



# EPI Surveillance Bulletin

Vol. 6 No. 2

Epidemiologic Week 5: January 26 – February 1, 2003



February 2003

## Wild Poliovirus Crosses Bangladesh Border!

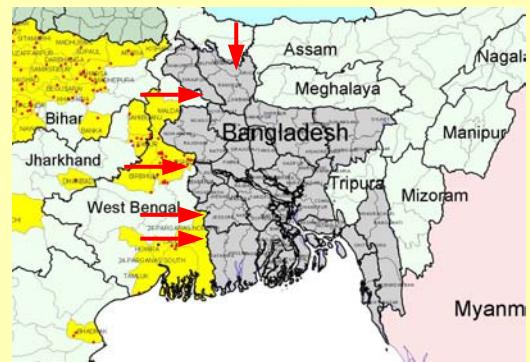
Importation of wild poliovirus from India into Bangladesh has been documented in Bhurungamari Upazila of Kurigram District and occurred in early September 2002. The South East Asia Regional Office of WHO notified WHO/Bangladesh last week of an 11 year old boy infected with P1W in a New Delhi slum whose parents brought him to their home village in Koch Bihar, West Bengal for further evaluation and treatment. Shortly after their arrival, and approximately 2 1/2 weeks after the onset of paralysis, the parents took the child to a Kabiraj in Bhurungamari Upazila of Kurigram district. The child remained in Bhurungamari Upazila under treatment for 2-3 weeks, all the while shedding wild poliovirus in the stool and potentially infecting any susceptible children in the area. Fortunately, as the child entered Bangladesh the week before the 2<sup>nd</sup> round of SNIDs, it is likely that if any wild poliovirus transmission occurred after his arrival, it was immediately and effectively interrupted by the high OPV coverage achieved in the SNIDs. To date no cases of polio in Bangladesh have been identified since the year 2000 despite intensive efforts to do so.

What is interesting about this importation is the fact that it occurred through a child living in New Delhi for the past 4 years who crossed the Bangladesh border in an area thought to be polio free (Koch Bihar), rather than from the border areas where wild virus is known to circulate (Eastern Bihar near Panchagarh & Thakurgaon, Murshidabad District next to Chapai Nawabganj, and 24 Parganas North next to Satkhira). As long as wild poliovirus continues to circulate in West Bengal and northern India, all of Bangladesh's borders are at risk for wild poliovirus importation. As revealed through the migration patterns across established border checkpoints, all of Bangladesh's 64 districts and 6 city corporations are potential targets for wild poliovirus importation. To date, 1,562 cases of polio have occurred in India in 2002, representing over 150,000 infected children. Any of these children may enter Bangladesh and re-introduce wild poliovirus. The best defense against re-circulation of wild poliovirus in Bangladesh is to achieve high levels of coverage during the upcoming Intensified 11<sup>th</sup> NIDs on March 30 and May 4 and to maintain high quality AFP surveillance throughout the country.

NID Divisional Advocacy and Planning meetings are being conducted from February 1-6, 2003. Multi-sectoral participation from the various GOB line ministries, civic organizations, development partners, NGOs and the private sector is critical to ensure the highest possible coverage during each of the two rounds of the Intensified 11<sup>th</sup> NIDs and thus keep polio out of Bangladesh. Preparation and implementation for the Intensified 11<sup>th</sup> NIDs is scheduled as follows:

February 15-27:	District Orientation and Planning Meeting
	District Inter Sectoral Meeting (DDCC)
March 1-13:	Upazila/CC/Municipality Orientation and Planning Meeting
	Upazila/CC/Municipality Inter Sectoral Meeting (UDCC)
March 15-27:	Union/Ward (urban) Volunteer Orientation
March 22-27:	Divisional and District Press Briefing
March 22-29:	House to House IPC by Field Workers & Volunteers
March 27-30:	Mobile and Mosque miking
<b>March 30- April 3: Intensified 11th NID and Child to Child Search - 1st Round</b>	
April 13-May 1:	NID Review Meetings at National, District, and Upazila levels
April 26-May 3:	House to House IPC by Field Workers & Volunteers
<b>May 4-8:</b>	<b>Intensified 11th NID and Child to Child Search - 2nd Round</b>

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



## Surveillance Summary for 1998-2002 (through Epidemiologic Week 5, January 26 – February 1, 2003)

	1998	1999	2000	2001	2002 <sup>1</sup>
Number of AFP cases	475	761	1138	1287	1360
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	1251	1322
No. of cases pending classification	0	0	0	0	38
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	2.51 <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%	89%
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>	93% <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 February 1, 2003; <sup>2</sup> NPAFP rate annualized for cases according to November 30, 2002; <sup>3</sup> among cases with inadequate stools occurring up to November 3, 2002; <sup>4</sup> as of January 4, 2003

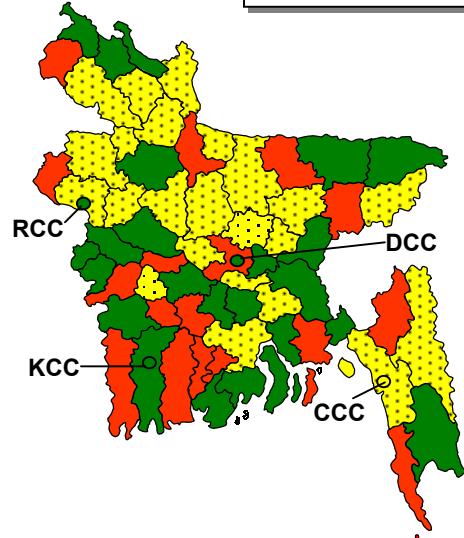
District	# Expected non-polio AFP	Total # AFP1	Wild polio-virus isolated	# Compatible cases	Non-Polio AFP cases <sup>1</sup>	Pending final classif. <sup>1</sup>	Anualized Non-polio AFP Rate <sup>2</sup> (/1,00,000)	Notification within 10 d after paralysis onset <sup>1</sup>	Investigation within 48 h 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>	
Dhaka Division														
DCC only	29	64		62	2	2.22	94%	100%	97%	100%	3	67%		
Dhaka (non DCC)	12	26		26	0	2.36	100%	96%	100%	89%	0	NA		
Faridpur	7	16		16	0	2.34	88%	93%	94%	100%	1	100%		
Gazipur	8	9		8	1	1.09	89%	100%	78%	100%	1	100%		
Gopalganj	5	14		11	3	2.18	54%	93%	57%	92%	5	80%		
Jamalpur	9	21		21	0	2.42	91%	95%	91%	91%	3	100%		
Kishoreganj	12	51		50	1	4.18	88%	96%	86%	98%	7	100%		
Madaripur	5	11		11	0	2.40	82%	91%	82%	91%	2	100%		
Manikganj	6	11		11	0	1.64	100%	100%	91%	100%	1	100%		
Munshiganj	6	13		13	0	2.18	92%	92%	92%	100%	1	100%		
Mymensingh	20	34		33	1	1.80	77%	94%	71%	100%	11	100%		
Narayanganj	9	18		18	0	2.18	83%	100%	83%	100%	4	100%		
Narsinghdi	8	30		29	1	3.68	90%	97%	93%	97%	1	100%		
Netrokona	9	19		19	0	2.18	95%	100%	90%	100%	3	100%		
Rajbari	4	13		13	0	3.55	100%	92%	100%	100%	0	NA		
Shariatpur	5	9		9	0	1.96	100%	100%	100%	100%	0	NA		
Sherpur	6	9		9	0	1.64	100%	100%	100%	100%	0	NA		
Tangail	15	29		28	1	2.04	76%	97%	86%	100%	4	75%		
<b>Total-DHAKA</b>	<b>175</b>	<b>397</b>	<b>0</b>	<b>0</b>	<b>387</b>	<b>10</b>	<b>2.31</b>	<b>88%</b>	<b>97%</b>	<b>89%</b>	<b>98%</b>	<b>47</b>	<b>94%</b>	
CTG Division														
CCC only	9	13		13	0	1.33	100%	100%	100%	100%	0	NA		
Chittagong (non CCC)	19	51		50	1	2.81	96%	98%	92%	96%	5	100%		
Bandarban	1	3		3	0	3.27	100%	100%	100%	100%	0	NA		
Brahmanbaria	11	21		21	0	2.08	81%	95%	81%	91%	4	100%		
Chandpur	10	24		23	1	2.29	87%	96%	88%	100%	3	100%		
Comilla	21	101		97	4	4.83	94%	96%	93%	96%	7	86%		
Cox's Bazar	7	16		15	1	2.34	81%	100%	81%	100%	1	100%		
Feni	6	22		22	0	4.00	100%	96%	100%	96%	0	NA		
Khagrachari	2	9		9	0	4.91	100%	78%	100%	89%	0	NA		
Laxmipur	7	13		13	0	2.03	77%	92%	85%	100%	2	100%		
Noakhali	11	27		27	0	2.58	85%	96%	89%	100%	3	100%		
Rangamati	2	7		7	0	3.82	43%	86%	57%	86%	3	100%		
<b>Total-CTG</b>	<b>106</b>	<b>307</b>	<b>0</b>	<b>0</b>	<b>300</b>	<b>7</b>	<b>2.98</b>	<b>91%</b>	<b>96%</b>	<b>91%</b>	<b>96%</b>	<b>28</b>	<b>96%</b>	
Sylhet Division														
Sylhet	11	15		15	0	1.49	87%	100%	87%	100%	2	100%		
Habiganj	8	11		10	1	1.36	64%	91%	64%	100%	3	100%		
Maulvibazar	7	21		20	1	3.12	86%	95%	91%	100%	3	100%		
Sunamganj	9	17		16	1	1.94	82%	100%	88%	100%	2	100%		
<b>Total-SYL</b>	<b>35</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>3</b>	<b>1.90</b>	<b>81%</b>	<b>97%</b>	<b>84%</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	
Raj Division														
RCC only	1	10		10	0	6.55	100%	100%	90%	100%	1	100%		
Rajshahi (non RCC)	9	16		16	0	1.82	81%	100%	94%	100%	1	100%		
Bogra	14	30		29	1	2.26	93%	87%	87%	90%	4	100%		
Dinajpur	11	17		17	0	1.59	71%	100%	77%	100%	5	100%		
Gaibandha	10	19		18	1	1.85	84%	90%	68%	100%	6	100%		
Joypurhat	4	12		11	1	2.73	92%	100%	92%	100%	0	NA		
Kurigram	8	22		20	2	2.59	95%	95%	82%	100%	4	75%		
Lalmonirhat	5	12		12	0	2.40	75%	100%	83%	100%	2	100%		
Naogaon	11	23		22	1	2.18	91%	87%	87%	100%	3	100%		
Natore	7	9		9	0	1.09	89%	100%	89%	100%	1	100%		
Nawabganj	6	13		13	0	2.18	85%	92%	85%	100%	2	100%		
Nilphamari	7	10		10	0	1.25	100%	100%	90%	100%	1	100%		
Pabna	10	24		23	1	2.51	88%	88%	88%	100%	2	100%		
Panchagarh	3	11		10	1	3.64	91%	82%	91%	100%	1	100%		
Rangpur	11	27		26	1	2.38	81%	96%	85%	100%	4	100%		
Sirajganj	11	29		29	0	2.78	83%	97%	90%	97%	3	100%		
Thakurgaon	5	13		12	1	2.62	85%	100%	92%	100%	1	100%		
<b>Total-RAJ</b>	<b>133</b>	<b>297</b>	<b>0</b>	<b>0</b>	<b>287</b>	<b>10</b>	<b>2.21</b>	<b>87%</b>	<b>94%</b>	<b>86%</b>	<b>99%</b>	<b>41</b>	<b>98%</b>	
Khulna Division														
KCC only	3	16		16	0	5.82	100%	100%	94%	93%	1	100%		
Khulna (non KCC)	7	23		22	1	3.12	86%	96%	87%	100%	3	67%		
Bagerhat	7	10		10	0	1.25	90%	100%	90%	80%	2	100%		
Chuadanga	4	7		7	0	1.91	86%	100%	100%	100%	0	NA		
Jessore	11	17		16	1	1.49	94%	100%	82%	93%	2	100%		
Jhenaidah	7	13		13	0	1.71	92%	92%	100%	100%	0	NA		
Kushtia	8	16		15	1	2.05	88%	100%	100%	100%	0	NA		
Magura	4	7		7	0	1.64	86%	100%	86%	100%	1	100%		
Meherpur	2	4		4	0	2.18	100%	100%	100%	100%	0	NA		
Narail	3	7		7	0	2.18	86%	86%	86%	86%	1	100%		
Satkhira	8	16		16	0	2.18	94%	94%	94%	94%	1	100%		
<b>Total-KHU</b>	<b>64</b>	<b>136</b>	<b>0</b>	<b>0</b>	<b>133</b>	<b>3</b>	<b>2.11</b>	<b>91%</b>	<b>97%</b>	<b>92%</b>	<b>96%</b>	<b>11</b>	<b>91%</b>	
Barisal Division														
Barisal	11	29		28	1	2.58	79%	97%	90%	100%	3	100%		
Barguna	4	27		26	1	6.82	96%	93%	96%	100%	1	100%		
Bhola	7	16		16	0	2.49	100%	100%	100%	94%	0	NA		
Jhalakhati	3	32		31	1	10.55	94%	94%	97%	100%	1	100%		
Patuakhali	6	16		15	1	2.73	88%	100%	88%	94%	1	100%		
Pirojpur	5	39		38	1	7.64	95%	97%	92%	100%	2	100%		
<b>Total BAR</b>	<b>36</b>	<b>159</b>	<b>0</b>	<b>0</b>	<b>154</b>	<b>5</b>	<b>4.42</b>	<b>92%</b>	<b>96%</b>	<b>94%</b>	<b>99%</b>	<b>8</b>	<b>100%</b>	
<b>National</b>	<b>549</b>	<b>1360</b>	<b>0</b>	<b>0</b>	<b>1322</b>	<b>38</b>	<b>2.51</b>	<b>89%</b>	<b>96%</b>	<b>89%</b>	<b>98%</b>	<b>145</b>	<b>96%</b>	

<sup>1</sup> Data as of Epidemiologic Week 5, 1 February, 2003<sup>3</sup> 60-day follow-up among cases without 2 adequate stool samples occurring up to 3 November, 2002

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

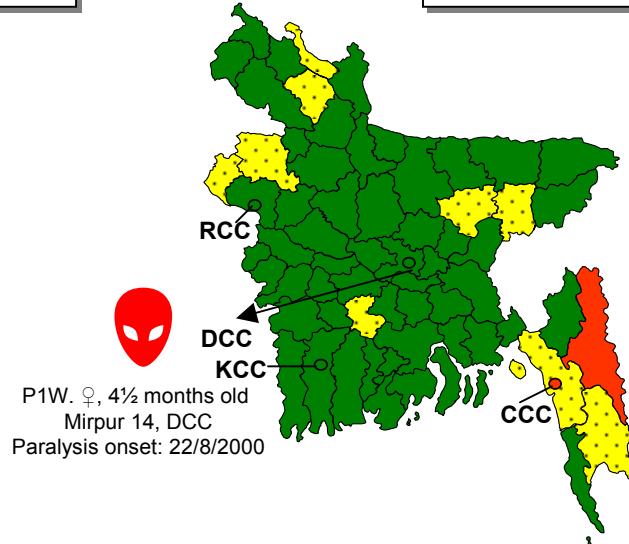
1999 (National: 0.87)

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



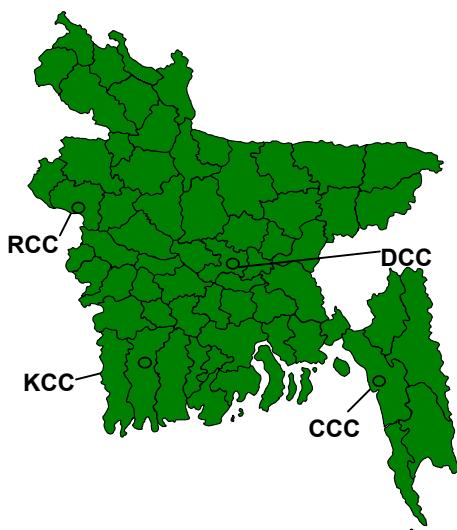
2000 (National: 1.82)

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



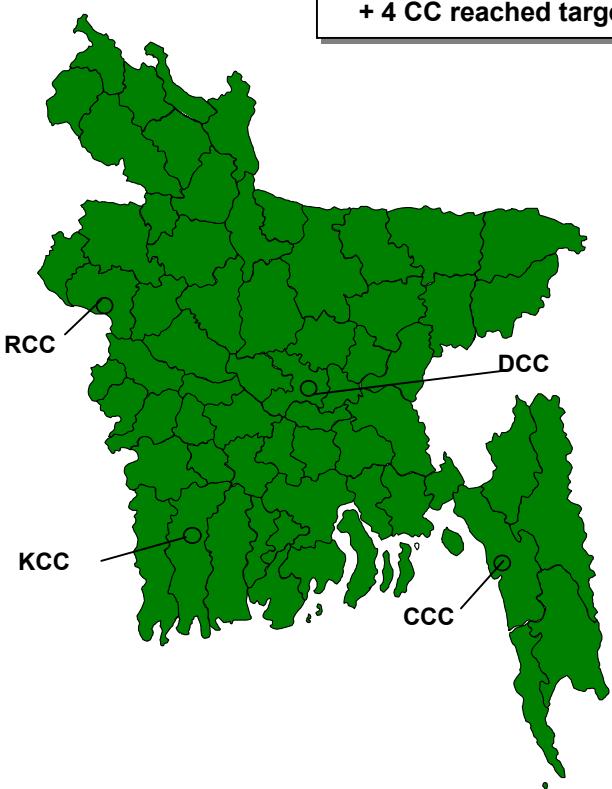
2001 (National: 2.35)

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



2002 (National: 2.51\*)

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



Rate per 1,000,000 children <15 years

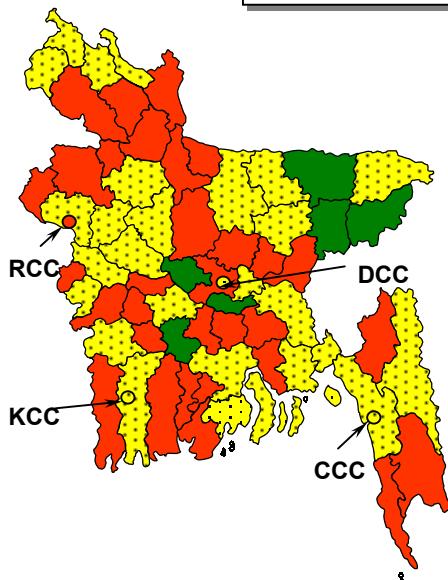
- 0.00 – 0.49
- 0.50 – 0.99
- >=1.00 (Target)

\*Non-Polio AFP rate annualized for cases occurring up to November 30, 2002

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

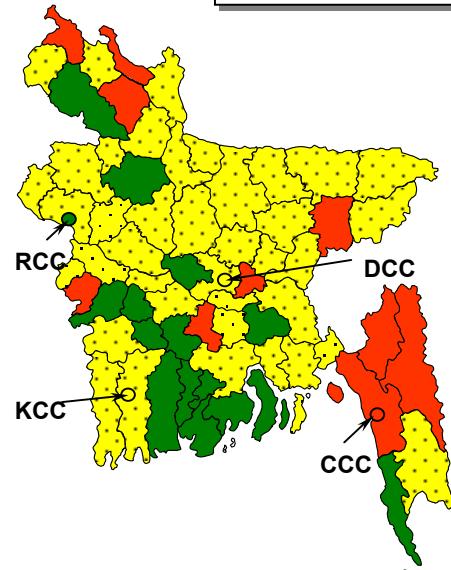
1999 (National: 49%)

6 of 64 Districts (9%) reached target.



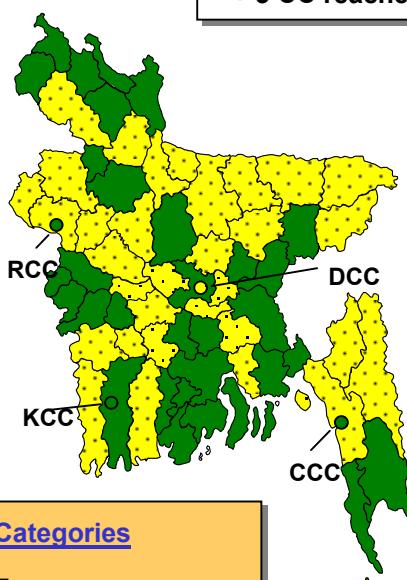
2000 (National: 68%)

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



2001 (National: 80%)

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

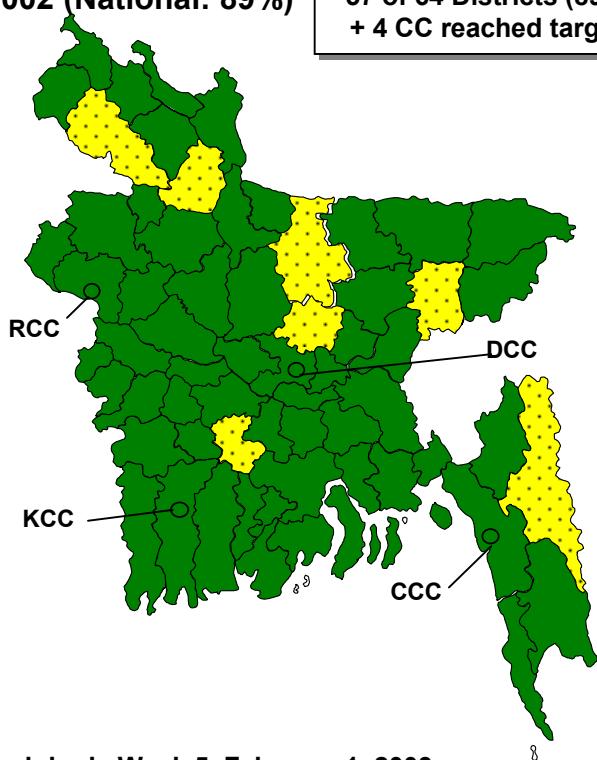


## Categories

- █ 0% - 49%
- █ 50% - 79%
- █ >=80% (Target)

2002 (National: 89%)

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



\*Data as of Epidemiologic Week 5, February 1, 2003