Annual Progress Report on Maintaining Polio Free Status

(Surveillance and Laboratory)

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Executive Summary

- National Certification Committee for Polio Eradication (NCCPE) had been reformed as Independent Committee
- Implementation of polio SIAs in Rakhine State
- Polio Outbreak Simulation Exercise
- 15% of township had OPV3 coverage <80% in 2015 (JRF) and 20% of townships have <80% OPV3 coverage in 2016 and 19% (64 townships)of have <80% in 2017 (mainly situated in conflict areas and self-administrative areas)
- Improve coverage in low performing areas – micro planning with development of annual EPI work plans by each townships, initiation of hospital based immunization, incentives to midwives, providing budget for supervision and monitoring, communication and advocacy meetings with local administrators and crash immunization program in hard to reach area.

Executive Summary

- According to 13th IHR declaration, May 2017 Myanmar is defined as country of no longer infected by WPV1 or cVDPV, but which remain vulnerable to re-infection by WPV or cVDPV.
- Training on Trainers for RSO and Team Leader/EPI focal staffs at States/Regional level had implemented and cascade trainings and orientations were conducted to all BHS and clinicians on AFP surveillance and response.
- Implement environmental surveillance system
- poliovirus type 2 (PV2) laboratory containment forward as per GAPIII phase 1 requirements with a new survey being conducted

States no longer infected by WPV1 or cVDPV, but which remain vulnerable to re-infection by WPV or cVDPV

- **WPV1**
  - Cameroon (last case 9 Jul 2014)
  - Niger (last case 15 Nov 2012)
  - Chad (last case 14 Jun 2012)
  - Central African Republic (last case 8 Dec 2011)

- **cVDPV**
  - Ukraine (last case 7th July 2015)
  - Madagascar (last case 22nd August 2015)
  - **Myanmar (last case 5th October 2015)**
  - Guinea (last case 14th December 2015)
  - Lao PDR (last case 11th January 2016)

Recommendations by IHR Committee

- Urgently strengthen routine immunization to boost population immunity.
- Enhance surveillance quality to reduce the risk of undetected WPV1 and cVDPV transmission, particularly among high risk mobile and vulnerable populations.
- Intensify efforts to ensure vaccination of mobile and cross border populations, Internally Displaced Persons, refugees and other vulnerable groups.
- Maintain these measures with documentation of full application of high quality surveillance and vaccination activities.

Section 4: Is polio surveillance sensitive ?

- 16 Regional Surveillance Officers, one in each region and state and one national surveillance coordinator at central level
- Reporting was intensified and systems were put in place to ensure immediate notification of AFP cases by telephone from all states/regions and townships
- Rakhine State has reached an annualized non-polio AFP rate of 3.48 / 100,000 under 15 years and the adequate stool sample collection is 94 percent in 2016

Table : Standard AFP surveillance indicators at national level

Year	Population <15 yrs	Total # of AFP cases <15 yrs	Total # of non-polio AFP cases <15 years	Non-polio AFP rate*	% AFP cases with 2 adequate stool samples**	% AFP cases with any stool samples	% AFP cases with 60 day follow-up***
2016	13,965,100	466	466	3.34	96	100	97
Jan-Sep 2017 (as of week 39)	13,515,236	282	271	2.67	97	100	83

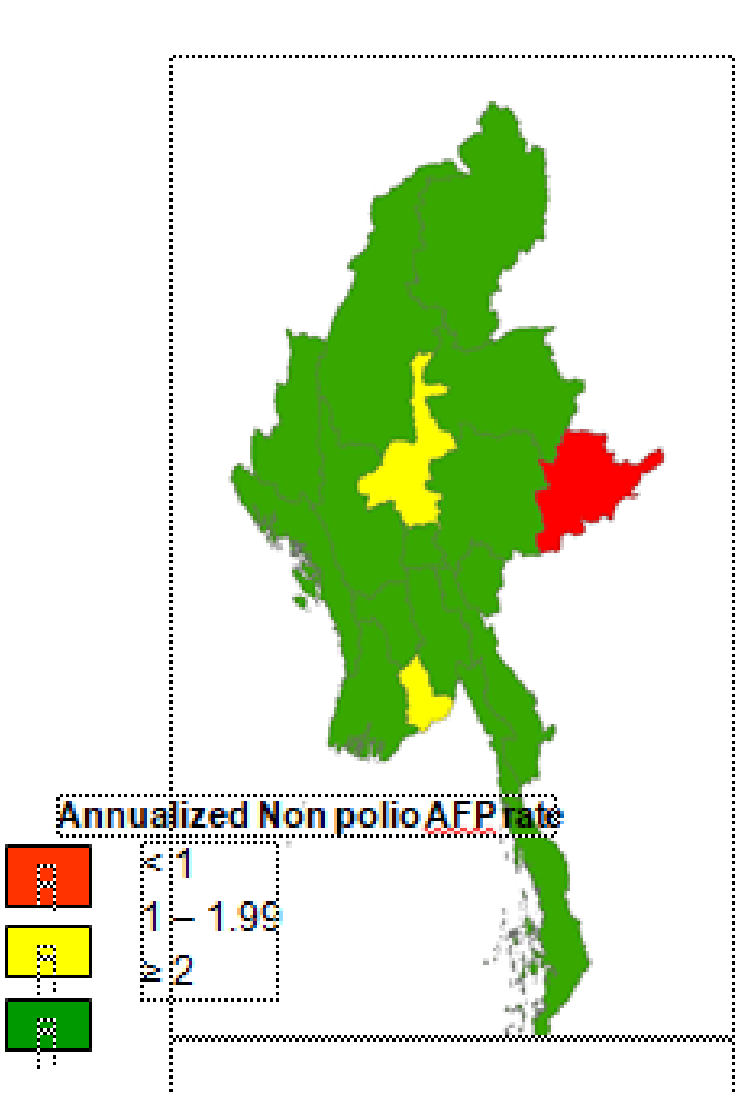
Non-polio AFP and adequate stool specimen collection rate by State and Region, 2016-2017

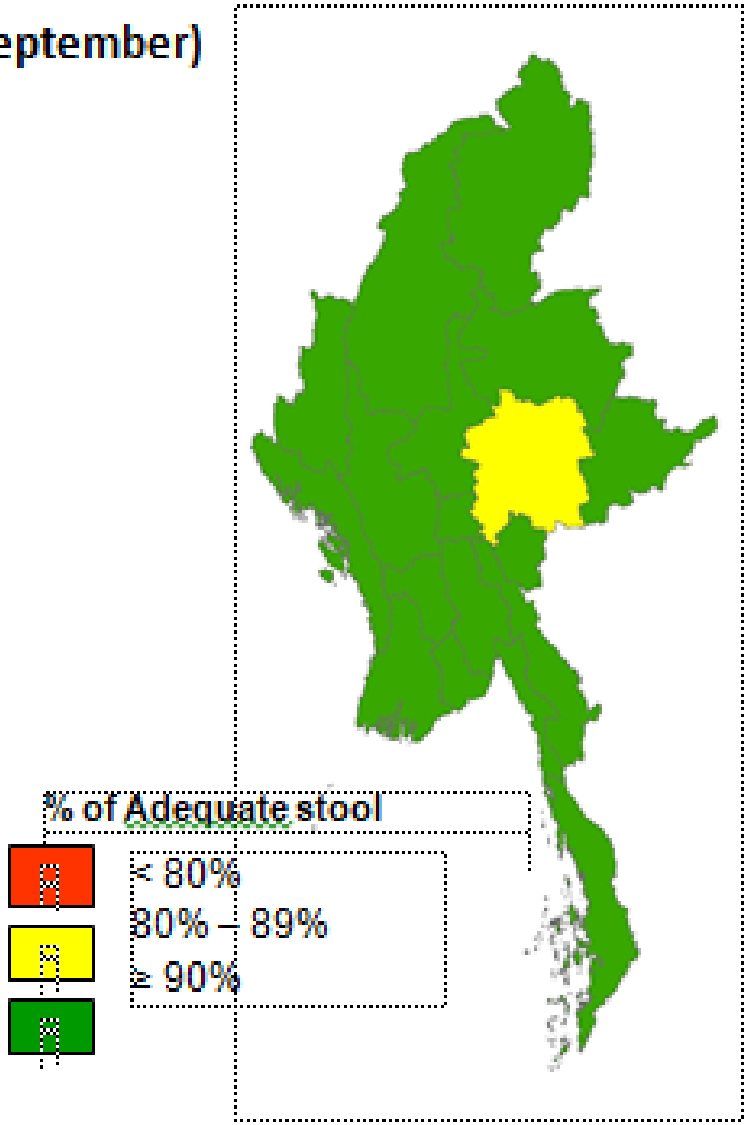
(as of 30 September, 2017)

State/Region	2016		2017	
	Non-polio AFP rate	% AFP cases with 2 adequate stool samples	Non-polio AFP rate	% AFP cases with 2 adequate stool samples
Ayeyarwady	3.30	96	3.60	91
Bago	5.81	99	2.71	100
Chin	3.24	100	2.17	100
Kachin	3.65	94	3.22	100
Kayah	3.21	100	2.80	100
Kayin	4.30	96	4.39	89
Magway	3.35	90	3.50	100
Mandalay	2.65	95	1.93	100
Nay Pyi Taw	2.11	100	3.03	100
Mon	3.00	100	2.46	100
Rakhine	3.48	94	2.74	100
Sagaing	2.54	95	2.62	100
Shan East	3.58	100	0.62	100
Shan North	2.98	95	3.27	94
Shan South	2.79	100	2.40	85
Tanintharyi	4.97	95	2.68	100
Yangon	2.55	92	1.33	100
National	3.34	96	2.67	97

Non-polio AFP and adequate stool specimen collection rate by State and Region, 2017

'as of 30 September)





AFP Surveillance

- Risk assessment of polio indicated that there was surveillance gap in Myanmar 2017 as only 5 Regions and States achieved targeted non polio rate of > 3/1000,000 population and most of the states and regions have not met the targeted non polio AFP rate and the non-polio AFP rate of shan-East, Yangon and Mandalay Regions are below 2/100,000 under 15 years

- RSO meeting is conducted to evaluate the performance and it is concluded that AFP surveillance system is sensitive enough to detect wild and vaccine derive polio cases at national level, however, there are challenges in risk areas such as Rakhine State. Based on meeting recommendations, 3 months plan to strengthen AFP surveillance and immunization in states and regions with focus on low performance areas.

Table : Completeness of routine (zero) AFP reporting from health facilities

Year	Number of reporting sites	Completeness of routine reporting	
		# reports expected*	% reports received
2016	370	19,240	99%
Jan–Sep 2017 (as of week 39)	381	13320	98%

Table 3: Timeliness of routine (zero) AFP reporting from health facilities

Year	Number of reporting sites	Timeliness of routine reporting	
		# reports expected on time	% reports received on time
2016	370	19,240	96%
Jan–Sep 2017 (as of week 39)	381	13320	95%

To Improve AFP Surveillance

- Active case searches are accelerated during active surveillance visit to hospitals by RSO or SDCU team leaders.
- Training on Trainers for RSO and Team Leader/EPI focal staffs at States/Regional level had implemented and cascade trainings and orientations were conducted in 2016 and 2017.
- RSO induction training on polio surveillance, data management training by using user friendly software developed
- polio outbreak simulation exercise had implemented with the guidance of NCCPE in 2017.
- implement environmental surveillance system to detect circulating polioviruses (PV) as a supplementary method in support of acute flaccid paralysis (AFP) surveillance for suspected polio cases
- 3 months plan by RSO

Table 6: Summary of AFP case classification for the period under review

Year	Total # AFP Cases	# AFP cases confirmed as polio	# AFP cases classified as compatible	# AFP cases discarded as non-polio AFP	Provide # and proportion (parentheses) of discarded AFP cases by final diagnosis				
					GBS	Trans-verse myelitis	Trau-matic neuritis	Others	Un-known
2016	466	0	0	466	65 (14%)	24	127	217	33
Jan–Sep 2017	282	0	0	271	33 (%)	19	70	116	43

2017 as of September-(11 cases pending for classification)

All the review cases in 2016 were defined final classification and all are discarded by ERC. Out of 11 cases pending for classification in 2017, five cases of AFP are pending classification for more than 90 days due to busy schedule of EPI and CEU staff. The meeting will be conducted in November 2017.

Table 7: Summary of AFP case reviewed and classified by the ERC

Year	# AFP cases reviewed by the ERC			For AFP cases discarded by the ERC provide the proportion by final diagnosis				
	Total	Compatible	Discarded	GBS	Transverse Myelitis	Traumatic neuritis	Other (please specify)	Unknown
2016	6	0	6	1	0	2	3 - Viral meningocephalitis - Myelitis - Duchenne muscular dystrophy (DMD)	0
Jan–Sep 2017								

Table 10: Specimens submitted for poliovirus testing

Year	# AFP case specimens	# specimens from AFP contacts	# stool specimens from healthy children	# Environment Specimens	# other clinical specimens (specify)	#stool specimens from aseptic meningitis	Tota
~~2015~~2016	948	150	0	0	0	0	1098
Jan–Sep 2017	572	30	0	0	0	0	602

Table 11: Specimens received and processed for polioviruses

Year	# AFP stools specimens received	# other stool specimens received	Completeness of stool specimen analysis (%)		# other specimens received*	Completeness of other specimen analysis (%)	
			Processed	Not Processed		Processed	Not Processed
2016	948	150	100%	0	0	100%	0
Jan–Sep 2017	572	30	100%	0	0	100%	0

**Other specimens such as CSF and environmental samples*

Laboratory Containment

- Out of 1023 laboratories, 473 laboratories (48%) responded and reminders have been sent to the non-responding laboratories.
- After analyzing the responding laboratories, high priority laboratories were identified and recommended to destroy the wild and Type 2 poliovirus infectious and potentially infectious specimens and keep the record. VDPV2 materials, stool samples retained up to July 2016, un-typed NPEVs and Sabin2 controls kept in the national polio laboratory (NHL) were already destroyed in 2016.
- After discussion with DMR, the retained oral fluid samples for Polio and Measles serology survey were also destroyed in 2016.

Laboratory Containment (Cont:)

- Some laboratories were checked the storage of polio virus type 2 infectious and potentially infectious specimens during the regular M & E visit conducted by NHL.
- Myanmar remains on track to complete GAPIII phase 2 for Sabin2/OPV2 infectious and potentially infectious materials. All VDPV2 materials have already earlier been destroyed.
- Governments, institutions, and polio facilities have been already informed about the upcoming need for polio virus containment.

Polio Outbreak Response Plan

- Developed National Polio Outbreak Preparedness and Response Plan to guide response to outbreak of any type polio.
- Responding to Poliovirus Type 2 Outbreak Standard Operating Procedures.
- Based on global, regional and national guideline and has all components of the required outbreak response.
- The guideline mentions about need for coordination for IHR 2005 reporting and response requirement.
- The vaccine of choice will be monovalent type 2 or bivalent depending upon type of outbreak.

Thank you