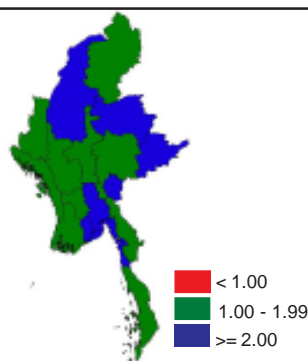


Myanmar Polio Newsletter

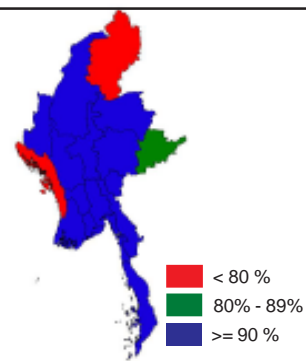
Volume 8, Issue 4

October - December 2007

Tel: +95-67-411391 (CEU)
Tel: +95-67-411391 (EPI)
Tel: +95-1-250583 (WHO)
Fax: +95-67-411391, +95-1-250273



Non-Polio AFP Rates
2007 (annualized)



Percentage of Adequate stool
collection 2007

Table 1: Reported AFP cases against targets by State/Division and classification status of cases with onset in 2006 and 2007

State & Division	Population <15 years	Minimum non-polio AFP target	2007 (Onset)								2006							
			Case Classification					Pending			Case Classification					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	49	46	0	0	0	0	3	0	53	53	0	0	0	0	0	
Bago East	1124456	22	25	23	1	0	0	1	0	1	21	21	0	0	0	0	0	
Bago West	913784	18	18	18	0	0	0	0	0	0	17	17	0	0	0	0	0	
Chin	192212	4	3	3	0	0	0	0	0	0	5	5	0	0	0	0	0	
Kachin	515712	10	8	8	0	0	0	0	0	0	6	6	0	0	0	0	0	
Kayah	105294	2	3	3	0	0	0	0	0	0	3	3	0	0	0	0	0	
Kayin	602029	12	11	10	1	0	0	1	0	0	13	13	0	0	0	0	0	
Magway	1814904	36	33	33	0	0	0	0	0	0	26	26	0	0	0	0	0	
Mandalay	2705689	54	41	40	0	0	0	0	0	1	49	48	0	0	0	1	0	
Mon	993998	20	34	33	1	0	0	1	0	0	23	23	0	0	0	0	0	
Rakhine	1096283	22	39	19	11	11	8	0	1	0	28	28	0	0	0	0	0	
Sagaing	2108204	42	44	44	0	0	0	0	0	0	47	47	0	0	0	0	0	
Shan East	304651	6	8	7	0	0	0	0	1	0	8	8	0	0	0	0	0	
Shan North	879540	18	24	20	0	0	0	0	4	0	22	22	0	0	0	0	0	
Shan South	751650	15	12	10	0	0	0	0	2	0	14	14	0	0	0	0	0	
Tanintharyi	539460	11	8	8	0	0	0	0	0	0	13	13	0	0	0	0	0	
Yangon	2285257	46	52	50	1	0	0	1	1	0	62	62	0	0	0	0	0	
TOTAL	19641463	393	412	375	15	11	8	4	12	2	410	409	0	0	0	1	0	

Table 2: Selected Performance Indicators by State/Division for cases with onset in 2006 and 2007

State & Division	2007 (onset)								2006							
	Surveillance Indicators				% AFP investigated within 48 hrs.	% AFP cases with 60 days Follow-up	% Weekly zero reports received	% Weekly zero reports received on Time	Surveillance Indicators				% 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 Rates		Specimen					
AFP rate	Non-polio AFP rate	% within 2 spec. within 14 days	% with any specimen	AFP rate	Non-polio AFP rate	% within 2 spec. within 14 days	% with any specimen	AFP rate	Non-polio AFP rate	% within 2 spec. within 14 days	% with any specimen	AFP rate	Non-polio AFP rate	% within 2 spec. within 14 days	% with any specimen	
TARGET	2	80		80	80	80	80	2.00	2	80		80	80	80	80	
Ayeyarwady	1.81	1.70	98	100	94	96	85	81	2.00	1.96	92	100	94	92	100	96
Bago East	2.22	2.05	92	100	100	95	90	90	1.91	1.91	100	100	100	88	100	95
Bago West	1.97	1.97	100	100	100	94	88	87	1.90	1.90	88	100	100	87	100	97
Chin	1.56	1.56	100	100	100	100	72	60	2.65	2.65	100	100	100	100	100	83
Kachin	1.55	1.55	75	100	100	83	89	75	1.19	0.99	100	100	100	100	100	85
Kayah	2.85	2.85	100	100	100	100	85	75	2.91	2.91	100	100	100	100	100	90
Kayin	1.83	1.66	91	100	92	85	87	87	2.03	1.86	83	100	100	91	100	100
Magway	1.82	1.82	97	100	100	96	97	97	1.46	1.41	96	100	100	89	100	100
Mandalay	1.52	1.48	100	100	98	100	94	94	1.85	1.70	96	100	98	88	100	97
Mon	3.42	3.32	94	100	91	91	94	94	2.36	2.36	100	100	91	87	100	98
Rakhine	3.56	1.73	64	100	96	89	90	74	2.61	2.33	89	100	96	81	100	75
Sagaing	2.09	2.09	98	100	98	89	87	85	2.27	2.18	100	100	98	68	100	83
Shan East	2.63	2.30	88	100	100	100	73	73	2.68	2.68	100	100	100	88	100	98
Shan North	2.73	2.27	96	100	100	100	77	72	2.55	2.32	100	100	100	100	100	100
Shan South	1.60	1.33	100	100	100	93	80	78	1.90	1.90	100	100	100	71	100	87
Tanintharyi	1.48	1.48	100	100	100	100	96	82	2.46	2.46	100	100	100	100	100	79
Yangon	2.28	2.19	90	100	94	95	94	92	2.77	2.72	90	100	94	92	100	100
TOTAL	2.10	1.91	92	100	97	95	88	84	2.12	2.04	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	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Ayeyarwady	34	52	26	5	3	3	3	0	1	4	5	5	5	13	2	6
Bago East	14	21	14	1	1	1	1	0	0	2	4	5	2	4	0	4
Bago West	28	17	11	0	1	1	0	0	0	1	3	4	1	2	2	3
Chin	2	5	2	1	0	1	0	0	0	0	0	1	0	0	1	0
Kachin	8	6	6	1	0	0	0	0	2	2	2	0	0	1	0	1
Kayah	3	4	2	1	1	0	0	0	0	0	0	0	1	1	0	0
Kayin	11	12	7	0	0	0	0	1	0	2	3	1	0	1	3	0
Magway	35	26	19	2	1	0	1	1	2	3	5	0	7	5	6	2
Mandalay	42	49	25	10	2	3	2	2	1	2	3	7	3	3	7	6
Mon	13	23	27	4	2	2	0	0	2	7	12	1	1	3	2	2
Rakhine	21	28	35	4	4	2	9	6	4	3	4	1	2	0	4	0
Sagaing	43	47	26	10	1	2	2	1	3	3	7	2	5	11	4	3
Shan East	3	8	6	0	0	0	0	0	1	2	3	0	0	1	1	0
Shan North	10	22	14	4	3	0	1	2	1	2	2	2	1	7	1	2
Shan South	8	14	9	1	1	2	0	0	0	2	3	0	1	1	2	0
Tanintharyi	8	13	5	3	0	0	0	0	0	1	2	1	1	2	0	1
Yangon	57	63	39	0	4	1	0	3	0	5	16	5	4	10	4	0
Total	340	410	412	47	24	18	19	16	17	41	74	35	34	65	39	30

Table 4: Stool processing and Laboratory performance indicators for cases with onset in 2006 & 2007

	Target	Achievement	
		2006	2007
% Specimens arriving at the Lab within 3 days after being sent	80	97	97
% Specimens arriving in the Lab in good condition	90	100	99.5
% Specimens with a turn-around time of 28 days or less	80	100	100
% Specimens for which non-polio enterovirus was isolated	10	15	11
% Polio-positive specimens forwarded to Ref Lab within 14 days after isolation	80	100	100

Table 5: Confirmed Polio cases

State/ Division	Township	EPID number	Date Onset	Stool 1 Result	Stool 2 Result
KAYIN	HPA-AN	MMR030507002	11/06/2007	VDPV	VDPV
BAGO(EAST)	PYU	MMR071607001	21/07/2007	VDPV	VDPV
MON	CHAUNGZON	MMR100307002	06/12/2007	VDPV	VDPV
RAKHINE	BUTHIDAUNG	MMR110807002	28/05/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307002	09/03/2007	P1 WILD	NEGATIVE
RAKHINE	MAUNGDAW	MMR111307003	26/03/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307005	19/04/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307006	13/04/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307012	15/03/2007	P1 WILD	NPEV
RAKHINE	MAUNGDAW	MMR111307013	30/04/2007	P1 WILD	NPEV
RAKHINE	MAUNGDAW	MMR111307014	10/04/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307019	03/05/2007	P1 WILD	P1 WILD
RAKHINE	MAUNGDAW	MMR111307020	12/05/2007	P1 WILD	P1W+NPEV
YANGON	KAYAN	MMR123407001	30/04/2007	VDPV	VDPV

Specimen tested at DHAKA and CDC

State/ Division	Township	ID CODE	Onset Date	Stool 1	Stool 2
RAKHINE	MAUNGDAW	MMR111307008	16/03/2007	P1WILD	P1WILD

State/ Division	Measles															AEFI												
	NNT case (death)					NNT case Investigation			Diphtheria Case (deaths)			Pertussis Case (deaths)			Cases				Total Cases		New	Total						
	Old		New		Total	Old		New		Total	Old		New		Total	Old		New		Total								
	Old	New	Total	Old	New	Total	Old	New	Total	Old	New	Total	Old	New	Total	Old	New	Total	Old	New	Total							
Ayeyarwaddy	1(0)	0	1(0)	1	0	1	0	0	0	0	0	0	0	0	0	2	37(0)	0	37(0)	57(1)	1(0)	58(1)	40(1)	1(0)	95(1)	0	0	0
Bago(East)	2(1)	2(0)	4(1)	2	2	4	0	0	0	0	0	0	0	0	0	1	23(0)	0	23(0)	87(0)	0	87(0)	110(0)	0	110(0)	0	0	0
Bago(West)	1(0)	1(0)	2(0)	1	1	2	0	0	0	0	0	0	0	0	0	7	93(5)	0	93(5)	12(1)	4(0)	16(1)	105(6)	4(0)	109(6)	0	0	0
Chin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kachin	1(0)	1(0)	1(0)	1	1	2	0	0	0	0	0	4(0)	0	0	0	0	0	0	0	2(0)	0	2(0)	0	0	2(0)	0	0	0
Kayah	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	4	68(0)	64(0)	132(0)	49(0)	1(0)	50(0)	1(0)	65(0)	182(0)	0	0	0
Magway	1(0)	1(1)	2(1)	1	1	2	0	0	0	0	0	0	0	0	5	5	61(0)	0	61(0)	2(0)	3(0)	5(0)	63(0)	3(0)	66(0)	0	0	0
Mandalay	7(3)	6(3)	13(6)	7	6	13	0	0	0	0	0	0	0	1	1	2	6(0)	35(0)	41(0)	26(0)	7(0)	32(0)	32(0)	42(0)	74(0)	2	0	2
Mon	1(1)	0	1(1)	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20(0)	1(0)	21(0)	20(0)	1(0)	21(0)	1	0	1
Rakhine	2(1)	1(1)	3(2)	2	1	3	0	0	0	0	0	0	0	4	2	6	212(0)	25(0)	237(0)	3(0)	0	3(0)	215(0)	25(0)	240(0)	1	0	1
Sagaing	0	2(0)	2(0)	0	2	2	0	0	0	0	0	0	0	2	0	2	67(0)	0	67(0)	1(0)	0	1(0)	68(0)	0	68(0)	1	0	1
Shan(East)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shan(North)	2(2)	0	2(2)	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shan(South)	3(2)	0	3(2)	3	0	3	0	0	0	0	0	0	1	0	1	24(0)	0	24(0)	0	0	0	0	0	0	0	0	0	0
Tanintharyi	1(0)	1(0)	2(0)	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7(0)	0	7(0)	0	0	7(0)	0	0	0
Yangon	0	0	0	0	0	0	1(0)	0	1(0)	0	0	0	0	0	0	0	0	0	0	88(2)	0	88(2)	0	0	88(2)	2	0	2
Total	22(10)	15(5)	37(15)	22	15	37	1(0)	0	1(0)	0	4(0)	0	4(0)	27	4	31	591(5)	124(0)	715(5)	354(4)	17(0)	371(4)	945(9)	141(0)	1086(9)	7	0	7

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 from 1 to 15% at 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.

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)

Confirmed case:

DIPHTHERIA:

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

PERTUSSIS

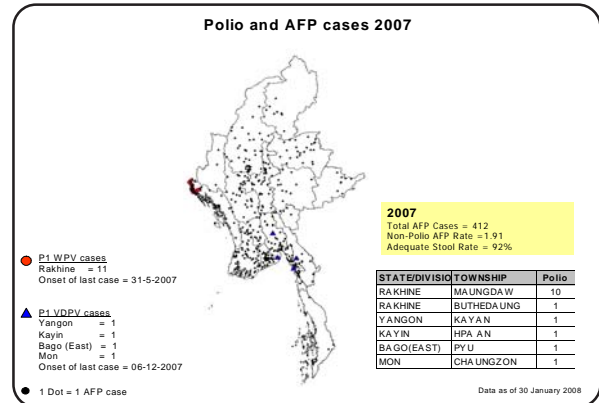
(Whooping cough): A case diagnosed as pertussis by a physician or a person with a cough lasting at least two weeks with at least one of the following symptoms:

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

Polio SIA Plans Myanmar - 2008

Polio situation

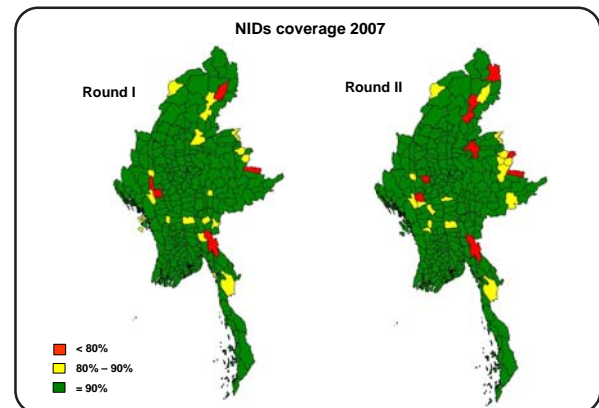
Myanmar reported 11 wild poliovirus cases and 4 vaccine derived poliovirus cases in 2007. The date of paralysis onset of last wild polio virus case is 31 May 2007 from Buthidaung township of Rakhine state and the last vaccine derived poliovirus case is reported from Chaungzon Township, Mon State with paralysis onset on 6 December 2007.



Coverage during NIDs

Estimated target for NIDs in Myanmar was 7.17 millions children in 0-5 yrs age group.

All the states and divisions achieved >90% coverage in both the rounds. There are very few townships with <80% coverage in both the NID rounds and the main reason for poor coverage is in-accessibility due to security reasons and also due to difficult terrains.



SIAs in 2007

In response to polio outbreak, Ministry of Health, Union of Myanmar has conducted four rounds of SIAs in Rakhine, three rounds in adjoining states and divisions (Magway, Bago and Ayeyarwady), one round in vaccine derived poliovirus circulation areas in addition to two rounds of National Immunization Days in entire country. As the outbreak was due to sero type 1, therefore monovalent OPV type 1 has been used during these SIAs in 2007.

SIA Plans for 2008

In response to last reported VDPV polio case with onset on 6th December 2007, Department of Health, Union of Myanmar is planning to conduct one round of mop up immunization in the month of February 2008. As the child has got infection before the second round of NID (3-5 December), and the coverage has been 97% in R1 and 99% in R2, it is expected that one additional round with good coverage will be adequate to stop VDPV circulation in these states and divisions.

As shown in the map, selected townships in Yangon and all townships of remaining three states and divisions with VDPV cases are being targeted with Monovalent OPV type 1. Over 1 million children will be vaccinated during February round in 35 Townships.

SNID / NID will be conducted in Myanmar based on the epidemiological situation in 2008.

