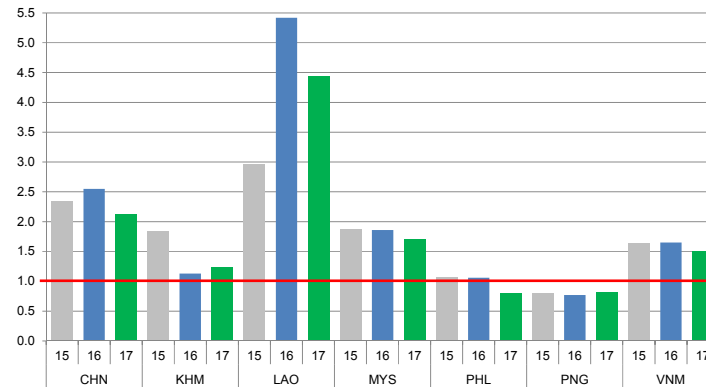


Chart 2. Adequate specimen collection rate, 2015–2017

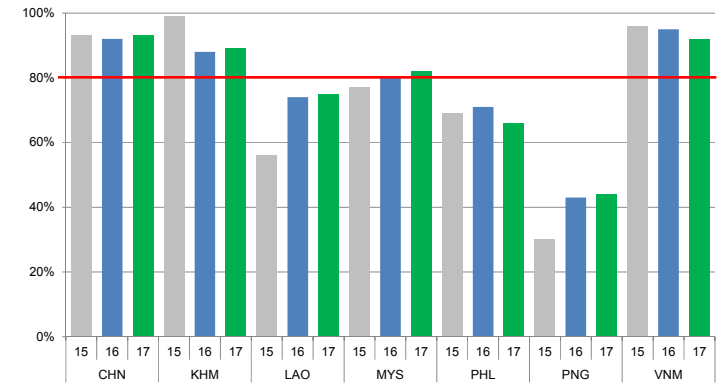


Chart 3. Percentage of reported AFP cases by number of polio vaccination doses, 2017

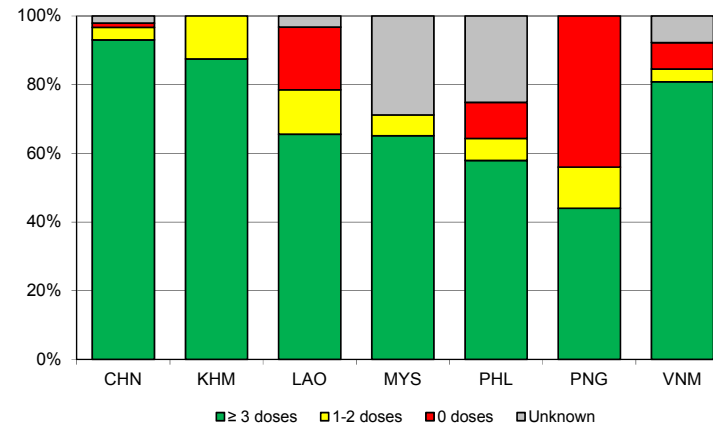
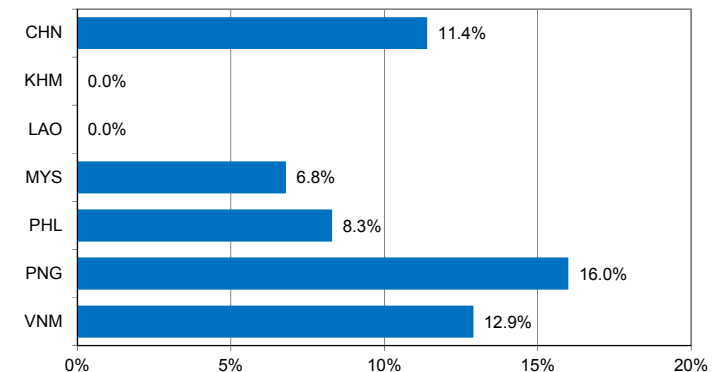


Chart 4. Percentage of reported AFP cases with pending classification > 90 days after onset, 2017



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 2017 and key surveillance indicators

Country/area	2016		2017											
	Total reported cases	Annual expected cases <15 years of age	Total reported cases	Classification						Indicators			Latest report date	Days since last report ⁴
				Confirmed wild poliovirus	Vaccine-derived poliovirus (VDPV)	Polio-compatible	Discarded (Non-polio)	Pending		Non-polio AFP rate	% with adequate specimens ²	% investigated ≤ 2 days of notification ³		
								Total	> 90 days ¹ # (%)					
≥ 1	≥ 80%	≥ 80%												
Australia	62	45	51	0	0	1	41	9	1 (2.0%)	1.13	39%	96%	29-Dec-17	5
Brunei Darrusalam	1	1	1	0	0	0	1	0	0 (0.0%)	1.00	0%	100%	02-Nov-17	62
Cambodia	51	45	56	0	0	0	54	2	0 (0.0%)	1.24	89%	95%	25-Dec-17	9
China	5691	2256	4803	0	1	0	3336	1466	548 (11.4%)	2.13	93%	100%	27-Dec-17	7
China, Hong Kong SAR	10	8	14	0	0	0	14	0	0 (0.0%)	1.75	79%	100%	06-Dec-17	28
China, Macao SAR	1	1	2	0	0	0	2	0	0 (0.0%)	2.00	50%	100%	14-Dec-17	20
Japan	-	161	-	-	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	133	21	93	0	0	0	82	11	0 (0.0%)	4.43	75%	76%	13-Dec-17	21
Malaysia	143	77	132	0	0	0	101	31	9 (6.8%)	1.71	82%	73%	16-Nov-17	48
Mongolia	7	9	6	0	0	0	5	1	0 (0.0%)	0.67	83%	100%	08-Dec-17	26
New Zealand	12	9	11	0	0	0	6	5	1 (9.1%)	1.22	45%	100%	14-Nov-17	50
Papua New Guinea	23	31	25	0	0	0	20	5	4 (16.0%)	0.81	44%	100%	02-Jan-18	1
Philippines	417	400	314	0	0	0	268	46	26 (8.3%)	0.79	66%	97%	18-Oct-17	77
Republic of Korea	70	68	51	0	0	0	39	12	1 (2.0%)	0.75	92%	100%	10-Nov-17	54
Singapore	7	6	6	0	0	0	5	1	0 (0.0%)	1.00	100%	100%	11-Dec-17	23
Viet Nam	382	234	350	0	0	0	226	124	45 (12.9%)	1.50	92%	89%	21-Dec-17	13
Pacific island countries and areas	20	11	14	0	0	0	12	2	0 (0.0%)	1.27	71%	100%	11-Dec-17	23
Total	7030	3383	5929	0	1	1	4212	1715	635 (10.7%)	1.75	90%	98%		

1. Number (%) of reported cases pending classification more than 90 days from date of onset of paralysis to date of last report
2. Percentage of reported cases with two stool specimens collected 24 hours apart and within 14 days of onset of paralysis
3. Percentage of reported cases investigated within two days of notification
4. 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 2017 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																		
			L20B positive	L20B positive + NPEV	NPEV only	Negative	Pending ≤ 14 days	Pending > 14 days	% results reported ≤ 14 days	% 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									
												Wild			Sabin	VDPV	Wild	Sabin	VDPV	Wild					Sabin	VDPV							
Australia	VIDRL	39	0	0	4	33	2	0	94%	12%	02-Jan-18	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brunei Darussalam	VIDRL	0	-	-	-	-	-	-	-	-	02-Jan-18	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cambodia	NIID	56	0	0	5	50	0	1	96%	8%	25-Dec-17	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China (total)		4730	45	0	331	4273	1	80	96%	6%	27-Dec-17		111	0	37	0	0	0	0	0	61	5	8	0	0	0	0	0	0	0	100%		
China, Anhui	Prov. Lab	302	3	0	14	284	0	1	100%	4%		Prov. Lab/CCDC	8	0	6	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	100%		
China, Beijing	Prov. Lab	31	1	0	0	29	0	1	97%	0%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	100%		
China, Chongqing	Prov. Lab	69	0	0	2	67	0	0	91%	2%		Prov. Lab/CCDC	4	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	100%		
China, Fujian	Prov. Lab	159	1	0	9	147	0	2	95%	4%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	100%		
China, Gansu	Prov. Lab	92	0	0	4	86	0	2	98%	4%		Prov. Lab/CCDC	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	100%		
China, Guangdong	Prov. Lab	364	4	0	33	325	0	2	95%	8%		Prov. Lab/CCDC	12	0	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	100%	
China, Guangxi	Prov. Lab	238	5	0	32	199	0	2	97%	12%		Prov. Lab/CCDC	10	0	4	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	100%	
China, Guizhou	Prov. Lab	187	0	0	15	166	0	6	95%	8%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
China, Hebei	Prov. Lab	255	4	0	24	226	0	1	99%	7%		Prov. Lab/CCDC	7	0	4	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	100%	
China, Heilongjiang	Prov. Lab	96	0	0	5	91	0	0	100%	5%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
China, Henan	Prov. Lab	446	8	0	54	380	0	4	89%	10%		Prov. Lab/CCDC	21	0	2	0	0	0	0	0	14	1	4	0	0	0	0	0	0	0	0	100%	
China, Hubei	Prov. Lab	166	0	0	19	145	0	2	97%	11%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hunan	Prov. Lab	229	1	0	18	209	0	1	99%	7%		Prov. Lab/CCDC	4	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	100%	
China, Jiangsu	Prov. Lab	199	4	0	3	189	0	3	100%	2%		Prov. Lab/CCDC	8	0	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	100%	
China, Jiangxi	Prov. Lab	143	1	0	15	127	0	0	94%	9%		Prov. Lab/CCDC	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	100%	
China, Jilin	Prov. Lab	54	0	0	6	47	0	1	100%	10%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Neimongol	Prov. Lab	85	2	0	1	81	0	1	99%	1%		Prov. Lab/CCDC	5	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	100%	
China, Ningxia	Prov. Lab	18	0	0	2	16	0	0	94%	11%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shaanxi	Prov. Lab	96	1	0	2	79	0	14	89%	2%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	100%	
China, Shandong	Prov. Lab	331	5	0	9	314	1	2	95%	2%		Prov. Lab/CCDC	12	0	1	0	0	0	0	0	7	4	0	0	0	0	0	0	0	0	0	100%	
China, Shanghai	Prov. Lab	36	0	0	0	36	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shanxi	Prov. Lab	157	0	0	5	152	0	0	94%	3%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Sichuan	Prov. Lab	300	0	0	18	255	0	27	96%	5%		Prov. Lab/CCDC	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100%	
China, Tianjin	Prov. Lab	30	0	0	0	30	0	0	98%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Xinjiang	Prov. Lab	143	3	0	10	126	0	4	93%	7%		Prov. Lab/CCDC	7	0	4	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	100%	
China, Yunnan	Prov. Lab	222	1	0	17	202	0	2	93%	6%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	100%	
China, Zhejiang	Prov. Lab	148	1	0	7	140	0	0	99%	4%		Prov. Lab/CCDC	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	100%	
China, Hainan	Prov. Lab	23	0	0	3	20	0	0	91%	11%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Liaoning	Prov. Lab	86	0	0	3	82	0	1	99%	2%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Qinghai	Prov. Lab	19	0	0	1	18	0	0	100%	5%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Tibet	Prov. Lab	6	0	0	0	5	0	1	40%	0%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hong Kong SAR	PHLC	15	0	0	0	14	1	0	98%	0%	02-Jan-18	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Macao SAR	PHLC	2	0	0	0	2	0	0	100%	0%	02-Jan-18	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	NIID	-	-	-	-	-	-	-	-	-	-	NIID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lao People's Democratic Republic	NIID	132	1	1	12	118	0	0	96%	9%	30-Dec-17	NIID	4	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	100%		
Malaysia	IMR	152	0	0	9	143	0	0	99%	6%	11-Nov-17	IMR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mongolia	PHI	6	0	0	0	6	0	0	100%	0%	22-Dec-17	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Zealand	IESR	7	0	0	0	6	1	0	100%	0%	18-Dec-17	IESR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Papua New Guinea	VIDRL	25	0	0	8	17	0	0	100%	23%	02-Jan-18	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philippines	RITM	456	6	0	25	416	9	0	99%	4%	27-Dec-17	RITM	15	0	4	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	100%	
Republic of Korea	NIH	51	0	0	4	46	1	0	98%	5%	10-Nov-17	NIH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Singapore	SGH	6	0	0	0	6	0	0	100%	0%	29-Dec-17	SGH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Viet Nam (North)	NIHE	176	1	0	27	143	5	0	100%	13%	29-Dec-17	NIHE	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	100%	
Viet Nam (South)	PI	191	0	0	33	156	2	0	100%	17%	02-Jan-18	PI	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pacific island countries and areas	VIDRL	14	0	0	5	9	0	0	100%	30%	02-Jan-18	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total		6058	53	1	463	5438																											

Table 3. Laboratory confirmation of polio isolates from environmental samples in 2016–2017 ¹

Country/area	Intratyptic differentiation lab ²	2016													2017														
		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	0	-	-	-	-	-	-	-	-	-	-	-	-	6	2	0	0	0	0	0	1	0	1	0	4	0	0	
China (total)		345	171	0	179	0	0	174	0	0	507	0	229	0	0	268	150	0	187	0	0	0	0	512	0	898	0	0	
China, Fujian	Prov. Lab/CCDC	60	12	0	3	0	0	1	0	0	11	0	42	0	0	45	15	0	4	0	0	0	0	25	0	278	0	0	
China, Gansu	Prov. Lab/CCDC	13	8	0	5	0	0	5	0	0	13	0	2	0	0	10	8	0	10	0	0	0	0	27	0	12	0	0	
China, Guangdong	Prov. Lab/CCDC	48	35	0	19	0	0	4	0	0	62	0	39	0	0	44	36	0	17	0	0	0	0	83	0	100	0	0	
China, Guangxi	Prov. Lab/CCDC	36	13	0	1	0	0	4	0	0	52	0	23	0	0	30	16	0	11	0	0	0	0	32	0	62	0	0	
China, Heilongjiang	Prov. Lab/CCDC	45	21	0	0	0	0	5	0	0	46	0	32	0	0	38	14	0	12	0	0	0	0	27	0	104	0	0	
China, Shandong	Prov. Lab/CCDC	45	28	0	25	0	0	15	0	0	42	0	40	0	0	36	21	0	17	0	0	0	0	68	0	183	0	0	
China, Shanghai	Prov. Lab/CCDC	24	18	0	17	0	0	4	0	0	34	0	18	0	0	14	12	0	13	0	0	0	0	28	0	26	0	0	
China, Xinjiang	Prov. Lab/CCDC	36	36	0	109	0	0	136	0	0	247	0	25	0	0	30	28	0	103	0	0	0	0	222	0	98	0	0	
China, Yunnan	Prov. Lab/CCDC	38	0	-	-	-	-	-	-	-	-	-	8	0	0	21	0	-	-	-	-	-	-	-	-	35	0	0	
Malaysia	IMR	10	0	-	-	-	-	-	-	-	-	-	6	0	0	14	0	-	-	-	-	-	-	-	-	10	0	0	
Philippines	RITM	0	-	-	-	-	-	-	-	-	-	-	-	-	40	8	0	1	0	0	0	0	0	7	0	21	0	0	
Total		355	171	0	179	0	0	174	0	0	507	0	235	0	0	328	160	0	188	0	0	0	1	0	520	0	933	0	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, 2000–2017

Country/area	2000–2009 ³	2010	2011	2012	2013	2014	2015	2016	2017
Australia									?VDPV2 (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) iVDPV3 (1 AFP)	aVDPV1 (1 AFP) aVDPV2 (2 AFP) cVDPV2 (2 AFP + 1 contact) iVDPV2 + iVDPV3 (1 AFP)	aVDPV2 (1 non-AFP) iVDPV2 + iVDPV3 (1 AFP)	aVDPV1 (1 non-AFP) aVDPV2 (2 AFP) iVDPV3 (1 AFP)	aVDPV1 (1 AFP) aVDPV2 (1 AFP) iVDPV2 (1 AFP)	aVDPV3 (1 AFP)	aVDPV3 (1 AFP) ?VDPV3 (1 AFP)
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								
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, "?VDPV" = 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