



Partnering with The Vaccine Fund

Updated February 2004

# Progress Report

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

by the Government of

COUNTRY:

ZAMBIA

Date of submission: 28 May 2004

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

*(Tick only one):*

- Inception report
- First annual progress report
- ✓ Second annual progress report
- Third annual progress report
- Fourth annual progress report
- Fifth annual progress report

*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.*

*The ISS funds are held at the Central Board of Health (CBoH) and are to be expended as per CBoH financial regulations. There is a GAVI Core Group comprising officers from the Central Board of Health, WHO, UNICEF and the Zambia Integrated Health Programme (USAID), which meets regularly, to ensure that GAVI activities are implemented as planned. Recommendations of the GAVI Core Group are taken to the ICC for endorsement. It is only after the ICC has approved the release of funds that CBoH can release any funds.*

*As explained in first annual progress report, activities to be funded by ISS funds were postponed to 2003 for a variety of reasons. However, a training of Master Trainers took place in February 2003 while provinces and districts conducted trainings from May to December 2003. The other activities that were undertaken using ISS funds are included in the table 1 below.*

## 1.1.2 Use of Immunization Services Support

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

**Funds received during the reporting year 2003: USD164, 000 (actual USD163, 960 less USD40 bank charges)**

**Remaining funds (carry over) from the year 2001: USD164, 000**

**Table 1: Use of funds during reported calendar year 2003 (Average exchange rate: USD 1 equivalent to ZMK 4,795)**

Area of Immunization Services Support	Total amount in US \$	Amount of funds (in ZMK)			
		PUBLIC SECTOR			PRIVATE SECTOR & Other
		Central	Region/State/Province	District	
Vaccines	-	-			
Injection supplies	6,271.40	30,040,000.00			
Personnel	-				
Transportation	-				
Maintenance and overheads	-				
Training	269,035.23		620,023,950.12	670,000,000.00	
IEC / social mobilization	-				
Outreach	-				
Supervision	-				
Monitoring and evaluation	-				
Epidemiological surveillance	-				
Vehicles	-				
Cold chain equipment	6,014.36	28,838,847.50			
Bank charges	808.87	3,878,553.80			
<b>Total:</b>	<b>182,129.87</b>	<b>62,757,401.30</b>	<b>620,023,950.12</b>	<b>670,000,000.00</b>	
<b>Remaining funds for next year:</b>	<b>49,303.42</b>				

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

*The ICC approved the use of ISS funds on training of health workers on Injection Safety and Revised EPI Guidelines, in October 2002 but the funds were actually spent in 2003. The reasons for the delay in using ISS funds were explained in the first annual progress report.*

### **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

NO

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

*Considering that Zambia passed the DQA, the recommendations were not many. The main recommendations were:*

- The HMIS and EPI (UCI) units should agree on the tally sheet design and supply, and alternatives for generating wastage and drop-out rates*
- Standard tally sheet formats should be provided to health units and district staff as well as guidelines for their use and storage.*
- The issue of population estimates should be resolved as quickly as possible and clear guidance should be provided by CBoH to lower levels.*
- HMIS and EPI should ensure that stock cards are distributed to all provinces, districts and health facilities for tracking all vaccines.*
- HMIS and EPI should develop guidelines and tools to ensure that immunisation data are monitored and used at all levels.*

*With the exception of the issue regarding population estimates, all these issues have been addressed and incorporated in the RED strategy that districts will be trained on early in 2004. And all the supplementary recommendations on recording, storing/reporting, monitoring/evaluation, demographics and planning, and system design have been addressed in the EPI trainings conducted in 2003 and will be followed up using the RED approach in 2004. The Central Board of Health has engaged the Central Statistical Office in discussion aimed at resolving the issue regarding population estimates.*

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

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

*Measles Coverage Survey*

## **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: N/A      YEAR: N/A**

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

*On 20 November 2003, Zambia received a quarterly shipment of 668,000 doses of DPT+Hib vaccines. The cost of this bundled consignment was USD1,571,915.00. No problems were encountered as there was enough storage capacity and the shipment was expected, ending the many years of waiting for new vaccines.*

### **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.*

#### **Cold Chain Equipment**

*UNICEF has ordered 79 freezers for provincial health offices and 110 kerosene refrigerators for health centres. This will greatly improve vaccine storage capacity at the provincial level and allow the provinces to closely monitor vaccine management in the districts. Previously some districts were collecting vaccines directly from the National Cold Store.*

#### **New Vaccines, Strengthening Immunisation Services and Injection Safety**

*The following activities were undertaken:*

- *Revision of the introduction plan for DPT+Hib was done and GAVI accepted the proposal*
- *Training of Master Trainers was conducted during the period 10-14 February 2003, and facilitators were drawn from WHO Country Office, UNICEF Country Office, MOH, CBoH, and Zambia Integrated Health Programme (ZIHP/USAID).*
- *Provincial and District trainings were conducted from May to December 2003.*
- *Social Mobilisation Materials were finalised.*
- *A quarterly shipment DPT+Hib arrived in the country on 20 November 2003*
- *A Financial Sustainability Plan (FSP) was developed and submitted to GAVI in November 2003.*

### **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.*

*These funds will be used to fund activities related to introduction of DPT+Hib in districts in 2004. The activities will include training of health facilities, advocacy and social mobilisation.*

### 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

The Injection Safety proposal was approved on 27 August 2002 and GAVI committed itself to supplying AD syringes and injection equipment valued at USD450, 500 for 2002-3. The first quarterly shipment of 488, 000 pieces of AD syringes arrived in the country in September 2002. These materials were distributed in 2003 following the EPI trainings that were conducted in all the 72 districts. Injection Safety was covered extensively in all the trainings.

#### 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.

<b>Indicators</b>	<b>Targets</b>	<b>Achievements</b>	<b>Constraints</b>	<b>Updated targets</b>
Updated inventory on incinerators and plan for collection/incineration of filled safety boxes by 2003	Updated inventory on incinerators and plans for collection/incineration of filled safety boxes by 2003	<ul style="list-style-type: none"> <li>• Updated inventory on incinerators</li> <li>• Plans for incineration of filled safety boxes</li> </ul>	Lack of incinerators in many health facilities	
Installation of incinerators in three provinces by 2003	Installation of incinerators in 3 provinces by 2003	Sourcing of funds and placing orders for incinerators	Delays in procuring incinerators	Installation of incinerators in three provinces by 2004
Incorporation of guidelines on collection and incineration of sharps waste in the Vaccinations Manual by 2003	Incorporation of guidelines on collection and incineration of sharps waste in the Vaccinations Manual by 2003	Revision of Vaccination Manual to incorporate collection and incineration of injection waste	Delay in production of manual	Production of revised Vaccination Manual by 2004
Introduction of safety boxes for routine immunization in all health facilities by 2003	Introduction of safety boxes for routine immunization in all health facilities by 2003	Training conducted and safety boxes introduced in health facilities in 2003	Nil	None
Development of plan for advocacy and communication on injection safety by 2003	Development of plan for advocacy and communication on injection safety by 2003	Plan partly completed	Frequent postponement of planned activities	Development of plan for advocacy and communication on injection safety by 2003



**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:*

**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.

**Indicators for follow up of progress in achieving of strategies for financial sustainability**

S. No.	Strategy	Indicator(s)	Value	
			Baseline	Target
1.1	Mobilization of additional Govt resources	Proportion of traditional vaccine costs covered by Government (including basket) funds by 2012	0%	10% increase per year
		Inclusion of resource needs in MTEF by 2004	Not included	Resource needs included in MTEF by 2004
		Inclusion of programme activities and resource requirements from the FSP in the annual Health Sector work plan by 2005	Not included	FSP incorporated in Health Sector plan by 2005
1.2	Mobilization of additional resources from local Government	Proportion of IEC, surveillance and cold chain maintenance costs funded by local government by 2007	0%	100% by 2007
1.3	Mobilization of resources from the private sector	Proportion of DTP-HepB+Hib vaccine costs covered by resources from the private sector by 2010	0%	25% (HepB equivalent) by 2010
1.4	Expansion of ICC and involvement in the Health Sector Steering Committee	Number of new ICC members recruited by 2005	0	4
		Number of HSSC meetings attended by the ICC by 2005	None	4 per year
2	Increasing reliability of public resources	Proportion of traditional vaccine costs covered by Government (including basket) funds by 2012	0% in 2002	100% by 2012
		Proportion of Government funded programme costs secured in the MTEF by 2012	0	100%
3.1	Reduction of vaccine wastage	Reduction of DTP-HepB+Hib 3 Vaccine wastage rate by 2006	34%	10%
3.2	Increasing vaccination through static units	Proportion of rural health facilities providing immunization services by 2005	None	100%
3.3	Involvement of private providers in providing vaccination	Proportion of private providers providing immunisation services by 2005	None	100%
3.4	Increasing numbers of infants vaccinated per outreach session	Increased immunisation coverage in all catchment areas by 2006	None	90%
3.5	Improvement of health worker skills in EPI management and service delivery	Proportion of health workers trained in management skills by 2005	0% in 2002	100% by 2005

**Table 2: Sources (planned) of financing of new vaccine DPT+Hib (2004) and DPT-HepB+Hib (from 2005)**

Proportion of vaccines supported by	Annual proportion of vaccines									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Proportion funded by GAVI/VF (%)	100	90	86	82	78	74	34	25	24	11
Proportion funded by the Government and other sources (%)	0	10	14	18	22	26	66	75	76	89
Total funding for DPT+Hib (2004) & DPT-HepB+Hib (From 2005)	8,812,000	7,084,006	5,587,030	5,404,171	5,508,431	5,668,175	5,832,552	6,001,696	6,175,745	6,354,842

*\* 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.gavittf.org> under FSP guidelines and annexes. Highlight assistance needed from partners at local, regional and/or global level.

### 3. Request for new and under-used vaccines for year 2005 (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
<b>DENOMINATORS</b>									
Births	465,849	479,882	496,678	568,428	587,460	606,016	625,409	645,421	666,075
Infants' deaths	50,777	52,307	54,138	54,000	55,809	57,572	59,414	61,315	63,277
Surviving infants	415,072	431,249	446,342	514,428	531,631	548,444	565,995	584,106	602,798
Infants vaccinated / to be vaccinated with 1 <sup>st</sup> dose of DTP (DTP1)*									
Infants vaccinated / to be vaccinated with 3 <sup>rd</sup> dose of DTP (DTP3)*	313,379	327,749	406,654	471,726	494,417	512,795	532,035	551,980	572,658
<b>NEW VACCINES **</b>									
Infants vaccinated / to be vaccinated with 1 <sup>st</sup> dose of DPT+Hib	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Infants vaccinated / to be vaccinated with 3 <sup>rd</sup> dose of DPT+Hib	N/A	N/A	N/A	N/A	494,417	N/A	N/A	N/A	N/A
Wastage rate of DPT+Hib	N/A	N/A	N/A	N/A	45%	N/A	N/A	N/A	N/A

Infants vaccinated / to be vaccinated with 1 <sup>st</sup> dose of DPT-HepB+Hib	N/A	N/A	N/A	N/A	N/A				
Infants vaccinated / to be vaccinated with 3 <sup>rd</sup> dose of DPT-HepB+Hib	N/A	N/A	N/A	N/A	N/A	512,795	532,035	551,980	572,658
Wastage rate of DPT-HepB+Hib	N/A	N/A	N/A	N/A	N/A	10%	10%	10%	5%
<b>INJECTION SAFETY****</b>									
Pregnant women vaccinated / to be vaccinated with TT	-	323,437	434,735	458,642	487,592	515,114	544,106	574,425	606,128
Infants vaccinated / to be vaccinated with BCG	-	441,491	423,499	412,496	446,470	478,753	506,582	542,154	579,485
Infants vaccinated / to be vaccinated with Measles	-	366,562	380,678	402,747	425,305	449,724	475,436	502,331	539,462

\* 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.*

*The Central Statistical Office has recently provided revised population figures for 2004 and the Demographic Health Survey of 2002 estimates that the Infant Mortality Rate is now 95/1000 which is lower than the rate of 109/1000 used in previous applications. A population growth rate of 3.2% per annum has also been used to estimate population figures for the subsequent years. The figures reported in the table above are consistent with those in the WHO/UNICEF Joint Reporting Form.*

### 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.

Following the adjustment of the maximum wastage for DPT+Hib from 25% to 50%, vaccine requirements were revised accordingly using a wastage rate of 45%. Nonetheless, the maximum wastage rate used for pentavalent was 15% but GAVI has since advised that the correct wastage rate is 10%. In consequence, the requirements for pentavalent vaccine in 2005 have been estimated using a maximum wastage rate of 10%.

**Table 4: Estimated number of doses of DPT+Hib vaccine. This is indicated for 2005 in case there is unforeseen delay in delivering the pentavalent 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	Remarks
<b>A</b>	Infants vaccinated / to be vaccinated with 1 <sup>st</sup> dose of DPT+Hib		512,795	<ul style="list-style-type: none"> <li>▪ <b>Phasing:</b> 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</li> <li>▪ <b>Wastage of vaccines:</b> 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.</li> <li>▪ <b>Buffer stock:</b> 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.</li> <li>▪ <b>Anticipated vaccines in stock at start of year... ..:</b> It is calculated by deducting the buffer stock received in previous years from the current balance of vaccines in stock.</li> <li>▪ <b>AD syringes:</b> A wastage factor of 1.11 is applied to the total number of vaccine doses requested from the Fund, <u>excluding</u> the wastage of vaccines.</li> <li>▪ <b>Reconstitution syringes:</b> it applies only for lyophilized vaccines. Write zero for other vaccines.</li> </ul>
<b>B</b>	Percentage of vaccines requested from The Vaccine Fund taking into consideration the Financial Sustainability Plan	%	100%	
<b>C</b>	Number of doses per child		3	
<b>D</b>	Number of doses	$A \times B / 100 \times C$	1,538,385	
<b>E</b>	Estimated wastage factor	(see list in table 3)	1.82	
<b>F</b>	Number of doses ( incl. wastage)	$A \times C \times E \times B / 100$	2,799,861	
<b>G</b>	Vaccines buffer stock	$F \times 0.25$	699,965	
<b>H</b>	Anticipated vaccines in stock at start of year 2005		0	
<b>I</b>	Total vaccine doses requested	$F + G - H$	3,499,826	
<b>J</b>	Number of doses per vial		10	
<b>K</b>	Number of AD syringes (+ 10% wastage)	$(D + G - H) \times 1.11$	2,484,569	
<b>L</b>	Reconstitution syringes (+ 10% wastage)	$I / J \times 1.11$	388,481	

<b>M</b>	Total of safety boxes (+ 10% of extra need)	$(K + L) / 100 \times 1.11$	31,891
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- **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.*

**Table 4: Estimated number of doses of DPT-HepB+Hib 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
<b>A</b>	Number of children to receive new vaccine		512,795
<b>B</b>	Percentage of vaccines requested from The Vaccine Fund taking into consideration the Financial Sustainability Plan	%	90
<b>C</b>	Number of doses per child		3
<b>D</b>	Number of doses	$A \times B / 100 \times C$	1,384,547
<b>E</b>	Estimated wastage factor	(see list in table 3)	1.11
<b>F</b>	Number of doses (incl. wastage)	$A \times C \times E \times B / 100$	1,536,847
<b>G</b>	Vaccines buffer stock	$F \times 0.25$	384,211
<b>H</b>	Anticipated vaccines in stock at start of year 2005		0
<b>I</b>	Total vaccine doses requested	$F + G - H$	1,921,058
<b>J</b>	Number of doses per vial		2
<b>K</b>	Number of AD syringes (+ 10% wastage)	$(D + G - H) \times 1.11$	1,963,321
<b>L</b>	Reconstitution syringes (+ 10% wastage)	$I / J \times 1.11$	1,066,187

### 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:** The country would aim for a maximum wastage rate of 25% for the first year with a plan to gradually reduce it to 15% by the third year. No maximum limits have been set for yellow fever vaccine in multi-dose vials.
- **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 lyophilised vaccines. Write zero for other vaccines.
- **Safety boxes:** A multiplying factor of 1.11 is applied to safety boxes to cater for

<b>M</b>	<b>Total of safety boxes (+ 10% of extra need)</b>	$(K + L) / 100 \times 1.11$	33,628
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areas where one box will be used for less than 100 syringes

### 3.3 Confirmed/revised request for injection safety support for the year 2005 (indicate forthcoming year)

**Table 5: Estimated supplies for safety of vaccination for the next two years with BCG (Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4 to 8)**

		<b>Formula</b>	<b>For year 2005</b>	<b>For year 2006</b>
<b>A</b>	<b>Target of children for BCG vaccination</b>	#	478,753	506,582
<b>B</b>	<b>Number of doses per child</b>	#	1	1
<b>C</b>	<b>Number of BCG doses</b>	A x B	478,753	506,582
<b>D</b>	<b>AD syringes (+10% wastage)</b>	C x 1.11	531,416	562,306
<b>E</b>	<b>AD syringes buffer stock <sup>1</sup></b>	D x 0.25	0	0
<b>F</b>	<b>Total AD syringes</b>	D + E	531,416	562,306
<b>G</b>	<b>Number of doses per vial</b>	#	20	20
<b>H</b>	<b>Vaccine wastage factor <sup>4</sup></b>	<i>Either 2 or 1.6</i>	2	2
<b>I</b>	<b>Number of reconstitution <sup>2</sup> syringes (+10% wastage)</b>	$C \times H \times 1.11 / G$	53,142	56,231
<b>J</b>	<b>Number of safety boxes (+10% of extra need)</b>	$(F + I) \times 1.11 / 100$	6,489	6,866

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

**NB. Although requirements for injection safety supplies have been indicated for 2006, Zambia is aware that GAVI support for injection safety will end in 2005 and is currently working on plans to finance this component after GAVI support.**

<sup>1</sup> 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.

<sup>2</sup> Only for lyophilized vaccines. Write zero for other vaccines

<sup>4</sup> 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 6: Estimated supplies for safety of vaccination for the next two years with DTP**

		<b>Formula</b>	<b>For year 2005</b>	<b>For year 2006</b>
<b>A</b>	<b>Target of children for DTP vaccination</b>	#	512,795	532,035
<b>B</b>	<b>Number of doses per child</b>	#	3	3
<b>C</b>	<b>Number of DTP doses</b>	A x B	1,538,385	1,596,105
<b>D</b>	<b>AD syringes (+10% wastage)</b>	C x 1.11	1,707,607	1,771,677
<b>E</b>	<b>AD syringes buffer stock <sup>3</sup></b>	D x 0.25	0	0
<b>F</b>	<b>Total AD syringes</b>	D + E	1,707,607	1,771,677
<b>G</b>	<b>Number of doses per vial</b>	#	10	10
<b>H</b>	<b>Vaccine wastage factor <sup>4</sup></b>	<i>Either 2 or 1.6</i>	1.6	1.6
<b>I</b>	<b>Number of reconstitution <sup>4</sup> syringes (+10% wastage)</b>	$C \times H \times 1.11 / G$	0	0
<b>J</b>	<b>Number of safety boxes (+10% of extra need)</b>	$(F + I) \times 1.11 / 100$	18,954	19,666

<sup>3</sup> 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.

<sup>4</sup> Only for lyophilized vaccines. Write zero for other vaccines

<sup>4</sup> 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: Estimated supplies for safety of vaccination for the next two years with Measles**

		<b>Formula</b>	<b>For year 2005</b>	<b>For year 2006</b>
<b>A</b>	<b>Target of children for Measles vaccination</b>	#	449,724	475,436
<b>B</b>	<b>Number of doses per child</b>	#	1	1
<b>C</b>	<b>Number of Measles doses</b>	A x B	449,724	475,436
<b>D</b>	<b>AD syringes (+10% wastage)</b>	C x 1.11	499,194	527,734
<b>E</b>	<b>AD syringes buffer stock <sup>5</sup></b>	D x 0.25	0	0
<b>F</b>	<b>Total AD syringes</b>	D + E	499,194	527,734
<b>G</b>	<b>Number of doses per vial</b>	#	10	10
<b>H</b>	<b>Vaccine wastage factor <sup>4</sup></b>	<i>Either 2 or 1.6</i>	1.6	1.6
<b>I</b>	<b>Number of reconstitution <sup>6</sup> syringes (+10% wastage)</b>	$C \times H \times 1.11 / G$	79,871	84,437
<b>J</b>	<b>Number of safety boxes (+10% of extra need)</b>	$(F + I) \times 1.11 / 100$	6,428	6,795

<sup>5</sup> 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.

<sup>6</sup> Only for lyophilized vaccines. Write zero for other vaccines

<sup>4</sup> 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: Estimated supplies for safety of vaccination for the next two years with TT**

		Formula	For year 2005	For year 2006
A	Target of target of pregnant women for TT vaccination	#	515,114	544,106
B	Number of doses per woman	#	2	2
C	Number of TT doses	A x B	1,030,228	1,088,212
D	AD syringes (+10% wastage)	C x 1.11	1,143,553	1,207,915
E	AD syringes buffer stock <sup>7</sup>	D x 0.25	0	0
F	Total AD syringes	D + E	1,143,553	1,207,915
G	Number of doses per vial	#	10	10
H	Vaccine wastage factor <sup>4</sup>	Either 2 or 1.6	1.6	1.6
I	Number of reconstitution <sup>8</sup> 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	12,693	13,408

**Table 5: Summary of total supplies for safety of vaccinations with BCG, DTP, TT and measles 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	531,416	562,306	The Central Statistical Office has revised population estimates for 2004 and the IMR has gone down from 109/1000 to 95/1000. In consequence the targets have been revised in line with the revised population estimates.
	for other vaccines	3,350,354	3,507,326	
Total of reconstitution syringes		133,013	140,668	
Total of safety boxes		44,564	46,735	

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

*The Central Statistical Office has revised population estimates for 2004 and the IMR has gone down from 109/1000 to 95/1000. In consequence the targets have been revised in line with the revised population estimates.*

<sup>7</sup> 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.

<sup>8</sup> Only for lyophilized vaccines. Write zero for other vaccines

<sup>4</sup> 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**

<b>Indicators</b>	<b>Targets</b>	<b>Achievements</b>	<b>Constraints</b>	<b>Updated targets</b>
<i>Introduction of the pentavalent vaccine in all health facilities</i>	<i>Introduction of the pentavalent vaccine in all health facilities by the fourth quarter of 2003</i>	<i>Approval of the proposal by GAVI</i>	<i>Unavailability of the pentavalent vaccine due to a Vaccine crisis</i>	<i>Introduction of pentavalent vaccine in all health facilities by the first quarter of 2005.</i>
<i>Introduction of the DPT+Hib vaccine in all health facilities</i>	<i>Introduction of the DPT+Hib vaccine in all health facilities by the first quarter of 2004</i>	<ul style="list-style-type: none"> <li>• <i>Approval of the revised proposal by GAVI</i></li> <li>• <i>Receipt of vaccine in 2003</i></li> <li>• <i>Training of health workers in 2003</i></li> </ul>	<i>None</i>	<i>None</i>

**5. Checklist**

Checklist of completed form:

<b>Form Requirement:</b>	<b>Completed</b>	<b>Comments</b>
Date of submission	28 May 2004	
Reporting Period (consistent with previous calendar year)	2003	
Table 1 filled-in	Yes	
DQA reported on	Yes	
Reported on use of 100,000 US\$	No	This will be reported on in the 2004 APR
Injection Safety Reported on	Yes	
FSP Reported on (progress against country FSP indicators)	Yes	
Table 2 filled-in	Yes	
New Vaccine Request completed	Yes	
Revised request for injection safety completed (where applicable)	Yes	
ICC minutes attached to the report	Yes	
Government signatures	Yes	
ICC endorsed	Yes	

## 6. Comments

→ *ICC/RWG comments:*

### **ICC Comments:**

- The Central Board of Health and the Central Statistical Office will continue discussions on the harmonisation of population estimates
- The Central Board of Health informed the ICC that it is committed to the implementation of the Vaccine Independence Initiative (VII) and has requested the Ministry of Finance to increase the allocation of funds to the VII. At the same time, the Central Board of Health is keen on implementing the Financial Sustainability Plan.
- JICA pledged to procure BCG vaccine for Zambia in 2005 in collaboration UNICEF.
- WHO and UNICEF urged the Government to urgently source funds to finance AD syringes and injection equipment and sustain the programme after GAVI support has ended. They advised that it will be unacceptable for the Government to re-introduce disposable and sterilisable syringes in the immunisation programme.

### **WHO/AFRO/ICP Southern Africa Comments:**

- Overall this is a very thorough and informative report. The data provided is also consistent with the data in the JRF.
- It is good to see the progress that is being made in introducing AD syringes and providing injection safety training for all districts. It would be interesting to monitor the impact that this has on reducing unintentional needle stick injuries among health workers as well as AEFIs.
- The acquisition of new cold chain equipment by UNICEF is also a very positive sign from improving vaccine storage capacity and vaccine management.
- It is good to see that the DQA recommendations are being implemented. As we have mentioned on other occasions however, it is important to calculate DPT1 coverage, and this variable should be added to the HMIS. Without the DPT1 coverage rate it is impossible to calculate the DPT1-3 dropout rate, which is very important in developing an appropriate strategy for increasing coverage (ie. determining whether the problem lies with access, utilization, or both.)

## 7. Signatures

For the Government of the **Republic of Zambia**

Signature:

Title: Permanent Secretary, Ministry of Health

Date:

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	Agency/Organisation	Name/Title	Date	Signature
Ministry of Health	Dr. S K Miti Permanent Secretary			USAID	Mr. R Clay Director of Population, Health and Nutrition		
Central Board of Health	Dr. B U Chirwa Director General			DFID	Mr. A Daly Health Adviser		
WHO	Dr. S Anyangwe Resident Representative			Zambia Integrated Health Programme (ZIHP) Systems	Dr. C Musumali Chief of Party		
UNICEF	Dr. S Goings Resident Representative			Zambia Integrated Health Programme (ZIHP) Services	Dr. P Eerens Chief of Party		
Rotary International District 9210	Mr. D Babbar Coordinator			JICA	Mr. K Sasaki Resident Representative		
Central Board of Health	Dr. G Carlsson Senior Health Advisor						

~ End ~