GAVI
THE GLOBAL ALLIANCE FOR VACCINES & IMMUNIZATION

Partnering with The Vaccine Fund

Updated February 2004

2003 Progress Report

to the
Global Alliance for Vaccines and Immunization (GAVI)
and
The Vaccine Fund

by the Government of

COUNTRY: GHANA

Date of submission: 26th May, 2004...

Reporting period: ..2003.. *(Information provided in this report MUST refer to the previous calendar year)*

(Tick only one) :

Inception report	ρ
First annual progress report	ρ
Second annual progress report	ρ
Third annual progress report	X
Fourth annual progress report	ρ
Fifth annual progress report	ρ

Text boxes supplied in this report are meant only to be used as guides. Please feel free to add text beyond the space provided.
**Unless otherwise specified, documents may be shared with the GAVI partners and collaborators*

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1. Report on progress made during the previous calendar year

To be filled in by the country for each type of support received from GAVI/The Vaccine Fund.

1.1 Immunization Services Support (ISS)

1.1.1 Management of ISS Funds

Please describe the mechanism for management of ISS funds, including the role of the Inter-Agency Co-ordinating Committee (ICC). Please report on any problems that have been encountered involving the use of those funds, such as delay in availability for programme use.

Management of the ISS funds followed the same mechanism reported in the 2001 and 2002 reports, i.e., GAVI funds are lodged in the dollar account of the Ghana Health Service (GHS). This account is a pooled one and has funds from other donors lodged in it. The signatories are the Director General and the Financial Controller of the Ghana Health Service. A proposal for the disbursement of GAVI funds for 2003 was presented by the EPI secretariat to the ICC. The proposal was extensively discussed and the ICC suggested modifications. Based on comments from ICC a modified proposal was then presented to the Director General for disbursement. The release of funds follows the procedures of the Ministry of Health with checks by Internal Audit/External Audit and also from Health Partners. This mechanism for management of the ISS funds is working well.

However there was delay in the release of the funds as well as in the notification of release. The funds were received in June 2003 at the same time as the Government funds were also released. Thus, for the first half of the year funds were not available at the district level for implementation of most public health activities, including EPI. In this situation we could not implement some of our planned activities, since most EPI activities are time-bound. We shall therefore be grateful for early release of funds to cushion the delays in release of Government funds. We shall also appreciate if copies of letters releasing the funds could be given to the Director Public Health and the EPI Manager (even as e-mail attachment).

1.1.2 Use of Immunization Services Support

In the <u>past year</u>, the following major areas of activities have been funded with the GAVI/Vaccine Fund contribution.

Funds received during the reporting year $529,000
Remaining funds (carry over) from the previous year $44,400

Table 1 : Use of funds during reported calendar year 2003

Area of Immunization Services Support	Total amount in US $	Amount of funds			
		PUBLIC SECTOR			PRIVATE SECTOR & Other
		Central	Region/State/Province	District	
Vaccines					
Injection supplies					
Personnel					
Transportation					
Maintenance and overheads	13,350	100%			
Training	7,000	14%	86%		
IEC / social mobilization					
Outreach (Includes Regional and district level supervison and operations)	13,318		2%	98%	
Supervision (National level)	5,000	100%			
Monitoring and evaluation	152,049	2.2%	3.8%	94%	
Epidemiological surveillance					
Vehicles					
Cold chain equipment					
Other ……. *(specify)* • Printing Annual Report 2002 ($5,000) • Photocopier machine ($4,050) • Printing of Immunization manual for peripheral health workers ($44,400) • Comb binding machine ($600) • Desk top computer and UPS ($5,000) • Printing of child health cards ($20,000)	79,050	100%			
Total:	269,767				
Remaining funds for next year:	303,633				

If no information is available because of block grants, please indicate under 'other'.

Please attach the minutes of the ICC meeting(s) when the allocation of funds was discussed.*(Please see ICC minutes of 8/4/2003 and 20/5/2003)*

Please report on major activities conducted to strengthen immunization, as well as, problems encountered in relation to your multi-year plan.

1. Routine Immunization

- Implementation of Reaching Every District. Low performing districts were targeted for special support and supervision.
- Implement lessons learnt to reduce missed opportunity; intense social mobilization and communication on EPI antigens for care takers and Health workers.
- Integration of Vitamin 'A' into routine EPI – discussions were held and plans prepared. Implementation is pending.
- 52 additional Private Midwives were trained (29 from Central and 23 from Volta Regions) to provide EPI services.

2. Accelerated control of VPDs

- Strengthen Surveillance for EPI target diseases using the framework of IDS
- Implement NIDs or mop up in selected districts in Low AFP surveillance performance areas & low routine OPV3 coverage
- Supported NPEC, NCC meetings and Polio Lab
- Trained and used local consultants to facilitate implementation of case based measles, NNT, YF and AFP in first quarter
- Implemented 2 rounds of quality TT SIAs in 17 selected high risk districts in 6 Regions whilst 2 districts conducted round 3
- Sustained the Paediatric Meningitis sentinel site surveillance reporting (Korle Bu and KATH). Total of 6 cases were detected.
- Continued with laboratory surveillance reporting of yellow fever, measles, cholera and meningitis regularly
- Monthly data feedback and quarterly surveillance meeting with Regional Surveillance officers

3. EPI review/assessment and evaluation activities

3.1 Post introduction evaluation of new vaccine

- The field work for the evaluation was conducted from 1- 8 April 2003 by a team composed of Ghana Health Service staff, WHO (country office, ICP and regional office) and UNICEF (Ghana).
- Four regions (Eastern, Central, Volta and Brong Ahafo) and the Accra Metro were visited.
- 2-3 districts in each region with a total of 30 health facilities, 1 national cold store, 4 regional cold stores and 12 district cold stores were visited.
- Standard questionnaire was administered to key informants
- Dissemination was made to ICC at a meeting held on 8 April 2003 at the Ministry of health.
  - ***Major finding*** – there is overall positive impact of the introduction on the immunization system in the country. This includes good immunization safety management standards, satisfactory timeliness, accuracy and completeness of data systems.

3.2 AFRO EPI status mid-term review (2001-2005)

- The AFRO EPI Mid-Term Review in Ghana was conducted from 11-15 August with assistance of external consultants from HQ, ICP and AFRO.
- The exercise involved review of documents, interview with key EPI managers at national, regional and district levels.
- The team also interacted with the following health partners – ICC members, USAID, UNICEF, Rotary Polio Plus
- Field work was conducted in Eastern and Brong Ahafo regions where the teams interacted with both regional and district managers.
- ICC was briefed on the key findings at an extra-ordinary meeting held at WHO on 15 August 2003.

  Findings:
  - There continues to strong commitment by government to develop a solid infrastructure for the delivery of safe and potent vaccines to the people of Ghana
  - It is difficult to determine true coverage rates due to the issue of low denominator, which in turn results in an exaggerated and distorted high coverage.
  - New vaccines have been incorporated into the system and have been making steady progress
  - Quality issues need to be addressed especially in the area of supervision and training
  - The reporting of 5 wild polioviruses as at August 2003 poses a great challenge to the programme

3.3 Injection safety and waste management assessment

- Ghana conducted an injection safety assessment from 17-24 September 2003 with a technical and financial assistance from UNICEF.
- Data was collected at 80 randomly selected health facilities in 7 regions.
- The data collection exercise involved:
  - administration of questionnaire in a face-to-face interview with facility in-charges and other key informants.
  - review of records and stock levels of resources
  - inspection of equipment (sterilizers, syringes and needles), and
  - inspection of waste disposal sites and practices (including the use of de monfort incinerators).

ICC was briefed on preliminary findings at an emergency meeting held at WHO on 25 September 2003

- ***Finding(s)*** - Auto disable and disposable syringes are used in all the facilities visited. Reuse of disposable or auto disable syringes was not observed during the assessment indicating very low or insignificant risk of the injections to both provider and recipients.

4 New technologies and innovations supported

4.1 TT-Uniject training (3-5 March)

- Ghana is among the countries evaluating the TT-Uniject programme in West Africa sub region.

- The programme is sponsored by UNICEF with technical support from PATH.
- Twenty-one TBAs drawn from the district were taken through the process of the administration of the TT-Uniject. They were assisted by the community health nurses from various communities to undertake practical demonstrations using oranges as clients.

4.2 BCG AD syringe and needle pilot training in Western region

- One-day training was conducted in Shama Ahanta East on the introduction BCG AD syringes and needles for 22 community health nurses in the district.
- It was sponsored by UNICEF and EPI (GHS)
- Participants were taken through both theory and practical sessions. Topics discussed in the theory session covered 5 modules:
  - Injection safety, Effective handling of vaccines, Reconstitution of vaccines
  - Preventing needles tick injections and Preventing re-use of Ad syringes
- The practical session was on skills and techniques on the use of the new technologies and to ensure that adverse events following immunization and prevented or reduced.

5. PROGRAMME SUPPORT

5.1 Supportive supervision

Supervision was intensified at the national level to region and district levels for both EPI and Surveillance activities. Any opportunity in the region or district was used to provide technical support at that level.

5.2 Linking services with communities.

Community mobilization and education activities have been well organized at the district and sub-district levels most especially during the 2 round nationwide NID programme and TT SIAs in the country. There are community based volunteers who are very much involved in the AFP and measles investigation programmes in all districts.

5.3 Monitoring for Action

Monthly monitoring of district activities has been very encouraging for coverage, wastage, vaccine stock and drop out rates. These form the basis for most of the visits to the district for supportive supervision. Feedback is provided and also discussed at managers quarterly review meetings. Four (4) EPI/Surveillance managers meetings were held in the year. Through monitoring, review and feedback to districts on monthly reports, timeliness of reporting has improved to 85% and completeness as at end of the year is 100%.

1.1.3 Immunization Data Quality Audit (DQA) (*If it has been implemented in your country)*

Has a plan of action to improve the reporting system based on the recommendations from the DQA been prepared?
If yes, please attach the plan.

YES [x] *NO* [ ]

If yes, please attach the plan and report on the degree of its implementation.

Observations, results and recommendations

- Verification factor of 0.872 was recorded. This suggests that the quality and reliability of the EPI data management process in the country is 87.2%. With this achievement, there would no DQA in the country in the next year.

- **Despite the achievement of 87.2% data quality and reliability, the team identified some weaknesses in data management system that needs attention and strengthening:**
  - **Data management training at all levels)**
  - **Regular review, monitoring and verification of district/sub-district data (Region & national)**
  - **Use of common denominator (all levels) etc.**

- The following recommendations were made to address some of the weaknesses:
  1. *Recording*
     - Policy guidelines & integration
     - Standard & pre-printed forms/formats
     - Standard vaccine ledger - doses
     - Tally sheets
     - Immunization schedule
  2. *Storing/Reporting*
     - Operational – procedure data management
     - Synchronise reporting deadlines & integrates

3. *Monitoring/Evaluation*
   - Realistic operational performance targets for Health Units
   - Use appropriate definitions (denominator)
   - Time-tracking
   - Completeness & timeliness
   - EPI monitor charts
4. *System design*
   - Integrated reporting
   - Monitor injection safety commodities
   - AEFI recording & monitoring
5. *Way forward*
   - New policy directives in data management
   - Supervision
   - Assessment

Plan for Data management strengthening:

Purpose - The need for data management strengthening became more imperative with the introduction of the new vaccines in January 2002. Regional EPI managers were taken through the process and importance of DQA during the national MLM training in January 2002; The observations from the DQA study in July emphasizes the need for training at the district and sub-district levels in basic data management process to improve the quality of the data.

It is against this proposal is being submitted with the objective of strengthening the system for effective data management at all levels in the country.

Strategies/key activities - The major strategies/key activities to be conducted are:

- Revision of monthly immunization returns form to include relevant information as indicated in the recommendations
- Support and supervision visits to train on:
  - Reporting
  - Compilation
  - Storage
  - Processing
  - Basic/simple Analysis
  - Utilization at service delivery level

- Procurement of computers to support data management at district level. Regions (10) have been provided with computers as part of the data management strengthening process. Three districts in each region (30 in all) have also been provided with computers for the same purpose.
- Printing of immunization monitoring charts

District and sub-district training programmes in data management

- **Use of common denominator (all levels) etc.**

Please attach the minutes of the ICC meeting where the plan of action for the DQA was discussed and endorsed by the ICC.

Please report on studies conducted regarding EPI issues during the last year (for example, coverage surveys).

Coverage survey which was panned for the early part of 2003 was postponed because of delay in release of funds. The exercise will take place in early 2004. To facilitate smooth take off funds for the exercise was released to the Regional levels in the latter part of 2003.

1.2 GAVI/Vaccine Fund New & Under-used Vaccines Support

1.2.1 Receipt of new and under-used vaccines during the previous calendar year

Start of vaccinations with the new and under-used vaccine: MONTH……JANUARY…. YEAR……2002….

Please report on receipt of vaccines provided by GAVI/VF, including problems encountered.

7th April 2003 - 804,400 doses (DPTHepB+Hib)
7th October 2003 - 400,000 doses (DPTHepB+Hib)
29th December 2003 - 479,600 doses (DPTHepB+Hib)

4th March 2003 - 235,600 doses (Yellow Fever)
11th June 2003 - 465,000 doses (Yellow Fever)
3rd September 2003 - 117,800 doses (Yellow Fever)

There was shortage of yellow fever vaccine at the beginning of the year which was a result of global shortage during that period.

1.2.2 Major activities

Please outline major activities that have been or will be undertaken, in relation to, introduction, phasing-in, service strengthening, etc. and report on problems encountered.

- Post-Introduction evaluation conducted in April 2003 with support of AFRO and ICP in April 2004. The findings indicate overall positive impact on the immunization system (copy of report attached).
- Consistent monitoring at all levels ensured to avoid waste. National wastage rate for 2003 was 3% with regional range from 0-8.
- Supply to regions is quarterly and regular from national.

Impact assessment will be conducted in 2004.

1.2.3 Use of GAVI/The Vaccine Fund financial support (US$100,000) for the introduction of the new vaccine

Please report on the proportion of 100,000 US$ used, activities undertaken, and problems encountered such as delay in availability of funds for programme use.

Not applicable.

1.3 *Injection Safety*

1.3.1 Receipt of injection safety support

Please report on receipt of injection safety support provided by GAVI/VF, including problems encountered

We received an amount of $273,800 towards the end of the year. We planned to use the funds for constructing incinerators. However we had to hold on pending results of tests being conducted by the Estate Management Unit of the Ghana Health Service about the safety of emissions and corrections we need to make for already built incinerators. The results will feed into the construction of new incinerators.

1.3.2 Progress of transition plan for safe injections and safe management of sharps waste.

Please report on the progress based on the indicators chosen by your country in the proposal for GAVI/VF support.
The following indicators were chosen for monitoring progress in the implementation of the 3-year injection safety plan as of 2003. These are to be measured through coverage survey and assessment programmes. The coverage survey could not be implemented in 2003 as planned due to other pressing priority activities. It was implemented in April 2004 in all 110 districts. Data from the survey is still being compiled and results expected later. The achievements reported in the table below are from routine administrative records and the Injection Safety assessment survey conducted in September 2003 (copy attached)

Indicators	Targets	Achievements	Constraints	Updated targets
• Proportion of health facilities disposing of needles and syringes properly • Proportion of districts reporting shortages of AD syringes during the year • Proportion of districts reporting shortage of safety boxes during the year. • Proportion district reporting on AEFI (including zero reporting)	30% 10% 10% 30%	The Inj. Safety assessment report indicates near 100% proper disposal. • No shortages of AD syringes reported • No shortages reported • 40% of districts reported on AEFI.		

1.3.3 Statement on use of GAVI/The Vaccine Fund injection safety support (if received in the form of a cash contribution)

The following major areas of activities have been funded (specify the amount) with the GAVI/The Vaccine Fund injection safety support in the past year:

The following major activities were initiated (although not with direct funding from the GAVI Injection Safety Support, but were pre-requisite for the construction of more incinerators):

1. Injection Safety Assessment, conducted in September 2003 with Technical support from WHO and financial assistance from UNICEF (Copy of report attached).
2. National Waste Management Policy guideline, by Ministry of Health in collaboration with Environmental Protection Agency during later part of the year. Draft report submitted in April 2004 and being studied for the necessary action. Financial support provided by WHO (draft copy attached).
3. Survey on emission of toxin from the existing de Monfort incinerators also by the Ministry of Health with financial support from WHO in the later part of the year. Draft report submitted in April 2004 and under study (draft copy attached).
4. Monitoring the performance of the existing de monfort incinerators was conducted to evaluate the performance of the facilities. Draft report was not ready until April 2004 (copy attached). Constructional changes have been recommended for effective performance. The recommendations are being addressed and will be reported on in the next report.
5. Contact has been made with manufacturing companies for possible supply of refractory materials locally. A potential supplier has been identified and negotiations are still on going to test the capacity of the bricks and approve of them for use. Further advances will be reported in future reports.

2. Financial sustainability

Inception Report :	Outline timetable and major steps taken towards improving financial sustainability and the development of a financial sustainability plan.
First Annual Progress Report :	Submit completed financial sustainability plan by given deadline and describe assistance that will be needed for financial sustainability planning.

Second Annual Progress Report :	Describe indicators selected for monitoring financial sustainability plans and include baseline and current values for each indicator. In the following table 2, specify the annual proportion of five year of GAVI/VF support for new vaccines that is planned to be spread-out to ten years and co-funded with other sources.

Table 2 : Sources (planned) of financing of new vaccine …… *(specify)*

Proportion of vaccines supported by	Annual proportion of vaccines									
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Proportion funded by GAVI/VF (%)	100	85	75	65	55	45	30	20	15	10
Proportion funded by the Government and other sources (%)	0	15	25	35	45	55	70	80	85	90
Total funding for ……. *(new vaccine)* *										

** Percentage of DTP3 coverage (or measles coverage in case of Yellow Fever) that is target for vaccination with a new and under-used vaccine*

Subsequent reports: Summarize progress made against the financing strategy, actions and indicators section of the FSP; include successes, difficulties and responses to challenges encountered in achieving outlined strategies and actions. Report current values for indicators selected to monitor progress towards financial sustainability. Include funds received to date versus those expected for last year and the current year and actions taken in response to any difficulties.
Update the estimates on program costs and financing with a focus on the last year, the current year and the next 3 years. For the last year and current year, update the estimates of expected funding provided in the FSP tables with actual funds received since. For the next 3 years, update any changes in the costing and financing projections. The updates should be reported using the same standardized tables and tools used for the development of the FSP (latest versions available on http://www.gaviftf.org under FSP guidelines and annexes. Highlight assistance needed from partners at local, regional and/or global level.

The major progress made in the Ghana FSP is the attainment of the target to be met by government in the procurement of new vaccines. In 2004 the Ghana Government contributed 25% of the new vaccine requirement as stated in the FSP. There has been some improvements in the timely disbursement of funds to the district level. By April 2004 about 85% of expected funds (non wage recurrent) to the districts have been disbursed.

The data available from our recent review shows that government and Health partners released more funds than budgeted for. However the amount disbursed to BMCs at the districts levels fell short of expectation. This is however so because some central procured goods and services that benefits the districts (e.g. vaccines) were not factored in this equation. This amount of 73% as stated ion the table below represents actual cash flow to the districts from the health fund.

Not much has improved on the cost of transaction (disbursing and processing funds) as this is a more wider government accounting procedural issue and goes beyond the health sector.
The table below summarize progress with the set of activities developed in the FSP and our selected indicators for monitoring the FSP.

Dimension of Financial Sustainability		Activities	Timed line	Remarks
SELF SUFFICIENCY	1	Initiate dialogue with MoF on sustainable real increase in health sector share of GDP	Quarterly	The MoH has engaged the MoF and health partners on this topic and significant results have been achieved. This mechanism has been established with the MoFEP where the budgets are discussed and the funding gap negotiated. Some increases have been realised and channelled through the HIPC initiatives to districts.
	2	Ensure that immunisation (including) cost of vaccines forms part of the PRS plan and indicators.	Each year	Since 2003 the cost of vaccines and injection safety materials form part of the MoH budget and the procurement plan. The MoH plan is part of the PRS and the indicators have been included.
	3	Ensure that cost of vaccines are part of the MoH procurement plan each year	Each year	This has been achieved since 2003.
RELIABILITY OF RESOURCES	1	Improve on timely disbursement of funds to sub national levels	Quarterly	The timely disbursement of funds have improved but not significantly
	2	Provide timely cash flow plans to Government and donors to ensure timely disbursement of funds	Quarterly	There are on-going discussions with health partners to ensure timely disbursement of funds (especially World Bank). Present issues are for the MoH to meet the conditions agreed in the MoU. These conditions should be considered as the indicator.
	3	Discuss with donors possibility of pre-financing the health budget (especially early procurement of vaccines)	First quarter each year	Some partner funds are flexible and could be discussed. This indicator is very close and are covered by other indicators above.
EFFICIENT USE OF RESOURCES	1	Reduce vaccine wastage levels(Trends in Wastage)		Wastage rates for all antigens reduced except for TT.
	2	Strengthen capacity (training) at sub national levels to enhance efficiency in management of vaccines	Annually	Regional Teams have been trained in EPI using selected topics of Mid-Level Management modules. Out of the 10 regions 8 have conducted training of District level staff.
	3	Increase supervision from national and regional levels	Quarterly	Regional Teams visit District level whilst National level visit Regions. However because of the inadequate number of staff planned visits could not all be fulfilled.

INDICATORS FOR MONITORING FSP ACTIVITIES

Monitoring Indicator	2001	2002	2003	2004
% MoH as share of GDP		10	12	
% MoH budget to District Level			56	
Vaccine costs included in procurement plan	Yes	Yes	Yes	Yes
% of funds (GoG/HF) disbursed timely		30	20	
% of funds received on time from GoG/HF		60	75	
Availability of funds for procurement of vaccine for proceeding year	Yes	Yes	Yes	Yes
% reduction in vaccine wastage by antigen :				
BCG		44%	40%	
MEASLES		34%	26%	
DPTHepBHib		7%	3%	
Yellow Fever		44%	39%	
TT		12%	15%	
OPV		17%	12%	

Non Staff Recurrent	2000	2001	2002	2003	2004
% GoG Disbursed	65%	75%	80%	85	
% DPF Disbursed	80%	80%	90%	73	

FSP MONITORING INDICATORS

Dimension of Financial Sustain-ability	Indicator	2000	2002	2003	2004
Self-sufficiency	%MOH Share of GDP	*8*	*10*	*12*	
Efficient Use of Resources	Trends in wastage rates over time, by antigen, particularly for OPV, DTP and TT which can be reused				
	OPV		17%	12%	
	DPTHepBHib		7%	3%	
	TT		12%	15%	

3. Request for new and under-used vaccines for year …….. *(indicate forthcoming year)*

Section 3 is related to the request for new and under used vaccines and injection safety for the ***forthcoming year****.*

3.1. Up-dated immunization targets

Confirm/update basic data approved with country application: figures are expected to be consistent with those reported in the WHO/UNICEF Joint Reporting Forms. Any changes and/or discrepancies **MUST** be justified in the space provided (page 12). Targets for future years **MUST** be provided.

Table 3 : Update of immunization achievements and annual targets

Number of	Achievements and targets								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
DENOMINATORS									
Births	733,554	751,893	770,689	789,957	809,707	829,949	849,830	870,026	891,246
Infants' deaths	41,243	42,275	43,331	44,415	45,525	46,663	47,830	49,026	50,222
Surviving infants	692,311	709,618	727,358	745,542	764,182	783,286	802,000	821,000	841,024
Infants vaccinated / to be vaccinated with **1st dose** of DTP (DTP1)*	620,124	611,133							
Infants vaccinated / to be vaccinated with **3rd dose** of DTP (DTP3)*	617,387	575,499							
NEW VACCINES **									
Infants vaccinated / to be vaccinated with **1st dose** of DPTHepBHib (…DPTHepBHib 1)			681,052	761,015	733,615	751,955	769,920	788160	807,383
Infants vaccinated / to be vaccinated with **3rd dose** of DPTHepBHib ……*(*DPTHepBHib *3)*			623,641	620,866	704,723	735,171	753,880	771,740	790,562
Wastage rate of *** DPTHepBHib			7%	3%					
Infants vaccinated / to be vaccinated with **Yellow Fever**		572,077	566,358	596,697	641,245	690,154	721,800	771,740	790,562

Wastage rate of *** **Yellow Fever**		30%	44%	39%					
INJECTION SAFETY****									
Pregnant women vaccinated / to be vaccinated with TT			543,038	540,586	809,707	829,949	849,830	870,026	891,246
Infants vaccinated / to be vaccinated with BCG		689,845	763,405	755,464	809,707	829,949	849,830	870,026	891,246
Infants vaccinated / to be vaccinated with Measles		619,015	668,527	646,166	764,182	783,286	802,000	821,000	841,024

* Indicate actual number of children vaccinated in past years and updated targets (with either DTP alone or combined)
** Use 3 rows for every new vaccine introduced
*** Indicate actual wastage rate obtained in past years
**** Insert any row as necessary

Please provide justification on changes to baseline, targets, wastage rate, vaccine presentation, etc. from the previously approved plan, and on reported figures which differ from those reported in the WHO/UNICEF Joint Reporting Form in the space provided below.

There is no change to our baseline targets despite our inability to reach our set targets. This is because we had problems with a low denominator which made monitoring for action ineffective. As we have almost resolved the issue we are confident that the necessary challenge can now be posed to low performing districts with appropriate support.

The delay in release of funds for district level activities is being addressed so we expect a better performance in the years ahead.

We also recognize the need to improve our routine performance especially OPV3 as part of efforts towards the eradication of poliomyelitis.

3.2 Confirmed/Revised request for new vaccine *(to be shared with UNICEF Supply Division)* **for the year** ***2005*** *(indicate forthcoming year)*

Please indicate that UNICEF Supply Division has assured the availability of the new quantity of supply according to new changes.

This is in line with our procurement plan and has been agreed on with UNICEF.

Table 4: Estimated number of doses of *PENTAVALENT (DPTHepBHib)* vaccine *(specify for one presentation only)* : *(Please repeat this table for any other vaccine presentation requested from GAVI/The Vaccine Fund*

		Formula	For year 2005
A	Infants vaccinated / to be vaccinated with 1st dose of ….DPTHepBHib		*751,955
B	Percentage of vaccines requested from The Vaccine Fund taking into consideration the Financial Sustainability Plan	*%*	65
C	Number of doses per child		3
D	Number of doses	*A x B/100 x C*	1,466,312
E	Estimated wastage factor	*(see list in table 3)*	1.11
F	Number of doses (incl. wastage)	*A x C x E x B/100*	1,627,607
G	Vaccines buffer stock	*F x 0.25*	0
H	Anticipated vaccines in stock at start of year ….		0
I	Total vaccine doses requested	*F + G - H*	1,627,607
J	Number of doses per vial		2
K	Number of AD syringes (+ 10% wastage)	*(D + G – H) x 1.11*	1,627,607
L	Reconstitution syringes (+ 10% wastage)	*I / J x 1.11*	903,322
M	Total of safety boxes (+ 10% of extra need)	*(K + L) / 100 x 1.11*	28,093

Remarks

- **Phasing:** Please adjust estimates of target number of children to receive new vaccines, if a phased introduction is intended. If targets for hep B3 and Hib3 differ from DTP3, explanation of the difference should be provided
- **Wastage of vaccines:** Countries are expected to plan for a maximum of:
  50% wastage rate for a lyophilized vaccine in 10 or 20-dose vial;
  25% for a liquid vaccine in a 10 or 20-dose vial;
  10% for any vaccine (either liquid or lyophilized) in 1 or 2-dose vial.
- **Buffer stock:** The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero under other years. In case of a phased introduction with the buffer stock spread over several years, the formula should read: [F – number of doses (incl. wastage) received in previous year] * 0.25.
- **Anticipated vaccines in stock at start of year… ….:** It is calculated by deducting the buffer stock received in previous years from the current balance of vaccines in stock.
- **AD syringes:** A wastage factor of 1.11 is applied to the total number of vaccine doses requested from the Fund, excluding the wastage of vaccines.
- **Reconstitution syringes:** it applies only for lyophilized vaccines. Write zero for other vaccines.
- **Safety boxes:** A multiplying factor of 1.11 is applied to safety boxes to cater for areas where one box will be used for less than 100 syringes

Table 5: Wastage rates and factors

Vaccine wastage rate	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%
Equivalent wastage factor	1.05	1.11	1.18	1.25	1.33	1.43	1.54	1.67	1.82	2.00	2.22	2.50

Please report the same figure as in table 3.-for 2005 96% of **surviving infants are targeted for immunization.*

Table 5: Estimated number of doses of *YELLOW FEVER* vaccine *(specify for one presentation only)* : *(Please repeat this table for any other vaccine presentation requested from GAVI/The Vaccine Fund*

		Formula	For year 2005
A	Infants vaccinated / to be vaccinated with 1st dose of ……. *(new vaccine)*		*690,154
B	Percentage of vaccines requested from The Vaccine Fund taking into consideration the Financial Sustainability Plan	*%*	65
C	Number of doses per child		1
D	Number of doses	*A x B/100 x C*	448,600
E	Estimated wastage factor	*(see list in table 3)*	1.33
F	Number of doses (incl. wastage)	*A x C x E x B/100*	596,638
G	Vaccines buffer stock	*F x 0.25*	0
H	Anticipated vaccines in stock at start of year ….		0
I	Total vaccine doses requested	*F + G - H*	596,638
J	Number of doses per vial		10
K	Number of AD syringes (+ 10% wastage)	*(D + G – H) x 1.11*	497,946
L	Reconstitution syringes (+ 10% wastage)	*I / J x 1.11*	66,227
M	Total of safety boxes (+ 10% of extra need)	*(K + L) / 100 x 1.11*	6,262

Remarks

- **Phasing:** Please adjust estimates of target number of children to receive new vaccines, if a phased introduction is intended. If targets for hep B3 and Hib3 differ from DTP3, explanation of the difference should be provided
- **Wastage of vaccines:** Countries are expected to plan for a maximum of:
  50% wastage rate for a lyophilized vaccine in 10 or 20-dose vial;
  25% for a liquid vaccine in a 10 or 20-dose vial;
  10% for any vaccine (either liquid or lyophilized) in 1 or 2-dose vial.
- **Buffer stock:** The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero under other years. In case of a phased introduction with the buffer stock spread over several years, the formula should read: [F – number of doses (incl. wastage) received in previous year] * 0.25.
- **Anticipated vaccines in stock at start of year… ….:** It is calculated by deducting the buffer stock received in previous years from the current balance of vaccines in stock.
- **AD syringes:** A wastage factor of 1.11 is applied to the total number of vaccine doses requested from the Fund, excluding the wastage of vaccines.
- **Reconstitution syringes:** it applies only for lyophilized vaccines. Write zero for other vaccines.
- **Safety boxes:** A multiplying factor of 1.11 is applied to safety boxes to cater for areas where one box will be used for less than 100 syringes

Table 5: Wastage rates and factors

Vaccine wastage rate	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%
Equivalent wastage factor	1.05	1.11	1.18	1.25	1.33	1.43	1.54	1.67	1.82	2.00	2.22	2.50

**Please report the same figure as in table 3*

3.3 Confirmed/revised request for injection safety support for the year …… *(indicate forthcoming year)*

Estimated supplies for safety of vaccination for the next two years with *(Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4 to 8)*

Table 6: BCG

		Formula	For year 2005	For year 2006
A	**Target of children for BCG vaccination**	#	829,949	849,830
B	**Number of doses per child**	#	1	1
C	**Number of …… doses**	A x B	829,949	849,830
D	**AD syringes (+10% wastage)**	C x 1.11	921,243	943,311
E	**AD syringes buffer stock** [1]	D x 0.25	0	0
F	**Total AD syringes**	D + E	921,243	943,311
G	**Number of doses per vial**	#	20	20
H	**Vaccine wastage factor** [4]	*Either 2 or 1.6*	2	2
I	**Number of reconstitution** [2] **syringes (+10% wastage)**	*C x H x 1.11 / G*	92,124	94,331
J	**Number of safety boxes (+10% of extra need)**	*(F + I) x 1.11 / 100*	11,248	11,518

If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.

No change

[1] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[2] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

Table 7: DPTHepBHib

		Formula	For year 2005	For year 2006
A	**Target of children for …… vaccination (for TT : target of pregnant women)[3]**	#	751,955	769,920
B	**Number of doses per child (for TT woman)**	#	3	3
C	**Number of …… doses**	A x B	2,255,865	2,309,760
D	**AD syringes (+10% wastage)**	C x 1.11	2,504,010	2,563,834
E	**AD syringes buffer stock [4]**	D x 0.25	0	0
F	**Total AD syringes**	D + E	2,504,010	2,563,834
G	**Number of doses per vial**	#	2	2
H	**Vaccine wastage factor [4]**	*Either 2 or 1.6*	1.6	1.6
I	**Number of reconstitution [5] syringes (+10% wastage)**	*C x H x 1.11 / G*	2,003,208	2,051,067
J	**Number of safety boxes (+10% of extra need)**	*(F + I) x 1.11 / 100*	50,030	51,225

If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.

No change

[3] GAVI will fund the procurement of AD syringes to deliver 2 doses of TT to pregnant women. If the immunization policy of the country includes all Women of Child Bearing Age (WCBA), GAVI/The Vaccine Fund will contribute to a maximum of 2 doses for Pregnant Women (estimated as total births).

[4] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[5] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

Table 8: *MEASLES*

		Formula	For year 2005	For year 2006
A	**Target of children for …… vaccination (for TT : target of pregnant women)[6]**	#	783,286	802,000
B	**Number of doses per child (for TT woman)**	#	1	1
C	**Number of …… doses**	A x B	783,286	802,000
D	**AD syringes (+10% wastage)**	C x 1.11	869,447	890,220
E	**AD syringes buffer stock [7]**	D x 0.25	0	0
F	**Total AD syringes**	D + E	869,447	890,220
G	**Number of doses per vial**	#	10	10
H	**Vaccine wastage factor [4]**	*Either 2 or 1.6*	1.6	1.6
I	**Number of reconstitution [8] syringes (+10% wastage)**	*C x H x 1.11 / G*	139,112	142,435
J	**Number of safety boxes (+10% of extra need)**	*(F + I) x 1.11 / 100*	11,195	11,462

If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.

No change

[6] GAVI will fund the procurement of AD syringes to deliver 2 doses of TT to pregnant women. If the immunization policy of the country includes all Women of Child Bearing Age (WCBA), GAVI/The Vaccine Fund will contribute to a maximum of 2 doses for Pregnant Women (estimated as total births).

[7] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[8] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

Table 9: *YELLOW FEVER*

		Formula	For year 2005	For year 2006
A	**Target of children for …… vaccination (for TT : target of pregnant women)[9]**	#	690,154	721,880
B	**Number of doses per child (for TT woman)**	#	1	1
C	**Number of …… doses**	A x B	690,154	721,880
D	**AD syringes (+10% wastage)**	C x 1.11	766,071	801,287
E	**AD syringes buffer stock [10]**	D x 0.25	0	0
F	**Total AD syringes**	D + E	766,071	801,287
G	**Number of doses per vial**	#	10	10
H	**Vaccine wastage factor [4]**	*Either 2 or 1.6*	1.6	1.6
I	**Number of reconstitution [11] syringes (+10% wastage)**	*C x H x 1.11 / G*	122,571	128,206
J	**Number of safety boxes (+10% of extra need)**	*(F + I) x 1.11 / 100*	9,864	10,317

If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.

No change

[9] GAVI will fund the procurement of AD syringes to deliver 2 doses of TT to pregnant women. If the immunization policy of the country includes all Women of Child Bearing Age (WCBA), GAVI/The Vaccine Fund will contribute to a maximum of 2 doses for Pregnant Women (estimated as total births).

[10] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[11] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

Table 10 : *TT*

		Formula	For year 2005	For year 2006
A	**Target of children for …… vaccination (for TT : target of pregnant women)**[12]	#	829,949	849,830
B	**Number of doses per child (for TT woman)**	#	2	2
C	**Number of …… doses**	A x B	1,659,898	1,699,660
D	**AD syringes (+10% wastage)**	C x 1.11	1,842,487	1,886,623
E	**AD syringes buffer stock** [13]	D x 0.25	0	0
F	**Total AD syringes**	D + E	1,842,487	1,886,623
G	**Number of doses per vial**	#	10	10
H	**Vaccine wastage factor** [4]	*Either 2 or 1.6*	1.6	1.6
I	**Number of reconstitution** [14] **syringes (+10% wastage)**	*C x H x 1.11 / G*	0	0
J	**Number of safety boxes (+10% of extra need)**	*(F + I) x 1.11 / 100*	20,452	20,942

If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.

No change

Table 11: Summary of total supplies for safety of vaccinations with BCG, DPTHepBHib, measles, yellow fever and TT for the next two years.

ITEM		For the year 2005	For the year 2006	Justification of changes from originally approved supply:
Total AD syringes	for BCG	**921,243**	**943,311**	
	for other vaccines	**5,982,015**	**6,141,963**	
Total of reconstitution syringes		**2,217,904**	**2,273,604**	
Total of safety boxes		**102,789**	**105,465**	

[12] GAVI will fund the procurement of AD syringes to deliver 2 doses of TT to pregnant women. If the immunization policy of the country includes all Women of Child Bearing Age (WCBA), GAVI/The Vaccine Fund will contribute to a maximum of 2 doses for Pregnant Women (estimated as total births).

[13] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[14] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

4. Please report on progress since submission of the last Progress Report based on the indicators selected by your country in the proposal for GAVI/VF support

<table>
<tr><th>Indicators</th><th>Targets</th><th>Achievements</th><th>Constraints</th><th>Updated targets</th></tr>
<tr>
<td>1. 3rd dose of Pentavalent vaccine coverage</td>
<td>1. 80% of districts achieve coverage of more than 80% in 3rd dose of Pentavalent vaccine coverage</td>
<td>
<table>
<tr><td>Coverage</td><td colspan="4">No of districts</td></tr>
<tr><td></td><td>2002</td><td>2003</td><td>2004</td><td></td></tr>
<tr><td>>80%</td><td>41</td><td>53</td><td></td><td></td></tr>
<tr><td>Btn 50-80</td><td>68</td><td>57</td><td></td><td></td></tr>
<tr><td><50%</td><td>41</td><td>53</td><td></td><td></td></tr>
</table>
</td>
<td>There was problems with low denominator after the census, which made coverage estimations ambiguous as they were unduly high. Complacency with performance resulted. The problem is being resolved now.</td>
<td>1. 80% of districts achieve coverage of more than 80% in 3rd dose of Pentavalent vaccine coverage</td>
</tr>
<tr>
<td>2. Drop out rate Penta 3 to Penta 1</td>
<td>Less than 10%</td>
<td>The achievement for 2003 was 7% compared to 8% achieved in 2002</td>
<td>District level staff do not calculate this monthly so that action could be taken promptly. Efforts are being made to train them during supervision and support visits</td>
<td>Less than 10%</td>
</tr>
<tr>
<td>3. Districts with Penta 1-3 drop out more than 10%</td>
<td>50%</td>
<td>44 (40%) districts out of the 110 districts achieved Penta 1-3 drop out rates more than 10% compared to 63 (57%) in 2002. There is progress.</td>
<td></td>
<td>30%</td>
</tr>
</table>

5. Checklist

Checklist of completed form:

Form Requirement:	Completed	Comments
Date of submission	26/5/2004	Soft copy sent by mail to GAVI Secretariat; Hard copy posted by DHL.
Reporting Period (consistent with previous calendar year)	2003	
Table 1 filled-in	X	
DQA reported on	X	
Reported on use of 100,000 US$	NA	Already reported on in 2001
Injection Safety Reported on	X	
FSP Reported on (progress against country FSP indicators)	X	
Table 2 filled-in	X	
New Vaccine Request completed	X	
Revised request for injection safety completed (where applicable)	X	
ICC minutes attached to the report	X	
Government signatures	X	
ICC endorsed	X	Discussed at ICC meeting of 12/5/2003

6. Comments

ICC/RWG comments:

The ICC recognises the progress being made by Ghana in ensuring the purchase of vaccines. However reduction in cost of the Pentavalent vaccine on the global market would boost the ability of the country to sustain the EPI system, the cost of which has increased tremendously with the inclusion of the Pentavalent vaccine.

See comments by the WHO Country Representative attached as Appendix 1.

7. Signatures

For the Government of …GHANA by Hon . DR KWAKU AFRIYIE……

Signature: ……...……...

Title: MINISTER OF HEALTH…….…….

Date: …24TH MAY, 2004…….…….

We, the undersigned members of the Inter-Agency Co-ordinating Committee endorse this report. Signature of endorsement of this document does not imply any financial (or legal) commitment on the part of the partner agency or individual.

Financial accountability forms an integral part of GAVI/The Vaccine Fund monitoring of reporting of country performance. It is based on the regular government audit requirements as detailed in the Banking form. The ICC Members confirm that the funds received have been audited and accounted for according to standard government or partner requirements.

Agency/Organisation	Name/Title	Date Signature
GHANA HEALTH SERVICE	DR. SAM ADJEI, DEPUTY DIRECTOR GENERAL	24/5/2004
GHANA HEALTH SERVICE	DR. GEORGE AMOFAH, DIRECTOR PUBLIC HEALTH	24/5/2004
GHANA HEALTH SERVICE	DR. K. O. ANTWI-AGYEI, EPI MANAGER	24/5/2004
WORLD HEALTH ORGANIZATION	DR. MELVILLE GEORGE, COUNTRY REPRESENTATIVE	24/5/2004
USAID	DR. URSULA NADOLNY HEALTH OFFICE CHIEF	24/5/2004

Agency/Organisation	Name/Title	Date Signature
UNICEF	DR. ALIU BELLO, HEAD OF HEALTH SECTION, UNICEF	24/5/2004
DFID	SANDRA BALDWIN, HEALTH ADVISOR	24/5/2004
RED CROSS	ACHEAMPONG OBEMPONG, EFET COORDINATOR	24/5/2004
ROTARY INTERNATIONAL	ADOTEI BROWN, CHAIRMAN	24/5/2004
WORLD BANK	EVELYN AWITTOR, OPERATIONS OFFICER	24/5/2004

~ End ~