



EPI Surveillance Bulletin

Pandemic Influenza A (H1N1) campaign

Government of Bangladesh conducted pandemic Influenza A (H1N1) campaign in 2 phases with a view to vaccinate all health care service provider (government and private sector) and 3rd trimester pregnant women during 1st phase and people those who are above 6 months of age with chronic medical conditions during 2nd phase. The 1st phase duration was 22 May 2010 to 30 June 2010 and the 2nd phase was 15 July 2010 to 30 September 2010. The inauguration ceremony was held on 4 May 2010 in Hotel Sheraton, Bangladesh. The chief guest was the Honorable Minister, Ministry of Health and Family Welfare (MOHFW), Professor A.F.M. Ruhal Haque and the special guests were Dr. Capt. (Rtd.) Mozibur Rahman Fakir, State Minister for MOH&FW, Mr. Shaikh Altaf Ali, Secretary, MOH&FW. Dr. Duangvadee Sungkhobol, WHO Representative to Bangladesh. Representatives from UNICEF and USAID were also present as special guests. The chief guest and other special guests received the first shot of pandemic influenza A (H1N1) vaccine, as a part of the inauguration.

Bangladesh has got 03 million doses vaccine for 1st phase and 12.6 million doses for 2nd phase by three shipments as a donation from World Health Organization (WHO). EPI HQ took the responsibility to implement the programme. In order to successful implementation training materials for health personnel as well as communication materials like brochure and poster for different stake holders were prepared. All health administrative units conducted registration for health care providers and pregnant women. In the 1st phase health care providers were vaccinated at health facilities and pregnant women were vaccinated at routine EPI sites. In the 2nd phase vaccination was conducted at health facilities where diagnosis and treatment are provided by doctors. Additional Vaccination sites were also available in all Diabetic and other Specialized Hospitals. This campaign is another success story for EPI programme in Bangladesh. DGHS, DGDA, IEDCR, USAID, UNICEF and World Health Organization supported for the successful outcome of the programme.

Table: Achievement of Pandemic Influenza A (H1N1) Campaign

1st Phase				2nd Phase							
Health Care Provider		Pregnant women		Chronic diseased persons							
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
660672	624447 (95%)	1045022	974145 (93%)	13000000		13000000		10022730	(77.1%)	1502	1511



Inauguration of the campaign by Honorable Minister, Ministry of Health and Family Welfare

post for different stake holders were prepared. All health administrative units conducted registration for health care providers and pregnant women. In the 1st phase health care providers were vaccinated at health facilities and pregnant women were vaccinated at routine EPI sites. In the 2nd phase vaccination was conducted at health facilities where diagnosis and treatment are provided by doctors. Additional Vaccination sites were also available in all Diabetic and other Specialized Hospitals. This campaign is another success story for EPI programme in Bangladesh. DGHS, DGDA, IEDCR, USAID, UNICEF and World Health Organization supported for the successful outcome of the programme.

Surveillance Summary

Description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 ¹
Number of AFP cases	1287	1365	1128	1301	1458	1619	1844	1790	1502	1511
No. of compatible cases according to virologic classification system	36	0	0	2	0	2	0	0	0	0
No. of cases with isolation of wild poliovirus	0	0	0	0	0	18	0	0	0	0
No. of discarded polio cases (i.e., non-polio AFP)	1251	1365	1128	1299	1458	1599	1844	1790	1502	1438
No. of cases pending classification	0	0	0	0	0	0	0	0	0	73
Expected annual number of non-polio AFP cases (2/100,000 children <15 yr)*	533	549	556	563	1094	1114	1135	1153	1151	1203

AFP Surveillance Performance Indicators

Indicators	Target	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 ¹
01 Annual Non-Polio AFP rate in children < 15 years old	≥ 2.0	2.34	2.49	2.03	2.31	2.66	2.87	3.25	3.10	2.61	2.51
02 Completeness of passive reporting from facilities	≥ 90%	65%	62%	67%	82%	91%	89%	90%	93%	91%	92%
03 Timeliness of passive reporting from facilities	≥ 80%	38%	36%	62%	75%	84%	83%	85%	87%	86%	85%
04 Suspected AFP cases investigated within 48 hours of notification	≥ 80%	96%	96%	98%	98%	99%	100%	99%	99%	99%	99%
05 Confirmed AFP cases with 2 stool specimens collected within 14 days after paralysis onset	≥ 80%	80%	89%	90%	90%	92%	93%	92%	92%	94%	95%
06 Stool specimens arriving at laboratory within 3 days after collection	≥ 80%	97%	98%	99%	99%	98%	99%	100%	100%	100%	100%
07 Stool specimens arriving at laboratory in "good" condition "good" = 1. Presence of unmelted ice or temperature <8°C 2. Adequate volume (≥ 8 grams or size of 1/2 thumb) 3. No evidence of leakage 4. No evidence of desiccation (drying)	≥ 90%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%
08 Confirmed AFP cases receiving a follow-up exam at least 60 days after paralysis onset	≥ 80%	93%	99%	100%	98%	99%	100%	100%	99%	99%	97% ²
09 Stool specimens with laboratory results: - Within 28 days after specimen receipt (old algorithm)	≥ 80%	99%	100%	100%	100%	100%	98%	100%	-	-	-
- Within 14 days after specimen receipt (new algorithm)	≥ 80%								80%	93%	95%
10 Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	29%	28%	23%	20%	20%	15%	15%	23%	19%	19%

¹ Data as of December 25, 2010; ² among cases occurring up to October 10, 2010; * Prior to 2005 NPAFP rate calculated as 1/100,000 under 15 children

AFP Surveillance Performance Indicators, 2009 - 2010

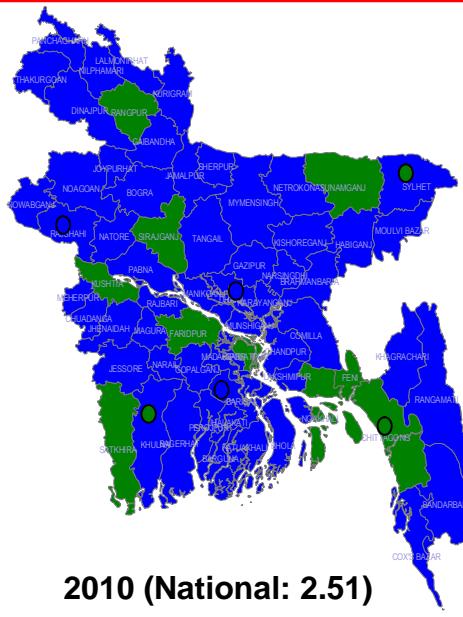
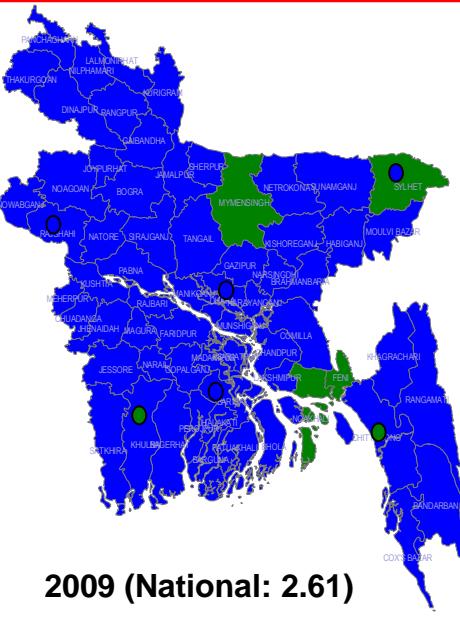
District	Minimum operational target of non-polio AFP		Total # AFP ¹		Wild polio-virus isolated		Compatible cases #		Non- Polio AFP cases ¹		Pending final classif. ¹		Annualized Non-polio AFP Rate ¹		Notification within 10 d after paralysis onset ¹		Investigation within 48 h after notification ¹		% with 2 stools within 14 days ¹		Stool sample arriving to lab within 72 hrs ¹		% with 60-day follow-up ²					
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010				
Barisal Division																												
Barguna	8	8	10	8					10	8	0	0	2.55	2.05	90%	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Barisal (non BCC)	20	21	29	29					29	29	0	0	2.94	2.95	100%	100%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	100%
BCC only	2	3	3	4					3	4	0	0	2.88	3.85	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bhola	16	17	39	24					39	23	0	1	4.93	2.92	100%	96%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Jhalakati	6	7	14	11					14	11	0	0	4.35	3.44	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Patuakhali	14	14	18	15					18	15	0	0	2.65	2.22	89%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Perojpur	10	11	24	19					24	19	0	0	4.70	3.74	96%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	67%	
Total_BAR	76	81	137	110	0	0	0	0	137	109	0	1	3.62	2.89	97%	99%	100%	100%	97%	99%	100%	100%	100%	100%	100%	93%		
CTG Division																												
Bandarban	3	3	5	5					5	5	0	0	3.58	3.60	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA
Brahmanbaria	22	23	25	30					25	30	0	0	2.26	2.73	92%	100%	92%	100%	96%	97%	100%	98%	100%	100%	100%	100%	100%	100%
Chandpur	21	22	23	23					23	23	0	0	2.21	2.22	91%	91%	100%	100%	83%	91%	100%	100%	100%	100%	100%	100%	100%	100%
Chittagong (non CCC)	41	42	42	40					42	33	0	7	2.07	1.63	88%	83%	98%	100%	90%	83%	100%	100%	100%	100%	100%	100%	100%	100%
CCC only	20	21	18	17					18	15	0	2	1.79	1.49	100%	100%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Comilla	43	44	52	62					52	58	0	4	2.44	2.73	98%	97%	98%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	100%
Cox's Bazar	16	17	20	20					20	19	0	1	2.45	2.34	100%	95%	100%	100%	95%	95%	100%	100%	91%	100%	100%	100%	100%	100%
Feni	11	12	10	7					10	7	0	0	1.79	1.26	90%	100%	86%	100%	100%	86%	100%	100%	100%	100%	100%	100%	100%	100%
Khagrachari	5	5	10	8					10	8	0	0	4.17	3.35	90%	88%	100%	100%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Lakshmipur	14	15	17	16					17	15	0	1	2.46	2.18	100%	94%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Noakhali	24	25	20	17					20	16	0	1	1.68	1.35	80%	100%	90%	71%	70%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Rangamati	5	5	10	7					10	7	0	0	4.10	2.88	80%	100%	100%	80%	100%	100%	100%	100%	100%	100%	100%	100%	NA	
Total-CTG	225	234	252	252	0	0	0	0	252	236	0	16	2.25	2.12	93%	94%	98%	98%	92%	94%	100%	100%	100%	100%	99%			
Dhaka Division																												
Dhaka (non DCC)	23	24	40	44					40	41	0	3	3.47	3.57	100%	93%	100%	100%	93%	95%	100%	99%	100%	88%				
DCC only	57	58	71	70					71	67	0	3	2.49	2.36	93%	96%	100%	94%	94%	100%	100%	90%	100%	100%	100%	100%	100%	100%
Faridpur	16	17	17	17					17	16	0	1	2.10	1.99	94%	94%	100%	100%	94%	94%	100%	100%	100%	83%				
Gazipur	19	20	21	27					21	25	0	2	2.24	2.67	86%	100%	100%	86%	96%	98%	100%	100%	80%					
Gopalganj	11	11	26	15					26	14	0	1	4.86	2.63	81%	87%	100%	100%	88%	87%	100%	100%	100%	100%	100%	100%	100%	100%
Jamalpur	20	20	51	35					51	34	0	1	5.21	3.49	98%	100%	98%	100%	94%	100%	99%	100%	100%	80%				
Kishoreganj	24	25	38	40					38	39	0	1	3.20	3.30	97%	90%	95%	95%	97%	93%	100%	100%	100%	100%	100%	100%	100%	100%
Madaripur	10	11	17	12					17	12	0	0	3.24	2.30	88%	100%	82%	92%	88%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Manikganj	12	13	23	23					23	23	0	0	3.80	3.82	96%	100%	100%	96%	100%	100%	98%	100%	100%	100%	100%	100%	100%	100%
Munshiganj	12	13	18	17					18	16	0	1	3.01	2.69	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Mymensingh	41	43	41	47					41	43	0	4	1.98	2.09	83%	87%	100%	100%	85%	96%	99%	100%	100%	90%				
Narayanganj	20	21	24	24					24	23	0	1	2.38	2.29	100%	100%	96%	100%	96%	96%	100%	100%	100%	50%				
Narsinghdhi	18	18	20	25					20	25	0	0	2.26	2.84	95%	88%	100%	100%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Netrokona	18	19	21	31					21	30	0	1	2.29	3.29	86%	87%	100%	100%	90%	94%	100%	100%	100%	100%	100%	100%	100%	100%
Rajbari	9	9	9	11					9	10	0	1	2.04	2.27	89%	91%	100%	100%	89%	91%	100%	100%	100%	100%	100%	100%	100%	100%
Sariatpur	10	11	16	10					16	8	0	2	3.19	1.60	81%	80%	100%	100%	88%	80%	100%	100%	100%	100%	100%	100%	100%	100%
Sherpur	12	12	25	16					25	15	0	1	4.25	2.56	96%	88%	100%	100%	96%	94%	100%	100%	100%	100%	100%	100%	100%	100%
Tangail	30	31	40	33					40	33	0	0	2.64	2.19	83%	97%	100%	100%	95%	91%	100%	100%	100%	100%	100%	100%	100%	100%
Total-KHU	135	143	171	178	0	0	0	0	171	167	0	11	2.52	2.47	96%	96%	99%	98%	95%	93%	100%	100%	100%	100%	100%	100%	100%	
Raj Division																												
Bogra	28	29	31	29					31	29	0	0	2.21	2.08	90%	100%	100%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Dinajpur	25	25	25	35					25	32	0	3	2.04	2.62	92%													

Disease Surveillance, 2009 - 2010

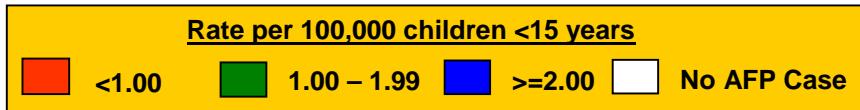
District	Neonatal Tetanus								Measles								AEFI			
	# of case reported by Active Surveillance		# of case reported by Passive Surveillance		# of case Investigated		# of case reported by Active Surveillance		# of case reported by Passive Surveillance		Outbreak*				# of case Reported					
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	Number of Outbreak (% Investigated)	# of cases								
Barisal Division																				
Barguna	1	2	1	2	2				1	21	8						6	9		
Barisal (non BCC)	2	2	3	3	2				6	4							35	62		
BCC only									2		2						2	5		
Bhola	1	2	3	4	3	3			1	2								2		
Jhalakhali	2		4		2				1	1	1						10	25		
Patuakhali	3	4	3	2	2	3	3	1	3	7							1	1		
Pirojpur					1				1	1	13						15	13		
Total_BAR	9	10	14	11	12	6	3	6	33	37						0	0	69	117	
CTG Division																				
Bandarban										1	1							4	2	
Brahmanbaria	6	4	8	2	8	1	1		20	11							10	12		
Chandpur		2		1		2	6	3	46	44						18	32	16		
Chittagong (non CCC)	1		3	1	1			2	2	9							9	11		
CCC only	2	6	1	5	2	6	2	9	3	3							4	1		
Comilla	1	4	1		1	5		1	9	29							8	13		
Cox's Bazar	2	1	2	1	2	1		1	1	7							6	2		
Feni		4		3		4	1		14	2							6	6		
Khagrachari	2		2		1		1		6	10							4	3		
Laxmipur	5	5	4	10	5	6	2	2	10	45							14	16		
Noakhali	8	4	9	4	7	5	2		27	5							10	9		
Rangamati								5		15							8	6		
Total-CTG	27	30	30	27	27	30	15	25	139	181						1 (100%)	0	18	115	97
Dhaka Division																				
Dhaka (non DCC)	2	3	1	1	2	4		1	11	39						87	20	28		
DCC only	5	4	1	2	5	3	12	19	269	229	1 (100%)					76	112	35		
Faridpur	1	4	2	5	3	1			8	6							65	57		
Gazipur		1	2	1	1	1		6	6	28							21	21		
Gopalganj	3		2		3			2	9	1							4	18		
Jamalpur		2	2	1		1			150	109							29	19		
Kishoreganj	7	5	7	8	5	5	13	1	17	56							31	22		
Madaripur			1				7	2	19	6							55	51		
Manikganj			1				2		8	15							31	24		
Munshiganj							2	47	91		1 (100%)					46	51	28		
Mymensingh	7	4	6	9	9	3	3	4	67	43							53	50		
Narayanganj	1	1			1	1		1	11	23							18	28		
Narsingdhi									4	15							30	41		
Netrokona		1	1	4					37	36							21	3		
Rajbari		1		1		1			50	10							45	27		
Shariatpur	3		1	1	3		3		16	21							45	20		
Sherpur	1		2	3	1				24	21							12	10		
Tangail	1	4		2	2	4	7	11	29	20							68	54		
Total-DHAKA	31	30	29	38	35	24	47	49	782	769	1 (100%)	2 (100%)	76	133	711	536				
Khulna Division																				
Bagerhat	2	2	2	3	1	2			7	7		1(100%)					12	38	93	
Chuadanga	2	2	2	3	2	1	2		2	2							22	9		
Jessore	4	2	4	2	3	2	3	5	16	19							31	29		
Jhenaidah	1		1	1	1	2	2	2	21	7							20	8		
Khulna (non KCC)	3		3		3				4	19							28	40		
KCC only		1		1		1			1	1							11	20		
Kushtia	2	1	1		2	1	2	2	11	15							23	7		
Magura	1		1		1				19	10							20	16		
Meherpur							7	2	26	20							9	3		
Narail	2	1	1	3	2	1	1	1	9	15							17	6		
Satkhira		1		1	1		1		2		10						23	28		
Total-KHU	16	11	14	14	14	10	17	14	116	125						1(100%)	0	12	242	259
Raj Division																				
Bogra	3	2	2	1	3	2	4	3	21	36							89	121		
Dinajpur	1	1	1	2	1	1		1	12	25							76	50		
Gaibandha	3	1	4	1	2	1	1		2	4							36	28		
Joypurhat									4	1							16	27		
Kurigram	4	2	1		3	2	2	1	11	1							13	12		
Lalmonirhat	1		2		1		2			1							21	21		
Natore		1	1	1		1	3	1	50	39							17	27		
Nilphamari						1	3	1	4	1							14	29		
Noagoan	1				1		4	11	48	41							31	52		
Nowabganj			1			1	5	2	19	20							17	7		
Pabna		1		1		1	18	3	90	111							33	22		
Panchagarh								1	1	3							17	17		
Rajshahi (non RCC)		2				2		3	30	14		1(100%)					57	43	37	
RCC only								3	3	68	19	1(100%)					40	50	41	
Rangpur	2	1	1	1	2	1			8								19	6		
Sirajganj	2	1			2			1	8	1							9	10		
Thakurgaon	2		3		2		1	4	4	16							31	23		
Total-RAJ	19	13	15	7	17	13	46	35	380	333		2(100%)	0	97	532	530				
Sylhet Division																				
Habiganj	3	7	2	7	2	2		5	4	9							17	4		
Maulvibazar	4	2	5	2	4	1	4	18	14	24	1(100%)					48	8	4		
Sunamganj	7	5	8	4	1	5	4	6	8	6							13	19		
Sylhet (non SCC)	4		2		3		1	19	19	27							8	2		
SCC only	1		2		1		13	16	12	9							1			
Total-SYL	19	14	19	13	11	8	22	64	57	75	1(100%)					48	0	47	29	
National	121	108	121	110	116	91	150	193	1,507	1,520	2(100%)	6(100%)	124	260	1,716	1,568				

Data as of 31 December 2010, * Only Lab Confirmed Measles and Mixed Type outbreak Cases

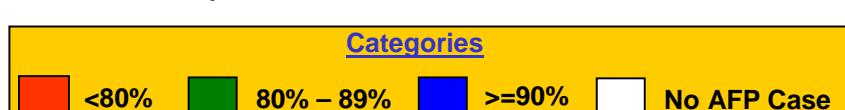
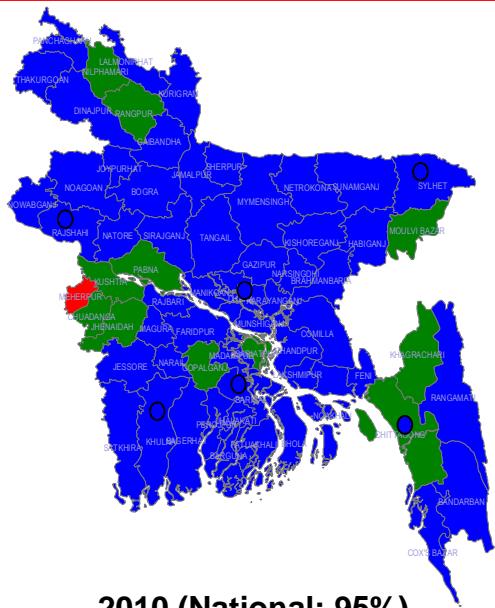
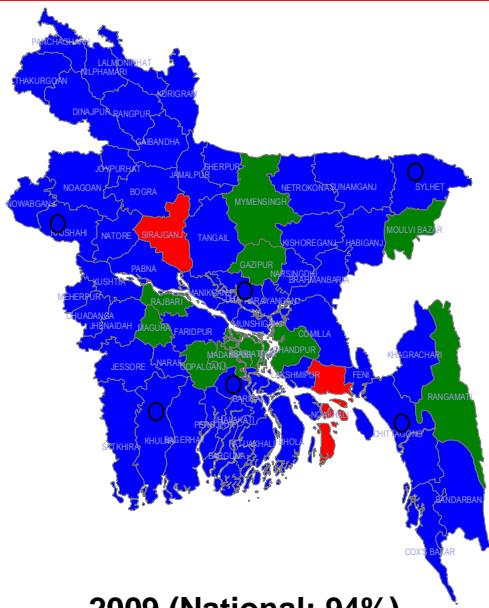
Annualized Non-Polio AFP Rate, by District, Bangladesh 2009-2010*



*Data as of 25 December 2010



Percentage of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2009-2010*



*Data as of 25 December 2010

International Developmental Partners for Polio Eradication in Bangladesh include Centers for Disease Control and Prevention, Atlanta, Governments of Japan, the Netherlands, USAID, Rotary International, U.K. DFID, UN Foundation, UNICEF and WHO