



# EPI Surveillance Bulletin

Vol. 13 No.4

Published in 31 December 2010

## Pandemic Influenza A (H1N1) campaign

Government of Bangladesh conducted pandemic Influenza A (H1N1) campaign in 2 phases with a view to vaccinate all health care service provider (government and private sector) and 3rd trimester pregnant women during 1st phase and people those who are above 6 months of age with chronic medical conditions during 2nd phase. The 1st phase duration was 22 May 2010 to 30 June 2010 and the 2nd phase was 15 July 2010 to 30 September 2010. The inauguration ceremony was held on 4 May 2010 in Hotel Sheraton, Bangladesh. The chief guest was the Honorable Minister, Ministry of Health and Family Welfare (MOHFW), Professor A.F.M. Ruhul Haque and the special guests were Dr. Capt. (Rtd.) Mozibur Rahman Fakir, State Minister for MOH&FW, Mr. Shaikh Altaf Ali, Secretary, MOH&FW. Dr. Duangvadee Sungkhobol, WHO Representative to Bangladesh. Representatives from UNICEF and USAID were also present as special guests. The chief guest and other special guests received the first shot of pandemic influenza A (H1N1) vaccine, as a part of the inauguration.



Inauguration of the campaign by Honorable Minister, Ministry of Health and Family Welfare

Bangladesh has got 03 million doses vaccine for 1st phase and 12.6 million doses for 2nd phase by three shipments as a donation from World Health Organization (WHO). EPI HQ took the responsibility to implement the programme. In order to successful implementation training materials for health personnel as well as communication materials like brochure and poster for different stake holders were prepared. All health administrative units conducted registration for health care providers and pregnant women. In the 1st phase health care providers were vaccinated at health facilities and pregnant women were vaccinated at routine EPI sites. In the 2nd phase vaccination was conducted at health facilities where diagnosis and treatment are provided by doctors. Additional Vaccination sites were also available in all Diabetic and other Specialized Hospitals. This campaign is another success story for EPI programme in Bangladesh. DGHS, DGDA, IEDCR, USAID, UNICEF and World Health Organization supported for the successful outcome of the programme.

Table: Achievement of Pandemic Influenza A (H1N1) Campaign

1st Phase				2nd Phase	
Health Care Provider		Pregnant women		Chronic diseased persons	
Target	Achievement	Target	Achievement	Target	Achievement
660672	624447 (95%)	1045022	974145 (93%)	13000000	10022730 (77.1%)

Surveillance Summary											
Description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 <sup>1</sup>	
Number of AFP cases	1287	1365	1128	1301	1458	1619	1844	1790	1502	1511	
No. of compatible cases according to virologic classification system	36	0	0	2	0	2	0	0	0	0	
No. of cases with isolation of wild poliovirus	0	0	0	0	0	18	0	0	0	0	
No. of discarded polio cases (i.e., non-polio AFP)	1251	1365	1128	1299	1458	1599	1844	1790	1502	1438	
No. of cases pending classification	0	0	0	0	0	0	0	0	0	73	
Expected annual number of non-polio AFP cases (2/100,000 children <15 yr)*	533	549	556	563	1094	1114	1135	1153	1151	1203	
AFP Surveillance Performance Indicators											
Indicators	Target	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 <sup>1</sup>
01 Annual Non-Polio AFP rate in children < 15 years old	≥ 2.0	2.34	2.49	2.03	2.31	2.66	2.87	3.25	3.10	2.61	2.51
02 Completeness of passive reporting from facilities	≥ 90%	65%	62%	67%	82%	91%	89%	90%	93%	91%	92%
03 Timeliness of passive reporting from facilities	≥ 80%	38%	36%	62%	75%	84%	83%	85%	87%	86%	85%
04 Suspected AFP cases investigated within 48 hours of notification	≥ 80%	96%	96%	98%	98%	99%	100%	99%	99%	99%	99%
05 Confirmed AFP cases with 2 stool specimens collected within 14 days after paralysis onset	≥ 80%	80%	89%	90%	90%	92%	93%	92%	92%	94%	95%
06 Stool specimens arriving at laboratory within 3 days after collection	≥ 80%	97%	98%	99%	99%	98%	99%	100%	100%	100%	100%
07 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%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%
08 Confirmed AFP cases receiving a follow-up exam at least 60 days after paralysis onset	≥ 80%	93%	99%	100%	98%	99%	100%	100%	99%	99%	97% <sup>2</sup>
09 Stool specimens with laboratory results:											
- Within 28 days after specimen receipt (old algorithm)	≥ 80%	99%	100%	100%	100%	100%	98%	100%	-	-	-
- Within 14 days after specimen receipt (new algorithm)	≥ 80%							80%	93%	95%	97%
10 Stool specimens from which non-polio enterovirus (NPEV) was isolated	≥ 10%	29%	28%	23%	20%	20%	15%	15%	23%	19%	19%

<sup>1</sup> Data as of December 25, 2010; <sup>2</sup> among cases occurring up to October 10, 2010; \* Prior to 2005 NPAPF rate calculated as 1/100,000 under 15 children

Please provide your feedback and comments to Dr. Md. Tawheed Hassan, DPM-EPI or Dr. Md. Shamsul Ashraf Khan, Program Manager,  
Child Health & Limited Curative Care, EPI Bhaban, Mohakhali, Dhaka 1212 Telephone: 9880530 or 9898797  
Chief Advisor to the Editorial Board: Dr. A.B.M. Jahangir Alam, Director, PHC & Line Director-ESD, DGHS, Mohakhali Dhaka.

**AFP Surveillance Performance Indicators, 2009 - 2010**

District	Minimum operational target of 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>1</sup>		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>		% with 60-day follow-up <sup>2</sup>	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
<b>Barisal Division</b>																								
Barguna	8	8	10	8					10	8	0	0	2.55	2.05	90%	100%	100%	100%	90%	100%	100%	100%	100%	100%
Barisal (non BCC)	20	21	29	29					29	29	0	0	2.94	2.95	100%	100%	100%	100%	100%	97%	100%	100%	100%	100%
BCC only	2	3	3	4					3	4	0	0	2.88	3.85	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bhola	16	17	39	24					39	23	0	1	4.93	2.92	100%	96%	100%	100%	97%	100%	100%	100%	100%	100%
Jhalakati	6	7	14	11					14	11	0	0	4.35	3.44	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Patuakhali	14	14	18	15					18	15	0	0	2.65	2.22	89%	100%	100%	100%	94%	100%	100%	100%	100%	100%
Perojpur	10	11	24	19					24	19	0	0	4.70	3.74	96%	100%	100%	100%	96%	100%	100%	100%	100%	67%
<b>Total-BAR</b>	<b>76</b>	<b>81</b>	<b>137</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>137</b>	<b>109</b>	<b>0</b>	<b>1</b>	<b>3.62</b>	<b>2.89</b>	<b>97%</b>	<b>99%</b>	<b>100%</b>	<b>100%</b>	<b>97%</b>	<b>99%</b>	<b>100%</b>	<b>####</b>	<b>100%</b>	<b>93%</b>
<b>CTG Division</b>																								
Bandarban	3	3	5	5					5	5	0	0	3.58	3.60	100%	100%	100%	100%	100%	100%	100%	100%	100%	NA
Brahmanbaria	22	23	25	30					25	30	0	0	2.26	2.73	92%	100%	92%	100%	96%	97%	100%	98%	100%	100%
Chandpur	21	22	23	23					23	23	0	0	2.21	2.22	91%	91%	100%	100%	83%	91%	100%	100%	100%	100%
Chittagong (non CCC)	41	42	42	40					42	33	0	7	2.07	1.63	88%	83%	98%	100%	90%	83%	100%	100%	100%	100%
CCC only	20	21	18	17					18	15	0	2	1.79	1.49	100%	100%	100%	100%	100%	94%	100%	100%	100%	100%
Comilla	43	44	52	62					52	58	0	4	2.44	2.73	98%	97%	98%	100%	98%	97%	100%	100%	100%	100%
Cox's Bazar	16	17	20	20					20	19	0	1	2.45	2.34	100%	95%	100%	100%	95%	95%	100%	100%	100%	91%
Feni	11	12	10	7					10	7	0	0	1.79	1.26	90%	100%	100%	86%	100%	100%	100%	100%	100%	100%
Khagrachari	5	5	10	8					10	8	0	0	4.17	3.35	90%	88%	100%	100%	100%	88%	100%	100%	100%	100%
Lakshmipur	14	15	17	16					17	15	0	1	2.46	2.18	100%	94%	100%	100%	100%	94%	100%	100%	100%	100%
Noakhali	24	25	20	17					20	16	0	1	1.68	1.35	80%	100%	90%	71%	70%	100%	100%	100%	100%	100%
Rangamati	5	5	10	7					10	7	0	0	4.10	2.88	80%	100%	100%	100%	80%	100%	100%	100%	100%	NA
<b>Total-CTG</b>	<b>225</b>	<b>234</b>	<b>252</b>	<b>252</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>252</b>	<b>236</b>	<b>0</b>	<b>16</b>	<b>2.25</b>	<b>2.12</b>	<b>93%</b>	<b>94%</b>	<b>98%</b>	<b>98%</b>	<b>92%</b>	<b>94%</b>	<b>100%</b>	<b>####</b>	<b>100%</b>	<b>99%</b>
<b>Dhaka Division</b>																								
Dhaka (non DCC)	23	24	40	44					40	41	0	3	3.47	3.57	100%	93%	100%	100%	93%	95%	100%	99%	100%	88%
DCC only	57	58	71	70					71	67	0	3	2.49	2.36	93%	96%	100%	100%	94%	94%	100%	100%	90%	100%
Faridpur	16	17	17	17					17	16	0	1	2.10	1.99	94%	94%	100%	100%	94%	94%	100%	100%	100%	83%
Gazipur	19	20	21	27					21	25	0	2	2.24	2.67	86%	100%	100%	100%	86%	96%	98%	100%	100%	80%
Gopalganj	11	11	26	15					26	14	0	1	4.86	2.63	81%	87%	100%	100%	88%	87%	100%	100%	100%	100%
Jamalpur	20	20	51	35					51	34	0	1	5.21	3.49	98%	100%	98%	100%	94%	100%	99%	100%	100%	80%
Kishoreganj	24	25	38	40					38	39	0	1	3.20	3.30	97%	90%	95%	95%	97%	93%	100%	100%	100%	100%
Madaripur	10	11	17	12					17	12	0	0	3.24	2.30	88%	100%	82%	92%	88%	100%	100%	100%	100%	100%
Manikganj	12	13	23	23					23	23	0	0	3.80	3.82	96%	100%	100%	100%	96%	100%	100%	98%	100%	100%
Munshiganj	12	13	18	17					18	16	0	1	3.01	2.69	100%	100%	94%	100%	100%	100%	100%	100%	100%	100%
Mymensingh	41	43	41	47					41	43	0	4	1.98	2.09	83%	87%	100%	100%	85%	96%	99%	100%	100%	90%
Narayanganj	20	21	24	24					24	23	0	1	2.38	2.29	100%	100%	96%	100%	96%	96%	100%	100%	100%	50%
Narsingdhi	18	18	20	25					20	25	0	0	2.26	2.84	95%	88%	100%	100%	95%	100%	100%	100%	100%	100%
Netrokona	18	19	21	31					21	30	0	1	2.29	3.29	86%	87%	100%	100%	90%	94%	100%	100%	100%	100%
Rajbari	9	9	9	11					9	10	0	1	2.04	2.27	89%	91%	100%	100%	89%	91%	100%	100%	100%	100%
Sariatpur	10	11	16	10					16	8	0	2	3.19	1.60	81%	80%	100%	100%	88%	80%	100%	100%	100%	100%
Sherpur	12	12	25	16					25	15	0	1	4.25	2.56	96%	88%	100%	100%	96%	94%	100%	100%	100%	100%
Tangail	30	31	40	33					40	33	0	0	2.64	2.19	83%	97%	100%	100%	95%	91%	100%	100%	100%	100%
<b>Total-DHAKA</b>	<b>362</b>	<b>376</b>	<b>518</b>	<b>497</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>518</b>	<b>474</b>	<b>0</b>	<b>23</b>	<b>2.86</b>	<b>2.63</b>	<b>92%</b>	<b>94%</b>	<b>98%</b>	<b>99%</b>	<b>93%</b>	<b>95%</b>	<b>100%</b>	<b>####</b>	<b>98%</b>	<b>94%</b>
<b>Khulna Division</b>																								
Bagerhat	14	15	20	15					20	15	0	0	2.84	2.14	90%	100%	100%	100%	90%	100%	100%	100%	100%	100%
Chuadanga	9	10	15	20					15	18	0	2	3.21	3.87	100%	100%	100%	90%	93%	85%	100%	100%	100%	100%
Jessore	23	24	23	33					23	32	0	1	2.01	2.80	100%	94%	100%	100%	91%	97%	100%	100%	100%	100%
Jhenaidah	15	15	17	18					17	17	0	1	2.33	2.35	94%	89%	100%	100%	100%	89%	100%	100%	100%	100%
Khulna (non KCC)	14	14	16	22					16	22	0	0	2.34	3.24	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
KCC only	8	9	6	8					6	8	0	0	1.45	1.95	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Kushtia	16	17	22	18					22	15	0	3	2.73	1.87	95%	94%	91%	89%	95%	83%	100%	100%	100%	100%
Magura	8	8	8	10					8	10	0	0	2.10	2.63	88%	100%	100%	100%	88%	100%	100%	100%	100%	100%
Meherpur	5	6	6	10					6	7	0	3	2.20	2.58	100%	90%	100%	100%	100%	70%	100%	100%	100%	100%
Narail	6	7	8	7					8	7	0	0	2.48	2.18	88%	86%	100%	100%	100%	100%	100%	100%	100%	100%
Satkhira	17	18	30	17					30	16	0	1	3.50	1.88	97%	100%	100%	100%	97%	94%	100%	100%	100%	100%
<b>Total-KHU</b>	<b>135</b>	<b>143</b>	<b>171</b>	<b>178</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>171</b>	<b>167</b>	<b>0</b>	<b>11</b>	<b>2.52</b>	<b>2.47</b>	<b>96%</b>	<b>96%</b>	<b>99%</b>	<b>98%</b>	<b>95%</b>	<b>93%</b>	<b>100%</b>	<b>####</b>	<b>100%</b>	<b>100%</b>
<b>Raj Division</b>																								
Bogra	28	29	31	29					31	29	0	0	2.21	2.08	90%	100%	100%</							

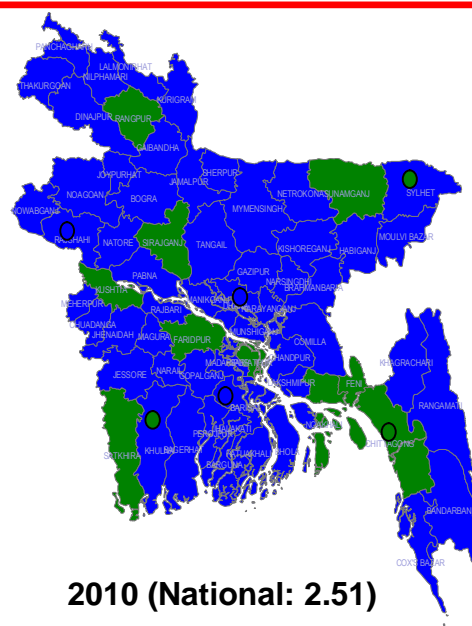
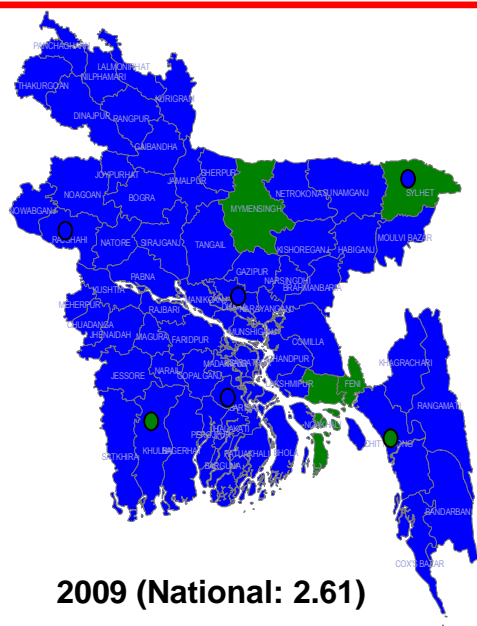
# Disease Surveillance, 2009 - 2010

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	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	Number of Outbreak (% Investigated)		# of cases		2009	2010
<b>Barisal Division</b>																
Barguna	1	2	1	2	2			1	21	8					6	9
Barisal (non BCC)	2	2	3	3	2				6	4					35	62
BCC only								2		2					2	5
Bhola	1	2	3	4	3	3			1	2						2
Jhalakhati	2		4		2			1	1	1					10	25
Patuakhali	3	4	3	2	2	3	3	1	3	7					1	1
Pirojpur					1			1	1	13					15	13
<b>Total BAR</b>	<b>9</b>	<b>10</b>	<b>14</b>	<b>11</b>	<b>12</b>	<b>6</b>	<b>3</b>	<b>6</b>	<b>33</b>	<b>37</b>			<b>0</b>	<b>0</b>	<b>69</b>	<b>117</b>
<b>CTG Division</b>																
Bandarban									1	1					4	2
Brahmanbaria	6	4	8	2	8	1	1		20	11					10	12
Chandpur		2		1		2	6	3	46	44	1 (100%)		18		32	16
Chittagong (non CCC)	1		3	1	1			2	2	9					9	11
CCC only	2	6	1	5	2	6	2	9	3	3					4	1
Comilla	1	4	1		1	5		1	9	29					8	13
Cox's Bazar	2	1	2	1	2	1		1	1	7					6	2
Feni		4		3		4	1		14	2					6	6
Khagrachari	2		2		1		1	2	6	10					4	3
Laxmipur	5	5	4	10	5	6	2	2	10	45					14	16
Noakhali	8	4	9	4	7	5	2		27	5					10	9
Rangamati								5		15					8	6
<b>Total-CTG</b>	<b>27</b>	<b>30</b>	<b>30</b>	<b>27</b>	<b>27</b>	<b>30</b>	<b>15</b>	<b>25</b>	<b>139</b>	<b>181</b>		<b>1 (100%)</b>	<b>0</b>	<b>18</b>	<b>115</b>	<b>97</b>
<b>Dhaka Division</b>																
Dhaka (non DCC)	2	3	1	1	2	4		1	11	39		1 (100%)		87	20	28
DCC only	5	4	1	2	5	3	12	19	269	229	1 (100%)		76		112	35
Faridpur	1	4	2	5	3	1			8	6					65	57
Gazipur		1	2	1	1	1		6	6	28					21	21
Gopalganj	3		2		3			2	9	1					4	18
Jamalpur		2	2	1		1			150	109					29	19
Kishoreganj	7	5	7	8	5	5	13	1	17	56					31	22
Madaripur			1				7	2	19	6					55	51
Manikganj			1				2		8	15					31	24
Munshiganj								2	47	91		1 (100%)		46	51	28
Mymensingh	7	4	6	9	9	3	3	4	67	43					53	50
Narayanganj	1	1			1	1		1	11	23					18	28
Narsingdhi									4	15					30	41
Netrokona		1	1	4					37	36					21	3
Rajbari		1		1		1			50	10					45	27
Shariatpur	3		1	1	3		3		16	21					45	20
Sherpur	1		2	3	1				24	21					12	10
Tangail	1	4		2	2	4	7	11	29	20					68	54
<b>Total-DHAKA</b>	<b>31</b>	<b>30</b>	<b>29</b>	<b>38</b>	<b>35</b>	<b>24</b>	<b>47</b>	<b>49</b>	<b>782</b>	<b>769</b>	<b>1 (100%)</b>	<b>2 (100%)</b>	<b>76</b>	<b>133</b>	<b>711</b>	<b>536</b>
<b>Khulna Division</b>																
Bagerhat	2	2	2	3	1	2			7	7		1(100%)		12	38	93
Chuadanga	2	2	2	3	2	1	2		2	2					22	9
Jessore	4	2	4	2	3	2	3	5	16	19					31	29
Jhenaidah		1		1		1	2	2	21	7					20	8
Khulna (non KCC)	3		3		3				4	19					28	40
KCC only		1		1		1			1	1					11	20
Kushtia	2	1	1		2	1	2	2	11	15					23	7
Magura	1		1		1				19	10					20	16
Meherpur							7	2	26	20					9	3
Narail	2	1	1	3	2	1	1	1	9	15					17	6
Satkira		1		1		1		2		10					23	28
<b>Total-KHU</b>	<b>16</b>	<b>11</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>10</b>	<b>17</b>	<b>14</b>	<b>116</b>	<b>125</b>		<b>1(100%)</b>	<b>0</b>	<b>12</b>	<b>242</b>	<b>259</b>
<b>Raj Division</b>																
Bogra	3	2	2	1	3	2	4	3	21	36					89	121
Dinajpur	1	1	1	2	1	1		1	12	25					76	50
Gaibandha	3	1	4	1	2	1	1		2	4					36	28
Joypurhat									4	1					16	27
Kurigram	4	2	1		3	2	2	1	11	1					13	12
Lalmonirhat	1		2		1		2			1					21	21
Natore		1	1	1		1	3	1	50	39			0		17	27
Nilphamari						1	3	1	4	1					14	29
Noagoan	1				1		4	11	48	41					31	52
Nowabganj		1				1	5	2	19	20					17	7
Pabna		1		1		1	18	3	90	111					33	22
Panchagarh								1	1	3					17	17
Rajshahi (non RCC)		2				2		3	30	14		1(100%)		57	43	37
RCC only							3	3	68	19		1(100%)		40	50	41
Rangpur	2	1	1	1	2	1			8						19	6
Sirajganj	2	1			2			1	8	1					9	10
Thakurgaon	2		3		2		1	4	4	16					31	23
<b>Total-RAJ</b>	<b>19</b>	<b>13</b>	<b>15</b>	<b>7</b>	<b>17</b>	<b>13</b>	<b>46</b>	<b>35</b>	<b>380</b>	<b>333</b>		<b>2(100%)</b>	<b>0</b>	<b>97</b>	<b>532</b>	<b>530</b>
<b>Sylhet Division</b>																
Habiganj	3	7	2	7	2	2		5	4	9					17	4
Maulvibazar	4	2	5	2	4	1	4	18	14	24	1(100%)		48		8	4
Sunamganj	7	5	8	4	1	5	4	6	8	6					13	19
Sylhet (non SCC)	4		2		3		1	19	19	27					8	2
SCC only	1		2		1		13	16	12	9					1	
<b>Total-SYL</b>	<b>19</b>	<b>14</b>	<b>19</b>	<b>13</b>	<b>11</b>	<b>8</b>	<b>22</b>	<b>64</b>	<b>57</b>	<b>75</b>	<b>1(100%)</b>		<b>48</b>	<b>0</b>	<b>47</b>	<b>29</b>
<b>National</b>	<b>121</b>	<b>108</b>	<b>121</b>	<b>110</b>	<b>116</b>	<b>91</b>	<b>150</b>	<b>193</b>	<b>1,507</b>	<b>1,520</b>	<b>2(100%)</b>	<b>6(100%)</b>	<b>124</b>	<b>260</b>	<b>1,716</b>	<b>1,568</b>

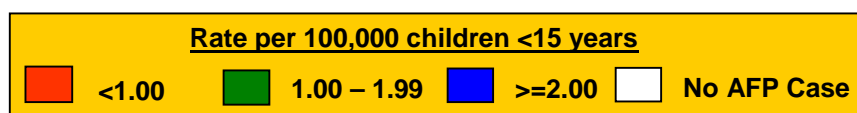
Data as of 31 December 2010, \* Only Lab Confirmed Measles and Mixed Type outbreak Cases

Data as of 31 December 2010, \* Only Lab Confirmed Measles and Mixed Type outbreak Cases

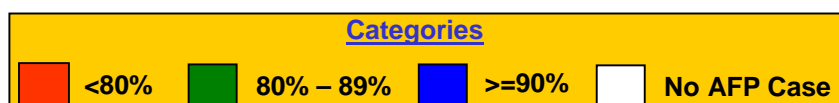
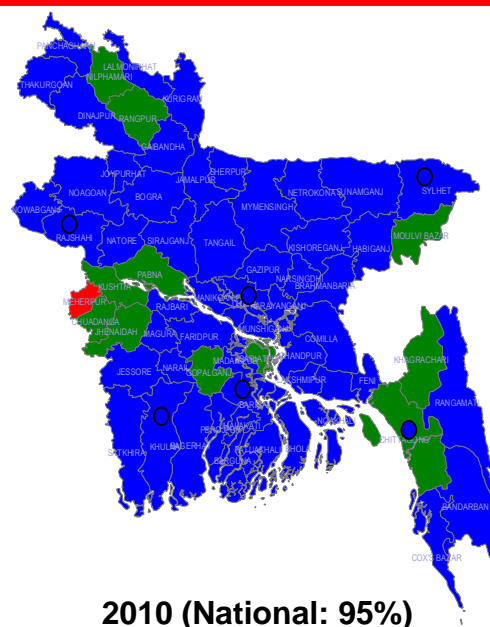
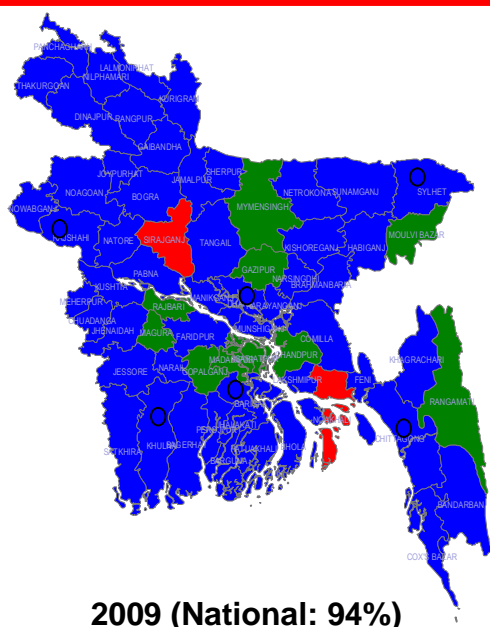
## Annualized Non-Polio AFP Rate, by District, Bangladesh 2009-2010\*



\*Data as of 25 December 2010



## Percentage of AFP Cases with Two Stool Samples Collected within 14 days of Paralysis Onset, by District, Bangladesh 2009-2010\*



\*Data as of 25 December 2010

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