



# EPI Surveillance Bulletin

Epidemiologic Week 1: December 29 – January 4, 2003

Vol. 6 No. 1

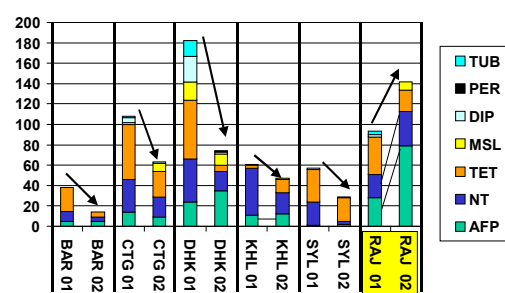


January 2003

## Weekly Reporting of AFP& EPI Diseases to Start from February

EPI, with support from WHO, is conducting a series of surveillance workshops to train health and hospital officials from city corporations and the divisional, district and upazila levels how to strengthen surveillance for AFP & EPI diseases as well as Adverse Events Following immunization (AEFI). Training at all levels should be completed in January so that the new system may begin in February. The new initiatives taken by EPI and DGHS to strengthen surveillance include increasing the frequency of case-based reporting of EPI diseases that present to hospitals from monthly to weekly, introducing a better system for case reporting within hospitals, involving district and city corporation officials more in surveillance data management and analysis, and adding all 463 Upazila Health Complexes (UHCs) to a surveillance network that already includes 123 major hospitals. These changes are needed because most cases of EPI disease and AEFIs presenting to facilities are not reported through the current system. This prevents district and city corporation officials from responding to outbreaks or developing better strategies for disease control and prevention. Limited experience suggests that these changes will result in better case-based reporting. After wild poliovirus circulation was identified in July 2002 in West Bengal, most major hospitals and UHCs in Rajshahi Division introduced weekly surveillance for AFP & EPI diseases. In all other divisions, major hospitals and UHCs began reporting only AFP on a weekly basis while EPI diseases continued to be reported by major hospitals monthly. A substantial increase in AFP and EPI disease reporting was evident in Rajshahi Division compared with the previous year and compared with other divisions.

EPI Diseases Reported through Passive Surveillance, Bangladesh Sep-Nov 2001 & Sep-Nov 2002



Other initiatives underway to strengthen routine EPI include EPI refresher orientations for all upazilas, districts, municipalities and city corporations, training and micro-planning in 6 phase-one districts for Hep B vaccine introduction into the routine EPI, development of an Injection Safety and Sharps Waste Management Plan of Action, and recruitment of 25 national consultants to support EPI at the local level.

**Shishu Shishu Proti Shishu Khuje Fero Proti Shishu!**

## Surveillance Summary for 1998-2002 (through Epidemiologic Week 1, December 29 – January 4, 2003)

	1998	1999	2000	2001	2002 <sup>1</sup>
Number of AFP cases	475	761	1138	1288	1352
No. of clinically confirmed polio cases	298	322	197	NA	NA
No. of compatible cases according to virologic classification system	NA	NA	NA	36	0
No. of cases with isolation of wild poliovirus	10	29	1	0	0
No. of discarded polio cases (i.e., non-polio AFP)	165	439	941	1252	1282
No. of cases pending classification	0	0	0	0	70
Expected annual number of non-polio AFP cases (1/100,000 children <15 yr)	495	505	515	533	549

## AFP Surveillance Performance Indicators:

Indicator	Target	1998	1999	2000	2001	2002
1. Annual Non-Polio AFP rate in children < 15 years old	≥ 1/100,000	0.33	0.87	1.82	2.35	2.58 <sup>2</sup>
2. Completeness of active reporting from hospitals	≥ 90%	46%	73%	95%	100%	100%
3. Timeliness of active reporting from hospitals	≥ 80%	15%	44%	72%	88%	100%
4. Suspected AFP cases investigated within 48 hours of notification	≥ 80%	89%	83%	93%	96%	96%
5. Confirmed AFP cases with 2 stool specimens collected ≤ 14 days after paralysis onset	≥ 80%	59%	49%	68%	80%	90%
6. Stool specimens arriving at laboratory ≤ 3 days after collection	≥ 80%	88%	81%	92%	97%	98%
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%
8. Confirmed AFP cases receiving a follow-up exam at least 60 days after paralysis onset	≥ 80%	80%	97%	95%	93% <sup>3</sup>	99% <sup>3</sup>
9. Stool specimens with laboratory results ≤ 28 days after specimen receipt	≥ 80%	16%	58%	94%	99%	100% <sup>4</sup>
10. Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	5%	13%	21%	29%	28%

<sup>1</sup> Data as of January 4, 2003; <sup>2</sup> NPAFP rate annualized for cases according to October 31, 2002; <sup>3</sup> among cases with inadequate stools occurring up to October 6, 2002; <sup>4</sup> as of December 7, 2002

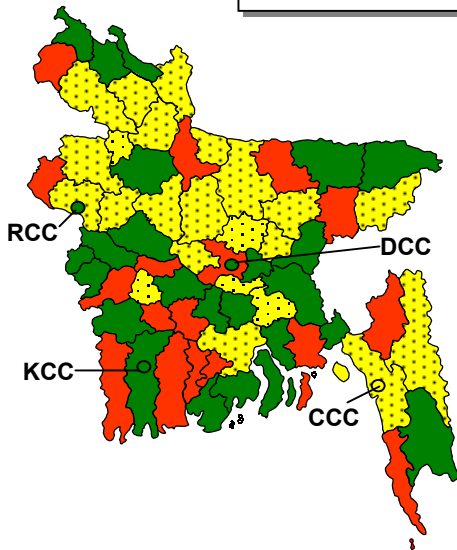
District	# Expected non-polio AFP	Total # AFP <sup>1</sup>	Wild polio-virus isolated	Compatible cases	Non-Polio AFP cases <sup>1</sup>	Pending final classif. <sup>1</sup>	Annualized Non-polio AFP Rate <sup>2</sup> (/1,00,000)	Notification within 10 d after paralysis onset <sup>1</sup>	Investigation within 48 h after notification <sup>1</sup>	% with 2 stools within 14 days <sup>1</sup>	Stool sample arriving to lab within 72 hrs <sup>1</sup>	# eligible for 60-day follow-up <sup>3</sup>	% with 60-day follow-up <sup>3</sup>
<b>Dhaka Division</b>													
DCC only	29	64			62	2	2.32	94%	100%	97%	100%	3	67%
Dhaka (non DCC)	12	26			26	0	2.40	100%	96%	100%	89%	0	NA
Faridpur	7	16			15	1	2.06	88%	93%	94%	100%	1	100%
Gazipur	8	8			8	0	1.20	88%	100%	88%	100%	1	100%
Gopalganj	5	14			9	5	1.92	54%	93%	57%	92%	4	75%
Jamalpur	9	21			21	0	2.53	91%	95%	91%	91%	3	100%
Kishoreganj	12	50			46	4	4.50	88%	96%	86%	98%	7	100%
Madaripur	5	11			11	0	2.64	82%	91%	82%	91%	2	100%
Manikganj	6	10			9	1	1.80	100%	100%	90%	100%	1	100%
Munshiganj	6	13			12	1	2.00	92%	92%	92%	100%	1	100%
Mymensingh	20	34			33	1	1.98	77%	94%	71%	100%	10	100%
Narayanganj	9	18			18	0	2.13	83%	100%	83%	100%	4	100%
Narsingdhi	8	30			28	2	3.90	90%	97%	93%	97%	1	100%
Netrokona	9	19			19	0	2.27	95%	100%	89%	100%	3	100%
Rajbari	4	13			13	0	3.90	100%	92%	100%	100%	0	NA
Shariatpur	5	9			9	0	2.16	100%	100%	100%	100%	0	NA
Sherpur	6	9			9	0	1.80	100%	100%	100%	100%	0	NA
Tangail	15	29			28	1	2.08	76%	97%	86%	100%	3	100%
<b>Total-DHAKA</b>	<b>175</b>	<b>394</b>	<b>0</b>	<b>0</b>	<b>376</b>	<b>18</b>	<b>2.41</b>	<b>88%</b>	<b>97%</b>	<b>89%</b>	<b>98%</b>	<b>44</b>	<b>96%</b>
<b>CTG Division</b>													
CCC only	9	13			12	1	1.33	100%	100%	100%	100%	0	NA
Chittagong (non CCC)	19	52			49	3	2.72	96%	98%	90%	96%	3	100%
Bandarban	1	3			3	0	3.60	100%	100%	100%	100%	0	NA
Brahmanbaria	11	21			21	0	2.29	81%	95%	81%	91%	4	100%
Chandpur	10	24			21	3	2.16	87%	96%	88%	100%	3	100%
Comilla	21	101			95	6	5.20	94%	96%	93%	96%	6	100%
Cox's Bazar	7	16			15	1	2.23	81%	100%	81%	100%	1	100%
Feni	6	22			22	0	4.20	100%	96%	100%	96%	0	NA
Khagrachari	2	9			9	0	5.40	100%	78%	100%	89%	0	NA
Laxmipur	7	13			13	0	2.23	77%	92%	85%	100%	2	100%
Noakhali	11	26			26	0	2.62	85%	96%	89%	100%	3	100%
Rangamati	2	7			7	0	4.20	43%	86%	57%	86%	3	100%
<b>Total-CTG</b>	<b>106</b>	<b>307</b>	<b>0</b>	<b>0</b>	<b>293</b>	<b>14</b>	<b>3.09</b>	<b>91%</b>	<b>96%</b>	<b>90%</b>	<b>96%</b>	<b>25</b>	<b>100%</b>
<b>Sylhet Division</b>													
Sylhet	11	15			15	0	1.31	87%	100%	87%	100%	2	100%
Habiganj	8	10			10	0	1.20	70%	100%	70%	100%	3	100%
Maulvibazar	7	21			20	1	3.26	91%	95%	86%	100%	3	100%
Sunamganj	9	17			16	1	1.87	82%	100%	88%	100%	2	100%
<b>Total-SYL</b>	<b>35</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>2</b>	<b>1.82</b>	<b>91%</b>	<b>96%</b>	<b>84%</b>	<b>100%</b>	<b>10</b>	<b>100%</b>
<b>Raj Division</b>													
RCC only	1	8			6	2	7.20	100%	100%	88%	100%	1	100%
Rajshahi (non RCC)	9	16			15	1	1.87	81%	100%	94%	100%	1	100%
Bogra	14	33			32	1	2.66	94%	85%	88%	91%	4	100%
Dinajpur	11	17			16	1	1.53	71%	100%	77%	100%	5	100%
Gaibandha	10	18			17	1	2.04	83%	89%	67%	100%	6	100%
Joypurhat	4	11			10	1	3.00	100%	100%	100%	100%	0	NA
Kurigram	8	21			20	1	2.70	95%	95%	86%	100%	3	100%
Lalmonirhat	5	10			10	0	2.40	70%	100%	80%	100%	2	100%
Naogaon	11	23			22	1	2.29	91%	100%	87%	100%	3	100%
Natore	7	10			8	2	1.03	89%	100%	90%	100%	1	100%
Nawabganj	6	13			12	1	2.40	85%	87%	85%	100%	2	100%
Nilphamari	7	10			9	1	1.37	100%	92%	90%	100%	1	100%
Pabna	10	24			22	2	2.64	88%	88%	88%	100%	2	100%
Panchagarh	3	11			10	1	3.60	91%	82%	91%	100%	1	100%
Rangpur	11	27			25	2	2.18	81%	96%	85%	100%	4	100%
Sirajganj	11	29			29	0	2.95	83%	97%	90%	97%	3	100%
Thakurgaon	5	13			12	1	2.88	85%	100%	92%	100%	1	100%
<b>Total-RAJ</b>	<b>133</b>	<b>294</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>19</b>	<b>2.32</b>	<b>87%</b>	<b>93%</b>	<b>86%</b>	<b>99%</b>	<b>40</b>	<b>100%</b>
<b>Khulna Division</b>													
KCC only	3	16			16	0	6.40	100%	100%	94%	93%	1	100%
Khulna (non KCC)	7	25			23	2	3.26	88%	96%	88%	100%	2	100%
Bagerhat	7	10			9	1	1.20	90%	100%	90%	80%	2	100%
Chuadanga	4	7			7	0	2.10	86%	100%	100%	100%	0	NA
Jessore	11	16			16	0	1.53	100%	100%	88%	93%	2	100%
Jhenaidah	7	13			12	1	1.54	92%	92%	100%	100%	0	NA
Kushtia	8	16			15	1	1.95	88%	100%	100%	100%	0	NA
Magura	4	7			6	1	1.80	86%	100%	86%	100%	1	100%
Meherpur	2	4			4	0	2.40	100%	100%	100%	100%	0	NA
Narail	3	7			6	1	2.40	86%	86%	86%	86%	1	100%
Satkhira	8	16			16	0	2.25	94%	94%	94%	94%	1	100%
<b>Total-KHU</b>	<b>64</b>	<b>137</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>7</b>	<b>2.18</b>	<b>92%</b>	<b>97%</b>	<b>93%</b>	<b>96%</b>	<b>10</b>	<b>100%</b>
<b>Barisal Division</b>													
Barisal	11	29			27	2	2.73	79%	97%	90%	100%	3	100%
Barguna	4	26			25	1	7.50	96%	92%	96%	100%	0	NA
Bhola	7	16			16	0	1.89	100%	100%	100%	94%	0	NA
Jhalakhati	3	32			29	3	9.60	97%	91%	97%	100%	1	100%
Patuakhali	6	15			15	0	3.00	93%	100%	93%	93%	1	100%
Pirojpur	5	39			35	4	7.20	97%	97%	95%	100%	2	100%
<b>Total-BAR</b>	<b>36</b>	<b>157</b>	<b>0</b>	<b>0</b>	<b>147</b>	<b>10</b>	<b>4.33</b>	<b>94%</b>	<b>96%</b>	<b>95%</b>	<b>99%</b>	<b>7</b>	<b>100%</b>
<b>National</b>	<b>549</b>	<b>1352</b>	<b>0</b>	<b>0</b>	<b>1282</b>	<b>70</b>	<b>2.58</b>	<b>89%</b>	<b>96%</b>	<b>90%</b>	<b>98%</b>	<b>136</b>	<b>99%</b>

<sup>1</sup> Data as of Epidemiologic Week 1, 4 January, 2003<sup>2</sup> Non-polio AFP rate is annualized for cases occurring up to 31 October, 2002<sup>3</sup> 60-day follow-up among cases without 2 adequate stool samples occurring up to 6 October, 2002

# Non-Polio AFP Rate, by District, Bangladesh 1999-2002\*

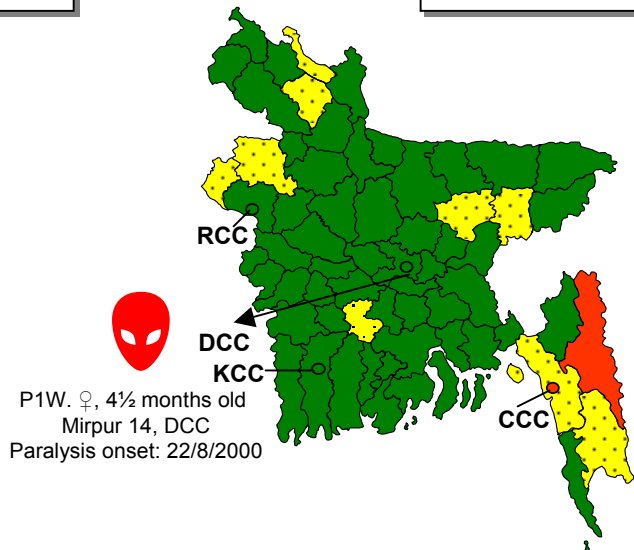
1999 (National: 0.87)

24 of 64 Districts (38%)  
+ 3 CC reached target.



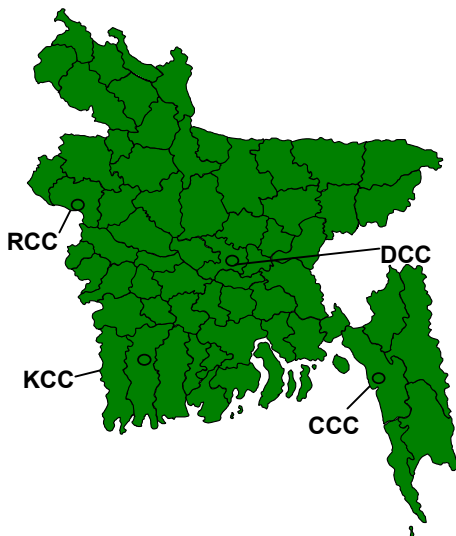
2000 (National: 1.82)

54 of 64 Districts (84%)  
+ 3 CC reached target.



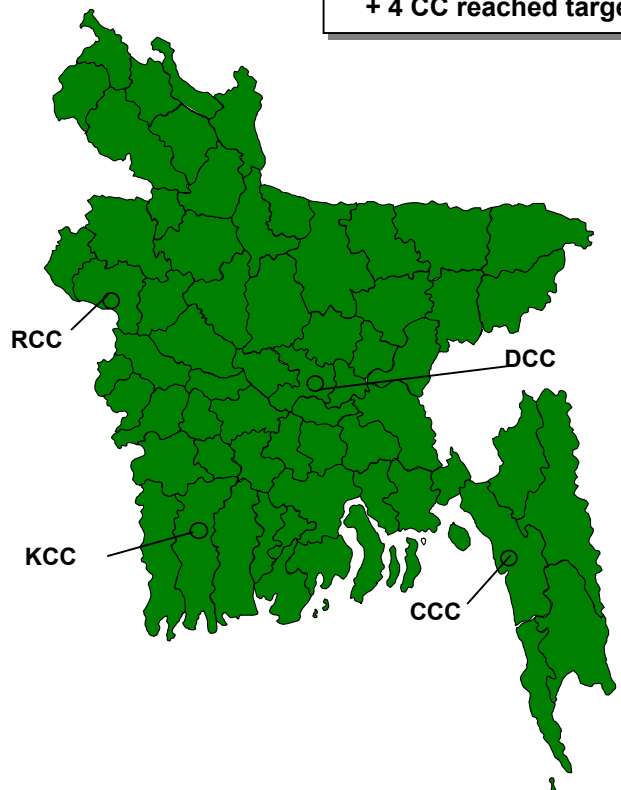
2001 (National: 2.35)

64 of 64 Districts (100%)  
+ 4 CC reached target.

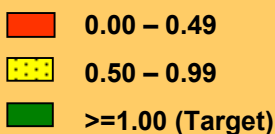


2002 (National: 2.58\*)

64 of 64 Districts (100%)  
+ 4 CC reached target.



Rate per 1,00,000 children <15 years

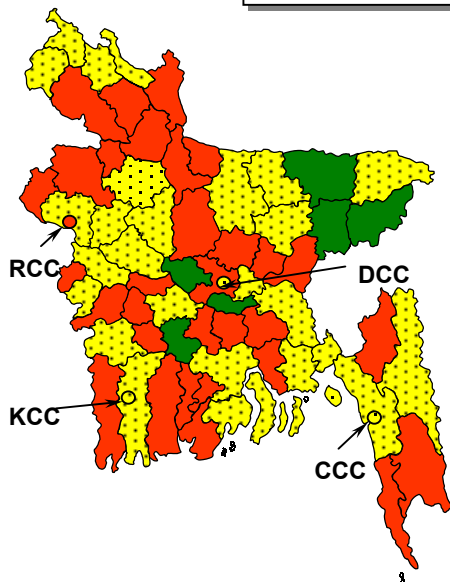


\*Non-Polio AFP rate annualized for cases occurring up to October 31, 2002

# Percent of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 1999-2002\*

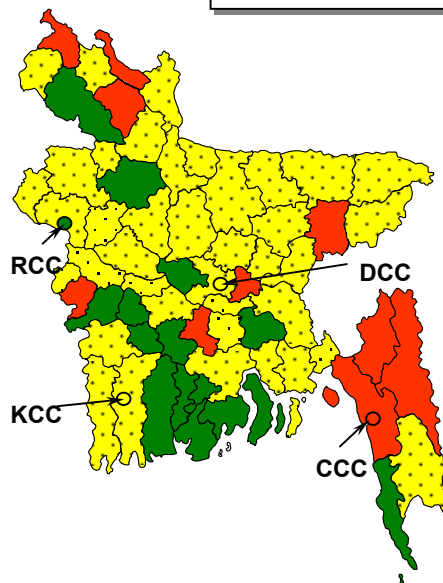
**1999 (National: 49%)**

**6 of 64 Districts (9%) reached target.**



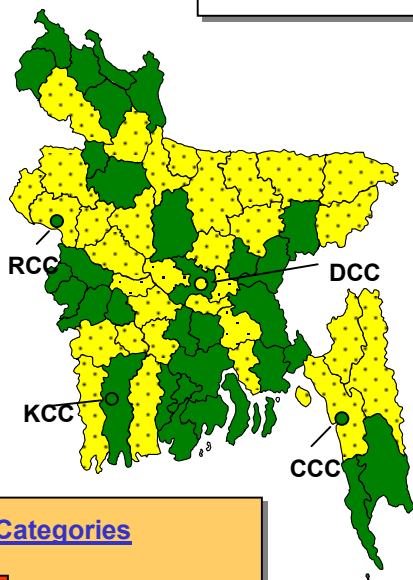
**2000 (National: 68%)**

**15 of 64 Districts (23%) + 1 CC reached target.**



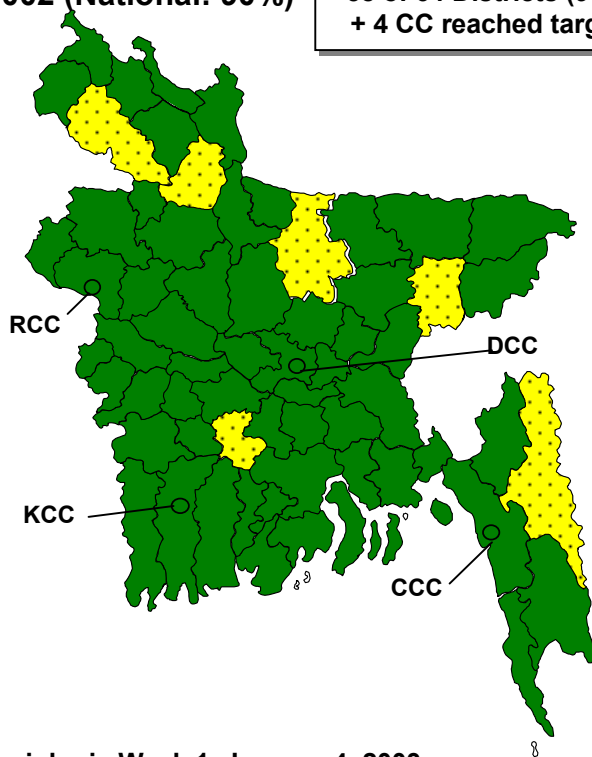
**2001 (National: 80%)**

**32 of 64 Districts (50%) + 3 CC reached target.**



**2002 (National: 90%)**

**58 of 64 Districts (91%) + 4 CC reached target.**



## Categories

- 0% – 49%
- 50% – 79%
- ≥80% (Target)

\*Data as of Epidemiologic Week 1, January 4, 2003