



EPI Surveillance Bulletin



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Coverage Evaluation Survey 2010: A way for forward stepping

Since 1991, a total of 17 Coverage Evaluation surveys (CES) have been conducted. The objectives of the CES are to monitor and analysis the quality and coverage of EPI services at the national, district and city corporation levels. The 2010 CES dissemination meeting was held on the 23 March 2011 in BCPS hall room, Mohakhali, Dhaka. The chief guest was the Honorable State Minister, Ministry of Health and Family Welfare (MOH&FW), Dr. Capt. (Rtd) Mozibur Rahman Fakir.

The survey was carried out in collaboration with EPI, WHO and UNICEF and implemented by Nielsen Bangladesh with the main objective of assessing the Childhood vaccination coverage (seven antigens: BCG, DPT, OPV, HepB and Measles); TT vaccination coverage among women with children aged 0-11 months to asses the status of protection at birth; TT5 coverage among 18-49 years old women to evaluate the progress of TT5 program through routine EPI. The CES also evaluated the 18 National immunization day Held between 10-14 January 2010 and measles follow-up campaign carried out in between 14-28 February, 2010.



Dissemination of EPI-CES 2010 : The Honorable State Minister, Ministry of Health and Family Welfare(MOH&FW), Dr. Capt. (Rtd) Mozibur Rahman Fakir, deliberating his speech, Chief of Health & Nutrition-UNICEF, WHO Country Representative to Bangladesh, Secretary, Ministry of Health and Family Welfare, Director General of Health services from left to right

The key findings of the CES, indicated that 79 percent of the surveyed children aged between 12-23 months were found to be fully vaccinated before observing their first birthday along with the highest coverage 99% for BCG, 98% for DPT1, OPV1 and Hep-B1, 97% for DPT2, OPV2 and Hep-B2 and 89% , 94% , 89% for DPT3, OPV3, Hep-B3 respectively and 85% for measles. Seventy nine percent of urban children were found to be fully vaccinated as against 80% of children residing in rural areas. Thirty nine percent of surveyed mothers received 5 doses of TT vaccination nationally. According to base of TT vaccination status of mother 92% percent children was protected at birth against tetanus. While the results for the 18th NID and Measles follow-up campaign revealed that the OPV, vitamin-A and antihelmenthic coverage in 18 NID were 97%,96%and 92% respectively whereas the measles and OPV coverage in measles follow-up campaign were 88% and 93% respectively.

The annual trend in valid childhood vaccination coverage was found to be highest in Rajshahi division 83% and lowest in Sylhet division 74% which was being followed by Chittagong 76%, Dhaka 78%, Khulna and Barisal 81% and Rangpur78%. As per CES findings the Rajshahi division, Rajshahi district and Rajshahi City Corporation were the best performing Division, District and City Corporation in the country. The Honorable State Minister, Ministry of Health and Family Welfare awarded them by handing over EPI crest to the respective managers for their outstanding performance. Bogra district was also awarded for its highest performance among the low performing 23 districts. The Honorable State Minister and Secretary of Ministry of Health and Family Welfare expressed their satisfaction regarding the performance. They appreciated the contribution of all health and family planning field workers and managers for this achievement. They also committed to continue their cooperation to run the program all over the country so that we can reach the MDGs and Digital Bangladesh.

Surveillance Summary

Description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 ¹
Number of AFP cases	1287	1365	1128	1301	1458	1619	1844	1790	1502	1537	307
No. of compatible cases according to virologic classification system	36	0	0	2	0	2	0	0	0	0	0
No. of cases with isolation of wild poliovirus	0	0	0	0	0	18	0	0	0	0	0
No. of discarded polio cases (i.e., non-polio AFP)	1251	1365	1128	1299	1458	1599	1844	1790	1502	1531	234
No. of cases pending classification	0	0	0	0	0	0	0	0	0	6	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	1220

AFP Surveillance Performance Indicators

Indicators	Target	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 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	2.62	1.71
02 Completeness of passive reporting from facilities	≥ 90%	65%	62%	67%	82%	91%	89%	90%	93%	91%	91%	91%
03 Timeliness of passive reporting from facilities	≥ 80%	38%	36%	62%	75%	84%	83%	85%	87%	86%	84%	85%
04 Suspected AFP cases investigated within 48 hours of notification	≥ 80%	96%	96%	98%	98%	99%	100%	99%	99%	99%	98%	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%	95%
06 Stool specimens arriving at laboratory within 3 days after collection	≥ 80%	97%	98%	99%	99%	98%	99%	100%	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 ½ thumb) 3. No evidence of leakage 4. No evidence of desiccation (drying)	≥ 90%	100%	99%	100%	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%	98%	56% 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%	96%
10 Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	29%	28%	23%	20%	20%	15%	15%	23%	19%	19%	9%

¹ Data as of March 26, 2011; ² among cases occurring up to January 9, 2011; * Prior to 2005 NPAFP rate calculated as 1/100,000 under 15 children

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Chief Advisor to the Editorial Board: Dr. A.B.M. Jahangir Alam, Director, PHC & Line Director-ESD, DGHS, Mohakhali Dhaka.

AFP Surveillance Performance Indicators, 2010 - 2011

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								
	2010	2011	2010	2011	2010	2011		2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011					
Barisal Division								8	1	0	2	2.01	1.07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA					
Barguna	8	9	8	3				29	6	0	0	2.90	2.56	100%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	NA				
Barisal (non BCC)	21	21	29	6				4	2	0	0	3.78	8.07	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
BCC only	3	3	4	2				25	3	0	2	3.12	1.60	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Bhola	17	17	25	5				11	4	0	0	3.37	5.24	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Jhalakati	7	7	11	4				15	3	0	1	2.17	1.86	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Patuakhali	14	15	15	4				19	1	0	2	3.67	0.82	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Perojpur	11	11	19	3				Total BAR	81	83	111	27	0	0	0	111	20	0	7	2.89	2.22	99%	100%	100%	100%	99%	100%	100%	100%	NA
CTG Division																														
Bandarban	3	3	5	1				5	1	0	0	3.53	3.01	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Brahmanbaria	23	23	30	9				30	7	0	2	2.68	2.67	100%	100%	100%	100%	97%	100%	98%	100%	100%	100%	100%	100%	NA				
Chandpur	22	22	23	5				23	3	0	2	2.18	1.21	91%	80%	100%	100%	91%	80%	100%	100%	100%	100%	100%	100%	NA				
Chittagong (non CCC)	42	42	42	7				41	6	1	1	1.99	1.24	83%	100%	100%	100%	83%	100%	100%	100%	100%	100%	100%	87%	0%				
CCC only	21	21	18	1				18	1	0	0	1.76	0.42	94%	100%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	NA				
Comilla	44	44	63	15				63	12	0	3	2.91	2.37	97%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	NA				
Cox's Bazar	17	17	20	6				19	4	1	2	2.29	2.06	95%	100%	100%	100%	95%	100%	100%	100%	100%	100%	100%	100%	NA				
Feni	12	12	7	2				7	1	0	1	1.23	0.75	100%	100%	86%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Khagrachari	5	5	8	3				8	2	0	1	3.29	3.51	88%	67%	100%	100%	88%	67%	100%	100%	100%	100%	100%	NA					
Lakshmipur	15	15	17	4				17	4	0	0	2.43	2.44	94%	100%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	NA				
Noakhali	25	25	17	6				17	5	0	1	1.40	1.76	100%	83%	71%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Rangamati	5	6	7	2				7	2	0	0	2.83	3.45	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Total-CTG	234	235	257	61	0	0	0	255	48	2	13	2.24	1.80	94%	95%	98%	100%	94%	97%	100%	100%	98%	75%							
Dhaka Division																														
Dhaka (non DCC)	24	24	45	11				45	8	0	3	3.84	2.92	93%	91%	100%	100%	98%	91%	99%	100%	82%	NA							
DCC only	58	59	70	10				70	7	0	3	2.42	1.03	96%	100%	100%	100%	94%	90%	100%	100%	100%	100%	100%	0%					
Faridpur	17	17	17	7				17	7	0	0	2.07	3.64	94%	86%	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%	NA				
Gazipur	20	20	27	7				27	5	0	2	2.83	2.24	100%	86%	100%	100%	96%	100%	100%	100%	86%	100%	100%	80%	NA				
Gopalganj	11	12	16	5				16	4	0	1	2.95	3.15	88%	100%	100%	100%	88%	100%	100%	100%	100%	100%	100%	100%	NA				
Jamalpur	20	21	36	4				36	3	0	1	3.63	1.29	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Kishoreganj	25	25	42	6				42	5	0	1	3.49	1.77	90%	83%	93%	100%	93%	67%	100%	100%	92%	NA							
Madaripur	11	11	12	4				12	4	0	0	2.25	3.21	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Manikganj	13	13	23	4				23	2	0	2	3.75	1.39	100%	100%	100%	100%	98%	100%	100%	100%	98%	100%	100%	NA					
Munshiganj	13	13	20	3				19	3	1	0	3.13	2.11	100%	100%	100%	100%	95%	100%	100%	100%	83%	100%	100%	NA					
Mymensingh	43	43	48	10				48	7	0	3	2.28	1.42	88%	90%	100%	100%	96%	90%	100%	100%	100%	100%	100%	NA					
Narayanganj	21	21	24	2				24	2	0	0	2.35	0.84	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	NA					
Narsingdi	18	19	25	2				25	1	0	1	2.79	0.48	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA					
Netrokona	19	19	31	6				30	3	1	3	3.23	1.38	87%	83%	100%	100%	94%	83%	100%	100%	100%	100%	100%	NA					
Rajbari	9	10	11	1				10	1	1	0	2.23	0.95	91%	100%	100%	100%	91%	100%	100%	100%	100%	100%	100%	NA					
Sariatpur	11	11	10	3				10	3	0	0	1.96	2.52	90%	100%	100%	100%	90%	100%	100%	100%	100%	100%	100%	NA					
Sherpur	12	13	15	3				15	3	0	0	2.51	2.15	87%	100%	100%	100%	93%	100%	100%	100%	100%	100%	100%	NA					
Tangail	31	32	35	10				35	9	0	1	2.28	2.50	97%	90%	100%	100%	91%	100%	100%	100%	89%	100%	100%	NA					
Total-DHAKA	376	383	507	98	0	0	0	504	77	3	21	2.74	1.79	94%	93%	99%	100%	95%	93%	100%	99%	96%	0%							
Khulna Division																														
Bagerhat	15	15	16	1				16	1	0	0	2.24	0.60	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Chuadanga	10	10	20	5				20	4	0	1	4.22	3.61	100%	90%	80%	85%	100%	100%	100%	100%	100%	100%	100%	NA					
Jessore	24	24	33	4				33	2	0	2	2.84	0.73	94%	75%	100%	100%	97%	75%	100%	100%	100%	100%	100%	NA					
Jhenaidah	15	15	18	1				18	0	0	1	2.44	0.00	89%	100%	100%	100%	89%	100%	100%	100%	100%	100%	100%	NA					
Khulna (non KCC)	14	15	22	2				22	2	0	0	3.18	1.23	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
KCC only	9	9	8	1				8	1	0	0	1.91	1.02	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Kushtia	17	17	17	6				17	5	0	1	2.08	2.61	100%	88%	83%	88%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Magura	8	8	10	2				10	1	0	1	2.58	1.10	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Meherpur	6	6	10	2				10	2	0	0	3.61	3.09	90%	100%	100%	100%	70%	100%	100%	100%	100%	100%	100%	100%	NA				
Narail	7	7	7	2				7	2	0	0	2.14	2.61	86%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA				
Satkhira	18	18	17	2				17	1	0	1	1.96	0.49	100%	50%	100%	100%	94%	50%	100%	100%	100%	100%	100%	100%	NA				
Total-KHU	143	144	178	28	0	0	0	178	21	0	7	2.59	1.30	97%	93%	98%	93%	93%	100%	100%	100%	100%	NA							
Raj Division																														
Bogra	29	29	29	6				29	6</td																					

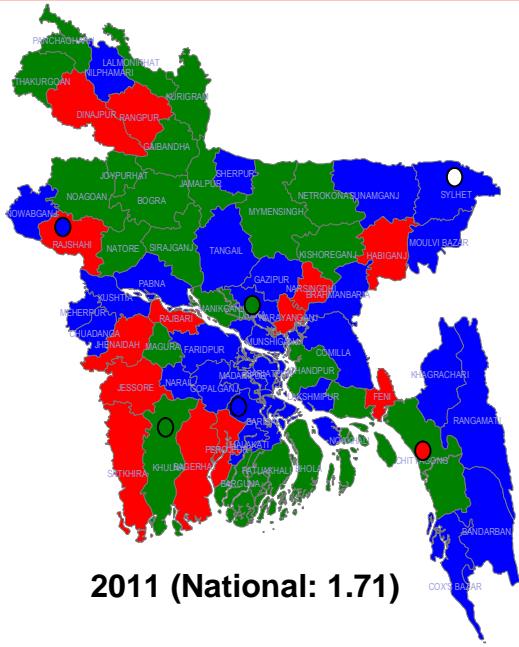
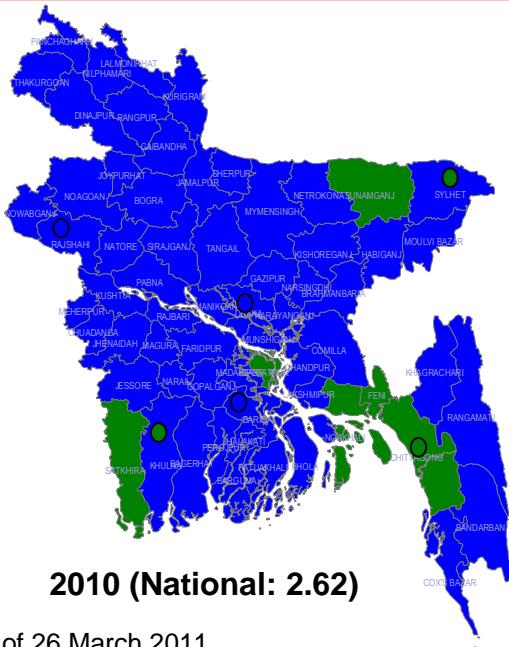
¹Data as of Epidemiologic Week 12, March 26, 2011, ² for cases occurring upto 9 January, 2011 which has inadequate stool or positive isolate at NPL or NPEV

Disease Surveillance, 2010 - 2011

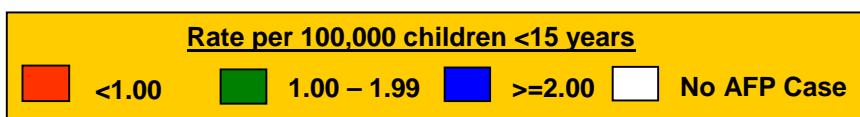
District	Neonatal Tetanus						Measles						AEFI			
	# of case reported by Active Surveillance		# of case reported by Passive Surveillance		# of case Investigated		# of case reported by Active Surveillance		# of case reported by Passive Surveillance		Outbreak*		# of case Reported			
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	Number of Outbreak (%) Investigated)	# of cases	2010	2011		
Barisal Division																
Barguna	1		2				1	2	8	7				10	1	
Barisal (non BCC)	2	1	3	2					4					63	4	
BCC only							2		2					4		
Bhola	2		4		3				2					2		
Jhalakhali							1		1					28		
Patuakhali	4		3		4		1	4	7	4				1	1	
Pirojpur							1		13	1				13		
Total BAR	9	1	12	2	7	0	6	6	37	12			0	0	121	6
CTG Division																
Bandarban									1					2		
Brahmanbaria	4		2		1				11	2				13		
Chandpur	2		1		2		3		44		1 (100%)	1 (100%)	18	24	16	2
Chittagong (non CCC)							2	2	9	3				11		
CCC only	6		5		6		9	9	3	7				1		
Comilla	4				5		1		29					13		
Cox's Bazar	1		1		1		1	1	7					2		
Feni	4		3		4			1	2	3				6		
Khagrachari							2		10	1				3		
Laxmipur	5		11	1	6		2	1	46	3				16	1	
Noakhali	4		4		5			1	5	7				9	1	
Rangamati							5	4	15	3				6		
Total-CTG	30	0	28	1	30	0	25	19	182	29	1 (100%)	1 (100%)	18	24	98	4
Dhaka Division																
Dhaka (non DCC)	3		1		4		1	8	39	3	1 (100%)		87		28	
DCC only	4	1	2		3	1	19	20	230	16				36	3	
Faridpur	4		7		3				6					58	3	
Gazipur	1		1		1		6	1	28	3				21	4	
Gopalganj	2		3				2	1	1		1 (100%)		11	18	1	
Jamalpur	2		1		1				109	8				19	2	
Kishoreganj	5	1	8	3	5	2	1		56	3				22		
Madaripur	3		3				2		6					52	6	
Manikganj									15					24		
Munshiganj							2		91	2	1 (100%)		46		28	1
Mymensingh	4	3	9	1	3	4	4	1	45	5				52	1	
Narayanganj	1				1		1		23	2				27	2	
Narsingdi									15	2				41	5	
Netrokona	1		4						36	6				3	1	
Rajbari	1		1		1				10	3				30	4	
Shariatpur			1						21	4				22	1	
Sherpur			3					1	21	2				12		
Tangail	4	1	3		4	1	11		20	2				58	3	
Total-DHAKA	30	11	41	10	26	8	49	32	772	61	2 (100%)	1 (100%)	133	11	551	37
Khulna Division																
Bagerhat	2	1	3	1	2				7	3	1(100%)		12		97	5
Chuadanga	2		2		1				3	2				10	2	
Jessore	2		2		2		5		21					31		
Jhenaidah	1		1		1		2	2	7	6				8	1	
Khulna (non KCC)									19	1				43	5	
KCC only	1		1	1	1				1					24	2	
Kushthia	1	1		1	1		2	3	16	4				9	3	
Magura									10					20	2	
Meherpur							2	1	20	8				2		
Narail	1		3		1		1	1	15	1				6	1	
Satkhira	1		1		1		2		10	1				28		
Total-KHU	11	2	13	3	10	0	14	7	129	26	1(100%)		12	0	278	21
Raj Division																
Bogra	2		1		2		3		36	6				125	4	
Dinajpur	1		2		1		1	1	25	2				51	3	
Gaibandha	1		1		1				4	3				28	1	
Joypurhat									1	7				27		
Kurigram	2				2		1	1	1					12		
Lalmonirhat								1	1					24	3	
Natore	1		1		1		1		39	3				28	2	
Nilphamari					1		1		1					31		
Noagoan		1				1	11	6	41	5				51	2	
Nowabganj	1		1		1		2	1	20	5				7	1	
Pabna	1	1	1		1	1	3		113	13				24		
Panchagarh							1		3					17		
Rajshahi (non RCC)	2		1		2		3	1	14	4	1(100%)		57		37	3
RCC only							3	9	22	11	1(100%)		40		42	1
Rangpur	1		1		1									7		
Sirajganj	1						1		1	1				9		
Thakurgaon							4		16					22	1	
Total-RAJ	13	2	9	0	13	2	35	20	338	60	2(100%)		97	0	542	21
Sylhet Division																
Habiganj	7	2	7	3	2		5	1	9	1				6		
Maulvibazar	2	1	3		1		18		24	2				4	1	
Sunamganj	5		4	1	5		6	5	6	14	1 (100%)		48	20		
Sylhet (non SCC)							19	2	29	7				2	1	
SCC only							16	1	9	1				1		
Total-SYL	14	3	14	4	8	0	64	9	77	25	1 (100%)	0	48	32	3	
National	107	19	117	20	94	10	193	93	1,535	213	6(100%)	3 (100%)	260	83	1,622	92

Data as of 31 March 2011, * Only Lab Confirmed Measles and Mixed Type outbreak Cases

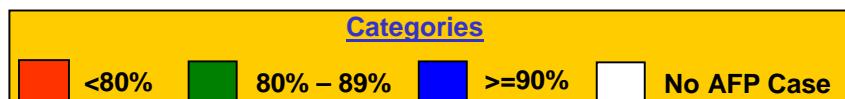
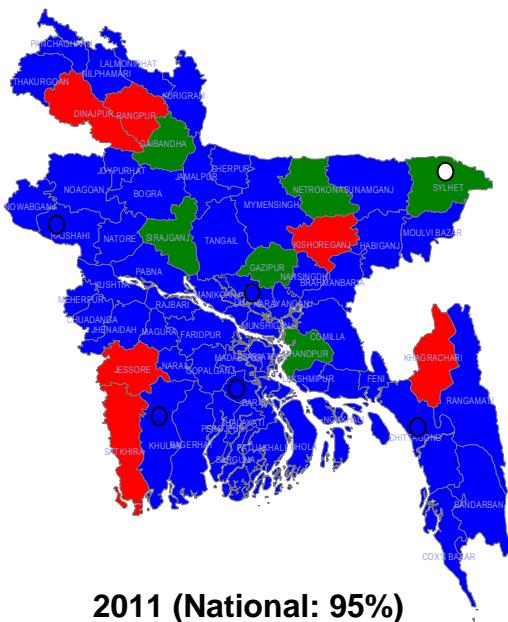
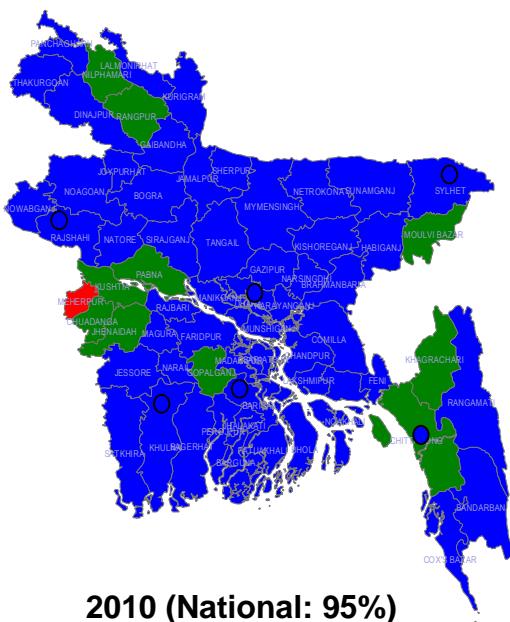
Annualized Non-Polio AFP Rate, by District, Bangladesh 2010-2011*



*Data as of 26 March 2011



Percentage of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2010-2011*



*Data as of 26 March 2011

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