Road to Future: EPI Management and Micro-planning

The year 2004 is coming to its' end. EPI is actively reviewing its' achievements and limitations of the past year in order to reach the RED strategy goals of bringing at least 90% of the children under full immunization coverage in all the upazilas by the end of the year 2005. EPI has made remarkable success in recent past. Bangladesh has been able to remain polio free for more than 4 years. BCG and DPT1 coverage have reached the high 95% levels indicating the high level of accessibility to the program.

Yet there are areas that need further attention. Approximately, 25% to 30% of children do not complete their whole immunization schedule. The actual immunization coverage of the children varies from place to place and there exists of pockets with unusually low coverage. These keep the risk of morbidity and mortality from these vaccine preventable diseases at very high level. In order to further strengthen routine immunization coverage, and thus reduce mortality and disease burden from these diseases, EPI is launching a series of activities that will end up with a rational and appropriate EPI management and Micro-plan for the year 2005 from union to national level.

Important aspects of the annual micro-plan for 2005 will be as follows:

- To ensure that all planned immunization sessions are held, plan for rescheduling of session plans or rearrangements of out reach sites, if needed;
- To organize regular session supervision with on the job training of the vaccinators and other staff according to annual supervision plan;
- To ensure uninterrupted vaccine and logistics supply with proper storage;
- To address the need of appropriate distribution of human and other resources;

- To address the adverse events following immunization (AEFI) and side effects appropriately in order to reduce dropout and left out rates;
- To implement appropriate waste and sharp disposal;
- To ensure community participation and to encourage community empowerment for successful implementation of routine immunization program and
- To constantly monitor the program implementation based on local level data analysis and fine-tune the activities as per need.

EPI has edited the existing micro-plan forms based on the feed back from the field in order to prepare a coordinated and total micro-plan for the next year for all levels. These forms are the tools to implement the coverage implementation plan and will help the managers to develop the annual plan. EPI recommends the managers to follow the steps listed below to complete the annual plan:

1. **Work plan:** Identifying weakness of the program based on quantitative and qualitative analysis and up to date work plan accordingly.
2. **Mapping**: union/ward/zone level maps for upazilas/ municipalities/CCs indicating locations of EPI centers, important landmarks, population, high-risk and hard-to-reach population;
3. **Annual Session Plan:** Generally 8 sessions per a rural ward per month; plans in urban areas and high-risk/hard-to-reach areas as per need;
4. **Supervision plan:** By both 1st and 2nd line supervisors;
5. **Vaccine and Logistic supply plan:** According to estimated target population; appropriate vaccine distribution points to be selected to minimize time needed for transportation;

Appropriate micro planning is necessary for attaining high performance in EPI planned for the next year. This is indeed the road to future for the betterment of the children of this country.

Surveillance Summary for 1998-2004 (through Epidemiologic Week 46, November 7 - 13, 2004)

	1998	1999	2000	2001	2002	2003	2004[1]
Number of AFP cases	475	761	1138	1287	1365	1128	1085
No. of clinically confirmed polio cases	298	322	197	NA	NA	NA	NA
No. of compatible cases according to virologic classification system	NA	NA	NA	36	0	0	1
No. of cases with isolation of wild poliovirus	10	29	1	0	0	0	0
No. of discarded polio cases (i.e., non-polio AFP)	165	439	941	1251	1365	1128	1012
No. of cases pending classification	0	0	0	0	0	0	72
Expected annual number of non-polio AFP cases (1/100,000 children <15 yr)	495	505	515	533	549	556	563

AFP Surveillance Performance Indicators:

Indicator	Target	1998	1999	2000	2001	2002	2003	2004
1. Annual Non-Polio AFP rate in children < 15 years old	≥ 1/100,000	0.33	0.87	1.82	2.34	2.49	2.03	2.23[2]
2. Completeness of passive reporting from facilities	≥ 90%	34%	66%	83%	65%	62%	67%	81%
3. Timeliness of passive reporting from facilities	≥ 80%	15%	30%	58%	38%	36%	62%	74%
4. Suspected AFP cases investigated within 48 hours of notification	≥ 80%	89%	83%	93%	96%	96%	98%	98%
5. Confirmed AFP cases with 2 stool specimens collected ≤ 14 days after paralysis onset	≥ 80%	59%	49%	68%	80%	89%	90%	92%
6. Stool specimens arriving at laboratory ≤ 3 days after collection	≥ 80%	88%	81%	92%	97%	98%	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%	92%	97%	100%	100%	99%	100%	100%
8. Confirmed AFP cases receiving a follow-up exam at least 60 days after paralysis onset	≥ 80%	80%	97%	95%	93%	99%	100%	97%[3]
9. Stool specimens with laboratory results ≤ 28 days after specimen receipt	≥ 80%	16%	58%	94%	99%	100%	100%	100%[4]
10. Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	5%	13%	21%	29%	28%	23%	21%

[1] Data as of November 13, 2004; [2] NPAFP rate annualized for cases according to September 11, 2004; [3] among cases occurring up to August 14, 2004; [4] as of October 18, 2004

AFP Surveillance Performance Indicators -- 2004

District	# Expected 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[2] (/1,00,000)	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[3]
Dhaka Division												
DCC only	36	40			36	4	1.29	90%	100%	85%	100%	88%
Dhaka (non DCC)	14	31			30	1	2.61	90%	100%	94%	100%	96%
Faridpur	8	30			29	1	4.74	87%	100%	93%	100%	96%
Gazipur	9	12			12	0	1.56	92%	100%	100%	100%	100%
Gopalganj	5	19			18	1	4.50	95%	100%	95%	100%	100%
Jamalpur	9	11			11	0	1.56	100%	100%	100%	100%	100%
Kishoreganj	11	30			28	2	3.19	97%	97%	93%	100%	100%
Madaripur	5	15			15	0	3.94	100%	100%	100%	100%	100%
Manikganj	6	12			10	2	2.34	83%	100%	83%	100%	100%
Munshiganj	6	20			16	4	3.28	90%	100%	90%	100%	91%
Mymensingh	20	25			25	0	1.69	80%	96%	84%	96%	100%
Narayanganj	9	15			15	0	2.34	93%	100%	93%	100%	100%
Narsingdhi	8	12			12	0	2.11	83%	100%	83%	100%	100%
Netrokona	9	16			14	2	1.72	88%	100%	88%	94%	91%
Rajbari	4	14			14	0	4.92	100%	100%	100%	100%	100%
Shariatpur	5	21			21	0	5.06	91%	100%	86%	100%	100%
Sherpur	6	13			13	0	2.58	92%	100%	100%	100%	100%
Tangail	14	27			25	2	2.11	93%	100%	89%	100%	100%
Total-DHAKA	*184*	*363*	*0*	*0*	*344*	*19*	*2.38*	*91%*	*99%*	*91%*	*99%*	*97%*
CTG Division												
CCC only	12	9			9	0	1.05	100%	100%	100%	100%	100%
Chittagong (non CCC)	20	33			29	4	1.83	97%	100%	94%	100%	96%
Bandarban	1	2			2	0	2.81	50%	100%	50%	100%	100%
Brahmanbaria	11	20			19	1	2.43	95%	95%	100%	90%	100%
Chandpur	10	17			13	4	1.26	94%	100%	82%	100%	100%
Comilla	20	38			35	3	1.97	97%	100%	97%	97%	92%
Cox's Bazar	8	16			14	2	1.76	88%	100%	94%	100%	100%
Feni	5	13			12	1	3.09	77%	100%	85%	100%	100%
Khagrachari	2	5			5	0	3.51	100%	100%	100%	100%	100%
Laxmipur	7	24			23	1	4.22	92%	92%	92%	100%	100%
Noakhali	11	26			22	4	2.43	92%	100%	81%	100%	100%
Rangamati	2	10			10	0	7.03	80%	90%	90%	100%	100%
Total-CTG	*109*	*213*	*0*	*0*	*193*	*20*	*2.18*	*93%*	*98%*	*92%*	*99%*	*98%*
Sylhet Division												
SCC	1	1			1	0	1.41	100%	100%	100%	100%	100%
Sylhet (non SCC)	10	15			13	2	1.55	80%	100%	87%	100%	100%
Habiganj	8	10			10	0	1.58	80%	100%	90%	100%	100%
Maulvibazar	7	12			12	0	2.01	92%	92%	75%	100%	100%
Sunamganj	9	18			18	0	2.34	100%	100%	100%	100%	86%
Total-SYL	*35*	*56*	*0*	*0*	*54*	*2*	*1.85*	*89%*	*98%*	*89%*	*100%*	*96%*
Raj Division												
RCC only	2	1			1	0	0.70	100%	100%	100%	100%	100%
Rajshahi (non RCC)	8	8			7	1	1.05	88%	100%	88%	100%	100%
Bogra	13	15			15	0	1.08	87%	100%	100%	100%	100%
Dinajpur	12	18			16	2	1.29	89%	100%	94%	100%	100%
Gaibandha	9	18			15	3	2.34	89%	100%	100%	100%	100%
Joypurhat	4	12			10	2	3.16	100%	100%	100%	100%	100%
Kurigram	8	11			11	0	1.58	64%	91%	82%	100%	100%
Lalmonirhat	5	13			11	2	3.09	85%	100%	92%	100%	100%
Natore	7	8			6	2	1.00	75%	88%	63%	100%	83%
Nilphamari	7	18			14	4	2.01	89%	100%	100%	100%	100%
Noagoan	11	15			14	1	1.41	100%	100%	100%	100%	100%
Nowabganj	6	8			7	1	1.41	75%	100%	75%	100%	100%
Pabna	10	20			20	0	2.53	100%	100%	90%	100%	100%
Panchagarh	4	10			10	0	3.16	100%	100%	100%	100%	100%
Rangpur	11	21			20	1	1.92	100%	95%	100%	100%	100%
Sirajganj	12	20			18	2	1.52	79%	95%	80%	95%	90%
Thakurgaon	5	11			10	1	2.81	100%	100%	100%	100%	100%
Total-RAJ	*134*	*227*	*0*	*0*	*205*	*22*	*1.77*	*90%*	*98%*	*93%*	*100%*	*99%*
Khulna Division												
KCC only	4	7			6	1	1.76	100%	100%	100%	100%	80%
Khulna (non KCC)	7	12			12	0	2.41	92%	92%	100%	100%	75%
Bagerhat	7	10			10	0	2.01	90%	100%	100%	100%	100%
Chuadanga	4	7			7	0	2.46	100%	100%	100%	100%	100%
Jessore	11	23			23	0	2.81	87%	96%	87%	100%	95%
Jhenaidah	7	12			12	0	2.41	92%	100%	83%	100%	100%
Kushtia	7	20			19	1	3.61	90%	100%	90%	100%	100%
Magura	4	6			6	0	2.11	83%	100%	83%	100%	100%
Meherpur	3	5			5	0	2.34	100%	100%	100%	100%	100%
Narail	3	9		1	7	1	2.34	78%	100%	78%	100%	100%
Satkhira	8	16			15	1	2.28	100%	94%	94%	100%	100%
Total-KHU	*65*	*127*	*0*	*1*	*122*	*4*	*2.49*	*91%*	*98%*	*91%*	*100%*	*96%*
Barisal Division												
BCC	1	4			4	0	5.62	100%	100%	100%	100%	75%
Barisal (non BCC)	10	21			21	0	2.95	86%	100%	81%	100%	100%
Barguna	4	7			6	1	1.76	100%	100%	100%	100%	100%
Bhola	7	16			15	1	2.21	88%	88%	88%	100%	100%
Jhalakhati	3	15			15	0	6.56	93%	87%	87%	100%	100%
Patuakhali	6	18			16	2	3.28	94%	100%	94%	100%	83%
Pirojpur	5	18			17	1	3.94	100%	100%	100%	100%	100%
Total_BAR	*36*	*99*	*0*	*0*	*94*	*5*	*3.24*	*93%*	*96%*	*91%*	*100%*	*96%*
National	*563*	*1085*	*0*	*1*	*1012*	*72*	*2.23*	*91%*	*98%*	*92%*	*99%*	*97%*

[1]Data as of Epidemiologic Week 46, November 13, 2004; [2] Non-Polio AFP rate is annualized for cases occurring up to September 11, 2004; [3] for cases occurring up to August 14, 2004

Disease Surveillance - 2004

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
						Number of Outbreak (% Investigated)	# of cases	
Dhaka Division								
DCC only	12	8	12	94	90	3 (100%)	228	31
Dhaka (non DCC)	7	8	2	8	36	1 (100%	328	18
Faridpur	11	7	11	10	52	1 (100%)	27	14
Gazipur	4	1	1	6	16			8
Gopalganj	7	12	11	8	14			18
Jamalpur	4	4	4	15	19	1 (100%)	71	20
Kishoreganj	13	21	11	38	222	4 (100%)	230	38
Madaripur	5	7	6	1	9			3
Manikganj	3	1	2	6	2	2 (100%)	404	7
Munshiganj	1	1	1	1	15			18
Mymensingh	18	10	10	31	94	3 (100%)	103	23
Narayanganj	5	5	4	15	17	1 (100%)	51	14
Narsingdhi	3	2	1	8	9			3
Netrokona	1	7	2	4	101	1 (100%)	137	30
Rajbari		1		1	39			2
Shariatpur	1	1	1	3	13			32
Sherpur	8	3	7	2	19	1 (100%)	51	21
Tangail	11	9	7	16	39			18
Total-DHAKA	**114**	**108**	**93**	**267**	**806**	**18 (100%)**	**1630**	**318**
CTG Division								
CCC only	8	9	5	36	39	1 (100%)	15	6
Chittagong (non CCC)	3	3	1	9	35	1 (100%)	10	8
Bandarban				11	3	1 (100%)	11	3
Brahmanbaria	20	23	19	4	18	1 (100%)	11	6
Chandpur	1	1	2	11	57	10 (100%)	154	29
Comilla	4	4	5	5	76	3 (100%)	254	5
Cox's Bazar	8	9	6	32	25			8
Feni	2	2	2		27			13
Khagrachari	1		1	3	5			6
Laxmipur	8	7	8	3	7	1 (100%)	32	29
Noakhali		1		3	29			5
Rangamati				4	16			
Total-CTG	**55**	**59**	**49**	**121**	**337**	**18 (100%)**	**487**	**118**
Sylhet Division								
SCC	4	2	1	71	55			2
Sylhet (non SCC)	8	6	5	97	300	4 (100%)	388	37
Habiganj	9	10	5	28	91	1 (100%)	67	35
Maulvibazar	10	11	2	14	74			19
Sunamganj	15	13	6	149	154	3 (100%)	182	14
Total-SYL	**46**	**42**	**19**	**359**	**674**	**8 (100%)**	**637**	**107**
Raj Division								
RCC only		1		2	3			3
Rajshahi (non RCC)	1	2		14	21	1 (100%)	34	3
Bogra	4	4	3	13	24	1 (100%)	74	28
Dinajpur	3	4	4	5	36	7 (100%)	537	26
Gaibandha	1	9	5	3	24	8 (100%)	272	55
Joypurhat				12	74	2 (100%)	27	10
Kurigram				3	1			19
Lalmonirhat		1	1		28			
Natore	4	6	3	7	10			5
Nilphamari	2	1	1	9	29	1 (100%)	13	16
Noagaon	4	5	4	7	34	2 (100%)	35	15
Nowabganj	3	2	1	7	30			7
Pabna	3	6	2	18	69			27
Panchagarh	2	2		2	41			1
Rangpur	7	7	5	16	11	3 (100%)	172	39
Sirajganj	1	1		11	39	1 (100%)	172	26
Thakurgaon		1		7	16			10
Total-RAJ	**35**	**52**	**29**	**136**	**490**	**26 (100%)**	**1336**	**290**
Khulna Division								
KCC only	1		1	4	11			3
Khulna (non KCC)				2	70	1 (100%)	20	39
Bagerhat	4		4	3	19			4
Chuadanga	1	2	2	2	11	1 (100%)	89	18
Jessore	9	10	4	5	53			24
Jhenaidah	7	8	4	6	17			12
Kushtia	4	3	4	2	5			10
Magura	2	5		9	55	2 (100%)	132	23
Meherpur			1	4	3			4
Narail	5	7	5	12	13			18
Satkhira	3	3	3		5			12
Total-KHU	**36**	**38**	**28**	**49**	**262**	**4 (100%)**	**241**	**167**
Barisal Division								
BCC								
Barisal (non BCC)	4	9		9	37			1
Barguna	1	2		15	85	2 (100%)	48	6
Bhola	3	11	3		8	1 (100%)	60	51
Jhalakhati	2	2	2	3	5			1
Patuakhali	2	3	2	7	69			5
Pirojpur	3	2	3	4	25			21
Total_BAR	**15**	**29**	**10**	**38**	**229**	**3 (100%)**	**108**	**85**
National	**301**	**328**	**228**	**970**	**2798**	**77 (100%)**	**4439**	**1085**

Data as of Epidemiologic Week 46, November 13, 2004

Annualized Non-Polio AFP Rate, by District, Bangladesh 2002-2004*

2002 (National: 2.49)
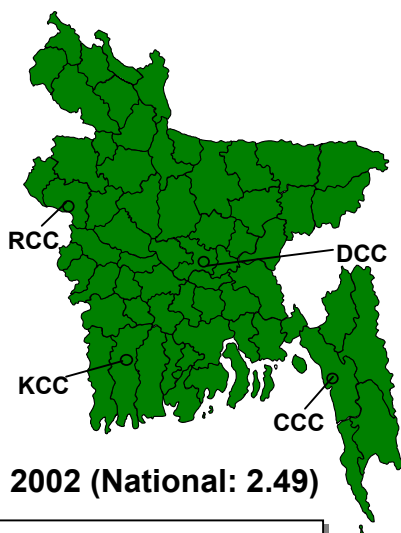
64 of 64 Districts (100%)
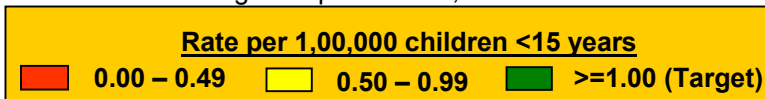+ 4 CC reached target.

2003 (National: 2.03)
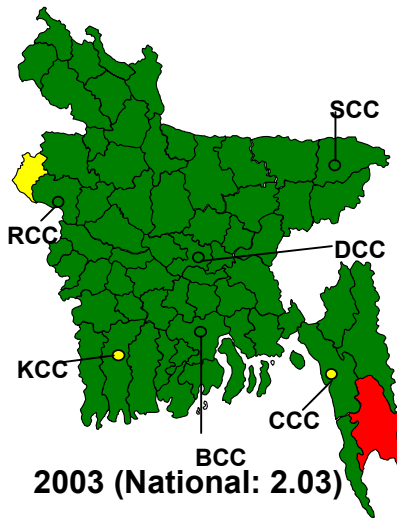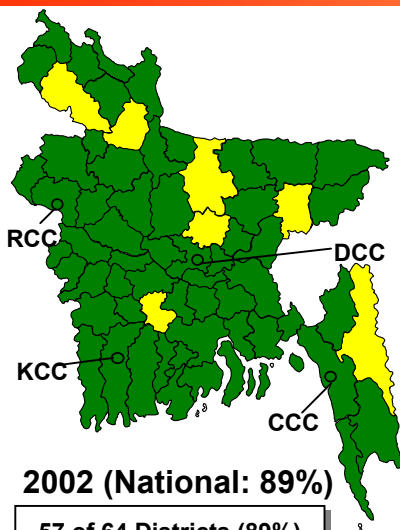
62 of 64 Districts (97%)
+ 4 CCs reached target.

2004 (National: 2.23)
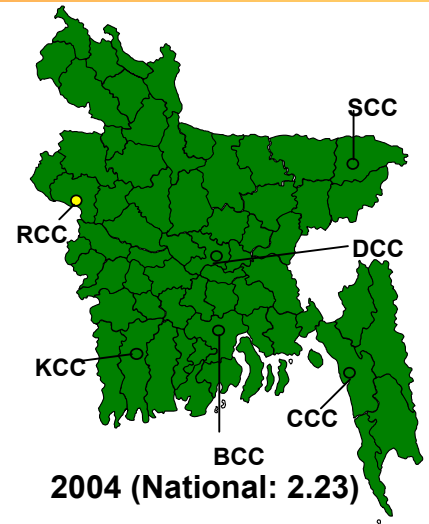
64 of 64 Districts (100%)
+ 5 CCs reached target.

*NPAFP rate annualized for cases according to September 11, 2004

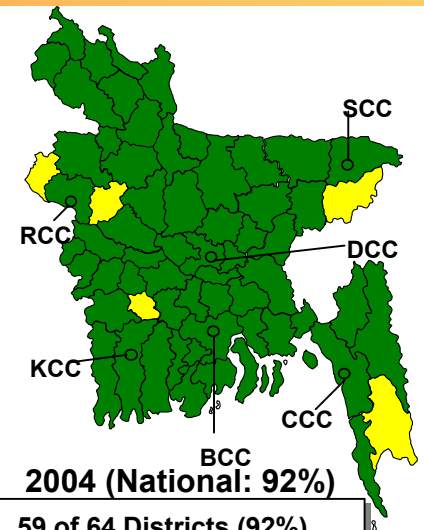**Rate per 1,00,000 children <15 years**

| 0.00 – 0.49 | 0.50 – 0.99 | >=1.00 (Target) |

Percent of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2002-2004*

2002 (National: 89%)

57 of 64 Districts (89%)
+ 4 CC reached target.

2003 (National: 90%)
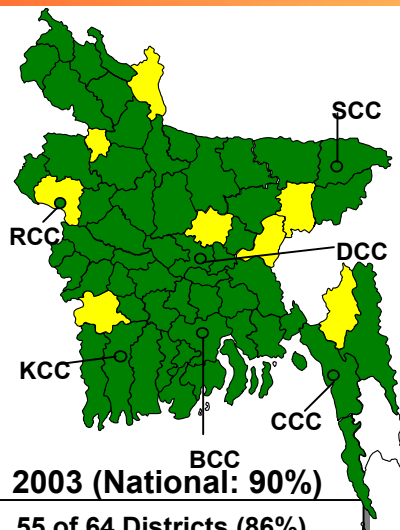
55 of 64 Districts (86%)
+ 6 CCs reached target.

2004 (National: 92%)

59 of 64 Districts (92%)
+ 6 CCs reached target.

*Data as of Epidemiologic Week 46, November 13, 2004

Categories

| 0% – 49% | 50% – 79% | >=80% (Target) | No AFP Case |