



EPI Surveillance Bulletin



Epidemiologic Week 27: July 2 – 8, 2006

Vol. 9 No.3

June 2006

Now, More Than ever: Stop Polio for Ever

Bangladesh has just conducted 13th Special NID in three rounds during April to June 2006. The effort was successfully carried out beginning five weeks after polio virus notification. As per independent observers' checklist findings first round coverage was 95.7% nationally, that of second round was higher: 97.0% nationally and the third round coverage is even higher: 98.1%. This urgently organized NID with high coverage has been praised in country and abroad.

Review of Independent Observers' checklist revealed that:

- Coverage of children increased from 95.7% to 98.1% in the 3rd Round.
- NID site coverage increased from 84.9% to 87.9%.
- NID site left out children covered during child to child search increased from 71.6% to 84.6% while NID site left out children remained un-reached during C-T-C search was 15.4%.
- Children over 5 years old were still found vaccinated in the second round. Three main reasons for not vaccinating children on the day of NID were found to be 'traveling', 'busy' and 'don't know'.
- The number of Independent Observers increased during 2nd round. Vaccine distribution was improved; number of NID sites experiencing shortage of vaccine decreased.

Field workers' visit, miking (in rural) and TV (in urban) were still the most effective modes of communicating campaign message during 1st and 2nd round. Teachers' participation didn't improve in the 2nd round. It was found that 12% NID sites were not identified with Moni flags. Keeping Icelpack inside vaccine carrier decreased. 1st line Supervisors' visit decreased remarkably and frustrating.

As of 8 July 2006, seven wild polio cases have been detected from different parts of Bangladesh. Besides Chandpur, other 6 cases have been reported from five districts of Bangladesh: Joypurhat, Dhaka, Kishoreganj, Barisal and Chittagong. The Joypurhat case had paralysis onset even before that of Rahima, the first identified case with wild polio virus importation from West Uttar Pradesh of India. Both Chandpur and Joypurhat wild polio viruses are closely related and the experts now believe that the wild polio virus importation occurred in September 2005 in Bangladesh. This means that circulation of wild polio virus was going on even before Rahima was picked up by our surveillance system. The fact that those four cases have been reported from southern, north west, central and north eastern parts of Bangladesh means that whole Bangladesh is now in the grip of wild polio virus circulation. More importantly, the identification of the most recent case in Barisal with onset after second round of NID demonstrates that wild polio virus continued to circulate in Bangladesh even after the 2nd round of the last NID.

In order to heightening surveillance, gear up routine EPI and accomplishing high coverage in NIDs, following activities should be undertaken with immediate effect.

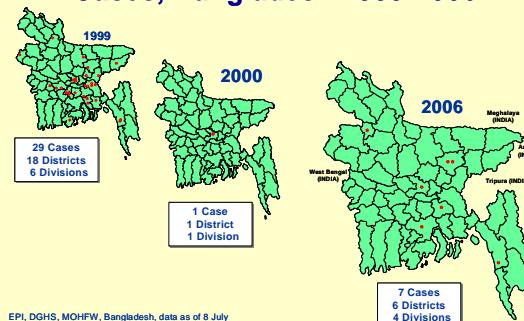
1. To identify potential pediatricians, general practitioners, Kabiraj and other service providers in the community and plan for orienting them formally and informally on strategies of polio eradication.

2. To renew relationship with all counter parts at all levels; NGOs, different partners and other stake holders will be targeted to make regular contacts and every opportunity should be seized to involve them in AFP surveillance activities.

3. To conduct active case search regularly and during ORI, CRI, Measles outbreak investigation and routine EPI session.

4. To create massive awareness sensitizing the community and service providers through multisectoral approach and using every opportunity for vaccinating every child under 1 with 4 routine OPV doses and those under 5 during NIDs.

Laboratory Confirmed Polio Cases, Bangladesh 1999-2006



EPI, DGHS, MOHFW, Bangladesh, data as of 8 July

In the past, we sacrificed our lives for the noble cause of our mother tongue and our independence. Now, time has come to sacrifice our lives for our beloved children. Deep in our hearts, we believe that we will come out victorious in the war against polio and Bangladesh will soon kick polio out of the country and become polio free once again.

Surveillance Summary for 1999-2006 (through Epidemiologic Week 27, July 2 – 8, 2006)

	1999	2000	2001	2002	2003	2004	2005	2006 ¹
Number of AFP cases	761	1138	1287	1365	1128	1301	1458	788
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	0
No. of cases with isolation of wild poliovirus	29	1	0	0	0	0	0	7
No. of discarded polio cases (i.e., non-polio AFP)	439	941	1251	1365	1128	1299	1458	625
No. of cases pending classification	0	0	0	0	0	0	0	156
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	2.16
2. Completeness of passive reporting from facilities	≥ 90%	66%	83%	65%	62%	67%	82%	92%	87%
3. Timeliness of passive reporting from facilities	≥ 80%	30%	58%	38%	36%	62%	75%	84%	80%
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%	92%
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%	98%	94% ²
9. Stool specimens with laboratory results ≤ 28 days after specimen receipt	≥ 80%	58%	94%	99%	100%	100%	100%	100%	95% ³
10. Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	13%	21%	29%	28%	23%	20%	20%	17%

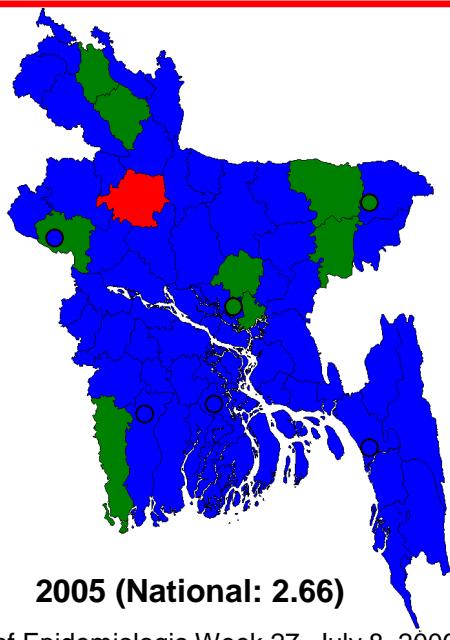
¹ Data as of July 8, 2006; ² among cases occurring up to April 24, 2006; ³ as of June 10, 2006, * Prior to 2005 NPAFP rate calculated as 1/100,000 children.

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	22		1		47	18	0	3	3.82	2.69	89%	95%	100%	100%	87%	95%	98%	95%	94%	92%	94%	82%
DCC only	61	64	54	25				54	19	0	6	1.76	1.14	96%	92%	98%	100%	93%	92%	100%	100%	91%	100%	91%	77%
Faridpur	15	16	23	17				23	14	0	3	3.01	3.47	96%	88%	100%	100%	96%	100%	100%	100%	100%	100%	91%	100%
Gazipur	18	18	15	12				15	10	0	2	1.70	2.15	100%	92%	100%	100%	93%	100%	100%	100%	100%	100%	100%	83%
Gopalganj	10	10	24	15				24	10	0	5	4.87	3.88	100%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Jamalpur	18	19	32	9				32	7	0	2	3.48	1.44	88%	89%	97%	100%	88%	89%	100%	100%	100%	100%	100%	100%
Kishoreganj	22	22	33	26	2			33	18	0	6	2.99	3.11	88%	88%	100%	96%	94%	92%	100%	100%	97%	100%		
Madaripur	10	10	22	11				22	10	0	1	4.59	3.99	91%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	90%
Manikganj	11	11	17	9				17	5	0	4	3.03	1.70	82%	89%	100%	100%	88%	89%	100%	100%	100%	100%	100%	100%
Munshiganj	11	11	31	9				31	6	0	3	5.64	2.08	97%	78%	100%	100%	97%	89%	100%	100%	100%	100%	100%	100%
Mymensingh	39	39	51	31				51	28	0	3	2.63	2.75	80%	94%	98%	100%	84%	100%	100%	100%	100%	100%	100%	100%
Narayanganj	19	20	16	12				16	10	0	2	1.66	1.96	94%	75%	100%	100%	92%	100%	100%	100%	100%	100%	100%	83%
Narsingdhi	17	17	19	12				19	10	0	2	2.24	2.22	90%	92%	100%	100%	89%	92%	100%	100%	100%	100%	100%	100%
Netrokona	17	17	26	16				26	13	0	3	3.03	2.87	100%	88%	100%	100%	96%	94%	100%	100%	96%	100%	100%	100%
Rajbari	8	8	11	7				11	5	0	2	2.65	2.29	100%	71%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Shariatpur	9	10	26	15				26	12	0	3	5.52	4.84	96%	93%	100%	100%	92%	93%	100%	100%	100%	100%	100%	100%
Sherpur	11	11	15	15				15	12	0	3	2.74	4.18	100%	87%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Tangail	28	28	32	20				32	14	0	6	2.30	1.92	91%	90%	100%	100%	91%	100%	100%	100%	100%	100%	100%	90%
Total-DHAKA	349	357	494	283	0	3	0	0	494	221	0	59	2.83	2.38	92%	90%	99%	99%	92%	95%	100%	100%	98%	94%	
CTG Division																									
Bandarban	3	3	3	4				3	2	0	2	2.19	2.74	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%
Brahmanbaria	21	21	25	21				25	14	0	7	2.43	2.60	92%	76%	92%	100%	88%	76%	100%	100%	93%	100%	100%	100%
Chandpur	20	21	21	14	1			21	8	0	5	2.06	1.47	95%	93%	95%	100%	86%	86%	100%	100%	95%	100%	100%	100%
Chittagong (non CCC)	38	38	46	20	1			46	12	0	7	2.43	1.21	98%	95%	100%	95%	96%	95%	100%	100%	100%	100%	100%	70%
CCC only	20	21	22	6				22	4	0	2	2.17	0.74	100%	100%	100%	100%	96%	83%	100%	100%	60%			
Comilla	40	41	50	42				50	34	0	8	2.50	3.23	98%	90%	98%	100%	90%	93%	100%	100%	98%	100%	100%	100%
Cox's Bazar	16	16	19	12				19	11	0	1	2.39	2.61	90%	100%	100%	100%	89%	92%	100%	100%	92%	100%	100%	89%
Feni	10	11	26	7				26	5	0	2	4.96	1.81	96%	100%	100%	100%	92%	86%	100%	100%	100%	100%	100%	100%
Khagrachari	5	5	7	5				7	4	0	1	2.75	2.89	86%	100%	100%	100%	86%	100%	100%	100%	100%	100%	100%	0%
Laxmipur	13	13	24	12				24	11	0	1	3.71	3.24	88%	100%	100%	100%	88%	92%	100%	100%	96%	100%	100%	83%
Noakhali	23	23	43	14				43	10	0	4	3.81	1.68	95%	100%	98%	100%	95%	93%	100%	100%	98%	100%	100%	83%
Rangamati	5	5	7	2				7	2	0	0	2.89	1.54	57%	100%	100%	100%	71%	100%	100%	100%	86%	100%	100%	100%
Total-CTG	214	218	293	159	0	2	0	0	293	117	0	40	2.74	2.07	94%	93%	98%	99%	91%	90%	100%	99%	98%	87%	
Sylhet Division																									
Habiganj	15	16	14	13				14	12	0	1	1.83	2.98	100%	92%	100%	100%	86%	100%	100%	100%	86%	100%	100%	100%
Maulvibazar	14	14	15	9				15	9	0	0	2.11	2.39	100%	100%	100%	100%	100%	100%	100%	100%	80%	100%	100%	100%
Sunamganj	18	18	14	12				14	9	0	3	1.60	1.95	100%	83%	100%	92%	93%	67%	92%	93%	100%	93%	100%	100%
Sylhet (non SCC)	19	20	25	22				25	18	0	4	2.57	3.51	100%	95%	100%	100%	88%	91%	100%	100%	96%	100%	100%	94%
SCC only	4	4	3	1				3	1	0	0	1.57	0.92	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total-SYL	70	72	71	57	0	0	0	0	71	49	0	8	2.02	2.63	100%	93%	100%	98%	92%	89%	100%	98%	90%	95%	
Raj Division																									
Bogra	26	27	13	7				13	6	0	1	0.99	0.87	85%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%
Dinajpur	23	24	27	12				27	7	0	5	2.32	1.14	78%	58%	100%	100%	89%	67%	100%	100%	92%	100%	100%	100%
Gaibandha	18	18	20	11				20	11	0	0	2.19	2.30	90%	91%	100%	100%	90%	82%	100%	100%	91%	100%	100%	100%
Joypurhat	7	7	13	4	1			13	3	0	0	3.52	1.55	85%	75%	100%	100%	85%	75%	100%	100%	100%	100%	100%	100%
Kurigram	15	15	16	12				16	11	0	1	2.11	2.76	81%	67%	100%	92%	94%	83%	100%	100%	100%	100%	100%	100%
Lalmirhat	10	10	13	5				13	4	0	1	2.68	1.57	85%	100%	100%	100%	77%	100%	100%	100%	100%	100%	100%	100%
Natore	13	13	13	9				13	8	0	1	2.00	2.34	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Nilphamari	14	14	12	6				12	6	0	0	1.75	1.66	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Noagaon	21	21	31	11				31	6	0	5	3.01	1.11	100%	73%	97%	82%	87%	64%	96%	82%	100%	100%	100%	100%
Nowabganj	13	13	19	11				19	9	0	2	2.99	2.68	90%	91%	100%	100%	84%	91%	100%	100%	100%	100%	100%	100%
Pabna	19	19	25	8				25	7	0	1	2.66	1.42	100%</td											

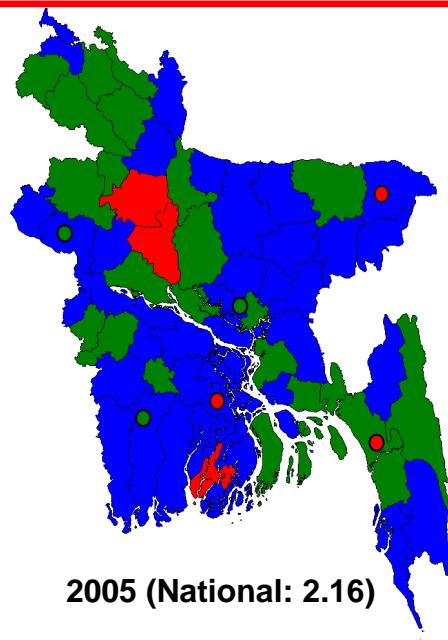
District	Neonatal Tetanus						Measles						AEFI			
	# of case reported by Active Surveillance		# of case reported by Passive Surveillance		# of case Investigated		# of case reported by Active Surveillance		# of case reported by Passive Surveillance		Outbreak*		# of case Investigated)	# of cases	# of case Reported	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	
Dhaka Division																
Dhaka (non DCC)	4	2	4	1	4	1	28	15	62	23	3(100%)	1(100%)	480	191	31	14
DCC only	11	4	15		11		204	80	241	8	20(100%)	1(100%)	2791	247	7	21
Faridpur	2		5		5		5	3	58	18	1(100%)	1(100%)	79	24	80	34
Gazipur	3		3		2		15	18	44	19	1(100%)	1(100%)	79	80	7	1
Gopalganj	7	1	8		7	1	5	31	157	34	3(100%)	1(100%)	144	30	51	13
Jamalpur		2	2		1		4	2	36	6					17	35
Kishoreganj	26	5	28	1	16	3	58	21	153	18	8(100%)	1(100%)	431	94	28	13
Madaripur		1	1			1	16	15	183	66	7(100%)	6(100%)	510	690	61	29
Manikganj	2		1				3	4	46	62	7(100%)	1(100%)	1211	38	40	13
Munshiganj	2		5		2		4	2	291	10	3(100%)		175		18	11
Mymensingh	21	6	12		20	9	41	28	206	18	6(100%)		582		82	22
Narayanganj			1				83	22	84	24	1(100%)		73		31	43
Narsinghdhi	1	1					22	15	46	12	1(100%)		53		10	19
Netrokona	2	2	8	4	8	4	6	2	199	54	8(100%)		986		28	29
Rajbari	1		3		2			3	50	10					8	27
Shariatpur	3	1	5	1	3		6	1	152	21	5(100%)		314		52	17
Sherpur	3	3	8	4	7	3		1	75	12	1(100%)		146		31	13
Tangail	4	2	3		5	1	15	8	27	16					26	19
Total-DHAKA	92	28	112	13	92	24	515	271	2110	431	75(100%)	13(100%)	8054	1394	608	373
CTG Division																
Bandarban							2	1	8	4					19	9
Brahmanbaria	9	3	18	1	11	2	2	4	61	13	3(100%)		269		7	10
Chandpur	4		3		3		7	6	91	16	4(100%)	2(100%)	103	57	44	27
Chittagong (non CCC)	1	1	7		1		17	15	76	17	1(100%)		17		7	6
CCC only	8	1	4	1	7	2	78	42	60	41	2(100%)		161		6	11
Comilla	8	4	6	1	2		9	18	219	62	9(100%)	1(100%)	1045	74	6	9
Cox's Bazar	7	1	8	6	7	1	7	13	24	21	1(100%)	1(100%)	183	42	8	12
Feni	2		4		2		5	1	211	25	5(100%)	1(100%)	412	25	11	12
Khagrachari							2		29	1					2	5
Laxmipur	6	6	10	1	6	6	4	11	78	28	2(100%)	1(100%)	41	31	55	17
Noakhali	7	2	11	1	8	1	27	17	86	18	1(100%)		80		20	3
Rangamati							1	1	53	7					3	2
Total-CTG	52	18	71	11	47	12	161	129	996	253	28(100%)	6(100%)	2311	229	188	123
Sylhet Division																
Habiganj	9	4	12	2	2	1	23		131	27	5(100%)		399		38	15
Maulvibazar	7	2	7	1	1		27	5	174	15	3(100%)		317		16	34
Sunamganj	8	8	12	2	6	4	285	13	354	23	2(100%)		730		28	25
Sylhet (non SCC)	4		4		6		162	24	326	61	4(100%)		204		20	9
SCC only	1		1		2		165	17	182	17					1	1
Total-SYL	29	14	36	5	17	5	662	59	1167	143	14(100%)	0	1650	0	103	84
Raj Division																
Bogra	2	1	6	1	3		7	4	28	13	2(100%)		75		169	37
Dinajpur	7		8		7		3	2	18	15	1(100%)	1(100%)	63	209	59	35
Gaibandha	2		5		8				28	4	1(100%)	7(100%)	61	541	44	41
Joypurhat	1		1		1		4	2	28	18		1(100%)		26	27	15
Kurigram		5		7				1	14	20		1(100%)		52	21	2
Lalmonirhat	1		1	1					21	4					2	8
Natore	4		4		4		16		180	22	7(100%)		703		27	76
Nilphamari	3		1	2	2	2	2		10	4					44	47
Noagoan	4		4		5		3	1	114	2	3(100%)		273		42	21
Nowabganj	6		3		6		6	1	8	1					10	19
Pabna	2		2		2		11		42	13					13	5
Panchagarh	1	1	3	1	2	1	2		75	3					10	6
Rajshahi (non RCC)	4		6		5		5	5	12	12	1(100%)	1(100%)	266	223	14	18
RCC only							14	3	242	172	5(100%)	1(100%)	329	50	47	15
Rangpur	10	4	8	1	9	1	7	1	7		2(100%)		47		31	15
Sirajganj	1	2	2	2	1	1	4		18	1	1(100%)		127		17	12
Thakurgaon							18	3	22		3(100%)		453		7	21
Total-RAJ	48	8	59	7	63	5	102	23	867	304	26(100%)	12(100%)	2397	1101	584	393
Khulna Division																
Bagerhat	4		4		2		8	9	305	54	13(100%)	10(100%)	674	480	24	51
Chuadanga	4	1	6	1	5		1	1	24	6		2(100%)		136	38	19
Jessore	5	2	4		3	3	10	35	44	57		1(100%)		60	62	20
Jhenaidah	2	1	2	1	2		3	4	20	12	2(100%)	1(100%)	99	148	37	11
Khulna (non KCC)	2		4		2		6	2	717	138	14(100%)	2(100%)	918	132	62	31
KCC only	1		1		1		3	5	127	19	14(100%)		1161		11	7
Kushtia	1			1	1		4	3	74	13	2(100%)	1(100%)	176	251	16	16
Magura	1		2	1	1	1	2	2	18	30		1(100%)		50	20	8
Meherpur	2		3		2		3	4	34	2	1(100%)		108		9	4
Narail	10	1	9	1	10	1	1	4	22	3	1(100%)		66		15	11
Satkhira	3	1	3		2	1		1	20	3	2(100%)	1(100%)	176	41	39	37
Total-KHU	35	6	38	5	31	6	41	70	1405	337	49(100%)	19(100%)	3378	1298	333	215
Barisal Division																
Barguna			1					9	4	84	32				5	7
Barisal (non BCC)	4	1	6	2	2		33	20	72	11	1(100%)		48		18	18
BCC only	2		1		2		29	12	21	9					1	2
Bhola	4		8	2	6	1	3	2	72	9	1(100%)		108		29	30
Jhalakhati	3	1	3	1	1	1	24	11	29	10	1(100%)		68		19	14
Patuakhali	3	2	3	1	2	1	41	25	70	37	3(100%)		331		6	12
Pirojpur			3		2		15	2	32	7	5(100%)		665		33	21
Total-BAR	16	4	25	6	15	3	154	76	380	115	11(100%)	0	1220	0	111	104
National	272	78	341	47	265	55	1,635	628	6,925	1,583	203(100%)	50(100%)	19,010	4,022	1,927	1,292

Data as of Epidemiologic Week 27, July 8, 2006. * Only lab confirmed measles and mixed outbreaks

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



2005 (National: 2.66)

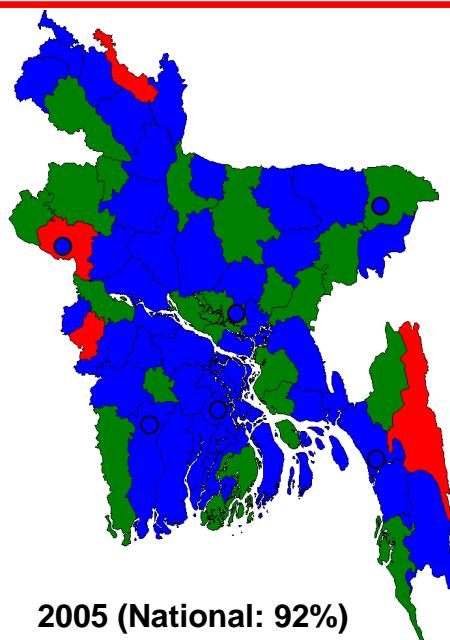


2005 (National: 2.16)

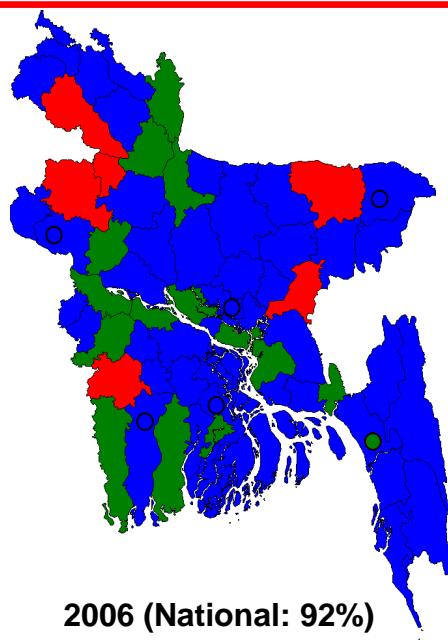
*Data as of Epidemiologic Week 27, July 8, 2006



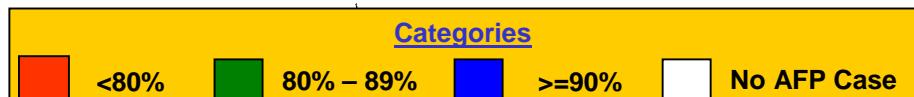
Percentage of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2005-2006*



2005 (National: 92%)



2006 (National: 92%)



*Data as of Epidemiologic Week 27, July 8, 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