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Hard to Reach Areas Need More Attention during NIDs

Following polio importation in January 2006, Bangladesh has conducted 4 rounds of 13th Special NID. The 1st round was kicked off on 16 April within fifth week of polio virus notification. The 4th round was conducted on 6 August after six weeks of the 3rd round. This round was conducted because new wild polio cases were still occurring following 2nd round and even 3rd round of NID with wide geographic spread. In the meantime, Bangladesh has reported 15 wild polio cases from 10 districts of all 6 divisions. 11 out of 15 wild polio cases have been reported from hard to reach areas. Chittagong has reported 4 polio cases, Barisal and Kishoregonj have reported 2 cases each, Chandpur, Joypurhat, Dhaka, Brahmanbaria, Hobigonj, Khulna and Noakhali have reported 1 case each. The last case is from Chittagong with onset of paralysis on 22 August 2006.

Since long NIDs are observed by some independent observers from development partners as well as from GoB. They monitor fixed site and child to child search activities by using Independent Observer's Checklist. As per Independent Observers' checklist findings, 1st round coverage was 95.7% nationally, that of 2nd was higher: 97% nationally and the 3rd round coverage was even higher: 98.1%. But 4th round coverage has come down to 94.1%.

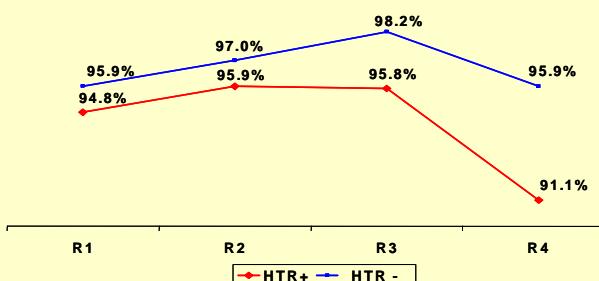
Review of Independent Observers' checklists revealed that:

1. Coverage of children decreased from 95.7% to 94.1% in the 4th round.
2. NID fixed site coverage decreased from 84.9% to 83%.
3. NID site left out children covered during child to child search activities decreased from 71.6% to 66.9% in 4th round leaving 33.1% NID fixed site left out children un-reached during child to child search operation.
4. During 4th round, less children over 5 years old were vaccinated
5. Three main reasons for not vaccinating children at NID fixed site in this 4th round were found to be 'traveling', 'didn't know' and 'busy'.
6. All sites visited by Independent Observers in 4th round were identified with Moni flag and 81% sites were visited by supervisors compared to 70% in the 3rd round.
7. Vaccine distribution was improved a lot this time and NID fixed sites experiencing shortage of vaccine were further decreased. VVM was found in good condition in all sites visited by independent observers.

This time the coverage of Khulna division is the highest (96.5%) among all divisions followed by sylhet (95.4%), Dhaka (95.1%) and Rajshahi (94.9%) division. Barisal and Chittagong divisions are poor performers in the 4th round with coverage 92.9% and 92.1% respectively.

The coverage of 4th round has initiated in-depth analysis of the root causes of poor performance. It has been found that preparatory time for the 4th round was very short, people were not informed well about the 4th round (evidenced by response of 23.2% people of those who failed to vaccinate their children at NID fixed site as 'didn't know' about NID), heavy shower of rain in some areas and most alarmingly very low coverage in hard to reach areas. The 4th round coverage in hard to reach areas is the lowest among all rounds of 13th Special NID. The coverage was increasing in the hard to reach areas steadily from 1st round (94.8%) to 3rd round (95.8%) but it has come down to 91.1% in 4th round as shown in the following slide.

NID Site and C-C Search Coverage, 13th Special NID: HTR+ vs. HTR- by Rounds



Source: Independent Observer Checklists

In order to address the problem of hard to reach areas, special measures have been taken in the EPI. District/Municipality/Upazila managers have been instructed to send exact information on hard to reach areas on the prescribed formats which include mode of transport to those areas depending on the seasons of the year and cost involved to transport vaccine to there. SMOs, DIMOs and EPIFs have been ordered to provide assistance to the managers in compiling all information of hard to reach areas. They will also extend their technical support in preparing micro planning for those high priority areas during NIDs. EPI has also formulated special supervision plans to monitor the micro plans and coverage in hard to reach areas.

Surveillance Summary for 1999-2006 (through Epidemiologic Week 38, September 17 – 23, 2006)

	1999	2000	2001	2002	2003	2004	2005	2006 ¹
Number of AFP cases	761	1138	1287	1365	1128	1301	1458	1231
No. of clinically confirmed polio cases	322	197	NA	NA	NA	NA	NA	NA
No. of compatible cases according to virologic classification system	NA	NA	36	0	0	2	0	1
No. of cases with isolation of wild poliovirus	29	1	0	0	0	0	0	15
No. of discarded polio cases (i.e., non-polio AFP)	439	941	1251	1365	1128	1299	1458	1095
No. of cases pending classification	0	0	0	0	0	0	0	120
Expected annual number of non-polio AFP cases (1/100,000 children <15 yr)*	505	515	533	549	556	563	1094	1114

AFP Surveillance Performance Indicators:

Indicator	Target	1999	2000	2001	2002	2003	2004	2005	2006
1. Annual Non-Polio AFP rate in children < 15 years old	≥ 2.0	0.87	1.82	2.34	2.49	2.03	2.31	2.66	2.69
2. Completeness of passive reporting from facilities	≥ 90%	66%	83%	65%	62%	67%	82%	92%	89%
3. Timeliness of passive reporting from facilities	≥ 80%	30%	58%	38%	36%	62%	75%	84%	82%
4. Suspected AFP cases investigated within 48 hours of notification	≥ 80%	83%	93%	96%	96%	98%	98%	99%	100%
5. Confirmed AFP cases with 2 stool specimens collected ≤ 14 days after paralysis onset	≥ 80%	49%	68%	80%	89%	90%	90%	92%	93%
6. Stool specimens arriving at laboratory ≤ 3 days after collection	≥ 80%	81%	92%	97%	98%	99%	99%	99%	99%
7. 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%	97%	100%	100%	99%	100%	100%	100%	100%
8. Confirmed AFP cases receiving a follow-up exam at least 60 days after paralysis onset	≥ 80%	97%	95%	93%	99%	100%	98%	99%	95% ²
9. Stool specimens with laboratory results ≤ 28 days after specimen receipt	≥ 80%	58%	94%	99%	100%	100%	100%	100%	98% ³
10. Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	13%	21%	29%	28%	23%	20%	20%	15%

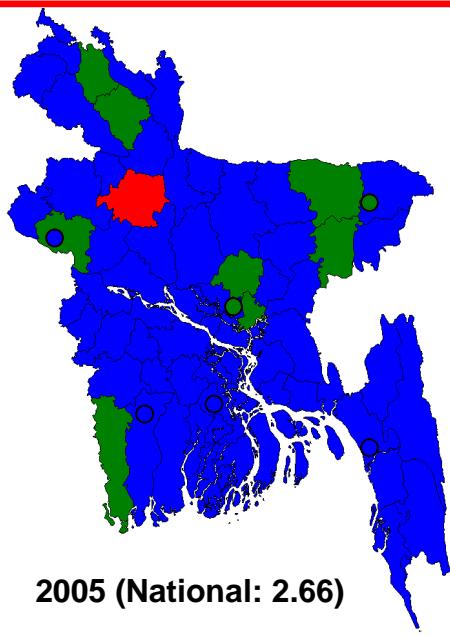
¹Data as of September 23, 2006; ² among cases occurring up to July 10, 2006; ³as of August 26, 2006, *Prior to 2005 NPAFP rate calculated as 1/100,000 children.

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			
	2005	2006	2005	2006	2005	2006		2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006		
Dhaka Division																									
Dhaka (non DCC)	25	26	47	34		1		47	31	0	2	3.82	3.29	89%	94%	100%	100%	87%	94%	98%	97%	94%	88%		
DCC only	61	64	54	38				54	35	0	3	1.76	1.49	96%	92%	98%	100%	93%	89%	100%	97%	93%	92%		
Faridpur	15	16	23	24				23	21	0	3	3.01	3.70	96%	88%	100%	100%	96%	100%	100%	96%	96%	100%		
Gazipur	18	18	15	19				15	13	0	6	1.70	1.98	100%	95%	100%	100%	93%	95%	100%	95%	100%	100%		
Gopalganj	10	10	24	23				24	17	0	6	4.87	4.68	100%	91%	100%	100%	91%	100%	100%	100%	100%	100%		
Jamalpur	18	19	32	18				32	13	0	5	3.48	1.90	88%	89%	97%	100%	88%	89%	100%	100%	100%	100%		
Kishoreganj	22	22	33	35		2		33	31	0	2	2.99	3.81	88%	94%	100%	100%	94%	94%	100%	100%	97%	86%		
Madaripur	10	10	22	16				22	13	0	3	4.59	3.68	91%	100%	100%	100%	96%	100%	100%	100%	100%	100%		
Manikganj	11	11	17	15				17	15	0	0	3.03	3.62	82%	100%	100%	100%	88%	100%	100%	100%	100%	100%	80%	
Munshiganj	11	11	31	16				31	14	0	2	5.64	3.45	97%	88%	100%	100%	94%	100%	100%	100%	100%	100%		
Mymensingh	39	39	51	40				51	37	0	3	2.63	2.58	80%	93%	98%	100%	84%	98%	100%	100%	100%	100%		
Narayanganj	19	20	16	24				16	20	0	4	1.66	2.78	94%	88%	100%	100%	88%	100%	100%	100%	100%	100%	67%	
Narsingdi	17	17	19	19				19	18	0	1	2.24	2.84	90%	89%	100%	100%	89%	95%	100%	100%	100%	100%		
Netrokona	17	17	26	21				26	21	0	0	3.03	3.30	100%	90%	100%	100%	96%	95%	100%	100%	100%	100%		
Rajbari	8	8	11	16				11	12	0	4	2.65	3.91	100%	88%	100%	100%	94%	100%	100%	100%	100%	100%		
Sariatpur	9	10	26	26				26	22	0	4	5.52	6.31	96%	96%	100%	100%	92%	96%	100%	100%	100%	100%		
Sherpur	11	11	15	19				15	19	0	0	2.74	4.70	100%	89%	93%	100%	95%	100%	100%	100%	100%	100%		
Tangail	28	28	32	32				32	32	0	0	2.30	3.11	91%	94%	100%	100%	91%	100%	100%	100%	100%	100%		
Total-DHAKA	349	357	494	435	0	3	0	0	494	384	0	48	2.83	2.94	92%	92%	99%	100%	92%	95%	100%	99%	98%	94%	
CTG Division																									
Bandarban	3	3	3	4				3	4	0	0	2.19	3.90	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Brahmanbaria	21	21	25	29		1		25	27	0	1	2.43	3.56	92%	83%	92%	100%	88%	83%	100%	100%	100%	100%	100%	
Chandpur	20	21	21	20		1		21	19	0	0	2.06	2.47	95%	100%	95%	100%	86%	95%	100%	100%	95%	100%		
Chittagong (non CCC)	38	38	46	28		4		46	23	0	1	2.43	1.64	98%	100%	100%	100%	96%	96%	100%	100%	100%	100%		
CCC only	20	21	22	12				22	11	0	1	2.17	1.44	100%	92%	100%	100%	96%	83%	100%	100%	100%	100%		
Comilla	40	41	50	56				50	53	0	3	2.50	3.58	98%	93%	98%	100%	90%	95%	100%	100%	98%	100%		
Cox's Bazar	16	16	19	19				19	18	0	1	2.39	3.03	90%	100%	100%	100%	89%	95%	100%	95%	100%	80%		
Feni	10	11	26	11				26	10	0	1	4.96	2.57	96%	91%	100%	100%	92%	82%	100%	100%	100%	100%		
Khagrachari	5	5	7	5				7	5	0	0	2.75	2.57	86%	100%	100%	100%	86%	100%	100%	100%	100%	NA		
Lakshimpur	13	13	24	17				24	16	0	1	3.71	3.35	88%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	
Noakhali	23	23	43	23		1		43	19	0	3	3.81	2.27	95%	96%	98%	100%	95%	96%	100%	100%	98%	86%		
Rangamati	5	5	7	3				7	3	0	0	2.89	1.64	57%	100%	100%	100%	71%	100%	100%	100%	100%	100%		
Total-CTG	214	218	293	227	0	7	0	0	293	208	0	12	2.74	2.62	94%	95%	98%	100%	91%	93%	100%	99%	97%		
Sylhet Division																									
Habiganj	15	16	14	16		1		14	15	0	0	1.83	2.65	100%	88%	100%	100%	86%	100%	100%	100%	100%	100%	100%	
Moulvi Bazar	14	14	15	14				15	10	0	4	2.11	1.89	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Sunamganj	18	18	14	27				14	24	0	3	1.60	3.69	100%	85%	100%	96%	93%	78%	92%	100%	96%	100%		
Sylhet (non SCC)	19	20	25	32				25	30	0	2	2.57	4.16	100%	97%	100%	100%	88%	94%	100%	100%	100%	88%		
SCC only	4	4	3	1				3	1	0	0	1.57	0.65	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA		
Total-SYL	70	72	71	90	0	1	0	0	71	80	0	9	2.02	3.05	100%	92%	99%	92%	91%	100%	99%	100%	96%		
Raj Division																									
Bogra	26	27	13	19				13	14	0	5	0.99	1.44	85%	95%	100%	100%	92%	89%	100%	95%	100%	100%		
Dinajpur	23	24	27	22		1		27	20	0	1	2.32	2.31	78%	77%	100%	100%	89%	82%	100%	95%	100%	100%		
Gaibandha	18	18	20	15				20	14	0	1	2.19	2.08	90%	87%	100%	100%	90%	87%	90%	93%	100%	100%		
Joypurhat	7	7	13	5		1		13	4	0	0	3.52	1.47	85%	80%	100%	100%	85%	80%	100%	100%	100%	50%		
Kurigram	15	15	16	18				16	17	0	1	2.11	3.03	81%	78%	100%	94%	94%	89%	100%	100%	100%			
Lalmonirhat	10	10	13	10				13	8	0	2	2.68	2.23	85%	80%	100%	100%	77%	90%	100%	100%	100%	100%		
Natore	13	13	13	17				13	14	0	3	2.00	2.91	100%	94%	100%	100%	88%	100%	100%	100%	100%	100%		
Nilphamari	14	14	12	10				12	10	0	0	1.75	1.96	100%	90%	100%	100%	90%	90%	100%	100%	100%	100%		
Noagean	21	21	31	20				31	17	0	3	3.01	2.24	100%	80%	97%	90%	87%	80%	96%	90%	100%	100%		
Nowabganj	13	13	19	15				19	14	0	1	2.99	2.96	90%	87%	100%	100%	84%	93%</td						

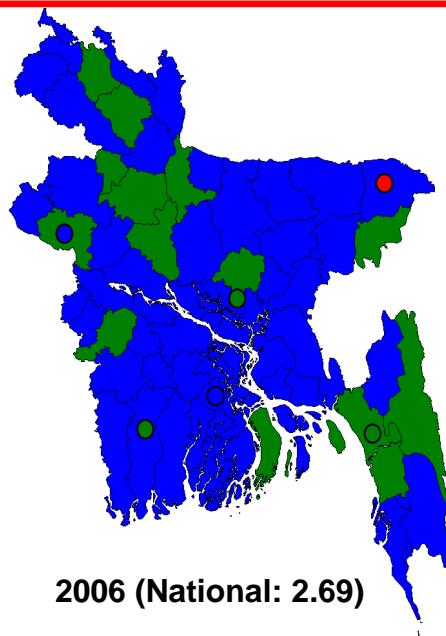
District	Neonatal Tetanus						Measles						AEFI			
	# of case reported by Active Surveillance		# of case reported by Passive Surveillance		# of case Investigated		# of case reported by Active Surveillance		# of case reported by Passive Surveillance		Outbreak*		Number of Outbreak (% Investigated)	# of cases	# of case Reported	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006			2005	2006
Dhaka Division																
Dhaka (non DCC)	4	2	4	2	4	1	28	16	62	32	3(100%)	1(100%)	480	191	31	20
DCC only	11	5	15	8	11		204	92	241	81	20(100%)	1(100%)	2791	247	7	25
Faridpur	2	3	5	3	5	3	5	3	58	27	1(100%)	1(100%)	79	24	80	61
Gazipur	3		3		2		15	21	44	22	1(100%)	1(100%)	79	80	7	4
Gopalganj	7	2	8		7	2	5	31	157	60	3(100%)	1(100%)	144	30	51	22
Jamalpur			2	2		1	4	3	36	8					17	40
Kishoreganj	26	8	28	7	16	6	58	21	153	21	8(100%)	1(100%)	431	94	28	36
Madaripur		2	1	1		2	16	18	183	70	7(100%)	6(100%)	510	690	61	30
Manikganj	2		1			1	3	6	46	88	7(100%)	1(100%)	1211	38	40	20
Munshiganj	2		5		2		4	2	291	12	3(100%)		175		18	16
Mymensingh	21	16	12	15	20	18	41	31	206	31	6(100%)		582		82	33
Narayanganj			1				83	23	84	27	1(100%)		73		31	52
Narsinghdhi	1	1					22	15	46	15	1(100%)		53		10	24
Netrokona	2	5	8	8	6	6	6	2	199	66	8(100%)		986		28	36
Rajbari	1		3		2			4	50	17					8	34
Shariatpur	3	2	5	1	3	1	6	1	152	31	5(100%)		314		52	27
Sherpur	3	3	8	9	7	3		1	75	14	1(100%)		146		31	19
Tangail	4	5	3	2	5	3	15	11	27	22					26	27
Total-DHAKA	92	54	112	58	92	47	515	301	2110	644	75(100%)	13(100%)	8054	1394	608	526
CTG Division																
Bandarban							2	1	8	5					19	13
Brahmanbaria	9	4	18	4	11	3	2	4	61	13	3(100%)		269		7	13
Chandpur	4		3		3		7	6	91	16	4(100%)	2(100%)	103	57	44	32
Chittagong (non CCC)	1	1	7		1		17	16	76	20	1(100%)		17		7	10
CCC only	8	2	4	2	7	2	78	42	60	42	2(100%)		161		6	14
Comilla	8	7	6	3	2		9	18	219	65	9(100%)	1(100%)	1045	74	6	10
Cox's Bazar	7	1	8	7	7	1	7	14	24	21	1(100%)	1(100%)	183	42	8	14
Feni	2		4	1	2	1	5	1	211	26	5(100%)	1(100%)	412	25	11	14
Khagrachari							2	29	1						2	8
Laxmipur	6	12	10	8	6	10	4	11	78	31	2(100%)	1(100%)	41	31	55	20
Noakhali	7	3	11	4	8	2	27	19	86	18	1(100%)		80		20	5
Rangamati							1	2	53	7					3	2
Total-CTG	52	30	71	29	47	19	161	134	996	265	28(100%)	6(100%)	2311	229	188	155
Sylhet Division																
Habiganj	9	6	12	3	2	2	23		131	28	5(100%)		399		38	19
Maulvibazar	7	3	7	2	1		27	6	174	18	3(100%)		317		16	39
Sunamganj	8	11	12	10	6	6	285	13	354	25	2(100%)		730		28	30
Sylhet (non SCC)	4	1	4		6	2	162	27	326	80	4(100%)		204		20	16
SCC only	1	1	1		2	1	165	20	182	21					1	3
Total-SYL	29	22	36	15	17	11	662	66	1167	172	14(100%)	0	1650	0	103	107
Raj Division																
Bogra	2	2	6	4	3	1	7	4	28	21	2(100%)		75		169	76
Dinajpur	7	1	8	1	7		3	3	18	42	1(100%)		63	209	59	39
Gaibandha	2	1	5		8			28	4	1(100%)	7(100%)	61	541	44	43	
Joypurhat	1		1		1		4	2	28	20			26	27	16	
Kurigram			5		7	2		1	14	28			52	21	2	9
Lalmonirhat	1		1		1				21	4					2	9
Natore	4		4		4		16	2	180	36	7(100%)		703		27	80
Nilphamari	3		1	3	2	2	2	1	10	5					44	57
Noagoan	4		4		5		3	2	114	3	3(100%)		273		42	25
Nowabganj	6		3		6		6	1	8	1					10	23
Pabna	2	1	2		2	1	11		42	20					13	9
Panchagarh	1	2	3	2	2	2		2	75	3					10	9
Rajshahi (non RCC)	4	2	6		5	2	5	8	12	21	1(100%)	1(100%)	266	223	14	23
RCC only							14	5	242	197	5(100%)	1(100%)	329	50	47	29
Rangpur	10	5	8	2	9	5	7	1	7	1	2(100%)		47		31	21
Sirajganj	1	2	2	3	1	1	4		18	5	1(100%)		127		17	16
Thakurgaon							18	3	22	2	3(100%)		453		7	24
Total-RAJ	48	16	59	15	63	16	102	33	867	413	26(100%)	12(100%)	2397	1101	584	501
Khulna Division																
Bagerhat	4	1	4		2	1	8	9	305	58	13(100%)	10(100%)	674	480	24	55
Chuadanga	4	1	6	4	5	1	1	2	24	14					136	38
Jessore	5	5	4	3	3	4	10	38	44	72					60	62
Jhenaidah	2	3	2	2	2		3	4	20	13	2(100%)	1(100%)	99	148	37	15
Khulna (non KCC)	2	1	4	1	2	1	6	2	717	162	14(100%)	2(100%)	918	132	62	40
KCC only	1		1		1		3	5	127	19	14(100%)	1(100%)	1161	35	11	7
Kushtia	1	1		1	1	1	4	3	74	14	2(100%)	1(100%)	176	251	16	19
Magura	1		2	1	1	1	2	3	18	33					50	20
Meherpur	2		3		2		3	4	34	7	1(100%)		108		9	7
Narail	10	1	9	3	10	1	1	5	22	3	1(100%)		66		15	13
Satkhira	3	2	3	1	2	1		1	20	13	2(100%)	1(100%)	176	47	39	50
Total-KHU	35	15	38	16	31	11	41	76	1405	408	49(100%)	20(100%)	3378	1339	333	277
Barisal Division																
Barguna		1	1	1			9	5	84	34					5	9
Barisal (non BCC)	4	5	6	5	2		33	20	72	14	1(100%)		48		18	21
BCC only	2		1		2		29	13	21	10					1	3
Bhola	4		8	2	6	1	3	2	72	11	1(100%)		108		29	39
Jhalakhati	3	2	3	2	1	2	24	11	29	10	1(100%)		68		19	18
Patuakhali	3	3	3	2	2	2	41	28	70	42	3(100%)		331		6	12
Pirojpur		2	3		2		15	2	32	7	5(100%)		665		33	26
Total-BAR	16	13	25	12	15	5	154	81	380	128	11(100%)	0	1220	0	111	128
National	272	150	341	145	265	109	1,635	691	6,925	2,030	203(100%)	51(100%)	19,010	4,063	1,927	1,694

Data as of Epidemiologic Week 38, September 23, 2006. * Only lab confirmed measles and mixed outbreaks

Annualized Non-Polio AFP Rate, by District, Bangladesh 2005-2006*



2005 (National: 2.66)

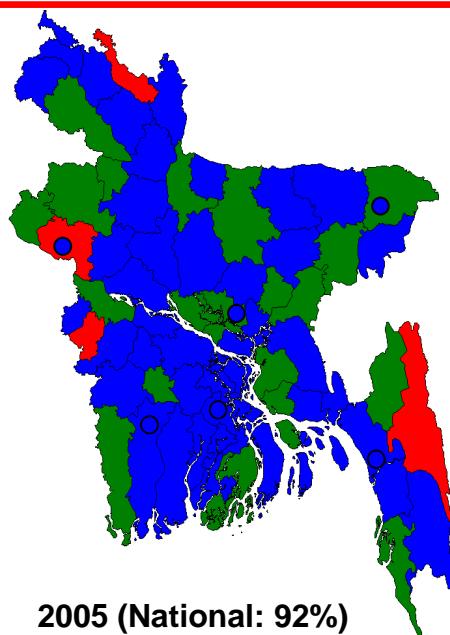


2006 (National: 2.69)

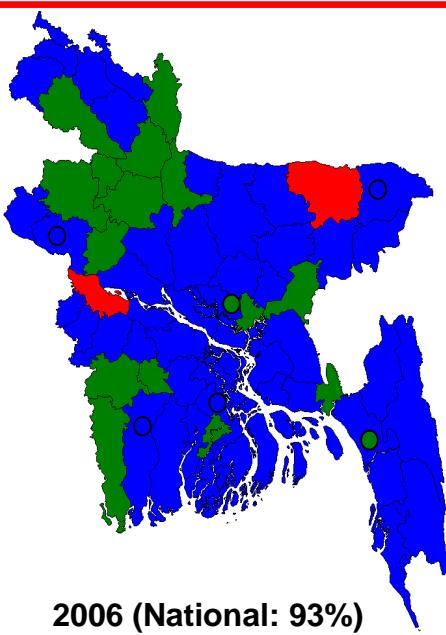
*Data as of Epidemiologic Week 38, September 23, 2006



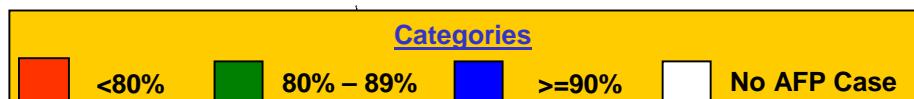
Percentage of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2005-2006*



2005 (National: 92%)



2006 (National: 93%)



*Data as of Epidemiologic Week 38, September 23, 2006

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