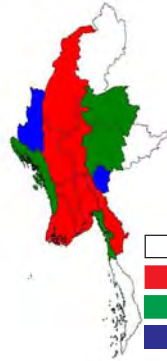


**Non-Polio AFP Rates
2006**

Myanmar Polio Newsletter

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**Non-Polio AFP Rates
2007 (annualized)**

- No AFP case
- < 1.00
- 1.00 - 1.99
- >= 2.00

Table 1: Reported AFP cases against targets by State/Division and classification status of cases with onset in 2006 and 2007 (date as of 04/05/2007)

State & Division	Population <15 years	Minimum non-polio AFP target	2007 (Onset)								2006							
			Case Classification								Case Classification							
			AFP		Polio			Pending			AFP		Polio			Pending		
AFP Cases	Discarded (Non-polio AFP)	Confirmed Polio	Wild Poliovirus Cases	Compatible	VDPV	Total	>90 Days	AFP Cases	Discarded (Non-polio AFP)	Confirmed Polio	Wild Poliovirus Cases	Compatible	VDPV	Total	>90 Days			
Ayeyarwady	2708341	54	9	6	0	0	0	0	3	0	53	53	0	0	0	0		
Bago East	1124456	22	3	2	0	0	0	0	1	0	21	21	0	0	0	0		
Bago West	913784	18	2	2	0	0	0	0	0	0	17	17	0	0	0	0		
Chin	192212	4	1	1	0	0	0	0	0	0	5	5	0	0	0	0		
Kachin	515712	10	0	0	0	0	0	0	0	0	6	6	0	0	0	0		
Kayah	105294	2	1	1	0	0	0	0	0	0	3	3	0	0	0	0		
Kayin	602029	12	1	0	0	0	0	0	1	0	13	13	0	0	0	0		
Magway	1814904	36	2	1	0	0	0	0	1	0	26	26	0	0	0	0		
Mandalay	2705689	54	6	5	0	0	0	0	1	0	49	48	0	0	0	1		
Mon	993998	20	4	4	0	0	0	0	0	0	23	23	0	0	0	0		
Rakhine	1096283	22	8	4	2	2	0	0	2	0	28	28	0	0	0	0		
Sagaing	2108204	42	5	3	0	0	0	0	2	0	47	47	0	0	0	0		
Shan East	304651	6	0	0	0	0	0	0	0	0	8	8	0	0	0	0		
Shan North	879540	18	4	3	0	0	0	0	1	0	22	22	0	0	0	0		
Shan South	751650	15	3	3	0	0	0	0	0	0	14	14	0	0	0	0		
Tanintharyi	539460	11	0	0	0	0	0	0	0	0	13	13	0	0	0	0		
Yangon	2285257	46	5	5	0	0	0	0	0	0	62	62	0	0	0	0		
TOTAL	19641463	393	54	40	2	2	0	0	12	0	410	409	0	0	0	1		

Table 2: Selected Performance Indicators by State/Division for cases with onset in 2006 and 2007 (data as of 04/05/2007)

State & Division	2007 (onset)								2006							
	Surveillance Indicators				Surveillance Indicators				Surveillance Indicators				Surveillance Indicators			
	AFP Rates		Specimen		% AFP investigated within 48 hrs.	% AFP cases with 60 days Follow-up	% Weekly zero reports received	% Weekly zero reports received on Time	AFP Rates		Specimen		% AFP investigated within 48 hrs.	% AFP cases with 60 days Follow-up	% Weekly zero reports received	% Weekly zero reports received on Time
AFP rate	Non-polio AFP rate	% within 2 spec.	% with any specimen	AFP rate					Non-polio AFP rate	% within 2 spec.	% with any specimen					
TARGET	2	80	80	80	80	80	80	2	80	80	80	80	80	80	80	
Ayeyarwady	1.33	0.89	100	100	100	100	85	82	2.00	1.96	92	100	94	92	100	96
Bago East	1.07	0.71	100	100	100	100	69	69	1.91	1.91	100	100	100	88	100	95
Bago West	0.88	0.88	100	100	100	0	62	57	1.90	1.90	88	100	100	87	100	97
Chin	2.08	2.08	100	100	100	0	14	12	2.65	2.65	100	100	100	100	100	83
Kachin	0.00	0.00	0	100	-	0	36	31	1.19	0.99	100	100	100	100	100	85
Kayah	3.80	3.80	100	100	100	0	69	60	2.91	2.91	100	100	100	100	100	90
Kayin	0.66	0.00	100	100	100	0	46	46	2.03	1.86	83	100	100	91	100	100
Magway	0.44	0.22	100	100	100	100	69	69	1.46	1.41	96	100	100	89	100	100
Mandalay	0.89	0.74	100	100	100	50	85	84	1.85	1.70	96	100	98	88	100	97
Mon	1.61	1.61	100	100	100	50	62	62	2.36	2.36	100	100	91	87	100	98
Rakhine	2.92	1.46	88	100	88	0	47	38	2.61	2.33	89	100	96	81	100	75
Sagaing	0.95	0.57	0	100	100	0	69	68	2.27	2.18	100	100	98	68	100	83
Shan East	0.00	0.00	0	100	0	0	77	77	2.68	2.68	100	100	100	88	100	98
Shan North	1.82	1.36	100	100	100	100	65	62	2.55	2.32	100	100	100	100	100	100
Shan South	1.60	1.60	100	100	100	0	62	62	1.90	1.90	100	100	100	71	100	87
Tanintharyi	0.00	0.00	0	100	0	0	85	72	2.46	2.46	100	100	100	100	100	79
Yangon	0.88	0.88	100	100	100	50	100	98	2.77	2.72	90	100	94	92	100	100
TOTAL	1.01	0.81	98	100	98	52	71	68	2.13	2.12	95	100	97	88	100	93

Table 3: AFP cases by month of paralysis onset, last 13 months

State/Division	2005 Total AFP	2006 Total AFP	2007 AFP to date	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Ayeyarwady	34	52	9	6	0	1	5	5	5	4	14	1	5	3	3	3
Bago East	14	21	3	4	0	3	2	2	0	0	1	3	1	1	1	1
Bago West	28	17	2	1	0	2	2	2	3	1	0	2	0	1	1	0
Chin	2	5	1	1	0	0	0	0	2	0	0	0	1	0	1	0
Kachin	8	6	0	0	0	0	0	0	3	0	1	0	1	0	0	0
Kayah	3	4	1	0	0	0	0	1	0	0	0	0	1	1	0	0
Kayin	11	12	1	0	0	2	0	1	0	1	2	1	0	0	0	1
Magway	35	26	2	2	0	4	2	3	3	0	3	6	2	1	0	1
Mandalay	42	49	6	3	2	4	3	4	3	3	8	6	10	2	3	1
Mon	13	23	4	1	1	0	0	3	4	1	3	5	4	2	2	0
Rakhine	21	28	8	4	2	1	0	4	2	1	5	3	4	3	1	4
Sagaing	43	47	5	2	0	2	2	3	5	3	8	6	10	1	2	2
Shan East	3	8	0	1	0	2	1	0	0	1	1	0	0	0	0	0
Shan North	10	22	4	1	0	0	1	0	4	4	6	1	4	3	0	1
Shan South	8	14	3	1	0	0	0	1	0	1	3	6	1	1	2	0
Tanintharyi	8	13	0	1	1	1	0	1	1	1	1	3	3	0	0	0
Yangon	57	63	5	5	4	5	7	3	6	8	6	5	0	4	1	0
Total	340	410	54	33	10	27	25	33	41	29	62	48	47	23	17	14

Table 4: Stool processing and Laboratory performance indicators for cases with onset in 2006 & 2007, data as of 04/05/2007

	Target	Achievement	
		2006	2007
% Specimens arriving at the Lab within 3 days after being sent	80	97	98
% Specimens arriving in the Lab in good condition	90	100	100
% Specimens with a turn-around time of 28 days or less	80	100	100
% Specimens for which non-polio enterovirus was isolated	10	15	7
% Polio-positive specimens forwarded to Ref Lab within 14 days after isolation	80	100	100

Table 5: NPEV Isolated Results, as reported by NHL between 1 January 2007 and 4 May 2007

State/ Division	Township	EPID number	Date Onset	Date Stool sent	Stool Condition	Date Report by NHL	Stool 1 Result	Stool 2 Result
MAGWAY	SALIN	MMR080507001	03/01/2007	06/01/2007	Good	29/01/2007	NPEV	NEGATIVE
SHAN(NORTH)	MONGYAI	MMR134007001	08/01/2007	16/01/2007	Good	13/02/2007	NPEV	NPEV
AYEYARWADY	KYAIKLAT	MMR140407001	16/02/2007	26/02/2007	Good	15/03/2007	NPEV	NPEV
SHAN(SOUTH)	PINDAYA	MMR132007001	19/02/2007	24/02/2007	Good	23/03/2007	NPEV	NPEV

N.B. If stool condition is good and laboratory finding is negative, it will not be shown in the table.

Table 6: Results of Intra-Typic Differentiation by NIH/Bangkok, 2007

State/ Division	Township	ID CODE	Onset Date	Stool Condition	Stool 1	Stool 2
MANDALAY	LEWAY	MMR092507001	08/02/2007	Good	P1(SL)+P2(SL)+P3(SL)	P1(SL)+P2(SL)+P3(SL)
SAGAING	WUNTHO	MMR053507001	02/02/2007	Good	P 1(SL)	P 1(SL)
AYEYARWADY	PATHEIN	MMR14107002	06/03/2007	Good	P 1(SL)	NEGATIVE
RAKHINE	MAUNGDAW	MMR11307002	09/03/2007	Good	P 1WILD	NEGATIVE
RAKHINE	MAUNGDAW	MMR11307003	26/03/2007	Good	P 1WILD	P 1WILD

Note: P 1, P 2, P 3 indicates Polio Serotype 1, 2, 3 respectively; "W" indicates "Wild Virus"; "S" indicates "Sabin (=Vaccine) Virus"

State/ Division	Table 7: Other Vaccine Preventable Diseases & AEFI for the month of January to March 2007																	
	NNT case (death)		NNT case Investigation		Diphtheria Case (deaths)		Pertussis Case (deaths)		Measles				AEFI					
	Old	New	Old	New	Old	New	Old	New	Outbreaks		Total Cases		Old	New	Total			
									No. (Investigated)	Old	New	Total	Old	New	Total	Old	New	Total
Ayeyarwaddy	0	0	0	0	0	0	0	0	1	0	19(0)	0	22(0)	0	41(0)	0	0	0
Bago(East)	0	0	0	0	0	0	0	0	0	0	0	0	53(0)	0	53(0)	0	0	0
Bago(West)	0	0	0	0	0	0	0	6	6	0	87(0)	0	42(0)	0	129(0)	0	0	0
Chin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kachin	0	0	0	0	0	0	0	0	0	0	0	0	1(0)	0	1(0)	0	0	0
Kayah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kayin	0	0	0	0	0	0	0	2	2	0	51(0)	0	47(0)	0	98(0)	0	0	0
Magway	0	0	0	0	0	0	0	3	3	0	33(0)	0	0	0	33(0)	0	0	0
Mandalay	0	0	0	0	0	0	0	0	0	0	0	0	3(0)	0	3(0)	0	0	0
Mon	0	0	0	0	0	0	0	0	0	0	0	0	4(0)	0	4(0)	0	0	0
Rakhine	0	0	0	0	0	0	0	1	1	0	84(0)	0	0	0	84(0)	0	0	0
Segaing	0	0	0	0	0	0	0	1	1	0	48(0)	0	0	0	48(0)	0	0	0
Shan(East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shan(North)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shan(South)	0	1(0)	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanintharyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yangon	0	0	0	0	0	0	0	0	0	0	0	0	71(0)	0	71(0)	0	0	0
Total	0	1(0)	0	1	0	0	0	0	14	14	322(0)	0	243(0)	0	565(0)	0	0	0

Remarks: Old ➤ Cumulative cases for the previous months
New ➤ New cases for the current month

CASE DEFINITION

ACUTE FLACCID PARALYSIS: Any child under 15 years old, with flaccid or floppy paralysis of sudden onset.

VACCINE DERIVED POLIOVIRUS (VDPV): A live, attenuated strain of the virus contained in the Oral Polio Vaccine which has mutated and reverted to a neurotropic form, capable of causing paralytic polio. VDPVs differ from the parental Sabin Strains at 1 to 15% of VP1 nucleotides.

MEASLES: Any person in whom a clinician suspects measles infection, or Any person with fever and maculopapular rash (i.e. non-vesicular) and cough, coryza (i.e. runny nose) or conjunctivitis (i.e. red eyes).

MEASLES OUTBREAK: Occurrence of more than 5 cases of measles in a village (a ward in a municipal area) within a period of one week.

AEFI: A medical incident that takes place after an immunization, causes concern, and is believed to be caused by immunization.

NEONATAL TETANUS

Suspected case: Any neonatal death between 3 and 28 days of age in which the cause of death is unknown; or Any neonate reported as having suffered from neonatal tetanus between 3 and 28 days of age and not investigated.

Confirmed case: Any neonate with normal ability to suck and during the first 2 days of life and
- who, between 3 and 28 days of age, cannot suck normally and
- becomes stiff or has spasms (i.e. jerking of the muscles)

DIPHTHERIA: An illness characterized by laryngitis or pharyngitis or tonsillitis, and an adherent membrane of the tonsils, pharynx and/or nose.

PERTUSSIS

(Whooping cough): A case diagnosed as pertussis by a physician or a person with a cough lasting at least two weeks with at least one of the following symptoms:

- Paroxysms (i.e. fits) of coughing.
- Inspiratory whooping.
- Post-tussive vomiting (i.e. vomiting immediately after coughing) without other apparent cause.

POLIO RE-INTRODUCED IN MYANMAR

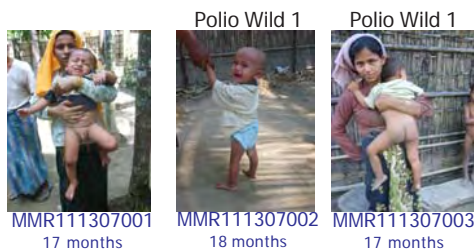
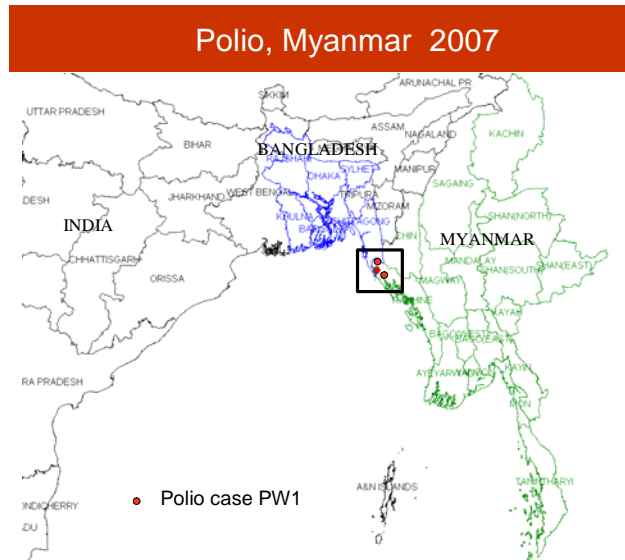
On 19 April 2007, after a polio-free period of over seven years, an AFP case with date of paralysis onset of 9 March 2007 from ward 5 of Maungdaw Township, North Rakhine State was reported as wild poliovirus type 1.

A second case from the same area (onset 26 March 2007) was confirmed on 3 May. In addition, 4 more AFP cases from same township await laboratory results. A national team conducted an immediate active search and ORI. A national team conducted an immediate active search and ORI. An international rapid response team (RRT) was invited to Myanmar and visited Maungdaw from 1 to 4 May. The team concluded that several factors have contributed to this polio outbreak, including:

- The re-introduction of wild poliovirus into neighbouring Bangladesh in 2006.
- Decline in routine immunization coverage for all antigens in Myanmar in 2006 compared to 2005.
- A gap of two years since the last polio SIA in North Rakhine State in 2005.

Following recommendations are made by RRT;

- An initial house to house mop-up with mOPV1 in 17 townships of Rakhine and 1 township of Chin between 14 and 18 May.
- A second house to house SNID round with mOPV1 to include Rakhine, Chin, Ayeyarwady, Magway, Bago West; covering a total of 83 townships, targeting 2.5 million children.
- A third house to house SNID round with mOPV1 to include the same 83 townships, commencing in late June with a 3 week interval after the second round.
- Both the second and the third round should be extended if the epidemiological situation changes.
- Immediate notification of cross-border AFP cases through the WHO Bangladesh and Myanmar offices.
- Synchronize SIAs with Bangladesh as far as possible, especially border transit points.



Date onset-25 Feb 07 Date onset-09 Mar 07 Date onset-26 Mar 07



Date onset-07 Mar 07 Date onset-19 April 07 Date onset-13 April 07

- ◆ Out of 6 cases 5 cases are reported from ward 5 Maungdaw township of Rakhine State.
- ◆ All cases paralysis onset within 2 months period.
- ◆ All asymmetrical paralysis.
- ◆ Age group 12-22 Months.
- ◆ All under immunized; only one dose OPV received by 5 cases and 2 doses by one.
- ◆ Two cases (MMR111307002, MMR111307003) lab confirmed P1 Wild.
- ◆ One case belonging to same township of Maungdaw has been reported from Bangladesh with P1 Wild.

Considering the potential rapid spread of wild poliovirus to other areas in Myanmar; it is recommended that all township medical officers and their staff should be alerted to the current polio outbreak. All AFP cases should be reported immediately by telephone to the State Health Director and the Regional Surveillance Officer (RSO). Reporting and investigating even

doubtful AFP cases without awaiting confirmation from the RSO. Provide weekly zero reports by telephone to the RSO. Inform NGOs and community leaders to advise the public to bring all newly paralyzed children to the health services without delay.

In response to the current polio outbreak, DOH Myanmar is conducting mop up immunization campaigns as recommended above by the International Rapid Response Team.