

## HIGHLIGHTS

### The Western Pacific Region takes part in a global switch from trivalent to bivalent oral polio vaccine (OPV)

Between 17 April and 1 May 2016, 155 countries and territories are taking part in the largest joint effort in the history of vaccines, a globally synchronized switch from trivalent OPV (tOPV) to bivalent OPV (bOPV). The WHO underscores the importance of this activity as a pivotal step towards the eradication of poliovirus.

Over the past ten years, more than 10 billion doses of OPV have been given to nearly three billion children worldwide, preventing more than 10 million cases of polio. "OPV has been instrumental in the battle to rid the world of polio," said WHO Regional Director for the Western Pacific, Dr Shin Young-soo. "We have successfully reduced the disease by more than 99%. But as we near the finish line we need to adopt new tactics to ensure we end this disease once and for all."

Wild poliovirus has 3 strains: types 1, 2, and 3. In September 2015, the Global Certification Committee on polio eradication declared worldwide eradication of type 2 wild poliovirus. This created an opportunity for those countries using tOPV to switch to bOPV. The next step will be replacement of OPV by Inactivated polio vaccine (IPV) once all wild polio is eradicated globally.

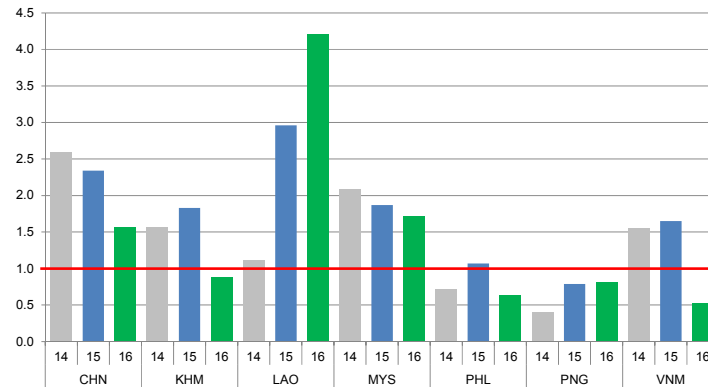
All 16 countries in the Western Pacific Region that still use OPV are now switching to bOPV. It is important that all countries switch during the same time period. "The switch is an ambitious but highly important activity. Its full and successful implementation will help to secure a world free of all polio disease," said Dr. Shin.

See more at: <http://www.who.int/immunization/diseases/poliomyelitis/endgame/objective2>

## 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: [WPR\\_EPIdata@wpro.who.int](mailto:WPR_EPIdata@wpro.who.int)  
Web: [www.wpro.who.int/immunization](http://www.wpro.who.int/immunization)

Chart 1. Non-polio AFP rate (per 100 000 persons < 15 years of age), 2014–2016\*



\* AFP rate annualized as of week 17

Chart 2. Adequate specimen collection rate, 2014–2016

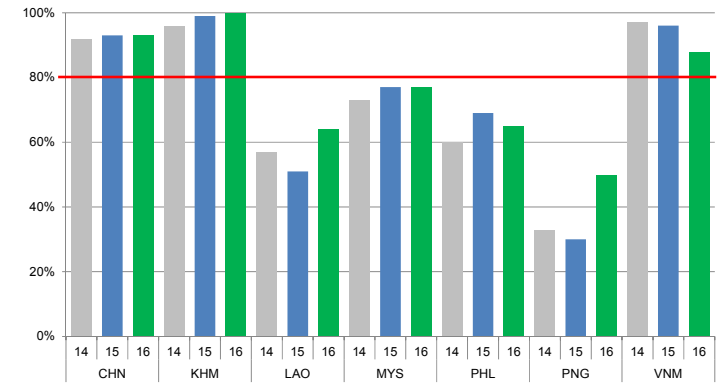


Chart 3. Percentage of reported AFP cases by number of polio vaccination doses, 2016

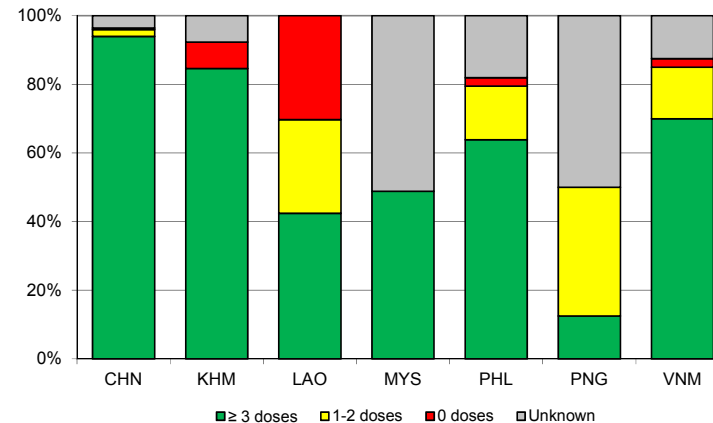
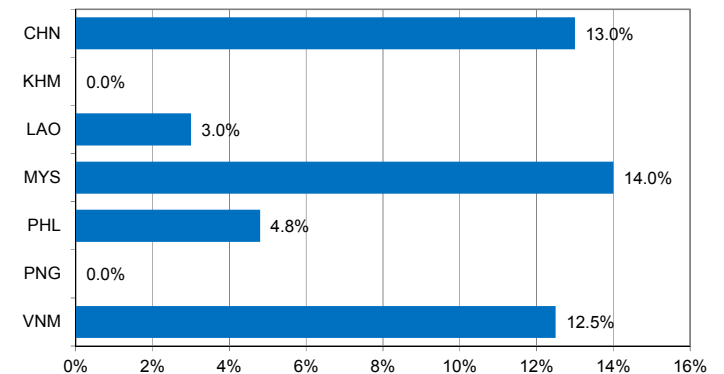


Chart 4. Percentage of reported AFP cases with pending classification > 90 days after onset, 2016



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 1A. Classification of AFP cases with onset in 2015 and key surveillance indicators

Country/area	2014		2015							Indicators			Latest report date <sup>4</sup>	Days since last report <sup>5</sup>
	Total reported cases	Annual expected cases <15 years of age	Total reported cases	Classification				Pending		Non-polio AFP rate	% with adequate specimens <sup>2</sup>	% investigated ≤ 2 days of notification <sup>3</sup>		
				Confirmed wild poliovirus	Vaccine-derived poliovirus (VDPV)	Polio-compatible	Discarded (Non-polio)	Total	> 90 days <sup>1</sup> # (%)					
														≤ 1
≤ 30														
Australia	60	44	53	0	0	0	53	0	0 (0.0%)	1.20	26%	100%	19-Feb-16	-
Brunei Darussalam	4	1	3	0	0	0	3	0	0 (0.0%)	3.00	100%	100%	18-Feb-16	-
Cambodia	72	46	84	0	0	0	84	0	0 (0.0%)	1.83	99%	100%	01-Feb-16	-
China	5758	2234	5223	0	0	1	5206	16	16 (0.3%)	2.34	93%	100%	20-Apr-16	6
China, Hong Kong SAR	19	8	10	0	0	0	10	0	0 (0.0%)	1.25	80%	100%	04-Feb-16	-
China, Macao SAR	1	1	1	0	0	0	1	0	0 (0.0%)	1.00	100%	100%	15-Jan-16	-
Japan	-	163	-	-	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	28	24	71	0	8 <sup>6</sup>	0	54	9	9 (12.7%)	2.96	56%	99%	18-Apr-16	8
Malaysia	161	77	144	0	0	0	144	0	0 (0.0%)	1.87	77%	79%	18-Apr-16	-
Mongolia	9	9	9	0	0	0	9	0	0 (0.0%)	1.00	100%	100%	02-Mar-16	-
New Zealand	8	9	7	0	0	0	7	0	0 (0.0%)	0.78	29%	100%	15-Apr-16	-
Papua New Guinea	12	34	27	0	0	0	26	1	1 (3.7%)	0.79	30%	74%	29-Mar-16	28
Philippines	272	387	413	0	0	0	413	0	0 (0.0%)	1.07	69%	98%	29-Mar-16	-
Republic of Korea	88	70	83	0	0	0	83	0	0 (0.0%)	1.19	86%	87%	22-Mar-16	-
Singapore	8	6	8	0	0	0	8	0	0 (0.0%)	1.33	100%	88%	03-Feb-16	-
Viet Nam	361	231	380	0	0	0	343	36	35 (9.2%)	1.65	96%	95%	22-Mar-16	35
Pacific island countries and areas	15	10	14	0	0	0	10	4	4 (28.6%)	1.40	71%	100%	11-Apr-16	15
<b>Total</b>	<b>6876</b>	<b>3354</b>	<b>6530</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>6454</b>	<b>66</b>	<b>65 (1.0%)</b>	<b>1.95</b>	<b>90%</b>	<b>98%</b>		

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. Report date is fixed as soon as all cases for the year have been classified
5. Countries are expected to submit data at least once per month to WPRO
6. Includes three cases that are 15 years old or older

Green	Reached or surpassed target
Yellow	Nearly reached target: 0.5–0.99 for non-polio AFP rate; 60–79% for other indicators
Red	Substantially below target

Table 1B. Classification of AFP cases with onset in 2016 and key surveillance indicators

Country/area	2015		2016											
	Total reported cases	Annual expected cases <15 years of age	Total reported cases	Classification						Indicators			Latest report date	Days since last report <sup>5</sup>
				Confirmed wild poliovirus	Vaccine-derived poliovirus (VDPV)	Polio-compatible	Discarded (Non-polio)	Pending		Non-polio AFP rate <sup>2</sup>	% with adequate specimens <sup>3</sup>	% investigated ≤ 2 days of notification <sup>4</sup>		
								Total	> 90 days <sup>1</sup> # (%)					≥ 1
Australia	53	45	22	0	0	0	5	17	6 (27.3%)	1.50	36%	82%	22-Apr-16	4
Brunei Darussalam	3	1	0	-	-	-	-	-	-	-	-	-	18-Feb-16	68
Cambodia	84	45	13	0	0	0	4	9	0 (0.0%)	0.88	100%	100%	18-Apr-16	8
China	5223	2234	1144	0	0	0	151	993	149 (13.0%)	1.57	93%	100%	20-Apr-16	6
China, Hong Kong SAR	10	8	5	0	0	0	3	2	0 (0.0%)	1.91	80%	100%	08-Apr-16	18
China, Macao SAR	1	1	0	-	-	-	-	-	-	-	-	-	21-Apr-16	5
Japan	-	163	-	-	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	71	24	33	0	3 <sup>6</sup>	0	16	14	1 (3.0%)	4.21	64%	97%	18-Apr-16	8
Malaysia	144	77	43	0	0	0	11	32	6 (14.0%)	1.71	77%	44%	18-Apr-16	8
Mongolia	9	8	2	0	0	0	0	2	0 (0.0%)	0.76	100%	100%	04-Apr-16	22
New Zealand	7	9	7	0	0	0	1	6	0 (0.0%)	2.38	43%	86%	22-Apr-16	4
Papua New Guinea	27	30	8	0	0	0	0	8	0 (0.0%)	0.82	50%	88%	29-Mar-16	28
Philippines	413	394	83	0	0	0	61	22	4 (4.8%)	0.64	65%	94%	11-Apr-16	15
Republic of Korea	83	69	10	0	0	0	3	7	0 (0.0%)	0.44	90%	100%	22-Mar-16	35
Singapore	8	6	2	0	0	0	2	0	0 (0.0%)	1.02	100%	100%	06-Apr-16	20
Viet Nam	380	231	40	0	0	0	6	34	5 (12.5%)	0.53	88%	98%	14-Apr-16	12
Pacific island countries and areas	14	10	5	0	0	0	2	3	0 (0.0%)	1.53	80%	100%	11-Apr-16	15
<b>Total</b>	<b>6530</b>	<b>3355</b>	<b>1417</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>265</b>	<b>1149</b>	<b>171 (12.1%)</b>	<b>1.29</b>	<b>89%</b>	<b>97%</b>		

1. Number (%) of reported cases pending classification more than 90 days from date of onset of paralysis to date of last report
2. Annualized non-polio AFP rate per 100 000 population under 15 years of age
3. Percentage of reported cases with two stool specimens collected 24 hours apart and within 14 days of onset of paralysis
4. Percentage of reported cases investigated within two days of notification
5. Countries are expected to submit data at least once per month to WPRO
6. Includes one case that is 15 years old or older

Green	Reached or surpassed target
Yellow	Nearly reached target: 0.5–0.99 for non-polio AFP rate; 60–79% for other indicators
Red	Substantially below target





Table 3. Laboratory confirmation of polio isolates from environmental samples in 2014–2015 <sup>1</sup>

Country/area	Intratype differentiation lab <sup>2</sup>	2014													2015														
		Total number of samples processed	Total number of samples with polio isolates	Type 1			Type 2			Type 3			NPEV	Pending ITD	Discordant pending sequencing	Total number of samples processed	Total number of samples with polio isolates	Type 1			Type 2			Type 3			NPEV	Pending ITD	Discordant pending sequencing
				Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV						Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV			
Australia	VIDRL	3	0	-	-	-	-	-	-	-	-	-	3	0	0	29	2	0	0	0	1	0	0	1	0	26	0	0	
China (total) <sup>3</sup>		167	167	0	79	0	0	129	2	0	115	0	0	0	0	1486	630	0	193	0	0	243	1	0	274	0	851	5	35
China, Fujian	Prov. Lab/CCDC	14	14	0	1	0	0	4	0	0	0	0	0	0	0	77	13	0	0	0	12	0	0	1	0	64	0	0	
China, Gansu	Prov. Lab/CCDC	0	0	-	-	-	-	-	-	-	-	-	-	-	-	88	46	0	11	0	0	9	0	0	28	0	37	5	0
China, Guangdong	Prov. Lab/CCDC	48	48	0	21	0	0	22	0	0	15	0	0	0	0	171	43	0	11	0	0	24	1	0	7	0	128	0	0
China, Guangxi	Prov. Lab/CCDC	0	0	-	-	-	-	-	-	-	-	-	-	-	-	261	71	0	10	0	0	12	0	0	52	0	190	0	0
China, Heilongjiang	Prov. Lab/CCDC	18	18	0	11	0	0	37	1	0	47	0	0	0	0	47	20	0	2	0	0	16	0	0	2	0	27	0	0
China, Shandong	Prov. Lab/CCDC	48	48	0	13	0	0	16	0	0	23	0	0	0	0	305	108	0	43	0	0	25	0	0	40	0	197	0	0
China, Shanghai	Prov. Lab/CCDC	12	12	0	6	0	0	12	0	0	10	0	0	0	0	129	21	0	2	0	0	12	0	0	7	0	108	0	0
China, Xinjiang	Prov. Lab/CCDC	27	27	0	27	0	0	38	1	0	20	0	0	0	0	396	308	0	114	0	0	133	0	0	137	0	88	0	35
China, Yunnan	Prov. Lab/CCDC	0	0	-	-	-	-	-	-	-	-	-	-	-	-	12	0	0	0	0	0	0	0	0	0	0	12	0	0
Malaysia	IMR	21	7	0	1	0	0	1	0	0	5	0	7	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>191</b>	<b>174</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>2</b>	<b>0</b>	<b>120</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1515</b>	<b>632</b>	<b>0</b>	<b>193</b>	<b>0</b>	<b>0</b>	<b>244</b>	<b>1</b>	<b>0</b>	<b>275</b>	<b>0</b>	<b>877</b>	<b>5</b>	<b>35</b>

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); VIDRL (Victorian Infectious Diseases Reference Laboratory, Australia)
3. Reported data from China are currently being verified and may be amended in the next issue of the bulletin.

Table 4. Vaccine-derived poliovirus identified from laboratory testing<sup>2</sup>, 2000-2016

Country/area	2000–2009 <sup>3</sup>	2010	2011	2012	2013	2014	2015	2016
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)	
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, or non-AFP cases
3. Refers to year of last VDPV case, and aggregate total of VDPV cases for 2000-2009