



Ministry of Health

# 2010 2nd Round National Immunization Days against Polio

Expanded Programme on Immunization  
Disease Control and Prevention Department  
Public Health Division  
Ghana Health Service



## **Acknowledgement**

The successful implementation of the 2<sup>nd</sup> Round National Immunization Days against Polio was as a result of the collaborative work between the Ministry of Health/Ghana Health Service and health partners. From preparatory activities through to the implementation of the nationwide exercise became possible as a result of the concerted efforts of Regional Deputy Directors of Health Services and Regional NIDs Coordinators who coordinated and monitored activities.

Our appreciation also goes to WHO, UNICEF and Rotary International for their technical, material and financial support for the national campaign. We also thank parents and caregivers for their cooperation and support.

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## List of Acronyms

AEFI	Adverse Event Following Immunization
ASH	Ashanti Region
BAR	Brong-Ahafo Region
Chn	Children
CR	Central Region
DA	District Assembly
DCE	District Chief Executive
DDPH	Deputy Director, Public Health
EPI	Expanded Programme on Immunization
ER	Eastern Region
GAR	Greater Accra Region
GES	Ghana Education Service
GHS	Ghana Health Service
GOG	Government of Ghana
GPRTU	Ghana Private Road Transport Union
HTRA	Hard to reach area
IEC	Information, Education and Communication
ISD	Information Services Department
ITN	Insecticide treated net
MDGs	Millennium Development Goals
MOH	Ministry of Health
NADMO	National Disaster Management Organization
NIDs	National Immunization Days
NMR	Neonatal mortality rate
NR	Northern region
OPV	Oral Polio Vaccine
RCC	Regional Coordinating Council
RHMT	Regional Health Management team
SD	Sub-district
SIA	Supplemental immunization activity
SNIDs	Sub-national Immunization Days
U5MR	Under-5 mortality rate
UER	Upper East Region
UNICEF	United Nations Children fund
UWR	Upper West Region
VHC	Village health committee
Vit A	Vitamin A
VR	Volta Region
WHO	World Health Organization
WR	Western Region

## Executive Summary

In March 2010, Ghana joined other countries in West and Central Africa in an extraordinary synchronized immunization campaign which targeted over 85 million children 0-59 months old across the sub-region. A second round of the campaign was organized in April 2010 to provide 2<sup>nd</sup> dose to children who were reached during the 1<sup>st</sup> round and the opportunity for those who were missed in the 1<sup>st</sup> round to be vaccinated. The 2<sup>nd</sup> round of the 2010 National Immunization Days was from 23<sup>rd</sup> – 25<sup>th</sup> April 2010.

Planning and coordination for the campaign started in January 2010 when the country first received information on the synchronized exercise. Planning meetings were held at all level to ensure effective campaign. The first and the second round was launched by Her Excellency the First Lady of the Republic of Ghana, Mrs. Ernestina Naadu Mills, to give the campaign the needed publicity to achieve results. The launching was held on 2<sup>nd</sup> March 2010 at the Civil Servants Association Conference Hall in Accra.

There was significant improvement in the planning of the campaign as all regions involved their districts in their microplanning meeting. All regions had a micro plan document to guide implementation of the campaign with the exception of Volta Region. Improved collaboration with District and Municipal Assemblies, NGOs and other sectors helped in mobilizing resources for the national exercise. There was adequate provision of cold chain logistics, vaccines and supplies at all levels.

Out of the total of 5,095,044 children targeted, exactly 5,201,937 were vaccinated giving coverage of 102.1%. The coverages ranged from 97.6% in Volta Region to 106.4% in Central Region. About 4,585,540 children between 6 – 59 months were targeted for vitamin A. Out of this figure; about 4,314,638 children were dosed giving coverage of 94.1%. The national OPV wastage rate was 7.9% which shows an improvement over the first round (8.1%). The wastage rate ranges from 5.4% in the Eastern Region to 11.3% in the Ashanti Region as shown in the figure above.

The results from the rapid assessment conducted by national supervisors indicate that 7.4% of the total children seen were not dosed with OPV during the campaign. That is, out of 2,081 children seen, 153 were missed. With regards to vitamin A, a total of 977 children between the ages of 6-59 months were sampled from 463 houses. Out of this figure, about 66 (6.8%) children were not dosed. Results from the assessments indicate that most caregivers who were aware of the campaign before the arrival of vaccination teams got their information mostly from Public Address System/Mobile Van, radio and from health worker/volunteers.

The results of the end-process rapid assessment conducted by the Kintampo Rural Health Training School showed that, out of a total of 11,274 children who were physically checked; about 10,737 (95.2%) were vaccinated and evidenced by finger marking and 181 (1.6%) were vaccinated and evidenced through recall by caregivers. About 356 (3.2%) children were missed. The major reasons why children were missed were child absent, household not visited and household not revisited.

In conclusion, the second round of the National Immunization Days against polio was conducted successfully in all regions. With improved microplanning at all levels and application of experiences learnt from the first round and other national campaigns, the quality of the second round of the 2010 National Immunization Days improved significantly. It is however recommended that:

- National level provide stickers to replace the use of chalk for house marking
- National level procure drug counters for counting vitamin A capsules
- Regions sustain and improve active surveillance particularly in the silent districts
- Worn-out vaccine carriers to be replaced to enhance good vaccine handling
- DHMTs should go all-out to lobby MMD assemblies to support them with transport and other logistics
- Vaccinators should be trained how to mark houses correctly and visibly
- Information to caregivers to continue with routine services should be stressed during volunteer training
- The sub-district health team should clearly demarcate geographical areas for the volunteers
- DHMTs should provide/ hire generators to ensure uninterrupted power supply to the cold rooms.

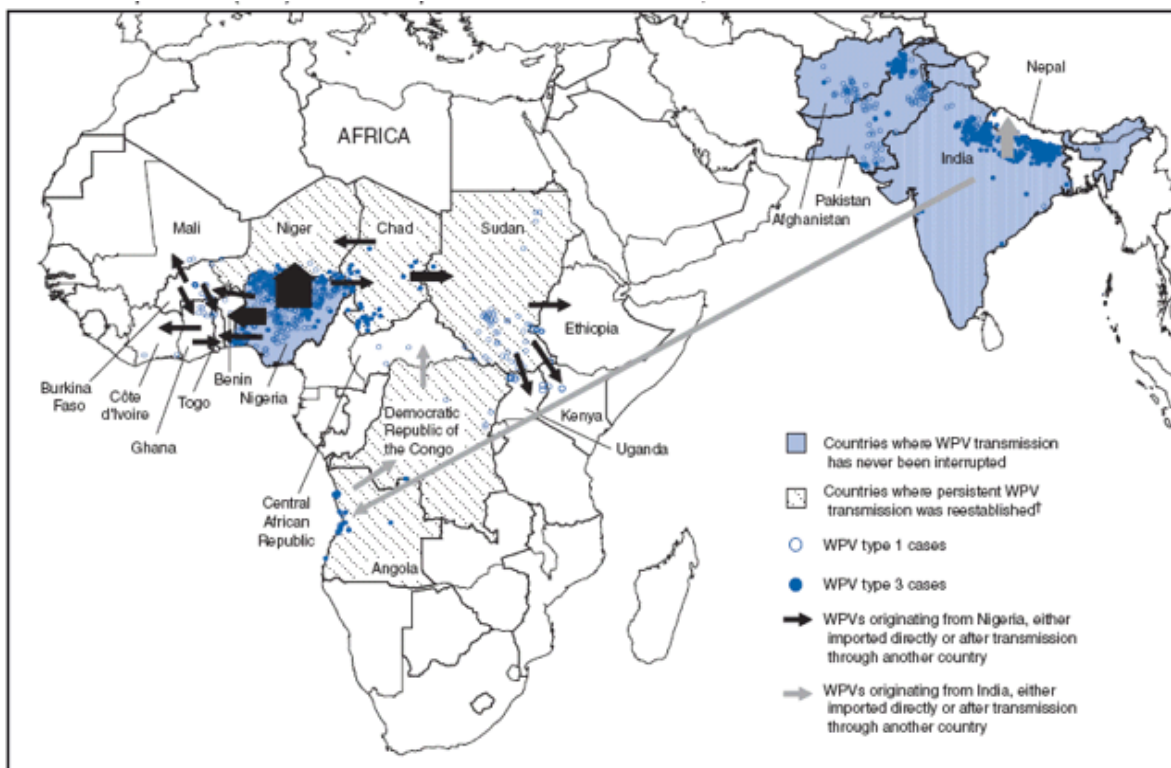
# 1 CHAPTER ONE – BACKGROUND AND INTRODUCTION

## 1.1 Introduction

The 2<sup>nd</sup> Round of the 2010 National Immunization Days was conducted to sustain the gains made in the polio eradication efforts of the West African Sub-region. Since the second half of 2008, a polio outbreak originating in Northern Nigeria has been spreading in West Africa. Among the unfortunate beneficiaries of this outbreak was Ghana. The country reported eight (8) cases of wild polio virus all from the Northern Region. In order to break further transmission of the virus, two rounds of sub-national immunization days were organized in high-risk regions (7 out of 10 regions) in the country. In addition to this, three rounds of nationwide polio vaccination campaigns were conducted in 2009. It is worthy of note that since November 2008, Ghana has not reported any case of polio.

Yet with the movement of people across borders, and the inadequate level of routine immunization in many countries in the West African block, the virus is still circulating as some countries have been re-infected with the virus, threatening more children with paralysis and even death. The map below illustrates the spread of the virus in 2008 and 2009.

Figure 1: WPV Circulation in 2008 and 2009



## 1.2 Background

In an effort to curtail the spread and work towards the global eradication of polio, Ghana joined 18 other countries in Central and West Africa and conducted two rounds of synchronized immunization campaign in an extraordinary display of solidarity and coordination. Ghana conducted the first round from 5<sup>th</sup> – 7<sup>th</sup> March 2010. The country again joined other countries within the sub-region to conduct the second round of this all important campaign from the 23<sup>rd</sup>

– 25<sup>th</sup> April 2010. Each child reached by a vaccination team received two drops of oral polio vaccine (OPV) in the first round and children 6 – 59 months received vitamin A in addition to polio vaccination in the second round. All services were administered from house-to-house.

To reach the unreached, other approaches were adopted. Communities which market dates fell outside the implementation days planned and covered all eligibles at during their market days. Camp-out teams stayed and covered island and lake communities and vaccination posts were mounted at most police barriers.

### 1.3 Timeline of Activities

Table 1: Timeline of Activities

Activity	Mar-10		Apr-10				May-10				Jun-10	
	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2
Microplanning with Regions and partners												
Regional level microplanning with districts												
District level planning												
Training of Volunteers and supervisors												
Campaign Implementation												
Regional and district levels reviews												
National post-campaign review												
Draft report												
Final Report												

## 2 CHAPTER TWO – PREPARATORY ACTIVITIES

### 2.1 Campaign planning and financing

#### 2.1.1 Microplanning

The national level microplanning meeting for the second round was jointly held with the review of the first round on 29<sup>th</sup> and 30<sup>th</sup> March 2010 at Erata Hotel, Accra.

The participants at these planning meetings were Regional Deputy Directors of Health Services, Regional Disease Control Officers and Regional NIDs Coordinators. At this meeting, funding of the campaign, the strategy to be used, tools for data collection and other important issues were discussed extensively with regions. Regional level microplanning was held from 5<sup>th</sup> -18<sup>th</sup> for the second round. Due to other competing activities, national level could not adequately participate in regional and district level microplanning in both rounds.

#### 2.1.2 Training

At the national level microplanning with regions, regional teams were trained. National supervisors training for the second round was held on Wednesday, 14<sup>th</sup> April at the National Aids Control Programme Conference Room. A total of 31 national supervisors and coordinators were trained for the second round. The training was facilitated by the National EPI Programme Manager and the Programme Manager for Vitamin A Supplementation. Regions also conducted training for regional supervisors and coordinators. Regional teams assisted districts to train team supervisors, coordinators and volunteers.

#### 2.1.3 Resource Mobilization and Funding

Funding for the campaign arrived late at the national level for both rounds. Strategies were however put in place to ensure early release to the regional level. Regions and districts were encouraged to pre-finance activities to ensure quality campaign. The funds that were provided to regions are shown below:

Table 2: Budget for the campaigns

Region	Allocation (GHc)
Ashanti	361,010
Brong-Ahafo	210,914
Central	178,106
Eastern	223,074
Greater Accra	272,609
Northern	303,358
Upper East	120,535
Upper West	89,107
Volta	178,199
Western	210,622
<b>Total</b>	<b>2,147,534</b>

## 2.2 Expenditure for Second Round NIDs - April 2010

ITEM	ACTIVITY	COST (in cedis)	Dollar equivalent	REMARKS
1	MICROPLANNING AND TRAINING AT NATIONAL LEVEL	-	-	was combined with measles microplanning meeting
2	SOCIAL MOBILIZATION AT NATIONAL LEVEL	15,048.00	10,597.18	
3	NATIONAL SUPERVISORS TRAINING	550.00	387.32	
4	NATIONAL MONITORING OF NIDS (SUPERVISION)	24,695.00	17,390.85	
5	NATIONAL SUPERVISORS REVIEW	550.00	387.32	
6	INDEPENDENT MONITORING	40,000.00	28,169.01	
7	REVIEW MEETING WITH REGIONS	32,180.00	22,661.97	
8	PRINTING OF TOOLS	28,497.00	20,068.31	
9	INDELIBLE INK	30,000.00	21,126.76	
10	VACCINE DISTRIBUTION	2,200.00	1,549.30	
11	REGIONAL LEVEL OPERATIONAL COSTS	2,147,534.00	1,512,347.89	
12	DEFICIT FOR ROUND 1	62,736.18	44,180.41	
	<b>TOTAL</b>	<b>2,383,990.18</b>	<b>1,678,866.32</b>	

## FUNDING FOR ROUND 2

1	WHO release to GHS Hq on 15th April	1,144,839.00	806,224.65	for operations
2	WHO release to RHTS, Kintampo on 15th April	40,000.00	28,169.01	for independent monitoring of campaign
	<b>TOTAL released by WHO</b>	<b>1,184,839.00</b>	<b>834,393.66</b>	
1	UNICEF release on 9th April 2010	282,000.00	198,591.55	to support training for round 2
2	unicef	98,634.62	69,461.00	to support social mob for round 2
3	UNICEF	143,263.00	100,889.44	to support operational cost for Central Region
4	UNICEF	143,448.00	101,019.72	to support operational cost for Volta Region
	<b>TOTAL released by UNICEF</b>	<b>667,345.62</b>	<b>469,961.70</b>	
1	MOH/GHS release	416,037.00	292,983.80	for social mobilization, training and micro-planning
2	MOH/GHS release	27,995.00	19,714.79	
3	MOH/GHS release	-	-	
	<b>TOTAL released by MOH/GHS</b>	<b>444,032.00</b>	<b>312,698.59</b>	
1	ROTARY	28,497.00	20,068.31	for printing of tools
2	ROTARY	30,000.00	21,126.76	for indelible ink
	<b>TOTAL released by ROTARY</b>	<b>58,497.00</b>	<b>41,195.07</b>	
	<b>TOTAL releases/pledges</b>	<b>2,354,713.62</b>	<b>1,658,249.03</b>	
	<b>DEFICIT (in Ghana Cedis)</b>	<b>-</b>	<b>20,617.30</b>	
	<b>DOLLAR EQUIVALENT OF GAP</b>	<b>= -</b>	<b>- 14,519.22</b>	

## 2.3 Support from District Assemblies and other stakeholders

**Table 3: Support from District Assemblies and other MDAs for Second Round**

Region	No. Of DAs	No. Providing Support			Total Cash Provided (GHc)
		Cash		Other	
Ashanti	27	1	27 (transport)		200.00
Brong-Ahafo	22	5	22 (transport)		8,000.00
Central	17	Not Stated	Not Stated		Not Stated
Eastern	21	1	9 (transport)		60.00
Greater Accra	15	Nil	8 (transport)		Nil
Northern	20				
Upper East	9	2	4 (transport)		2,000.00
Upper West	9	Nil	9 (transport)		Nil
Volta	18				
Western	17			250.00 (AMS)	250.00
<b>Total</b>	<b>175</b>				<b>10,510.00</b>

## 2.4 Cross-border Activities

Ghana shares common borders with Togo to the East, Burkina Faso to the North, and Cote d'Ivoire to the West. In the spirit of synchronization, funds were provided to districts which border the aforementioned countries. Below is the list of regions that border other countries:

**Table 4: Regions bordering neighbouring countries**

Region	Number of Districts	Bordering Country(s)
Brong-Ahafo	3	Cote d'Ivoire
Northern	6	Togo (4)/Cote d'Ivoire (2)
Upper East	6	Togo (3)/Burkina Faso (3)
Upper West	5	Burkina Faso (5)
Volta	8	Togo (10)
Western	4	Cote d'Ivoire (4)

With the exception of Upper West Region and Volta Region, all other regions sharing common border with neighbouring countries held cross border meetings for the second round. It must be noted however that Upper West Region discussed activities for both rounds in their cross border meeting held for the first round.

### 2.4.1 Key Issues at Meetings:

- Synchronizations not implemented as planned at higher level as each country has its own dates for implementation.
- Date for Second Round not fixed due to country elections (Togo)
- Exchange of reports on cross-border activities not done by neighbors

## 2.5 Data Collection and Management

Data management tools for the campaign were developed by the Ghana Health Service with technical support from WHO. The tools used for data collection were the following:

1. Guidelines for Vaccination teams
2. Supervisory Checklist for Assessing level of Preparedness
3. Vaccination team tally sheet
4. Daily Summary Sheet
5. Checklist for vaccination team supervision
6. Rapid Assessment form
7. Summary for Rapid Assessment
8. Format for Narrative Report Writing
9. Appraisal form for campaign supervisors

The tally sheets were filled by vaccination teams and submitted to the team supervisors who, after summarization onto summary sheets, submit to sub-district coordinators. Sub-district coordinators in turn submit the forms to district coordinators or the district coordinating team who collates and report to the regional coordinating office. Daily reporting to the national coordinating office was done every day by all regions.

Monitoring checklists were also designed for use by the national, regional and district supervisors and independent monitors. This was designed to ensure that procedures were done correctly, supplies were adequate and that no child was missed. Daily updates were given to the DHMT either during the daily coordination meetings or by phone.

### 3 CAMPAIGN IMPLEMENTATION AND RESULTS

#### 3.1 Campaign Implementation

On the campaign implementation days, volunteers moved from house-to-house to vaccinate children less than 5 years with OPV and dose children 6 – 59 months with Vitamin A. The implementation took place from the 23<sup>rd</sup> - 25<sup>th</sup> April 2010 with the exception of few districts who started earlier than the above date or extended for one or two more days in order to reach all eligible children. Supervision and monitoring was intensified by national supervisors, regional supervisors and district supervisors. In addition to this, supervisors from WHO and UNICEF were also on the ground.

At each level of implementation, there was a coordination team, stationed to oversee and coordinate the campaign.

#### 3.2 Key Findings at Regional Level

##### 3.2.1 Microplanning

- Regional level microplanning started from 9<sup>th</sup> April 2010 in Northern Region to 19<sup>th</sup> April 2010 in Greater Accra Region
- Brong-Ahafo, Greater Accra, Upper West and Volta Regions did not involve any partner
- Number of partners involved varied from two (2) in Ashanti Region to eight (8) in Western Region
- All regions involved their districts in their microplanning meeting
- All regions had a microplan document with the exception of Volta Region. Western Region microplan was not very detailed

The number of district level microplans available at regional level for planning purposes is shown below:

Table 5: Number of district level micro-plans at Region

Region	Number of Districts	No. of district level microplans at Region
Ashanti	27	3
Brong-Ahafo	22	22 (Draft Copies)
Central	17	1
Eastern	21	21
Greater Accra	10	3
Northern	20	0
Upper East	9	0
Upper West	9	7
Volta	18	0
Western	17	17 (Not detailed)

#### 3.3 Key Findings during campaign Implementation

##### 3.3.1 Strengths

- All regional supervisors in Ashanti Region pre-financed their pre-campaign visit
- Improved documentation of NID activities at all levels

- Improved collaboration with District and Municipal Assemblies, NGOs and other sectors in NIDs
- Adequate cold chain logistics, vaccines and supplies
- Practical training at all levels with role-plays and demonstrations improved quality
- Hiring of bicycles for volunteers in hard to reach areas and scattered communities
- Use of the NIDs to provide routine services to children on islands and other hard-to-reach communities
- The usual panic created as a result of artificial shortages of vaccines and blue vitamin A was absent. This is an improvement of planning over the previous campaigns.
- Well developed micro plans at most levels visited
- Good communication between Supervisors, Coordinators and Team leaders with the provision of telephone credits.
- Districts were able to pre-finance most activities
- Fundamental knowledge about the exercise and the minimum skills needed to conduct the exercise exist.

### **3.3.2 Weaknesses**

- Revisits not indicated on tally sheets
- Some districts did not send any spread sheet to sub districts
- Insufficient vaccine carriers and ice-packs.
- Inadequate team supervision in some sub-districts.
- Some teams closed too early
- Some volunteers not reminding Caretakers of routine immunization
- The volunteers seem too complacent and health staff fatigued.
- Complacency on some health workers and volunteer(know everything)
- Fatigue (result in counting basic tallying errors, non adherence to instructions)
- Difficulties in replacing old/weak volunteers due to community agitation.
- Still poor implementation of micro-plans in some sub-districts
- Most teams were not giving information on routine to care takers and not asking for AFP cases by some volunteers. This was exposed by the rapid assessment results.

### **3.3.3 Challenges**

- Inadequate/cracked vaccine carriers
- District Assemblies not giving financial support
- Funds were received late from the National level.
- Rainfall in some areas made accessibility to Hard to reach areas very difficult.
- Failure of some MDAs releasing vehicles to the campaign
- Resistance by some communities/religious sects for eligibles to be vaccinated
- Small size and over aged boat used in Asougyaman island communities
- Conflict and banned on the use of motors in Bawku Municipality.
- Synchronization with neighbours not yielding results

### 3.4 Summary of Performance by Region

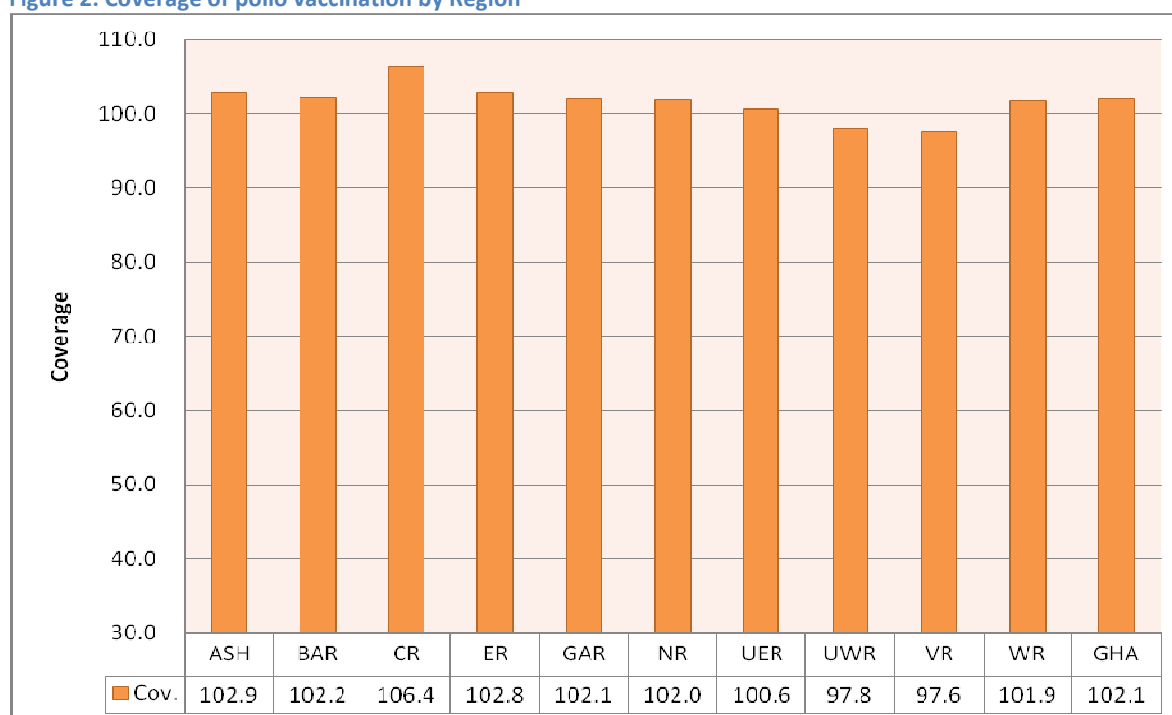
Table 6: Summary of Performance by Region

Regions	Target (Chn 0-59 months)	Number dosed with OPV	Percentage Coverage (%)	Target for Vit A	Number dosed with Vit A	Coverage for Vit A
Ashanti	950,190	977,507	102.9	855,171	822,639	96.2
Brong-Ahafo	472,083	482,453	102.2	424,875	405,536	95.4
Central	421,960	448,870	106.4	379,764	375,980	99.0
Eastern	530,743	545,573	102.8	477,669	470,408	98.5
Gt. Accra	770,614	787,002	102.1	693,553	638,068	92.0
Northern	632,753	645,597	102.0	569,478	503,597	88.4
Upper East	232,550	233,846	100.6	209,295	192,671	92.1
Upper West	148,101	144,873	97.8	133,291	120,813	90.6
Volta	404,116	394,406	97.6	363,704	329,960	90.7
Western	531,934	541,810	101.9	478,741	454,966	95.0
<b>National</b>	<b>5,095,044</b>	<b>5,201,937</b>	<b>102.1</b>	<b>4,585,540</b>	<b>4,314,638</b>	<b>94.1</b>

The table above shows the performance of the April 2010 NIDs. Out of a total of 5,095,044 children targeted, exactly 5,201,937 were vaccinated giving coverage of 102.1%. The coverages ranged from 97.6% in Volta Region to 106.4% in Central Region. About 4,585,540 children between 6 – 59 months were targeted for vitamin A. Out of this figure; about 4,314,638 children were dosed giving coverage of 94.1%.

### 3.5 Coverage of Polio Vaccination – 2<sup>nd</sup> Round

Figure 2: Coverage of polio vaccination by Region



**Table 7: Analysis of districts performance - OPV**

Coverage	Frequency	Percent	Cum Percent
<b>below 80</b>	1	0.6%	0.6%
<b>Between 80-90</b>	4	2.3%	2.9%
<b>Between 90-95</b>	9	5.1%	8.0%
<b>Between 95-99</b>	53	30.3%	38.3%
<b>Above 100</b>	108	61.7%	100.0%
<b>Total</b>	175	100.0%	100.0%

From the table above, only one district (South Tongu, 78.3%) recorded coverage of less than 80%. East Gonja (86.6%) in Northern Region, Adaklu Anyigbe (87.3%) and Biakoye (86.8%) in the Volta Region and La Sub-Metro (85.6%) in Greater Accra were the only districts that recorded between 80% and 90%. Nine (9) districts, constituting 5.1% recorded coverages of between 90 and 95%. These districts were Atwima Nwabiagya (93.7%) in the Ashanti Region, Dangme West (94.0%) and Ablekuma (90.1%) in Greater Accra, Central Gonja (92.7%) and Sawla-Tuna-Kalba (94.9%) in Northern Region, Jirapa (92.7%) in Upper West Region, Krachi East (92.9%) and Krachi West (93.0%) in Volta Region and Juabeso (94.8%) in Western Region as shown in the map.

**Figure 3: Geographical Distribution of Campaign Coverage – Round 2**

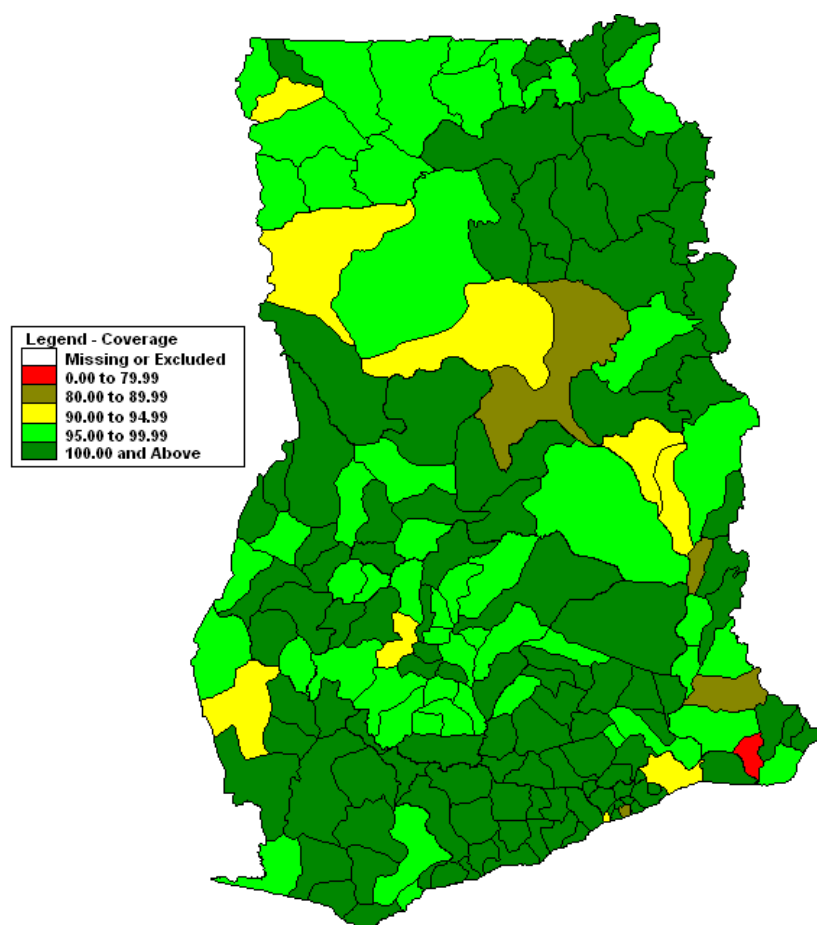


Figure 4: Regional Coverage for Round 1 and Round 2

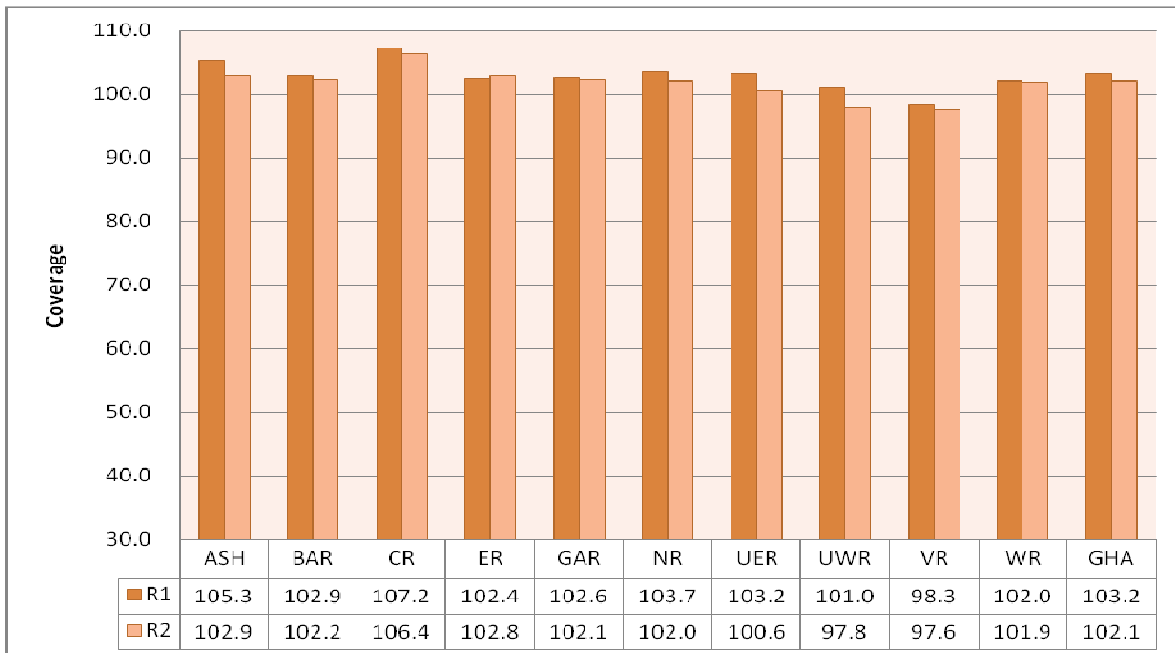
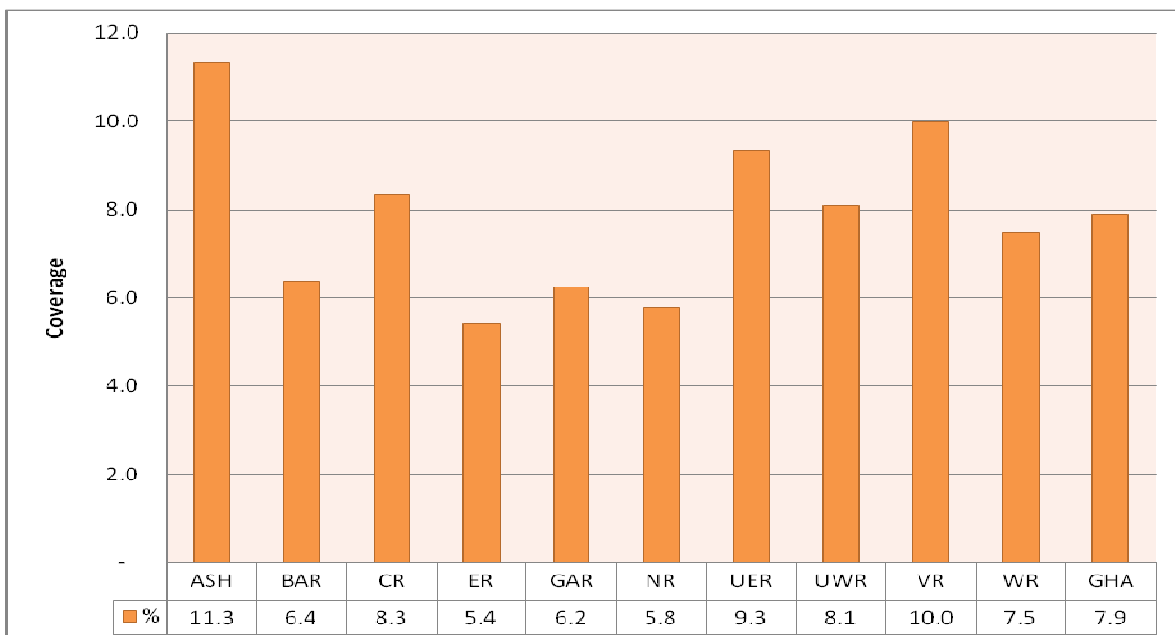


Figure 4 shows the national coverage and coverages recorded by regions in the first and second rounds of the 2010 National Immunization Days. From the figure, only Eastern Region improved on their first round coverage from 102.4% to 102.8%. The highest decline was recorded in Upper West, Upper East and Ashanti Regions with a gap of 3.2%, 2.7% and 2.5% respectively. The national coverage also fell from 103.2% to 102.1%, a decline of 1.1%.

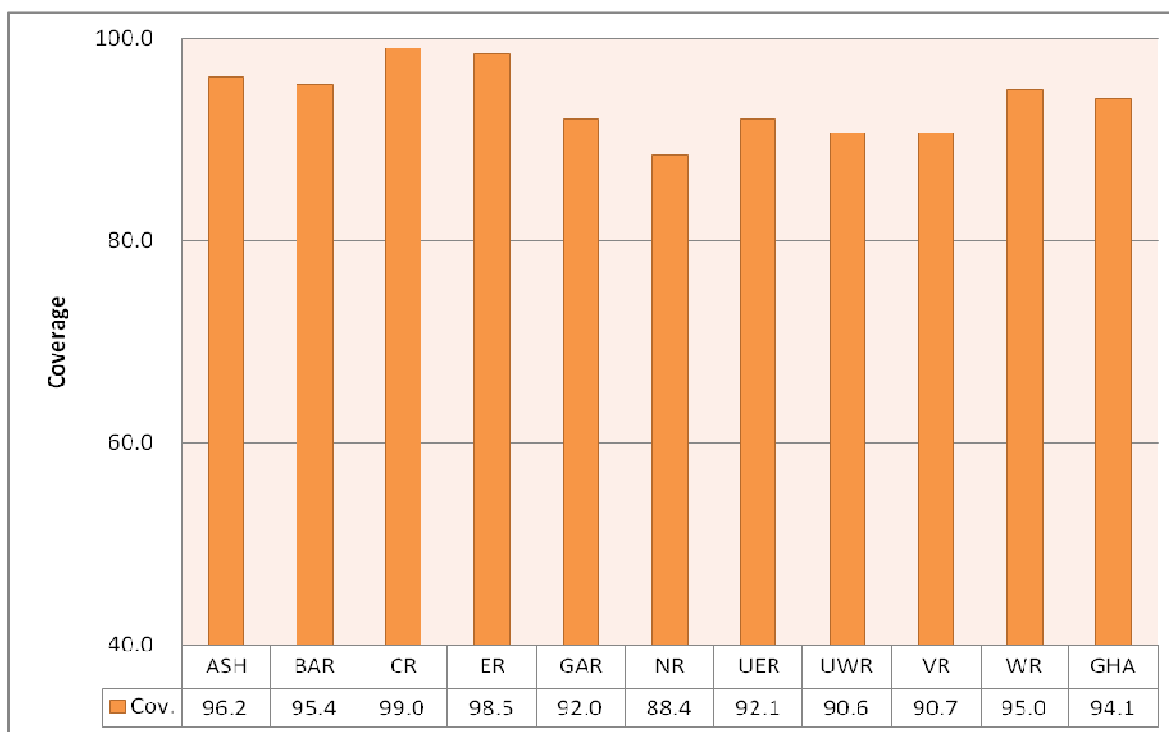
Figure 5: OPV Wastage Rate



The national OPV wastage rate was 7.9% which shows an improvement over the first round (8.1%). The wastage rate ranges from 5.4% in the Eastern Region to 11.3% in the Ashanti Region as shown in the figure above.

### 3.6 Coverage for Vitamin A – 2<sup>nd</sup> Round

Figure 6: Coverage of Vitamin A



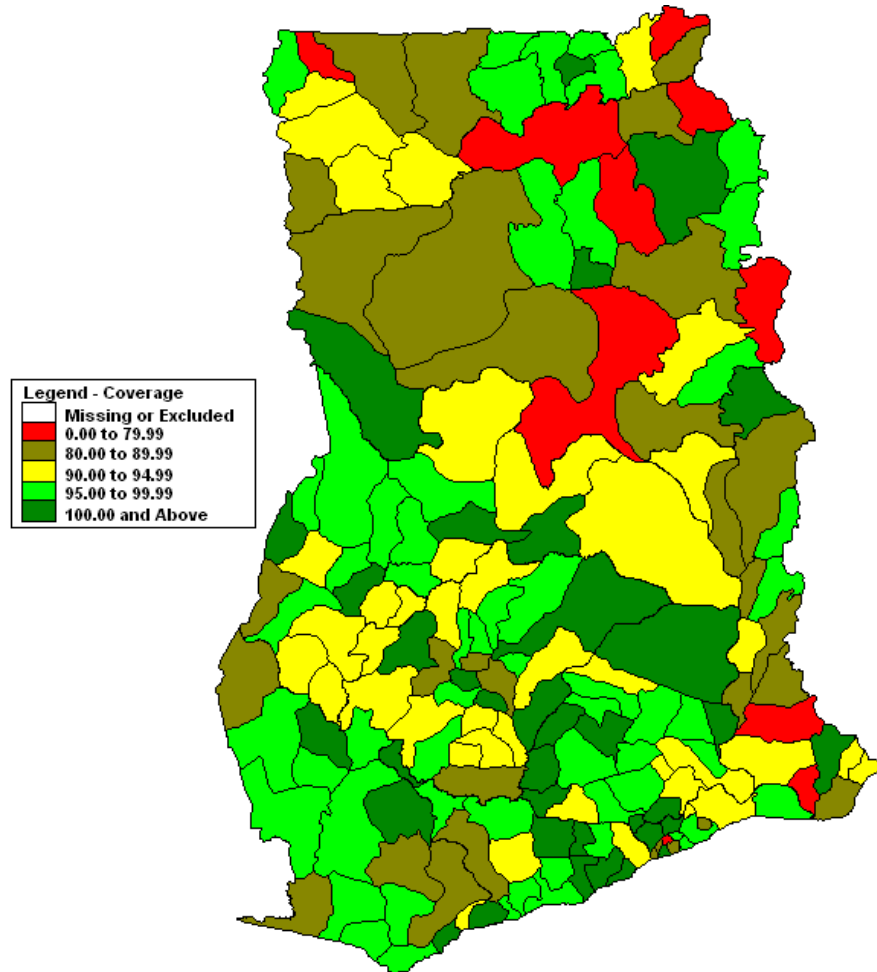
The figure above indicates the coverage for vitamin A for the second round NIDs. From the figure, the country recorded a national coverage of 94.1% ranging from 88.4% in the Northern Region to 99.0% in the Central Region. Generally, all regions recorded lower coverages as compared to OPV. Performance of districts is shown in the table below:

Table 8: Analysis of district performance – Vitamin A

Coverage	Frequency	Percent	Cum Percent
<b>below 80</b>	10	5.7%	5.7%
<b>Between 80-90</b>	32	18.3%	24.0%
<b>Between 90-95</b>	40	22.9%	46.9%
<b>Between 95-99</b>	57	32.6%	79.4%
<b>Above 100</b>	36	20.6%	100.0%
<b>Total</b>	175	100.0%	100.0%

From the table above, 82 districts representing 46% of districts in Ghana had less than 95%. Out of this figure, 10 districts had less than 80% and 32 districts recorded coverages between 80% and 90%. The districts that recorded less than 80% were: Bunkpurugu-Yunyuo (61.6%), East Gonja (74.4%), Karaga (66.2%), West Mamprusi (68.0) and Zabzugu-Tatale (79.9%) all in the Northern Region, Bawku (77.5%) in the Upper East Region, Lambussie (70.2) in the Upper West Region, Adaklu-Anyigbe (70.7%) and South Tongu (76.1%) in the Volta Region and Ayawaso Sub-Metro (73.7%) in the Greater Accra Region. This is shown in figure 7.

Figure 7: Geographical distribution of vitamin A coverage



## 4 CAMPAIGN ASSESSMENT AND VALIDATION OF RESULTS

### 4.1 Introduction

The campaign was assessed by national supervisors as well as independent monitors from the Kintampo Rural Health Training School. The national supervisors conducted in-process assessment to identify insufficiently covered areas and inform the affected district to revisit those areas. The end process assessment conducted by the independent monitors gives a more accurate validation of the campaign results.

#### 4.1.1 Inprocess Rapid Assessment by National Supervisors

Table 9: Summary of national supervisors' assessment for Polio vaccination

Regions	No of houses visited	Number of chn in houses visited	Chn not vaccinated	% Not vaccinated	Zero dose	% Zero dose
Ashanti	109	279	25	9.0	11	3.9
Brong-Ahafo	90	229	12	5.2	2	0.9
Central	124	340	18	5.3	0	-
Eastern	93	190	0	-	0	-
Greater Accra	81	215	16	7.4	0	-
Northern	89	89	22	24.7	0	-
Upper East	96	220	20	9.1	0	-
Upper West	70	175	3	1.7	3	1.7
Volta	79	162	7	4.3	1	0.6
Western	87	182	30	16.5	4	2.2
<b>National</b>	<b>918</b>	<b>2,081</b>	<b>153</b>	<b>7.4</b>	<b>21</b>	<b>1.0</b>

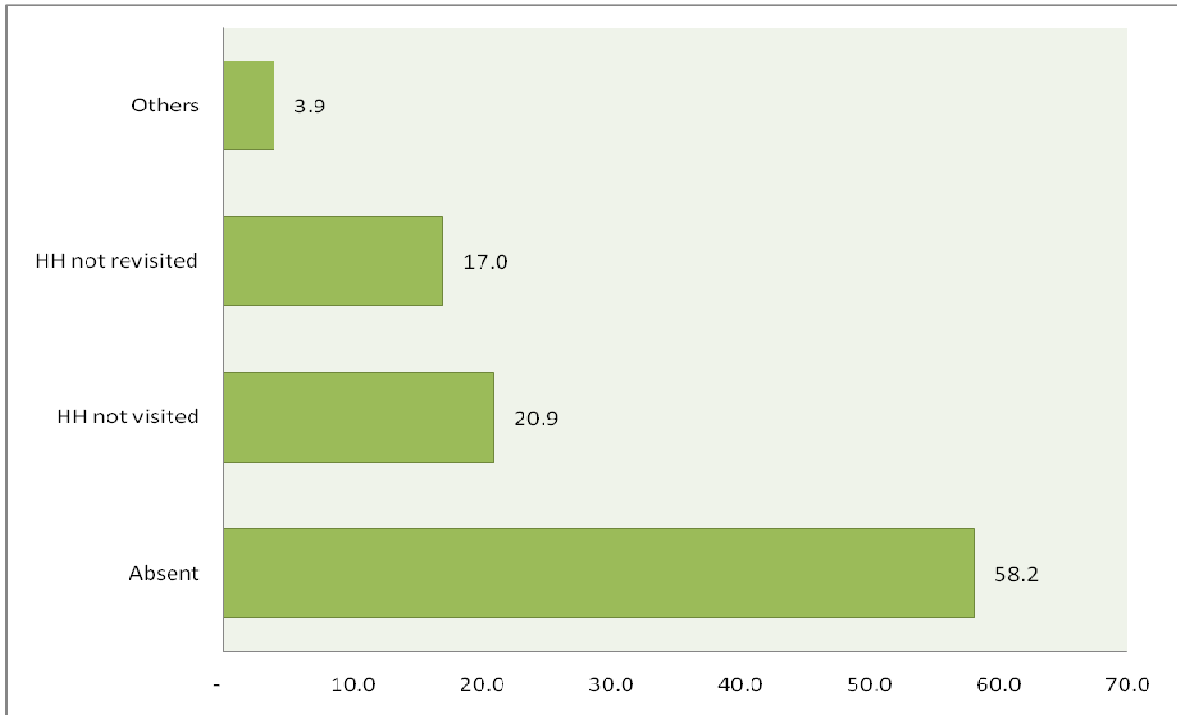
With regards to polio vaccination, the results from the rapid assessment conducted by national supervisors indicate that 7.4% of the total children seen were missed. That is, out of 2,081 children seen, 153 were missed. The proportion of children not vaccinated ranged from 0% in the Eastern Region to 24.7% in the Northern Region. About 1.0% of children assessed received OPV for the first time during the April 2010 NIDs.

Table 10: Summary of national supervisors' assessment for Vitamin A

Regions	No of houses visited	Number of chn eligible for vit A	Chn not dosed	% Not dosed
Brong-Ahafo	90	208	12	5.8
Central	124	334	18	5.4
Greater Accra	81	194	8	4.1
Northern	89	89	21	23.6
Volta	79	152	7	4.6
<b>National</b>	<b>463</b>	<b>977</b>	<b>66</b>	<b>6.8</b>

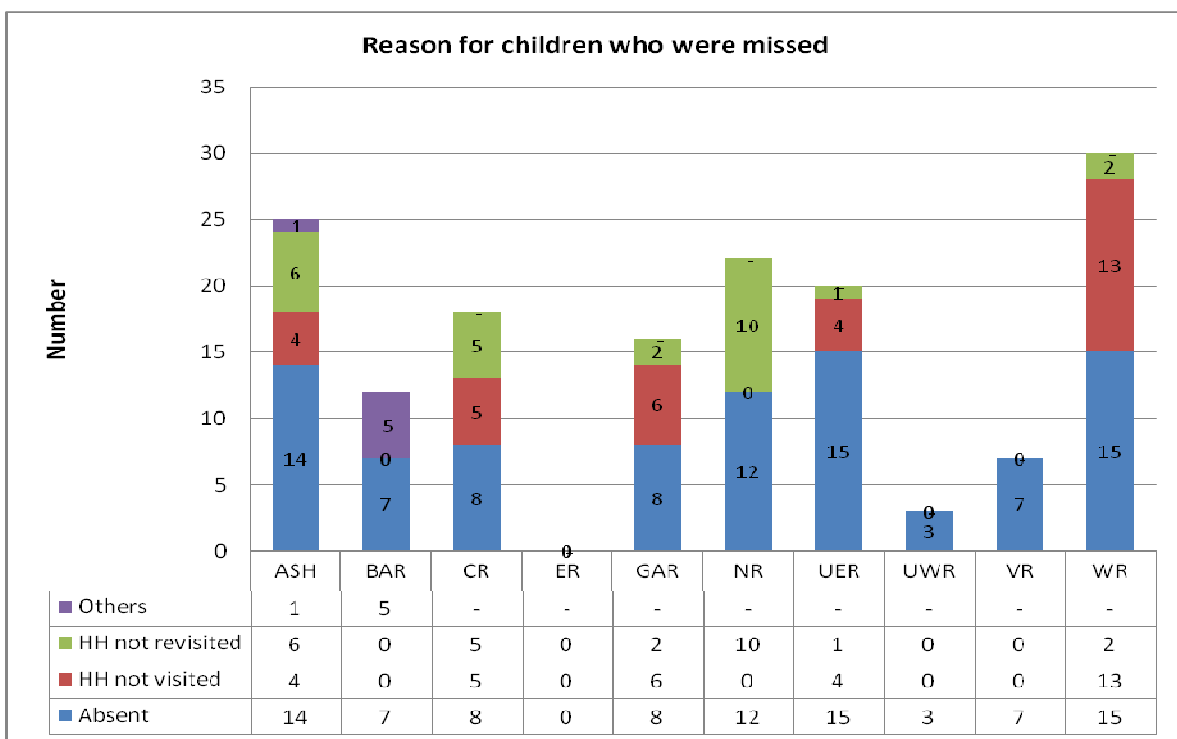
Only five national supervisory teams did rapid assessment for vitamin A supplementation. In all, a total of 977 children between the ages of 6-59 months were sampled from 463 houses. Out of this figure, about 66 (6.8%) children were not dosed. The proportion of children who were not dosed ranged from 4.1% in Greater Accra Region to 23.6% in Northern Region. Northern Region experienced shortages of vitamin A capsules throughout the campaign implementation period which partly explains the low vitamin A coverage in the region.

Figure 8: Reasons why children were missed



Child absent (58.2%) was the major reason why children were missed. This was followed by household not visited (20.9%), household not revisited (17.0%) and others (3.9%) as shown in the figure above. The regional specific reasons why children were missed is shown in the figure below:

Figure 9: Reasons why Children were missed by Region

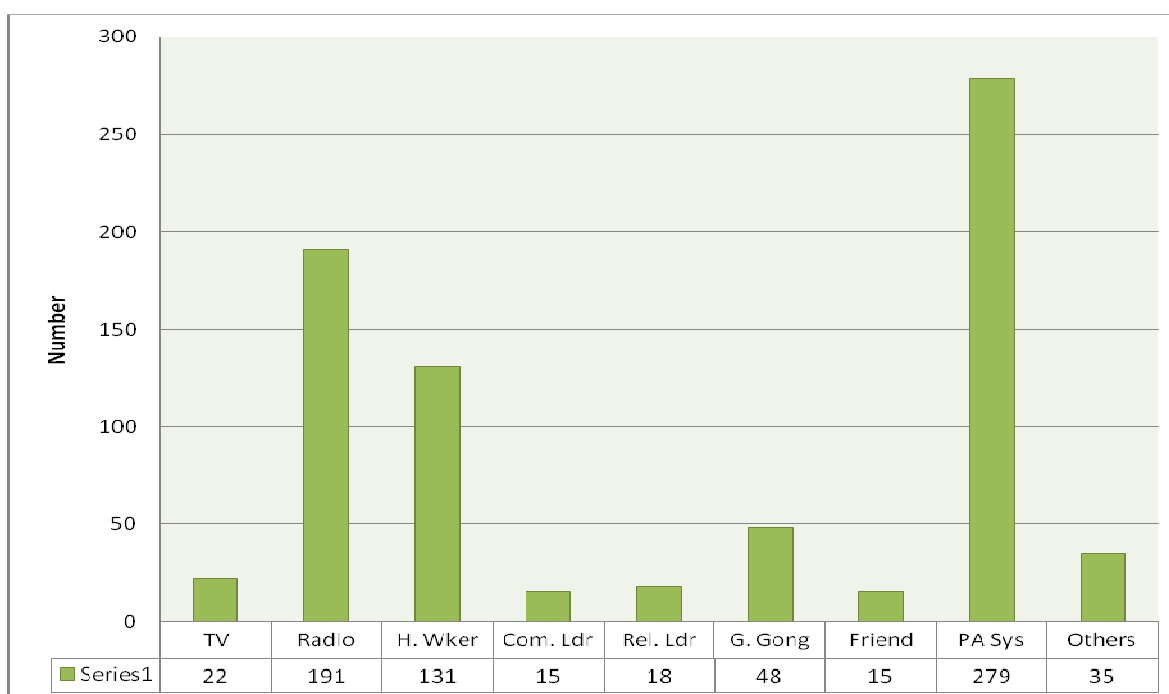


**Table 11: House marking and Awareness of campaign**

Regions	Houses surveyed	Houses not Marked	Houses not visited	Caregivers sampled	Caregivers aware	Caregivers not aware	% not aware
Ashanti	0	0	0	0	0	0	0
Brong-Ahafo	90	3	0	159	125	34	21.4
Central	124	43	2	194	135	59	30.4
Eastern	93	3	0	92	60	32	34.8
Gt. Accra	81	0	0	81	53	28	34.6
Northern	89	0	0	89	54	35	39.3
Upper East	97	13	13	97	36	61	62.9
Upper West	70	1	0	70	58	12	17.1
Volta	79	0	0	79	59	20	25.3
Western	87	15	13	87	32	55	63.2
National	810	78	28	948	612	336	35.4

From the above table, out of 810 houses visited, 78 were not marked and 28 were not visited by a vaccination team at all. About 612 caregivers out of a total of 948 caregivers interviewed by national supervisors were aware of the campaign before the vaccination teams arrived. Therefore, 336 (35.4%) caregivers were not aware of the campaign before teams arrived. The national supervisory team which visited Ashanti Region did not report on house marking and awareness of campaign.

**Figure 10: Sources of Information on Campaign**



The medium through which most caregivers heard about the campaign was the PA system (37.0%). This was followed by radio (25.3%) and then health workers (17.4%) as illustrated in the figure above.

#### 4.1.2 End-Process Assessment by Independent Monitors

Students from the Kintampo Rural Health Training School supported by their tutors as Regional Coordinators conducted an end-process assessment for children in houses and those found out-of-houses in 85 out of 170 districts (Excluding sub-metros in Accra Metro).

The terms of reference, methodology and their findings are presented below:

##### 4.1.2.1 House-to-house independent monitoring

The terms of reference for the assessment of children found in houses were to assess the:

- Proportion of children (0-59 )months vaccinated in households visited
- Proportion of children (0-59 ) months not vaccinated in households visited
- Reasons why children were not vaccinated
- Proportion of insufficiently covered areas with missed children.
- Proportion of completely marked houses with children
- Proportion of children 0-59 months receiving OPV for the first time
- Proportion of care takers aware of NIDs before arrival of vaccination teams
- Major ources of information used during the NIDs
- Proportion of caregivers that were informed on routine immunization.

##### 4.1.2.2 Methodology

The assessment was done in 85 districts out of 170 in the country. Convenient sampling was used to select sub -districts, communities and houses. Three (3) sub-districts were studied in each district. In each sub-district one community was chosen. In each community 20 houses were entered. Every household in each house was assessed. Every child 0-59 months seen in houses visited during the assessment was studied

**Table 12:** Number of Regions and districts studied

Item	Number
Regions	10
District	85
Sub-districts	255
Communities	255

In all, a total of 255 sub-districts and 255 communities were studied. About 5,100 houses, 11,765 households and 13,315 children 0-59 months were sampled. About 11,274 children out of the total children sampled were physically checked as indicated in tables 12 and 13.

**Table 13:** Household Profile

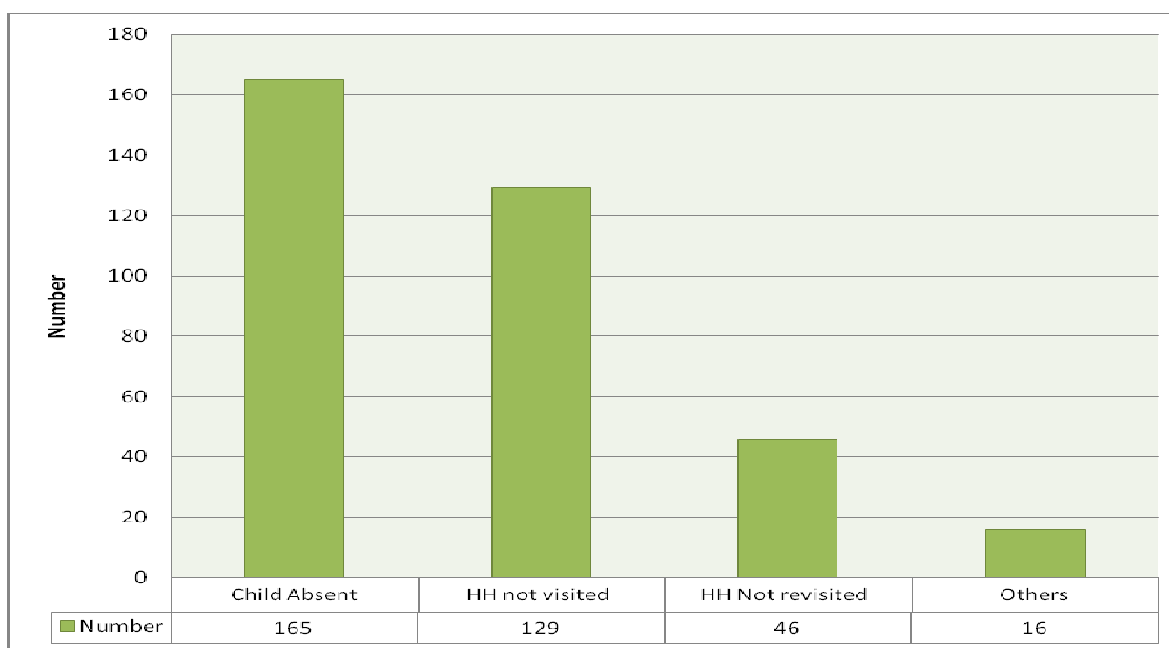
Item	Number
Number of Houses visited	5,100
Number of House Holds visited	11,765
Total number of children 0-59 months in houses visited	13,315
Number of children 0-59 months physically checked in houses visited	11,274

**Table 14:** Vaccination Status of children

Item	Number	Percentage
Vaccinated By finger marking	10,737	95.24
By History	181	1.61
Missed	356	3.16
Total	11,274	100

The result of the assessment showed that, out of a total of 11,274 children who were physically checked; about 10,737 (95.2%) were vaccinated and evidenced by finger marking and 181 (1.6%) were vaccinated and evidenced through recall by caregivers. About 356 (3.2%) children were missed. The major reasons why children were missed were child absent, household not visited and household not revisited as shown in the figure below:

**Figure 11:** Reasons why Children were missed



**Figure 12:** House Marking

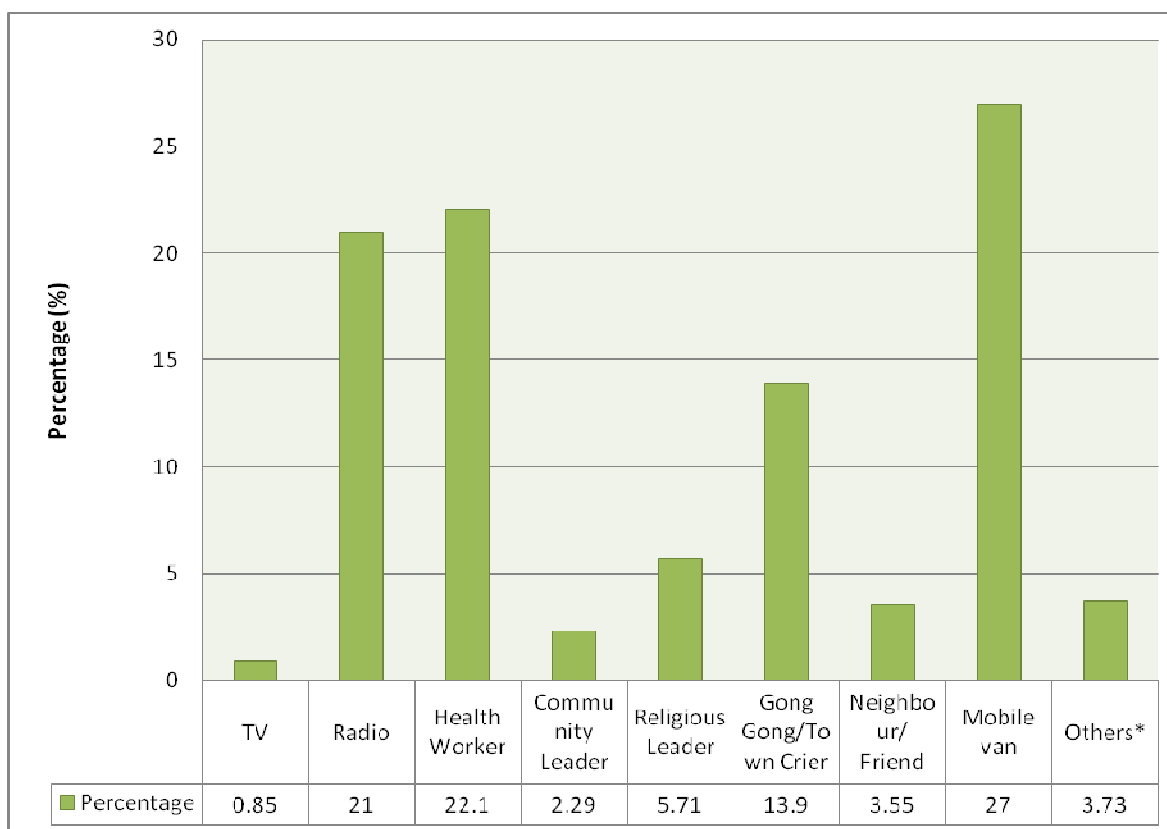
Item	Number	Percentage
Total houses visited	5,100	100.00
Houses Marked Correctly	4,562	89.45
Houses Marked as Completed but had missed Chn	182	3.57

A total of 4,562 (89.5%) were correctly marked. About 182 (3.6%) houses marked as completed had missed children in them

**Table 15:** Caretakers' awareness of the campaign

Awareness Status	Number	Percentage
Caretaker s Aware	8,392	75.42
Caretakers not Aware	2,735	24.58
<b>Total caretakers</b>	<b>11,127</b>	<b>100.00</b>

**Figure 13:** Sources of information on the campaign



The major source of information for caregivers during the 2<sup>nd</sup> Round NIDs was the Public Address System. Other useful medium through which information on the campaign were disseminated were through health workers and radio as shown in the figure above.

#### 4.1.2.3 Out-of-house independent monitoring

The terms of reference for the assessment of children found out of house were to assess the:

- Proportion of children 0-59 months vaccinated
- Proportion of children 0-59 months not vaccinated
- Establish places where children were seen
- Establish reasons why children were not vaccinated
- Proportion of care takers aware of NIDs before arrival of vaccination teams
- Proportion of care takers not aware of NIDs before arrival of vaccination teams

**Table 16:** Vaccination status for children found out-of-house

Item	Number	Percentage
Physically checked	2,490	100.00
Finger marked	2,424	97.35
Finger not marked	66	2.65

**Table 17:** Places where children were seen

Place	Number Seen	Percentage
Road side	881	35.38
Market	278	11.16
Playground	948	38.07
Schools	41	1.65
Riverside	48	1.93
Lorry station	160	6.43
Others*	134	5.38

**Table 18:** Reasons for Children who were missed

Reasons for not vaccinated	Number	Percentage
Child Absent at visit time	34	51.52
House Hold not visited	20	30.30
House Hold Not revisited	6	9.09
Others*	6	9.09
Total	66	100

**Table 19:** Caretakers' awareness of the campaign

Awareness Status	Number	Percentage
Caretaker s aware	784	78.24
Caretakers not aware	218	21.76
Total caretakers	1,002	100

### 4.1.3 Zero Dose and Routine Services

As part of the assessment by independent monitors, children receiving OPV for the first time were evaluated as well as caregivers who were reminded about routine immunization. The results are tabulated below:

Item	Number
Children (0-11) months receiving OPV for the first time	60
Caretakers informed about routine immunizations	5,891
Caretakers not informed about routine immunizations	4,405

Table 20: Vitamin supplementation

Item	Number	Percentage
Total Children 6-59 months	11,513	100
Children (6-59) months receiving Vitamin A	11,121	96.60
Children (6-59) months not receiving Vitamin A	392	3.40

### 4.2 Key findings during independent assessment

- Some house markings were not visible
- Poor demarcation of some geographical locations resulting in some houses not visited by volunteers (Kasoa)
- Some houses were marked with the same chalk colour as the house painting.
- In some areas, house markings were done at hidden/obscure places
- Some houses were not marked though visited
- Some house markings were washed off due to the rainfall that followed the exercise
- Late release of funds to districts was a challenge.

### 4.3 Constraints

- Inadequate funds for social mobilization
- Inadequate vehicle support from collaborators
- Frequent power outage in some districts

### 4.4 Recommendations:

- DHMTs should go all-out to lobby MMD assemblies to support them with transport and other logistics.
- Vaccinators should be trained how to mark houses correctly & visibly.
- Information to caregivers to continue with routine services should be stressed during volunteer training.
- The sub-district health team should clearly demarcate geographical areas for the volunteers

- DHMTs should provide/ hire generators to ensure uninterrupted power supply to the cold rooms.
- Funds should be released as early as possible to all the levels

#### **4.5 Post-Campaign Review**

The nationwide polio vaccination exercise became a reality as a result of the inputs made by national, regional and district health officers. It was therefore necessary that a meeting was organized for stakeholders to review the general performance of the campaign. To this end, a two-day post campaign review meeting was organized in Kumasi from the 18<sup>th</sup> – 19<sup>th</sup> May 2010. The meeting was opened and chaired by Alhaj Dr. Mohammed Bin Ibrahim, the Ashanti Regional Director for Health Services.

Issues discussed at the review meeting included:

- Preparatory activities for the campaign
- Implementation of the campaign
- Post Campaign activities
- In-process and end process assessment
- Experiences from regions and district over the two rounds
- Injection safety
- H1N1 Vaccination

## 5 CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

The second round of the National Immunization Days against polio was conducted successfully in all regions. With improved microplanning at all levels and application of experiences learnt from the first round and other national campaigns, the quality of the second round of the 2010 National Immunization Days improved significantly.

### 5.2 Recommendations

#### 5.2.1 General Recommendations

- Micro-plans should be properly documented and kept for easy reference
- It is very important to acknowledge and appreciate support from partners in order to keep interest. We must acknowledge in writing and attach technical report
- Time for training should be long enough to allow trainees to understand the activity and their tasks

#### 5.2.2 National Level

- Early confirmation of budget and early release of funds
- Provision of stickers in replace of chalk for house marking
- Procurement of drug counters for counting vitamin A capsules
- Worn-out vaccine carriers need to be replaced to enhance good vaccine handling
- Provision of fiber glass boat for Asuogyaman District in Eastern Region and Pru District in Brong-Ahafo Region to improve access for both supplemental and routine immunization
- There is the need to increase volunteers' allowance, especially the boat teams and those who walk long distances to vaccinate in hamlets.

#### 5.2.3 Regional Level

- Sustain and improve active surveillance particularly in the silent districts
- Special visit to be organized by the RDCU to appraise status of Cold Chain equipment for necessary action
- To ensure quality training at all levels

#### 5.2.4 District and Sub-district Levels

- Provision of rain coats and Wellington boots to volunteers
- Thorough micro planning for big markets
- Procurement of hand sanitizers for use by volunteers
- Team supervisors should step up their supervision to ensure quality data capture.
- Districts to use outcome of assessment to formulate policies that will help them deliver more efficiently and effectively.
- District should stick to format for report writing

## 6 ANNEXES

### National: Summary of Day 1 – 3 Performance by Region

Regions	OPV Vaccination			Vitamin A			Oral Polio Vaccine				Vit A Capsules	
	Target	Dosed	Coverage	Target	Dosed	Coverage	Received	Used	Wastage	Vials with VVM Change	Received	Used
Ashanti	950,190	977,507	102.9	855,171	822,639	96.2	1,304,020	1,102,620	11.3	-	1,161,572	833,138
Brong-Ahafo	472,083	482,453	102.2	424,875	405,536	95.4	622,233	515,248	6.4	-	621,234	414,435
Central	421,960	448,870	106.4	379,764	375,980	99.0	590,688	489,665	8.3	-	611,059	395,607
Eastern	530,743	545,573	102.8	477,669	470,408	98.5	613,260	576,738	5.4	-	609,723	474,978
Gt. Accra	770,614	787,002	102.1	693,553	638,068	92.0	906,060	839,420	6.2	3	806,139	651,485
Northern	632,753	645,597	102.0	569,478	503,597	88.4	754,558	685,252	5.8	-	587,698	499,857
Upper East	232,550	233,846	100.6	209,295	192,671	92.1	231,595	257,896	9.3	-	276,125	192,200
Upper West	148,101	144,873	97.8	133,291	120,813	90.6	193,320	157,600	8.1	-	168,658	121,710
Volta	404,116	394,406	97.6	363,704	329,960	90.7	643,581	438,154	10.0	-	624,131	341,254
Western	531,934	541,810	101.9	478,741	454,966	95.0	753,785	585,618	7.5	19	703,150	451,516
Ghana	5,095,044	5,201,937	102.1	4,585,540	4,314,638	94.1	6,613,100	5,648,211	7.9	22	6,169,489	4,376,180

**Day One Results**

**National: Summary of Day 1 Performance by Region**

Regions	OPV Vaccination			Vitamin A			Oral Polio Vaccine				Vit A Capsules	
	Target	Dosed	Coverage	Target	Dosed	Coverage	Received	Used	Wastage	Vials with VVM Change	Received	Used
Ashanti	950,190	592,847	62.4	855,171	494,754	57.9	774,900	668,700	11.3	-	681,198	500,457
Brong-Ahafo	472,083	241,185	51.1	424,875	203,801	48.0	314,860	256,639	6.0	-	319,613	207,011
Central	421,960	237,758	56.3	379,764	201,251	53.0	332,188	256,796	7.4	-	329,854	206,771
Eastern	530,743	269,681	50.8	477,669	230,446	48.2	317,170	284,695	5.3	-	323,237	231,942
Gt Accra	770,614	432,762	56.2	693,553	342,327	49.4	531,940	459,120	5.7	-	491,810	358,203
Northern	632,753	281,029	44.4	569,478	225,994	39.7	327,785	298,646	5.9	-	256,802	219,182
Upper East	232,550	118,629	51.0	209,295	98,047	46.8	155,841	131,791	10.0	-	141,309	98,598
U. West	148,101	85,331	57.6	133,291	72,639	54.5	112,640	93,620	8.9	-	101,995	73,093
Volta	404,116	190,885	47.2	363,704	162,120	44.6	303,301	210,163	9.2	-	318,391	168,442
Western	531,934	276,551	52.0	478,741	234,748	49.0	386,180	297,580	7.1	-	372,285	236,872
Ghana	5,095,044	2,726,658	53.5	4,585,540	2,266,127	49.4	3,556,805	2,957,750	7.8	-	3,336,494	2,300,571

**Day Two Results**

**National: Summary of Day 2 Performance by Region**

Regions	OPV Vaccination			Vitamin A			Oral Polio Vaccine				Vit A Capsules	
	Target	Dosed	Coverage	Target	Dosed	Coverage	Received	Used	Wastage	Vials with VVM Change	Received	Used
Ashanti	950,190	284,619	30.0	855,171	243,527	28.5	385,640	316,920	10.2	-	340,253	246,313
B-Ahafo	472,083	164,128	34.8	424,875	138,975	32.7	209,763	175,153	6.3	-	198,399	141,866
Central	421,960	141,921	33.6	379,764	116,973	30.8	179,391	155,602	8.8	-	171,250	117,735
Eastern	530,743	189,136	35.6	477,669	162,767	34.1	203,180	198,125	4.5	-	191,573	163,831
Gt Accra	770,614	246,404	32.0	693,553	205,908	29.7	234,580	261,440	5.8	-	232,101	205,417
Northern	632,753	220,977	34.9	569,478	162,358	28.5	262,043	233,797	5.5	-	192,971	163,748
Upper East	232,550	82,951	35.7	209,295	69,658	33.3	27,454	87,990	5.7	-	91,896	68,352
U. West	148,101	44,433	30.0	133,291	36,481	27.4	56,620	47,500	6.5	-	48,715	36,719
Volta	404,116	132,149	32.7	363,704	107,864	29.7	217,994	147,460	10.4	-	193,850	113,058
Western	531,934	180,667	34.0	478,741	152,392	31.8	249,170	193,960	6.9	-	226,111	149,760
Ghana	5,095,044	1,687,385	33.1	4,585,540	1,396,903	30.5	2,025,835	1,817,947	7.2	-	1,887,119	1,406,799

**Day Three Results**

**National: Summary of Day 3 Performance by Region**

Regions	OPV Vaccination			Vitamin A			Oral Polio Vaccine				Vit A Capsules	
	Target	Dosed	Coverage	Target	Dosed	Coverage	Received	Used	Wastage	Vials with VVM Change	Received	Used
Ashanti	950,190	100,041	10.5	855,171	84,358	9.9	143,480	117,000	14.5	-	140,121	86,368
B-Ahafo	472,083	77,140	16.3	424,875	62,760	14.8	97,610	83,456	7.6	-	103,222	65,558
Central	421,960	69,191	16.4	379,764	57,756	15.2	79,109	77,267	10.5	-	109,955	71,101
Eastern	530,743	86,756	16.3	477,669	77,195	16.2	92,910	93,918	7.6	-	94,913	79,205
Gt Accra	770,614	107,836	14.0	693,553	89,833	13.0	139,540	118,860	9.3	3	82,228	87,865
Northern	632,753	143,591	22.7	569,478	115,245	20.2	164,730	152,809	6.0	-	137,925	116,927
Upper East	232,550	32,266	13.9	209,295	24,966	11.9	48,300	38,115	15.3	-	42,920	25,250
U/ West	148,101	15,109	10.2	133,291	11,693	8.8	24,060	16,480	8.3	-	17,948	11,898
Volta	404,116	71,372	17.7	363,704	59,976	16.5	122,286	80,531	11.4	-	111,890	59,754
Western	531,934	84,592	15.9	478,741	67,826	14.2	118,435	94,078	10.1	19	104,754	64,884
Ghana	5,095,044	787,894	15.5	4,585,540	651,608	14.2	1,030,460	872,514	9.7	22	945,876	668,810

**Ashanti Region - Summary of Days 1 - 3 Performance by district**

Districts	Target for OPV	chn 0 - 59 Months vaccinated with OPV	OPV Coverage	Target for Vitamin A	Chn 6-59 months dosed with Vitamin A	Vitamin A Coverage	Number of OPV doses received	Number of OPV doses used	OPV Wastage Rate	OPV Vials with VVM Change (3 & 4)	Total vitamin A capsules received	Total vitamin A capsules used	No AFP cases Identified	Sub-districts reports expected	Sub-districts reports received
<b>Ashanti Region</b>	<b>950,190</b>	<b>977,507</b>	<b>102.9</b>	<b>855,171</b>	<b>822,639</b>	<b>96.2</b>	<b>1,304,020</b>	<b>1,102,620</b>	<b>11.3</b>	<b>-</b>	<b>1,161,572</b>	<b>833,138</b>	<b>4</b>	<b>402</b>	<b>402</b>
Adansi North	30,548	30,409	99.5	27,493	25,296	92.0	39,580	34,260	11.2	-	33,533	25,007	-	18	18
Adansi South	30,444	30,613	100.6	27,400	22,565	82.4	36,000	33,200	7.8	-	23,188	23,188	-	15	15
Afigya-Kwabre	30,470	32,168	105.6	27,423	26,966	98.3	43,840	35,980	10.6	-	37,693	27,504	-	18	18
Ahafo-Ano North	19,188	19,412	101.2	17,269	16,039	92.9	26,600	21,080	7.9	-	23,119	16,113	-	15	15
Ahafo-Ano South	33,855	36,284	107.2	30,470	30,741	100.9	41,560	40,480	10.4	-	37,028	31,228	-	18	18
Amansie Central	15,447	15,205	98.4	13,902	13,508	97.2	24,240	18,420	17.5	-	24,428	13,901	-	15	15
Amansie West	32,467	32,379	99.7	29,220	27,405	93.8	40,260	36,840	12.1	-	32,855	27,843	-	21	21
Asante-Akim North	33,517	33,351	99.5	30,165	27,443	91.0	49,020	36,480	8.6	-	39,639	27,486	-	15	15
Asante-Akim South	24,308	25,461	104.7	21,877	22,429	102.5	36,240	28,740	11.4	-	32,668	21,812	-	18	18
Asante-Mampong	19,121	19,091	99.8	17,209	16,879	98.1	23,380	20,260	5.8	-	23,213	16,921	-	15	15
Atwima-Kwanwoma	19,384	20,047	103.4	17,446	17,256	98.9	22,400	22,140	9.5	-	20,000	17,479	-	12	12
Atwima-Mponua	23,097	23,014	99.6	20,787	19,563	94.1	28,360	26,600	13.5	-	22,187	20,378	-	21	21
Atwima-Nwabiagya	35,175	32,972	93.7	31,658	28,003	88.5	40,000	35,160	6.2	-	39,264	28,126	2	15	15
Bekwai	24,500	23,378	95.4	22,050	20,187	91.6	28,000	26,840	12.9	-	21,733	20,304	-	12	12
Bosome-Freho	13,752	13,727	99.8	12,377	11,441	92.4	16,400	15,320	10.4	-	14,000	11,480	-	15	15
Bosomtwe	17,420	18,525	106.3	15,678	15,726	100.3	23,560	21,040	12.0	-	22,881	15,884	-	9	9
Ejisu-Juaben	34,092	33,048	96.9	30,683	27,292	88.9	40,960	37,940	12.9	-	37,864	27,846	-	15	15
Ejura-Sekodumasi	19,732	19,777	100.2	17,759	16,714	94.1	27,460	22,640	12.6	-	22,596	16,856	-	21	21
Kumasi	309,605	335,187	108.3	278,645	282,087	101.2	458,800	384,200	12.8	-	387,701	287,167	1	15	15
Kwabre	28,609	27,415	95.8	25,748	22,584	87.7	37,900	29,960	8.5	-	51,307	22,391	-	12	12
Obuasi	45,651	45,311	99.3	41,086	37,565	91.4	57,680	49,040	7.6	-	53,137	37,292	-	15	15
Offinso	21,074	20,678	98.1	18,967	17,210	90.7	26,160	23,740	12.9	-	21,622	17,884	-	9	9
Offinso North	18,063	18,514	102.5	16,257	15,732	96.8	21,800	21,300	13.1	-	16,225	15,744	1	6	6
Sekyere-Afram Plains	18,507	19,775	106.9	16,656	16,721	100.4	43,880	22,600	12.5	-	51,467	16,810	-	18	18
Sekyere West	16,128	15,881	98.5	14,515	14,114	97.2	26,220	19,940	20.4	-	26,570	15,126	-	15	15
Sekyere East	15,659	15,614	99.7	14,093	13,547	96.1	18,000	16,640	6.2	-	15,600	13,742	-	12	12
Sekyere South	20,377	20,271	99.5	18,339	17,626	96.1	25,720	21,780	6.9	-	30,054	17,626	-	12	12

**Brong-Ahafo Region - Summary of Days 1 - 3 Performance by district**

Districts	Target for OPV	chn 0 - 59 Months vaccinated with OPV	OPV Coverage	Target for Vitamin A	Chn 6-59 months dosed with Vitamin A	Vitamin A Coverage	Number of OPV doses received	Number of OPV doses used	OPV Wastage Rate	OPV Vials with VVM Change (3 & 4)	Total vitamin A capsules received	Total vitamin A capsules used	No AFP cases identified	Sub-districts reports expected	Sub-districts reports received
<b>Brong-Ahafo</b>	<b>472,083</b>	<b>482,453</b>	<b>102.2</b>	<b>424,875</b>	<b>405,536</b>	<b>95.4</b>	<b>622,233</b>	<b>515,248</b>	<b>6.4</b>	<b>-</b>	<b>621,234</b>	<b>414,435</b>	<b>3</b>	<b>339</b>	<b>339</b>
Asunafo North	25,444	25,549	100.4	22,900	20,734	90.5	38,246	27,828	8.2	-	40,010	20,967	-	15	15
Asunafo South	18,800	18,601	98.9	16,920	15,325	90.6	20,440	19,791	6.0	-	30,722	15,700	-	12	12
Asutifi	21,302	21,795	102.3	19,172	17,705	92.3	28,480	23,836	8.6	-	23,010	18,091	-	18	18
Atebubu-Amanten	19,882	21,035	105.8	17,894	18,026	100.7	33,000	23,580	10.8	-	29,315	18,202	-	18	18
Berekum	21,394	20,427	95.5	19,255	17,869	92.8	29,424	22,783	10.3	-	31,161	17,950	-	12	12
Dormaa East	10,394	10,702	103.0	9,355	8,970	95.9	14,540	12,022	11.0	-	13,023	8,978	-	9	9
Dormaa	29,743	29,708	99.9	26,769	23,569	88.0	35,780	31,310	5.1	-	36,262	25,404	-	21	21
Jaman North	17,536	17,981	102.5	15,782	14,995	95.0	22,340	18,683	3.8	-	20,505	15,234	-	9	9
Jaman south	19,253	20,723	107.6	17,328	18,448	106.5	27,520	22,200	6.7	-	26,669	18,537	1	18	18
Kintampo North	19,406	19,962	102.9	17,465	16,506	94.5	24,630	21,647	7.8	-	20,476	16,796	-	21	21
Kintampo South	15,376	15,330	99.7	13,838	13,562	98.0	18,860	17,400	11.9	-	19,246	15,143	1	18	18
Nkoranza North	12,028	12,362	102.8	10,825	11,126	102.8	13,280	12,625	2.1	-	17,140	11,149	-	12	12
Nkoranza South	20,137	20,113	99.9	18,123	17,154	94.7	21,780	20,800	3.3	-	18,936	16,942	-	21	21
Pru	28,637	30,247	105.6	25,773	23,488	91.1	37,520	31,700	4.6	-	29,219	23,581	-	15	15
Sene	21,983	21,843	99.4	19,785	18,396	93.0	31,160	23,645	7.6	-	28,719	18,530	-	15	15
Sunyani	26,811	29,488	110.0	24,130	24,809	102.8	42,030	31,500	6.4	-	40,930	25,171	-	18	18
Sunyani West	22,116	24,282	109.8	19,904	19,647	98.7	26,060	25,210	3.7	-	22,690	20,012	1	15	15
Tain	21,073	21,337	101.3	18,966	18,812	99.2	25,660	22,422	4.8	-	22,065	19,013	-	15	15
Tano North	16,141	15,775	97.7	14,527	13,075	90.0	28,270	16,470	4.2	-	32,354	13,227	-	15	15
Tano South	16,808	16,793	99.9	15,127	14,300	94.5	19,210	17,680	5.0	-	16,979	14,552	-	9	9
Techiman	44,710	45,305	101.3	40,239	38,871	96.6	51,820	47,231	4.1	-	59,593	41,302	-	24	24
Wenchi	23,109	23,095	99.9	20,798	20,149	96.9	32,183	24,885	7.2	-	42,210	20,154	-	9	9

**Central Region - Summary of Days 1 - 3 Performance by district**

Districts	Target for OPV	chn 0 - 59 Months vaccinated with OPV	OPV Coverage	Target for Vitamin A	Chn 6-59 months dosed with Vitamin A	Vitamin A Coverage	Number of OPV doses received	Number of OPV doses used	OPV Wastage Rate	OPV Vials with VVM Change (3 & 4)	Total vitamin A capsules received	Total vitamin A capsules used	No APP cases Identified	Sub-districts reports expected	Sub-districts reports received
<b>Central Region</b>	<b>421,960</b>	<b>448,870</b>	<b>106.4</b>	<b>379,764</b>	<b>375,980</b>	<b>99.0</b>	<b>590,688</b>	<b>489,665</b>	<b>8.3</b>	<b>-</b>	<b>611,059</b>	<b>395,607</b>	<b>3</b>	<b>243</b>	<b>243</b>
Abura-Asebu-Kwam	22,536	23,618	104.8	20,282	19,827	97.8	26,720	25,780	8.4	-	29,179	20,017	1	12	12
Agona East	15,450	15,908	103.0	13,905	13,302	95.7	19,850	17,070	6.8	-	20,290	13,302	-	15	15
Agona West	23,108	25,301	109.5	20,797	21,113	101.5	27,260	26,060	2.9	-	29,908	26,472	-	15	15
Ajumako-Enyan-Ess	21,136	21,990	104.0	19,022	18,802	98.8	24,980	24,244	9.3	-	24,000	18,851	1	12	12
Asikuma-Odoben-B	23,756	25,380	106.8	21,380	21,693	101.5	36,430	28,000	9.4	-	54,754	28,596	-	12	12
Assin North	28,424	28,963	101.9	25,582	24,641	96.3	60,130	32,195	10.0	-	60,641	24,968	-	18	18
Assin South	21,377	21,873	102.3	19,239	17,952	93.3	32,320	24,700	11.4	-	40,380	18,194	-	18	18
Awutu-Senya	45,491	49,970	109.8	40,942	38,797	94.8	55,299	53,174	6.0	-	49,038	38,847	-	15	15
Cape Coast	24,897	25,169	101.1	22,407	22,151	98.9	30,920	27,960	10.0	-	32,490	21,591	1	15	15
Efutu	10,803	12,088	111.9	9,723	10,319	106.1	13,560	13,128	7.9	-	13,045	10,443	-	12	12
Gomoa East	32,169	35,603	110.7	28,952	30,283	104.6	48,600	38,147	6.7	-	45,098	30,425	-	21	21
Gomoa West	27,455	29,796	108.5	24,710	25,437	102.9	40,209	31,510	5.4	-	41,836	29,861	-	12	12
Komenda-Edina-Egu	27,938	30,950	110.8	25,144	26,782	106.5	32,960	32,140	3.7	-	31,000	28,000	-	15	15
Mfantseman	44,235	45,997	104.0	39,812	39,559	99.4	58,080	51,245	10.2	-	61,103	39,722	-	21	21
Twifu-Hemang-Low	26,698	28,308	106.0	24,028	21,408	89.1	35,887	33,170	14.7	-	31,509	21,629	-	12	12
Upper Denkyira East	16,728	17,084	102.1	15,055	14,897	98.9	32,863	18,772	9.0	-	33,938	15,263	-	9	9
Upper Denkyira West	9,759	10,872	111.4	8,783	9,017	102.7	14,620	12,370	12.1	-	12,850	9,426	-	9	9

**Eastern Region - Summary of Days 1 - 3 Performance by district**

Districts	Target for OPV	chn 0 - 59 Months vaccinated with OPV	OPV Coverage	Target for Vitamin A	Chn 6-59 months dosed with Vitamin A	Vitamin A Coverage	Number of OPV doses received	Number of OPV doses used	OPV Wastage Rate	OPV Vials with VVM Change (3 & 4)	Total vitamin A capsules received	Total vitamin A capsules used	No AFP cases Identified	Sub-districts reports expected	Sub-districts reports received
<b>Eastern Region</b>	<b>530,743</b>	<b>545,573</b>	<b>102.8</b>	<b>477,669</b>	<b>470,408</b>	<b>98.5</b>	<b>613,260</b>	<b>576,738</b>	<b>5.4</b>	<b>-</b>	<b>609,723</b>	<b>474,978</b>	<b>-</b>	<b>387</b>	<b>387</b>
Akwapim North	26,581	26,588	100.0	23,923	22,706	94.9	36,340	29,370	9.5	-	36,106	22,329	-	15	15
Akwapim South	28,259	30,009	106.2	25,433	25,858	101.7	32,520	31,700	5.3	-	29,426	26,547	-	18	18
Akyemansa	12,461	15,843	127.1	11,215	13,477	120.2	18,000	16,340	3.0	-	16,400	13,481	-	15	15
Asuogyaman	17,948	18,518	103.2	16,153	16,521	102.3	20,000	19,760	6.3	-	23,574	16,411	-	15	15
Atiwa	23,812	24,491	102.9	21,431	21,646	101.0	26,060	26,060	6.0	-	21,745	21,703	-	18	18
Birim Central	31,575	31,945	101.2	28,418	26,902	94.7	33,180	33,060	3.4	-	46,932	27,951	-	12	12
Birim North	17,333	17,271	99.6	15,600	15,901	101.9	20,000	18,100	4.6	-	18,500	15,901	-	18	18
Birim South	16,342	17,790	108.9	14,708	16,230	110.3	20,000	19,040	6.6	-	18,000	16,230	-	15	15
East Akim	27,958	28,535	102.1	25,162	25,134	99.9	30,970	29,776	4.2	-	30,769	25,157	-	18	18
Fanteakwa	21,377	21,675	101.4	19,239	18,287	95.1	24,000	23,140	6.3	-	23,000	18,432	-	21	21
Kwaebibirim	40,534	41,205	101.7	36,481	35,147	96.3	44,000	42,000	1.9	-	53,316	36,126	-	27	27
Kwahu East	15,893	15,602	98.2	14,304	13,500	94.4	17,000	16,680	6.5	-	14,522	13,539	-	18	18
Kwahu North	32,956	35,573	107.9	29,660	31,027	104.6	37,590	37,050	4.0	-	35,059	31,152	-	21	21
Kwahu South	18,624	19,124	102.7	16,762	16,703	99.7	21,800	20,420	6.3	-	19,883	17,041	-	18	18
Kwahu West	17,984	18,578	103.3	16,186	16,043	99.1	22,260	21,080	11.9	-	20,045	16,535	-	15	15
Lower Manya-Krobo	19,479	19,852	101.9	17,531	16,738	95.5	22,000	21,032	5.6	-	19,800	16,708	-	15	15
New Juaben	35,380	35,343	99.9	31,842	29,563	92.8	38,500	38,160	7.4	-	45,149	29,611	-	24	24
Suhum-Krabo-Coa	46,374	46,952	101.2	41,737	41,113	98.5	53,180	48,580	3.4	-	50,930	41,450	-	24	24
Upper Manya-Krobo	20,630	20,660	100.1	18,567	17,836	96.1	22,960	21,820	5.3	-	21,638	18,509	-	18	18
West Akim	37,238	38,820	104.2	33,514	31,976	95.4	44,000	39,900	2.7	-	38,500	31,934	-	24	24
Yilo Krobo	22,005	21,199	96.3	19,805	18,100	91.4	28,900	23,670	10.4	-	26,429	18,231	-	18	18

**Greater Accra - Summary of Days 1 - 3 Performance by district**

Districts	Target for OPV	chn 0 - 59 Months vaccinated with OPV	OPV Coverage	Target for Vitamin A	Chn 6-59 months dosed with Vitamin A	Vitamin A Coverage	Number of OPV doses received	Number of OPV doses used	OPV Wastage Rate	OPV Vials with VVM Change (3 & 4)	Total vitamin A capsules received	Total vitamin A capsules used	No AFP cases Identified	Sub-districts reports expected	Sub-districts reports received
<b>Greater Accra</b>	<b>770,614</b>	<b>787,002</b>	<b>102.1</b>	<b>693,553</b>	<b>638,068</b>	<b>92.0</b>	<b>906,060</b>	<b>839,420</b>	<b>6.2</b>	<b>3</b>	<b>806,139</b>	<b>651,485</b>	<b>1</b>	<b>198</b>	<b>198</b>
Ablekuma	114,634	103,326	90.1	103,171	85,514	82.9	120,000	114,360	9.6	-	91,500	86,548	-	9	9
Ashiedu Keteke	29,979	32,712	109.1	26,981	27,748	102.8	36,000	35,980	9.1	-	27,800	27,793	-	6	6
Ayawaso	74,894	75,340	100.6	67,405	49,660	73.7	82,000	81,800	7.9	-	68,572	62,717	-	21	21
La	35,057	30,001	85.6	31,551	27,476	87.1	40,000	34,420	12.8	-	37,500	27,611	-	12	12
Okaikoi	61,488	62,522	101.7	55,339	48,834	88.2	70,000	64,000	2.3	-	50,000	48,988	-	15	15
Osu Clottey	30,485	31,626	103.7	27,437	26,846	97.8	36,680	34,800	9.1	-	30,250	27,139	-	15	15
<b>Accra</b>	<b>346,537</b>	<b>335,527</b>	<b>96.8</b>	<b>311,883</b>	<b>266,078</b>	<b>85.3</b>	<b>384,680</b>	<b>365,360</b>	<b>8.2</b>	<b>-</b>	<b>305,622</b>	<b>280,796</b>	<b>-</b>	<b>78</b>	<b>78</b>
Adentan	29,090	33,188	114.1	26,181	24,077	92.0	35,980	34,860	4.8	-	30,468	24,281	-	12	12
Ashaiman	39,825	41,869	105.1	35,843	29,949	83.6	44,960	44,440	5.8	-	30,971	29,872	-	21	21
Dangme East	21,902	22,326	101.9	19,712	19,029	96.5	26,000	24,620	9.3	-	27,240	19,220	-	12	12
Dangme West	25,698	24,162	94.0	23,128	21,192	91.6	31,660	25,440	5.0	-	31,649	21,233	-	12	12
Ga East	55,160	61,773	112.0	49,644	50,512	101.7	69,000	64,980	4.9	-	70,065	46,432	-	12	12
Ga South	80,890	87,033	107.6	72,801	74,298	102.1	120,000	91,100	4.5	1	83,500	74,589	1	18	18
Ga West	44,630	47,276	105.9	40,167	40,831	101.7	54,400	50,980	7.3	2	61,032	42,174	-	9	9
Ledzokuku-Krowor	54,301	60,017	110.5	48,871	48,809	99.9	63,380	62,300	3.7	-	58,656	48,787	-	9	9
Tema	72,581	73,831	101.7	65,323	63,293	96.9	76,000	75,340	2.0	-	106,936	64,101	-	15	15

**Northern Region - Summary of Days 1 - 3 Performance by district**

**Upper East - Summary of Days 1 - 3 Performance by district**

**Upper West - Summary of Days 1 - 3 Performance by district**

**Volta Region - Summary of Days 1 - 3 Performance by district**

**Western Region - Summary of Days 1 - 3 Performance by district**

**List of National Coordinators, Supervisors and Drivers for the March 2010 NIDS**