

HIGHLIGHTS

Seventh Meeting of Vaccine-Preventable Diseases Laboratory Networks in the Western Pacific Region 26-29 September 2017—Manila, Philippines

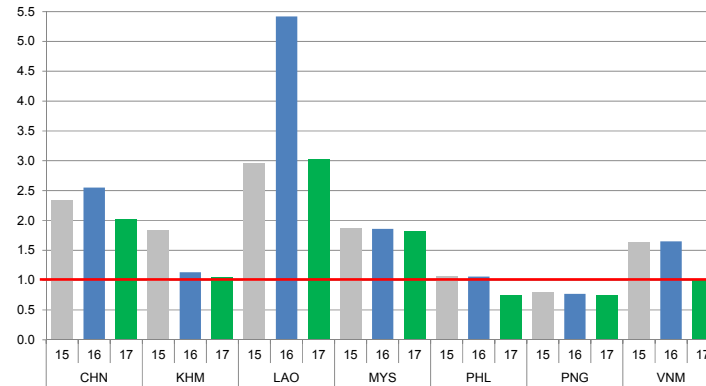
The Seventh Meeting on Vaccine-Preventable Diseases Laboratory Networks in the Western Pacific Region was held in Manila, Philippines from 26-29 September 2017, to review the performance and identify the challenges of the poliovirus and measles and rubella network laboratories in the Region. The meeting reviewed ways to further strengthen the performance of network laboratories and also to monitor the implementation of recommendations from the Sixth Vaccine-Preventable Diseases Laboratory Networks meeting in September 2016. The meeting provided an opportunity to discuss strengthening the quality and sensitivity of poliovirus detection, enhancing poliovirus surveillance through the introduction of environmental surveillance (ES) in key countries and the application of the Global Action Plan III (GAP III) for the containment of poliovirus on the laboratory network. Ways to improve the quality and timeliness of laboratory based surveillance, the challenges of identifying funds for the procurement and delivery of high quality laboratory supplies, the importance of improving molecular surveillance for support of verification of elimination of measles and rubella, and the strengthening of rubella and CRS surveillance were also discussed.



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Chart 1. Non-polio AFP rate (per 100 000 persons < 15 years of age), 2015–2017*



* AFP rate annualized as of week 40

Chart 2. Adequate specimen collection rate, 2015–2017

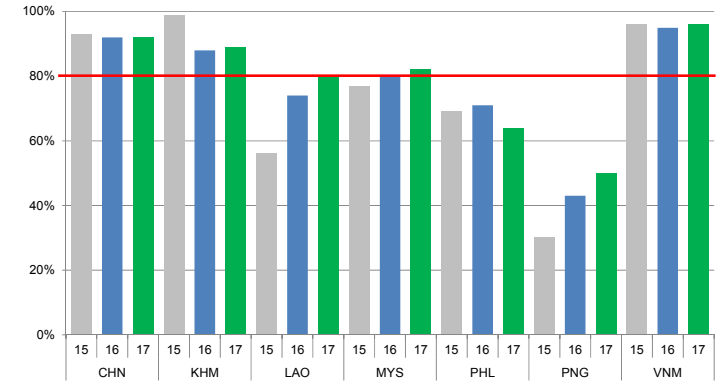


Chart 3. Percentage of reported AFP cases by number of polio vaccination doses, 2017

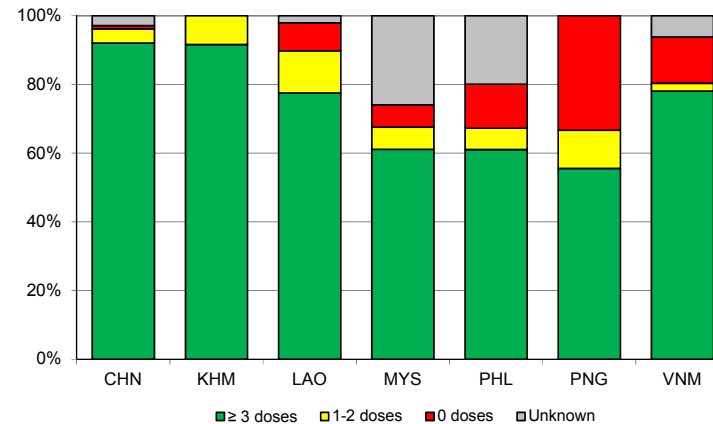
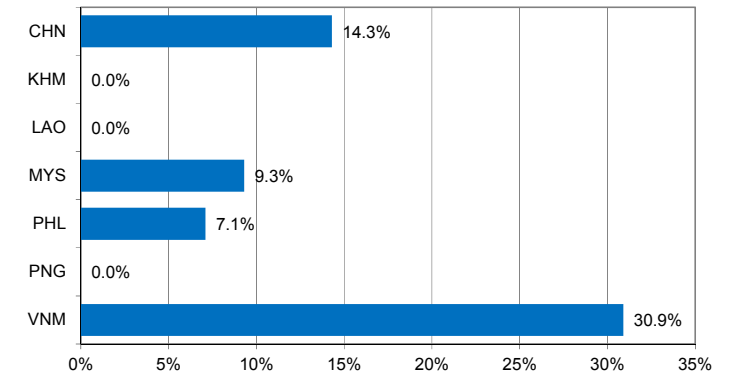


Chart 4. Percentage of reported AFP cases with pending classification > 90 days after onset, 2017



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 ⁵
				Confirmed wild poliovirus	Vaccine-derived poliovirus (VDPV)	Polio-compatible	Discarded (Non-polio)	Pending		Non-polio AFP rate ²	% with adequate specimens ³	% investigated ≤ 2 days of notification ⁴		
								Total	> 90 days ¹ # (%)					
≥ 1	≥ 80%	≥ 80%	≤ 30											
Australia	62	45	37	0	0	1	20	16	5 (13.5%)	1.07	35%	95%	06-Oct-17	4
Brunei Darussalam	1	1	1	0	0	0	1	0	0 (0.0%)	1.30	0%	100%	24-Jul-17	78
Cambodia	51	45	36	0	0	0	29	7	0 (0.0%)	1.04	89%	100%	09-Oct-17	1
China	5691	2256	3503	0	1	0	2220	1282	502 (14.3%)	2.02	92%	100%	09-Oct-17	1
China, Hong Kong SAR	10	8	13	0	0	0	9	4	2 (15.4%)	2.11	77%	100%	06-Oct-17	4
China, Macao SAR	1	1	2	0	0	0	1	1	0 (0.0%)	2.60	50%	100%	29-Sep-17	11
Japan	-	161	-	-	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	133	21	49	0	0	0	46	3	0 (0.0%)	3.03	80%	80%	11-Aug-17	60
Malaysia	143	77	108	0	0	0	68	40	10 (9.3%)	1.82	82%	69%	21-Sep-17	19
Mongolia	7	9	5	0	0	0	4	1	0 (0.0%)	0.72	80%	100%	08-Oct-17	2
New Zealand	12	9	7	0	0	0	5	2	1 (14.3%)	1.01	29%	100%	13-Sep-17	27
Papua New Guinea	23	31	18	0	0	0	15	3	0 (0.0%)	0.75	50%	100%	08-Sep-17	32
Philippines	417	394	226	0	0	0	184	42	16 (7.1%)	0.75	64%	98%	10-Aug-17	61
Republic of Korea	70	68	45	0	0	0	28	17	0 (0.0%)	0.86	91%	100%	11-Sep-17	29
Singapore	7	6	5	0	0	0	5	0	0 (0.0%)	1.08	100%	100%	09-Oct-17	1
Viet Nam	382	234	178	0	0	0	81	97	55 (30.9%)	0.99	96%	92%	16-Aug-17	55
Pacific island countries and areas	20	11	10	0	0	0	9	1	1 (10.0%)	1.18	60%	100%	11-Sep-17	29
Total	7030	3377	4243	0	1	1	2725	1516	592 (14.0%)	1.63	89%	98%		

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

Green	Reached or surpassed target
Yellow	Nearly reached target: 0.5–0.99 for no n-polio AFP rate; 60–79% for other indicators
Red	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	29	0	0	4	24	1	0	96%	17%	09-Oct-17	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brunei Darussalam	VIDRL	0	-	-	-	-	-	-	-	-	09-Oct-17	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cambodia	NIID	34	0	0	4	30	0	0	97%	11%	09-Oct-17	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China (total)		3443	38	0	255	3091	1	58	95%	6%	09-Oct-17		91	0	35	0	0	0	0	0	47	1	8	0	0	0	0	0	0	0	99%	
China, Anhui	Prov. Lab	216	3	0	8	203	0	2	100%	3%		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	26	1	0	0	24	0	1	96%	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	50	0	0	3	46	0	1	96%	5%		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	119	1	0	3	115	0	0	87%	2%		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	65	0	0	4	60	0	1	96%	5%		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	256	2	0	30	224	0	0	95%	10%		Prov. Lab/CCDC	8	0	6	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	100%
China, Guangxi	Prov. Lab	170	3	0	25	141	0	1	98%	14%		Prov. Lab/CCDC	6	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	100%
China, Guizhou	Prov. Lab	135	0	0	12	119	0	4	99%	8%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hebei	Prov. Lab	199	4	0	14	181	0	0	99%	5%		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	79	0	0	4	75	0	0	100%	5%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Henan	Prov. Lab	322	6	0	48	264	0	4	88%	13%		Prov. Lab/CCDC	17	0	2	0	0	0	0	0	10	1	4	0	0	0	0	0	0	0	0	100%
China, Hubei	Prov. Lab	116	0	0	12	99	0	5	95%	10%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hunan	Prov. Lab	158	1	0	17	138	0	2	99%	9%		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	145	4	0	3	134	0	4	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	95	1	0	12	80	0	2	94%	11%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	100%
China, Jilin	Prov. Lab	44	0	0	5	39	0	0	100%	9%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Neimongol	Prov. Lab	58	2	0	1	55	0	0	98%	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	14	0	0	3	11	0	0	93%	18%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shaanxi	Prov. Lab	65	1	0	2	55	0	7	88%	3%		Prov. Lab/CCDC	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0%
China, Shandong	Prov. Lab	252	4	0	7	240	1	0	94%	2%		Prov. Lab/CCDC	6	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	100%
China, Shanghai	Prov. Lab	26	0	0	0	26	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Shanxi	Prov. Lab	124	0	0	5	119	0	0	95%	4%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Sichuan	Prov. Lab	205	0	0	8	191	0	6	95%	3%		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	26	0	0	0	26	0	0	100%	0%		Prov. Lab/CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Xinjiang	Prov. Lab	104	3	0	8	91	0	2	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	168	1	0	11	149	0	7	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	113	1	0	6	105	0	1	100%	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	11	0	0	2	9	0	0	82%	14%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Liaoning	Prov. Lab	60	0	0	2	51	0	7	100%	2%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Qinghai	Prov. Lab	17	0	0	0	16	0	1	100%	0%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Tibet	Prov. Lab	5	0	0	0	5	0	0	40%	0%		CCDC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Hong Kong SAR	PHLC	11	0	0	0	11	0	0	97%	0%	22-Sep-17	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
China, Macao SAR	PHLC	2	0	0	0	2	0	0	100%	0%	22-Sep-17	PHLC	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	NIID	-	-	-	-	-	-	-	-	-	-	NIID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lao People's Democratic Republic	NIID	93	2	0	7	84	0	0	95%	7%	02-Oct-17	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Malaysia	IMR	110	0	0	7	101	0	2	98%	6%	10-Aug-17	IMR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mongolia	PHI	5	0	0	0	5	0	0	100%	0%	06-Oct-17	NIID	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Zealand	IESR	4	0	0	0	3	1	0	100%	0%	04-Oct-17	IESR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	VIDRL	18	0	0	6	12	0	0	100%	24%	09-Oct-17	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philippines	RITM	386	6	0	23	338	19	0	99%	4%	09-Oct-17	RITM	14	0	4	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	100%
Republic of Korea	NIH	45	0	0	4	36	5	0	98%	6%	11-Sep-17	NIH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Singapore	SGH	5	0	0	0	5	0	0	100%	0%	09-Oct-17	SGH	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Viet Nam (North)	NIHE	128	0	0	21	91	16	0	100%	16%	15-Sep-17	NIHE	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Viet Nam (South)	PI	132	0	0	23	102	7	0	100%	18%	09-Oct-17	PI	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pacific island countries and areas	VIDRL	10	0	0	3	7	0	0	100%	26%	09-Oct-17	VIDRL	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total		4455	46	0	357	3942	50	60	95%	6%			105	0	39	0	0	0	0	0	57	1	8	0								

