International AFP Surveillance Review Recognizes Achievements in Polio Eradication

A high level international team of polio experts from WHO HQ in Geneva, WHO SEARO, UNICEF, CDC Atlanta, USAID, JICA and EPI experts from India, Indonesia and Srilanka along with national counterparts completed review of AFP Surveillance in Bangladesh from 10-20 April 2004. During this period 15 different teams visited upazilas and municipalities of 47 districts as well as all 6 city corporations and National Polio and Measles Laboratory. The team also reviewed the national level activities of EPI HQ, National Certification Committee on Polio Eradication, National Expert Review Committee and of the National Task Force on Lab Containment.

At the end of the review on 20 April 2004 a debriefing session on the review findings and recommendations was organized at a local hotel under the chairmanship of the Director General of Health Services Prof. Dr. Md. Mizanur Rahman. Honorable State Minister, MOH FW Mr. Mizanur Rahman Sinha MP was present as the chief guest.

Dr. Roland Sutter, team leader of the International AFP Surveillance Review presented the keynote paper on findings and recommendations of the review. He expressed the teams overall satisfaction about the structure, functioning and culture of AFP and EPI disease surveillance system in Bangladesh.

The review team noted that Bangladesh has not detected indigenous or imported wild polioviruses since August 2000. They felt that the AFP surveillance system is sufficiently sensitive and expected it to detect any poliovirus transmission, including importations of wild poliovirus or the emergence of VDPVs. Therefore given the period of time since the last detection of indigenous wild poliovirus and the performance of the AFP system, the review team believes that it is highly unlikely that wild poliovirus is currently circulating in Bangladesh.

However, Dr. Sutter expressed his caution and said that given the continued wild circulation of wild poliovirus in India, the program cannot be complacent. Strengthening of the AFP surveillance system is needed to further increase confidence to detect: 1) imported wild poliovirus, 2) vaccine-derived polioviruses (VDPVs), 3) and provide a solid foundation for certification of polio-free status. Government ownership through active involvement such as funding, participation in case investigations, conducting training and orientation for EPI activities should be enhanced further at all levels.

Mr. Mizanur Rahman Sinha, Honorable State Minister, MOHFW, expressed his thanks to the members of the review team for pointing out the strengths and weaknesses of the surveillance system in Bangladesh. He said that the Government of Bangladesh is fully committed to protect the polio free status of the country and will do everything necessary to further strengthen AFP and EPI Disease Surveillance.

Shishu Shishu Proti Shishu Khuje Fero Proti Shishu!

Surveillance Summary for 1998-2004 (through Epidemiologic Week 17, April 18 - 24, 2004)

	1998	1999	2000	2001	2002	2003	2004[1]
Number of AFP cases	475	761	1138	1287	1365	1128	283
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	0
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	191
No. of cases pending classification	0	0	0	0	0	0	92
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	1.33[2]
2. Completeness of active reporting from hospitals	≥ 90%	46%	73%	95%	100%	100%	100%	100%
3. Timeliness of active reporting from hospitals	≥ 80%	15%	44%	72%	88%	100%	99%	100%
4. Suspected AFP cases investigated within 48 hours of notification	≥ 80%	89%	83%	93%	96%	96%	98%	96%
5. Confirmed AFP cases with 2 stool specimens collected ≤ 14 days after paralysis onset	≥ 80%	59%	49%	68%	80%	89%	90%	93%
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%	67%[3]
9. Stool specimens with laboratory results ≤ 28 days after specimen receipt	≥ 80%	16%	58%	94%	99%	100%	100%	96%[4]
10. Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	5%	13%	21%	29%	28%	23%	19%

[1] Data as of Apr 24, 2004; [2] NPAFP rate annualized for cases according to Feb 21, 2004; [3] among cases with inadequate stools occurring up to Jan 24, 2004; [4] as of Mar 27, 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]	# eligible for 60-day follow-up[3]	% with 60-day follow-up[3]
Dhaka Division													
DCC only	36	11			8	3	0.90	91%	100%	91%	100%	0	NA
Dhaka (non DCC)	14	10			5	5	1.39	80%	100%	90%	100%	0	NA
Faridpur	8	4			4	0	2.44	100%	100%	100%	100%	0	NA
Gazipur	9	6			4	2	2.17	100%	100%	83%	100%	0	NA
Gopalganj	5	3			3	0	2.60	100%	100%	100%	100%	0	NA
Jamalpur	9	3			3	0	2.17	100%	100%	100%	100%	0	NA
Kishoreganj	11	9			8	1	2.36	100%	100%	100%	100%	0	NA
Madaripur	5	7			4	3	2.60	100%	100%	100%	100%	0	NA
Manikganj	6	3			1	2	1.08	67%	100%	67%	100%	0	NA
Munshiganj	6	2			2	0	1.08	100%	100%	100%	100%	0	NA
Mymensingh	20	11			9	2	0.98	82%	91%	82%	100%	0	NA
Narayanganj	9	6			6	0	2.89	100%	100%	100%	100%	0	NA
Narsingdhi	8	5			2	3	0.81	80%	100%	80%	100%	1	0%
Netrokona	9	1			0	1	0.00	100%	100%	100%	100%	0	NA
Rajbari	4	3			3	0	3.25	100%	100%	100%	100%	0	NA
Shariatpur	5	6			5	1	3.90	100%	100%	83%	100%	0	NA
Sherpur	6	0			0	0	0.00	NA	NA	NA	NA	NA	NA
Tangail	14	9			4	5	1.39	100%	100%	100%	100%	0	NA
Total-DHAKA	*184*	*99*	*0*	*0*	*71*	*28*	*1.52*	*93%*	*99%*	*92%*	*100%*	*1*	*NA*
CTG Division													
CCC only	12	2			2	0	0.54	100%	100%	100%	100%	0	NA
Chittagong (non CCC)	20	9			7	2	0.65	100%	100%	100%	100%	0	NA
Bandarban	1	1			1	0	6.50	100%	100%	100%	100%	0	NA
Brahmanbaria	11	7			4	3	0.59	100%	100%	100%	86%	0	NA
Chandpur	10	3			1	2	0.00	100%	100%	100%	100%	0	NA
Comilla	20	9			4	5	0.65	100%	100%	100%	100%	0	NA
Cox's Bazar	8	3			2	1	0.00	67%	100%	100%	100%	0	NA
Feni	5	3			1	2	0.00	100%	100%	100%	100%	0	NA
Khagrachari	2	2			1	1	3.25	100%	100%	100%	50%	0	NA
Laxmipur	7	8			7	1	6.50	75%	75%	88%	100%	1	100%
Noakhali	11	8			5	3	1.77	75%	100%	75%	100%	1	100%
Rangamati	2	3			2	1	3.25	67%	67%	100%	100%	0	NA
Total-CTG	*109*	*58*	*0*	*0*	*37*	*21*	*1.13*	*90%*	*95%*	*95%*	*97%*	*2*	*100%*
Sylhet Division													
SCC	1	0			0	0	0.00	NA	NA	NA	NA	NA	NA
Sylhet (non SCC)	10	6			6	0	1.95	83%	100%	100%	100%	0	NA
Habiganj	8	3			2	1	0.81	100%	100%	100%	100%	0	NA
Maulvibazar	7	3			1	2	0.93	67%	67%	33%	100%	0	NA
Sunamganj	9	10			6	4	3.61	90%	100%	90%	100%	0	NA
Total-SYL	*35*	*22*	*0*	*0*	*15*	*7*	*1.86*	*86%*	*96%*	*86%*	*100%*	*0*	*NA*
Raj Division													
RCC only	2	0			0	0	0.00	NA	NA	NA	NA	NA	NA
Rajshahi (non RCC)	8	2			1	1	0.00	100%	100%	100%	100%	0	NA
Bogra	13	6			5	1	1.50	83%	100%	100%	100%	0	NA
Dinajpur	12	3			3	0	1.63	67%	100%	67%	100%	1	100%
Gaibandha	9	9			8	1	4.33	78%	100%	100%	100%	0	NA
Joypurhat	4	5			3	2	4.88	100%	100%	100%	100%	0	NA
Kurigram	8	2			0	2	0.00	0%	100%	50%	100%	0	NA
Lalmonirhat	5	5			4	1	2.60	100%	10%	100%	100%	0	NA
Natore	7	1			0	1	0.00	100%	100%	100%	100%	0	NA
Nilphamari	7	3			3	0	2.79	100%	100%	100%	100%	0	NA
Noagoan	11	1			1	0	0.59	10%	100%	100%	100%	0	NA
Nowabganj	6	0			0	0	0.00	NA	NA	NA	NA	NA	NA
Pabna	10	5			3	2	1.30	100%	100%	100%	100%	0	NA
Panchagarh	4	2			2	0	1.63	100%	100%	100%	100%	0	NA
Rangpur	11	2			2	0	0.59	100%	100%	100%	100%	0	NA
Sirajganj	12	4			3	1	1.08	67%	67%	75%	100%	0	NA
Thakurgaon	5	5			1	4	0.00	100%	100%	100%	100%	0	NA
Total-RAJ	*134*	*55*	*0*	*0*	*39*	*16*	*1.31*	*87%*	*98%*	*95%*	*100%*	*1*	*100%*
Khulna Division													
KCC only	4	2			2	0	3.25	100%	100%	100%	100%	0	NA
Khulna (non KCC)	7	5			3	2	1.86	100%	80%	100%	100%	0	NA
Bagerhat	7	5			4	1	1.86	80%	100%	100%	100%	0	NA
Chuadanga	4	2			2	0	1.63	100%	100%	100%	100%	0	NA
Jessore	11	1			0	1	0.00	100%	100%	100%	100%	0	NA
Jhenaidah	7	1			1	0	0.00	100%	100%	100%	100%	0	NA
Kushtia	7	5			3	2	0.93	80%	100%	80%	100%	0	NA
Magura	4	1			0	1	0.00	100%	0%	100%	100%	0	NA
Meherpur	3	1			0	1	0.00	100%	100%	100%	100%	0	NA
Narail	3	1			0	1	0.00	0%	0%	0%	100%	0	NA
Satkhira	8	3			2	1	1.63	100%	100%	100%	100%	0	NA
Total-KHU	*65*	*27*	*0*	*0*	*17*	*10*	*1.00*	*92%*	*92%*	*93%*	*100%*	*0*	*NA*
Barisal Division													
BCC	1	4			2	2	13.00	100%	100%	100%	100%	0	NA
Barisal (non BCC)	10	4			4	0	1.30	100%	100%	100%	100%	0	NA
Barguna	4	2			1	1	1.63	100%	100%	100%	100%	0	NA
Bhola	7	4			1	3	0.00	75%	75%	75%	100%	1	100%
Jhalakhati	3	4			3	1	2.17	100%	75%	100%	100%	0	NA
Patuakhali	6	3			1	2	0.00	50%	100%	67%	100%	1	0%
Pirojpur	5	1			0	1	0.00	100%	100%	100%	100%	0	NA
Total_BAR	*36*	*22*	*0*	*0*	*12*	*10*	*1.08*	*91%*	*91%*	*91%*	*100%*	*2*	*50%*
National	***563***	***283***	***0***	***0***	***191***	***92***	***1.33***	***90%***	***96%***	***93%***	***99%***	***6***	***67%***

[1]Data as of Epidemiologic Week 17, Apr 24, 2004; [2] Non-Polio AFP rate is annualized for cases occurring up to Feb 21, 2004; [3] among cases with inadequate stools occurring up to Jan 24, 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	8	3	7	43	16	2 (100%)	185	
Dhaka (non DCC)	3	4		5	6			3
Faridpur	1			6	15	1 (100%)	54	
Gazipur	1			2	3			
Gopalganj	2	2	3	1	2			2
Jamalpur		1	1	7	2			3
Kishoreganj	3	2	3	11	39	1 (100%)	34	
Madaripur					2			
Manikganj	1	1		5		1 (100%)	404	
Munshiganj		1						2
Mymensingh	5	2	4	13	23	1 (100%)	45	
Narayanganj	2	1	2	2				1
Narsingdhi				1				
Netrokona					6			1
Rajbari					1			
Shariatpur				2				5
Sherpur	1		1	1				
Tangail	4	2	3	6	11			2
Total-DHAKA	**31**	**19**	**24**	**105**	**126**	**6 (100%)**	**722**	**19**
CTG Division								
CCC only	2	2		24	18	1 (100%)	15	1
Chittagong (non CCC)	2	2		5	15			2
Bandarban				5		1 (100%)	11	
Brahmanbaria	7	7	6	2	12	1 (100%)	11	2
Chandpur				3	2	2 (100%)	33	8
Comilla		1			6			
Cox's Bazar	2	3	1	20	9			
Feni	1	1	1		4			4
Khagrachari					1			
Laxmipur	2	1	1	2	2			1
Noakhali				1	13			
Rangamati								
Total-CTG	**16**	**17**	**9**	**62**	**82**	**5 (100%)**	**70**	**18**
Sylhet Division								
SCC	1		1	31	25			
Sylhet (non SCC)	3		3	33	71	2 (100%)	74	4
Habiganj	3	2	2	2	6			7
Maulvibazar	4	3	1	2	6			
Sunamganj	1	1		6	3			
Total-SYL	**12**	**6**	**7**	**74**	**111**	**2 (100%)**	**74**	**11**
Raj Division								
RCC only				1	1			
Rajshahi (non RCC)	1			4	9	1 (100%)	34	
Bogra				1				
Dinajpur		2	1	2	7			1
Gaibandha	1	5	5	1	2			
Joypurhat				6	42	2 (100%)	27	
Kurigram				3	1			
Lalmonirhat			1		3			
Natore	1	2		1	1			
Nilphamari					14	1 (100%)	13	
Noagoan	1	2	2	1	8	1 (100%)	13	
Nowabganj				3	5			
Pabna	2	3		8	22			10
Panchagarh					11			
Rangpur	3	2	2	9	2			1
Sirajganj				6	5			
Thakurgaon				3	3			
Total-RAJ	**9**	**16**	**11**	**49**	**136**	**5 (100%)**	**87**	**12**
Khulna Division								
KCC only				2	4			2
Khulna (non KCC)				3	2			6
Bagerhat				1				
Chuadanga				1	1			1
Jessore	2	2	2	1	12			5
Jhenaidah	1			2	7			3
Kushtia	1	1	2	2	3			
Magura		1		6	19	1 (100%)	36	2
Meherpur			1	3	1			
Narail	1	1	1	6	4			2
Satkhira	2		1					7
Total-KHU	**7**	**5**	**7**	**27**	**53**	**1 (100%)**	**36**	**28**
Barisal Division								
BCC								
Barisal (non BCC)				5	4			
Barguna				6	9	2 (100%)	48	
Bhola	1	1			1			1
Jhalakhati	1			1	3			
Patuakhali	1			2	30			
Pirojpur					1			1
Total_BAR	**3**	**1**	**0**	**14**	**48**	**2 (100%)**	**48**	**2**
National	**78**	**64**	**58**	**331**	**556**	**21 (100%)**	**1037**	**90**

Data as of Epidemiologic Week 17, April 24, 2004

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

2002 (National: 2.49)
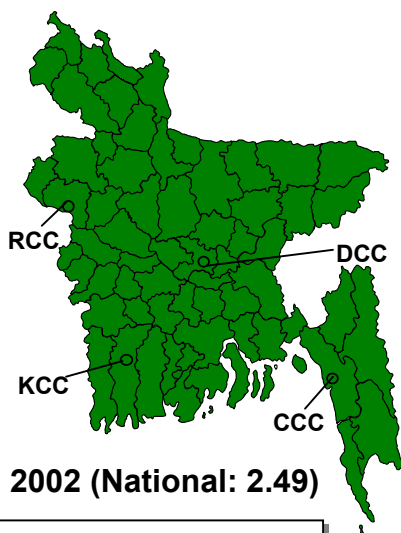
64 of 64 Districts (100%)
+ 4 CC reached target.
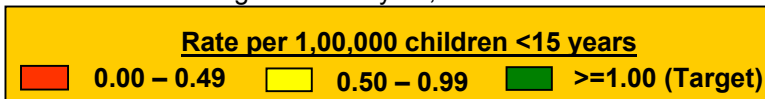
2003 (National: 2.03)
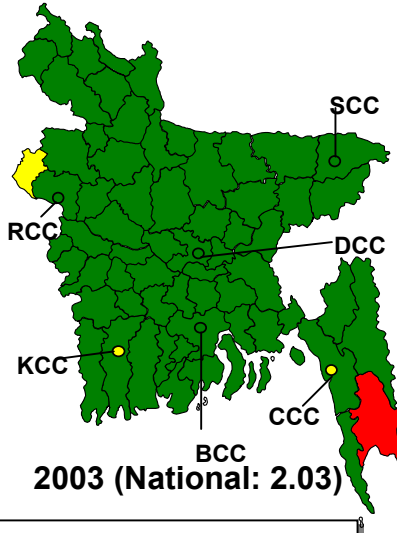
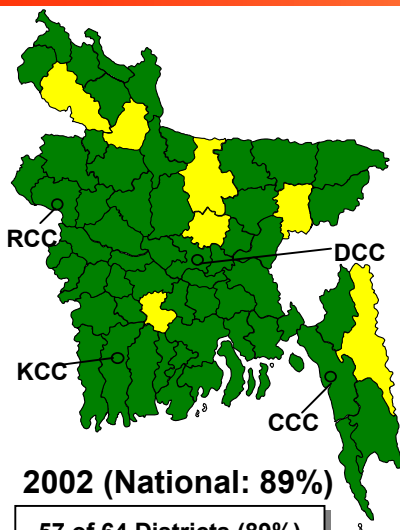62 of 64 Districts (97%)
+ 4 of 6 CCs reached target.

2004 (National: 1.33)
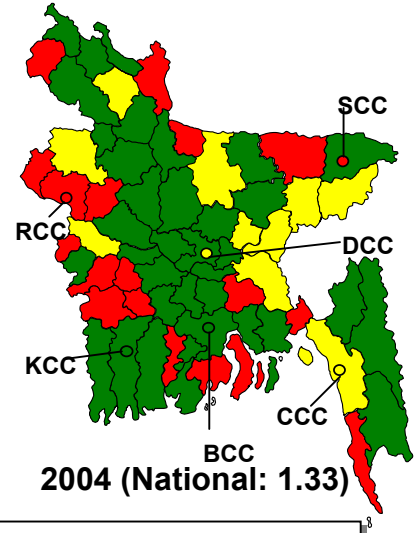
36 of 64 Districts (56%)
+ 2 of 6 CCs reached target.

*NPAFP rate annualized for cases according to February 21, 2004

Rate per 1,00,000 children <15 years

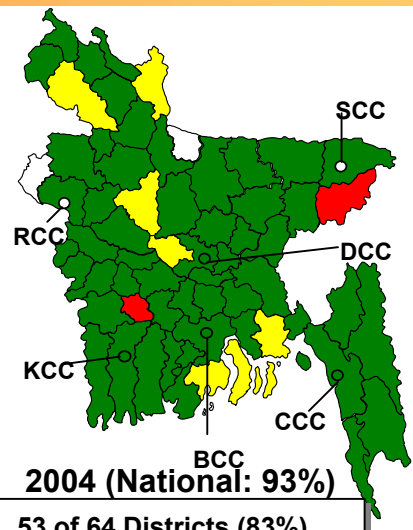| 0.00 – 0.49 | 0.50 – 0.99 | >=1.00 (Target) |

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%)
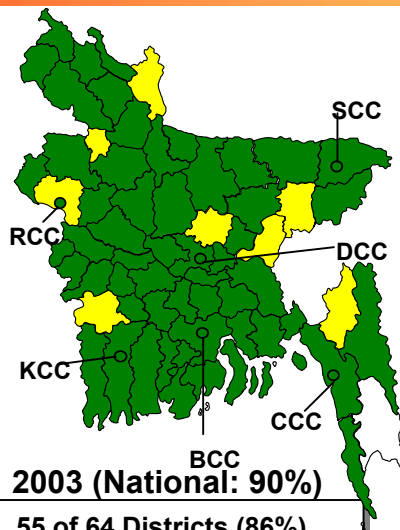
55 of 64 Districts (86%)
+ 6 CCs reached target.

2004 (National: 93%)

53 of 64 Districts (83%)
+ 4 CCs reached target.

*Data as of Epidemiologic Week 17, April 24, 2004

Categories

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