



World Health
Organization

Zambia



ANNUAL REPORT
2013

Editorial Committee

Dr. Olusegun Babaniyi, *WHO Representative*

Dr. Peter Songolo, *National Professional Officer, Disease Prevention and Control (DPC)*

Dr. Freddie Masaninga, *National Professional Officer, Malaria (MAL)*

Ms. Nora Mweemba, *National Professional Officer, Health Information and Promotion (HIP)*

Mr. Mbaulo Musumali, *Operations Officer (OO)*



**World Health
Organization**

Zambia

ANNUAL REPORT

2013

Foreword



Dr. Olusegun Babaniyi
WHO Representative

I am delighted to present the World Health Organisation Country Office (WCO) annual report for the year 2013. The year 2013 marked the end of the WHO Country Cooperation Strategy (CCS) 2008-2013 and the 2012-2013 biennium for the technical cooperation programme between WHO and the Government of the Republic of Zambia (GRZ). As a lead UN agency in health, WHO continued to provide technical and financial support for implementation of the National Health Strategic Plan (NHSP) 2011-2015. WHO also remained committed to supporting government's efforts aimed at achieving the health-related Millennium Development Goals (MDGs) while working in collaboration with other partners particularly through the United Nations Development Assistance Framework (UNDAF) 2011-2015.

In line with the WHO reforms, the Country Office put in place a fully-fledged Country Support Unit (CSU) which resulted in additional strength, more transparency and efficiency in the provision of support to government. The migration of the office to the WHO global e-mail services also enhanced its operations. The implementation rates for technical cooperation programmes improved significantly from 89% in the 2010-2011 biennium to 97% in the 2012-2013 biennium.

Significant achievements were made in a number of programmes during 2013. Notable among these was the introduction of four new and under-utilised vaccines in the national immunisation system which included Pneumococcal Conjugate Vaccine (PCV), measles second dose, Human Papilloma Virus vaccine (HPV) and rota virus vaccine. The national cold chain storage capacity for vaccines was also expanded from 3,580 litres in 2012 to 50,000 litres in 2013. Positive developments were also recorded in the male circumcision programme. The number of males circumcised increased significantly from 173,922 in 2012 to 266,476 in 2013. WHO provided normative guidance, technical leadership, advocacy and coordination for the scale-up of the male circumcision programme.

The year 2013 was the mid-point for the implementation of the National Health Strategic Plan 2011-2015 and other programme specific strategic plans. WHO provided technical and financial support to MoH for the mid-term review of the NHSP, the National Malaria Strategic Plan 2011-2015, the National TB Strategic Plan 2011-2015 and the National AIDS Strategic Framework (NASF) 2011-2015.

One of the notable events in 2013 was the classification of Zambia by WHO as a low risk for yellow fever. WHO provided the necessary leadership, technical and financial assistance to the Ministry of Health to conduct a survey to determine whether or not there was presence of yellow fever in the country. The survey was instrumental in helping the country to confirm or refute the yellow fever classification. Another notable event in 2013 was the commencement of the national 2013 Tuberculosis (TB) prevalence survey which will be concluded in 2014.

Notwithstanding these achievements, much needs to be done in the country to improve health indicators. The work of WHO in Zambia in the 2014-2015 biennium will continue to support priorities in the NHSP. The major focus will continue to be that of reducing the disease burden, strengthening health systems, improving human resources for health and ensuring consistent and adequate supply of quality essential medicines. In order to address the rising burden of Non-Communicable Diseases in the Country, WHO supported the development of the National Non-Communicable Diseases (NCDs) Strategic Plan 2012-2016 which is reflective of strategies outlined in the WHO Global Non-Communicable diseases action plan 2013-2020. The implementation of this plan will receive support from WHO in 2014 and beyond. The WHO Country Office will also work within the framework of WHO's 12th Global Programme of Work to in order to help the country achieve national, regional and global health targets and goals.

It is gratifying to note that stakeholders value WHO's role, leadership, work and contribution globally as was indicated by results of a WHO global perception survey. Zambia is one of the countries that participated in this survey. The survey provided useful findings on areas WHO needs to pay attention to further improve the organisation's work. At country level, the findings will be incorporated into the general communications strategy as part of the WHO reforms and will form part of the on-going efforts aimed at improving the visibility of the organization.



Dr. Olusegun Babaniyi

WHO Representative

Acronyms

ACT	Artemisinin-Based Combination Therapy	FANC	Focused Antenatal Care
ADH	Adolescent Health	FP	Family Planning
AHO	African Health Observatory	GAVI	Global Alliance for Vaccines and Immunization
AFRO	WHO Regional Office for Africa	GAP	Governance Action Plan
AFP	Acute Flaccid Paralysis	GBV	Gender Based Violence
AIDS	Acquired Immuno-Deficiency Syndrome	GDP	Gross Domestic Product
ANC	Antenatal Care	GDF	Global Drug Facility
ANI	Accelerated Nutrition Improvement in Africa	GGM	Good Governance for Medicines
ART	Antiretroviral Therapy	GFATM	Global Fund to Fight AIDS, TB and Malaria
ARV	Anti-Retroviral Drugs	GLP	Global laboratory Practice
AVW	Africa Vaccination Week	GRZ	Government of the Republic of Zambia
BFHF	Baby Friendly Health Facility Initiative	GSM	Global Management System
CAH	Child and Adolescent Health	GTYS	Global Tobacco Youth Survey
CBO	Community- Based Organization	HCF	Health Care Financing
CBU	Copperbelt University	HMIS	Health Management Information System
CDC	US Centre for Disease Prevention and Control	HIS	Health Information System
CCA	Country Capacity Assessment	HIV	Human Immuno-deficiency virus
CCM	Country Coordination Mechanism	HPR	Health Promotion
CCS	Country Cooperation Strategy	HR	Human Resources
CHAI	Clinton Health Access Initiative	HRH	Human Resources for Health
CHAZ	Churches Health Association of Zambia	HRHSP	National Human Resources for Health Strategic Plan
CHAs	Community Health Assistants	HQ	Headquarters
CHEP	Copperbelt Health Education Project	HSI	Hospital Safety Index
CHPP	Country Health Policy Process	ICASA	International Conference on HIV and AIDS in Africa
CIDA	Canadian International Development Agency	IBP	Implementing Best Practices
CIDRZ	Center for Infectious Diseases Research in Zambia	IDRC	International Development Research Centre
COPD	Chronic Obstructive Pulmonary Disease	IDS	Integrated Diseases Surveillance
CPs	Cooperating Partners	IDSR	Integrated Disease Surveillance and Response
CRVS	Civil Registration Vital Statistics	IHP+	International Health Partnership Plus
CSU	Country Support Unit	IHR	International Health Regulations
CSO	Central Statistical Office	IEC	Information, Education and Communication
CVD	Cardiovascular Diseases	IMAI	Integrated Management of Adolescent and Adult Illnesses
DDT	Dichloro-Diphenyl-Trichloroethane	IMCI	Integrated Management for Childhood Illnesses
DFC	Direct Financial Cooperation	IMR	Infant Mortality Rate
DFID	UK Department for International Development	IPD	Institute Pasteur, Dakar
DHB	District Health Board	IPTp	Intermittent Preventive Treatment in Pregnancy
DHIS	District Health Information System	ITNs	Insecticide Treated Nets
DHMT	District Health Management Team	IRS	Indoor Residual Spraying
DHS	Demographic and Health Survey	IRH	Integrated Reproductive Health
DOTS	Directly Observed Treatment Short Course	IVDs	In Vitro Diagnostics
DRC	Democratic Republic of Congo	IST/ESA	WHO Inter-country Support Team for Eastern and Southern Africa
DRM	Disaster Risk Management	IST/WA	WHO Inter-country Support Team for West Africa
EDM	Essential Drugs and Medicines	IYCF	Infant and Young Child Feeding
EPI	Expanded Programme on Immunization	JAR	Joint Annual Review
EML	Essential Medicines List		
EmONC	Emergency Obstetric New-born Care		
EPR	Epidemic Preparedness and Response		

LCMS	Living Conditions and Monitoring Survey	SAG	Sector Advisory Group
LLINS	Long Lasting Insecticide Treated Nets	SARN	Southern Africa Regional Network
MACEPA	Malaria Control and Evaluation Partnership for Africa	SGBV	Sexual Gender Based Violence
MAMPA	Monitoring Alcohol Policies in Africa Project	SHI	Social Health Insurance
MC	Male Circumcision	SIAAs	Supplementary Immunisation Activities
MCH	Maternal and Child Health	SIDA	Swedish International Development Agency
MCDMCH	Ministry of Community Development Mother and Child Health	SMAGS	Safe Motherhood Action Groups
MDA	Mass Drug Administration	SNDP	Sixth National Development Plan
MDG	Millennium Development Goal	STAG	Strategic Technical Advisory Group
MDGs	Millennium Development Goals	SWAps	Sector-wide Approaches
MDR	Multi-Drug Resistance	TA	Technical Assistance
MeTA	Medicines Transparency Alliance	TB	Tuberculosis
MIS	Malaria Indicator Survey	TDRS	Tropical Diseases Research Centre
MIYCN	Maternal Infant and Young Child Nutrition	TFM	Transition Funding Mechanism
MMR	Maternal Mortality Ratio	TOT	Training of Trainers
MNCH	Maternal New-born and Child Health	TWG	Technical Working Group
MOCTA	Ministry of Chiefs and Traditional Affairs	UHC	Universal Health Coverage
MoF	Ministry of Finance	UNDAF	United Nations Development Assistance Framework
MoH	Ministry of Health	UNGASS	United Nations General Assembly Special Session on HIV and AIDS
MOLSS	Ministry of Labour and Social Security	UNFPA	United Nations Population Fund
MoU	Memorandum of Understanding	UNICEF	United Nations Children's Fund
MSL	Medical Stores Limited	UNZA	University of Zambia
MTEF	Medium Term Expenditure Framework	USAID	United States Agency for International Aid
MTR	Mid-Term Review	UTH	University Teaching Hospital
NAC	National HIV and AIDS/STI/TB Council	VMMC	Voluntary Medical Male Circumcision
NCDs	Non Communicable Diseases	WB	World Bank
NFNC	National Food and Nutrition Commission	WCO	WHO Country Office
NGO	Non-Governmental Organization	WHA	World Health Assembly
NHA	National Health Accounts	WHD	World Health Day
NHSP	National Health Strategic Plan	WHO	World Health Organisation
NPO	National Professional Officer	WHO-FCTC	WHO Framework Convention on Tobacco Control
NTDs	Neglected Tropical Diseases	WISN	Workload Indicator for Staffing Need
NTP	National Tuberculosis Programme	WMR	World Malaria Report
PEPFAR	President's Emergency Plan For AIDS Relief	WNTD	World No Tobacco Day
PMDT	Programatic Management of Drug Resistant Tuberculosis	WR	WHO Representative
PMTCT	Prevention of Mother to Child Transmission	YF	Yellow Fever
PRNT	Plaque Reduction Neutralising Test	YWCA	Young Women's Christian Association
OGAC	Office of the US Global AIDs Coordinator	ZamNis	Zambia Nutrition Information System
OHT	One Health Costing Tool	ZDHS	Zambia Demographic and Health Survey
OPV	Oral Polio Virus	ZEMA	Zambia Environmental Management Agency
RBM	Roll Back Malaria	ZMW	Zambian Kwacha
SARA	Service Availability Readiness Assessment	ZNBTS	Zambia National Blood Transfusion Services
SADC	Southern Africa Development Community	ZNF	Zambia National Formulary
SDH	Social Determinants of Health		

Executive Summary

This report provides highlights of the contribution which the World Health Organization made to the health sector in Zambia through its technical cooperation programme with government in 2013. It is worthwhile to note that the year 2013 marked the end of both the 2012-2013 biennium for the technical cooperation programme and the Country Cooperation Strategy for 2008-2013. The report gives an insight into the progress which was made in the implementation of activities for various priority health programmes, challenges that were faced and recommendations for future action particularly in the next biennium 2014–2015.

During the year under review, WHO continued to provide technical and financial assistance to the Zambian health sector for priority programmes. The priority areas included health system strengthening, development of human resources for health, Expanded Programme on Immunisation, polio eradication, maternal, new-born and child health, HIV and AIDs, male circumcision, tuberculosis, malaria; non-communicable diseases, health promotion, essential medicines, nutrition and the promotion of a healthy environment. WHO also continued to provide medical supplies and equipment.

A significant improvement was made in mobilising funding for implementation of various health initiatives. WHO's financial contribution to the health sector increased from 11 million USD in the 2011-2012 biennium to 13 million in the 2012-2013 biennium. Funding for the TB programme increased from 760,000 USD in 2012 to 1,100,000 USD in 2013 with contributions from TB CARE 1 and WHO resources. WHO also received grants from the PEPFAR, Bill and Melinda Gates Foundation and CIDA Canada for HIV and AIDS and male circumcision programmes. In addition, the USAID contributed funding for the malaria programme. The improved funding levels contributed to improvements in the implementation of programme activities.

A number of achievements were reported in various programmes during 2013. WHO worked with UNICEF and other partners to support the introduction of four new vaccines in the routine immunisation system namely; pneumococcal vaccine (PCV), Human Papilloma Virus vaccine (HPV), measles second dose and rota virus vaccine. WHO also contributed financial and technical support towards the expansion of the cold chain storage capacity for vaccines and facilitated the installation of equipment for vaccine cold rooms in three provinces. The national capacity for storage of vaccines improved from 3,580 litres in 2012 to 50,000 litres in 2013.

Positive developments were also seen in other programmes. The scale up of the male circumcision programme was extended to most parts of the country and the number of male circumcisions conducted increased to 266,476 in 2013 compared to 173,922 in 2012. WHO provided financial and technical support to the Ministry of Community Development, Mother and Child Health for the implementation of the CIDA UN H4+ maternal, newborn and child health (MNCH) initiative in five districts.

Other accomplishments include the provision of financial and technical support for the successful mid-term review and revision of the National Health Strategic plan 2011-15 and the National Malaria Strategic Plan 2011-2015, the National TB Strategic Plan 2011-2015 and the National AIDS Strategic Framework (NASF) 2011-2015. WHO also supported the Ministry of Health to conduct the national 2013 TB prevalence survey which will be concluded in 2014. Other notable activities include the development of a health care financing strategy for universal health coverage and the development and adoption of a one health costing tool for a coordinated health sector.

Following WHO's classification of the country as a low risk for yellow fever, WHO provided technical assistance to the national health authorities to conduct a survey to determine whether or not there was presence of yellow in the country. WHO contributed 265,928 USD which included training, transportation, staff allowances, consultancy, sample processing, serological and entomological assessments and reporting.

The successes observed in 2013 were due to a number of factors which include the existence of strong partnerships particularly within the United Nations through the United Development Assistance Framework (UNDAF) and with other health developmental partners. WHO actively participated in Sector Wide Approaches (SWAPs) coordination mechanisms of the health development partners. The improved financial position of the WHO Country Office in 2013 also contributed to the positive developments which were seen in different programme areas. In addition, the WHO Country Office Support Unit (CSU) consisting of eight full time staff was established in 2012 and continued to play a pivotal role in delivering transparent, accountable financial, logistic and travel services needed to effectively support the Ministry of Health (MOH) and Ministry of Community Development, Mother and Child health.

Notwithstanding these successes, many challenges continue to affect the health sector in Zambia. HIV and AIDs, malaria and TB remain major drivers of the disease burden in the country. The burden of non-communicable diseases particularly, hypertension, diabetes, cardio-vascular diseases, and chronic obstructive pulmonary diseases is steadily growing. This is compounded by a weak health system, insufficient human resources for health, limited health care financing, shortages of essential medicines and supplies, high poverty levels and a large geographical land mass which limits the provision of services as close as possible to communities especially in rural areas.

The work of WHO in the next biennium 2014–2015 will seek to address the afore-mentioned challenges. The major focus in reducing the disease burden will be to support the scale up of health programmes to achieve universal coverage. The role of WHO remains that of providing technical assistance in accordance with its core functions and mandate of policy dialogue, advocacy, setting standards and norms generating evidence and monitoring disease trends.

Contents

FOREWORD	i
ACCRONYMS	iii
EXECUTIVE SUMMARY	v
CHAPTER 1: GENERAL COUNTRY PROFILE	1
Demographic Indicators	1
Epidemiological situation.....	2
Health care delivery system.....	2
Socio economic situation	3
CHAPTER 2: PROGRAMMES CONTRIBUTION TO NATIONAL PRIORITIES	5
HEALTH SYSTEM STRENGTHENING	5
Human Resources for Health	5
Health information systems	6
Leadership and governance	6
Health Care Financing.....	6
WHO's Global Perception Survey.....	6
ESSENTIAL DRUGS AND MEDICINES	7
Promoting Good Governance for Medicines (GGM).....	7
Pharmacovigilance	7
Traditional Medicine.....	8
Promoting rational use of essential medicines	8
Collaborations in the Sector.....	8
DISEASE PREVENTION AND CONTROL	9
International Health Regulations 2005.....	9
Integrated Disease Surveillance and Response.....	9
Yellow Fever	9
Guidelines and training modules for IDSR.....	10
Neglected Tropical Diseases (NTDS) control	11
Non Communicable Diseases	11
Emergency crisis and risk management.....	11
EXPANDED PROGRAMME ON IMMUNISATION (EPI).....	12
Routine Immunisation	12
Introduction of New Vaccines	13
Disease Surveillance	13
Support for EPI Laboratory operations	14
Measles control and surveillance.....	14
Paediatric Pneumonia and Meningitis Surveillance.....	15

Rotavirus Surveillance	15
Polio Eradication Initiative.....	15
Logistics for EPI.....	16
Expansion of the cold storage capacity for vaccines.....	16
MATERNAL HEALTH	19
Safe Abortion	20
WHO CIDA H4+ Programme	20
Skilled Birth Attendance.....	21
Family Planning	21
National Emergency Obstetric and Newborn Care (EmONC) services assessment.....	22
Maternal Death Surveillance Report.....	22
Maternal, New born and Child Health Roadmap	22
Sexual Gender Based Violence (SGBV)	22
CHILD AND ADOLESCENT HEALTH	23
Newborn Care.....	23
Integrated Management of Childhood Illnesses (IMCI)	23
Prevention of Childhood Obesity	23
Prevention and control of pneumonia and diarrhoea.....	24
Adolescent Health.....	24
Research	24
Policies, strategies and guidelines.....	24
Planning and Monitoring	24
NUTRITION.....	25
Accelerating Nutrition Improvements Project.....	25
Infant and Young Child Nutrition	26
HEALTH PROMOTION	26
Capacity building for health promotion implementation.....	26
Tobacco control.....	26
Addressing alcohol misuse and psychoactive substance abuse.....	27
Communication strategies and social mobilization	27
Health campaigns and commemoration of health days.....	28
Actions to improve the visibility of WHO and Media outreach activities	28
HIV AND AIDS.....	28
Overview of the HIV epidemic and targets of the national HIV Response.....	28
HIV Testing and Counseling (HTC).....	28
Prevention of Mother to Child Transmission of HIV (PMTCT)	29
Monitoring and Evaluation for PMTCT.....	30
Scaling up Anti-Retroviral Treatment	30
Normative Guidance, Policy and Guidelines	31
Monitoring and Evaluation	31

Resource Mobilisation	32
Technical Support to UNDAF	32
Voluntary Medical Male Circumcision	32
MALARIA.....	33
Key malaria issues in 2013.....	33
Programme impact	34
Intervention coverage:.....	35
Malaria programme review	35
Policies, guidelines, strategies.....	35
Joint malaria planning and reporting at country level	36
Surveillance, monitoring and evaluation, operations research (SMEO).....	36
Advocacy and community support.....	36
Technical support to WHO/AFRO	36
National and Regional partnerships.....	36
TUBERCULOSIS	36
Training of Health workers.....	37
TB/HIV collaborative activities	37
National TB Prevalence Survey.....	37
Technical review meetings and Supervision	38
World TB Day	38
CHAPTER 3: ADMINISTRATION AND FINANCE	41
Human resources.....	41
Information and Communication Technology.....	43
Program budget and workplan implementation.....	43
Direct Financial Contribution (DFC)	45
Office accommodation and transport	45
Major coordination meetings.....	45
WHO Country Office retreats in 2013	45
Familiarization visits to provinces by the WHO Representative.....	47
CHAPTER 4 MAJOR CHALLENGES, LESSONS LEARNT AND RECOMMENDATIONS.....	49
Challenges	49
Lessons Learnt.....	50
Recommendations	51

ANNEX SECTION

ANNEX 1: Selected publications by staff at WCO in 2013.....	53
ANNEX 2A: Selected Technical Mission to Zambia, 2013	54
ANNEX 2B: Selected Technical Missions by WCO to other countries, 2013.....	56
ANNEX 3: World Health Days and health campaigns supported in 2013.....	58
ANNEX 4: Organizational structure - WHO Country Office Zambia 2013.....	59

List of Tables

Table 1: Key health and demographic indicators.....	1
Table 2 : Top ten major causes of morbidity in health facilities (2010-2012)	2
Table 3: Human resources establishment analysis (2011-2012).....	5
Table 4: AFP surveillance core indicators, 2013.....	14
Table 5: WHO Country Office staff list, 2013.....	42
Table 6: Summary of WCO Budget 2012/13 Biennium	43
Table 7: Work plan budget implementation, 2013	44
Table 8: Familiarization visits to provinces by the WHO Representative.....	47

List of Figures

Figure 1: Immunisation Coverage by District and Province, 2013.....	13
Figure 2: Measles cases and immunisation and campaigns, 1998 to 2013	14
Figure 3: National cold chain capacity in Zambia.....	17
Figure 4: Summary of MDG Progress, Zambia	18
Figure 5: Maternal Mortality Ratio and projection to 2015.....	20
Figure 6: Total Fertility Rate and Contraceptive Prevalence Rate trends.....	21
Figure 7: Districts targeted for the 1000 Most Critical Days Programme (MCDP) to scale up nutrition	25
Figure 8: Number of people tested by districts during HTC in 2013.....	29
Figure 9: PMTCT Coverage (2005-2012).....	30
Figure 10: Number of patients (adults & children) on ART in Zambia, 2005-2012	31
Figure 11: Cumulative total for Male Circumcision: 2007-2013.	32
Figure 12: Total malaria cases in Zambia, 2012.....	34
Figure 13: Severe anaemia (Hb<8g/dl) prevalence among children under five years	34
Figure 14: Malaria parasite prevalence in children under five, 2006-2012.....	34
Figure 15: Household ownership of at least one ITN by areas, 2006-2012.	35
Figure 16: Households sprayed within previous 12 months in urban areas, 2006-2012.....	35
Figure 17: TB notifications, 2005-2012.....	37
Figure 18: TB cure and treatment success rates, 2005-2011.....	37
Figure 19: TB/HIV data, 2006-2012.....	37



CHAPTER 1

General country profile

Demographic Indicators

Zambia is a landlocked country, with an area of 752,612 square kilometres. It shares borders with eight countries namely: the Democratic Republic of Congo, Angola, Botswana, Namibia, Zimbabwe, Malawi, Mozambique and Tanzania. The population of Zambia was estimated to be 13 092 666 with an annual growth rate of 2.8% (CSO, 2010). Out of the total population, 51% is that of females and 49% males. The population is relatively young, 45% per cent is that of persons below 15 years. Out of the total population, 60.5 per cent were residing in rural areas while 39.5 per cent were residing in urban areas, making Zambia one of the most urbanized countries in Africa. Although the population is relatively small, it is geographically scattered, making delivery of equitable health services close to the people a challenge.

Table 1: Key health and demographic indicators

Indicator	Value	Year	Source	MDG target
Population	13 092 666	2010	CSO	-
Population Growth rate	2.8	2010	CSO	-
Total fertility rate (Females 15-49 Years)	6.2	2007	ZDHS	-
Maternal Mortality per 100,000 live births	591	2007	ZDHS	162.3
Infant Mortality per 1,000 live births	70	2007	ZDHS	35.7
Under Five Mortality per 1,000 live births	119	2007	ZDHS	63.6
Proportion of births attended by skilled health personnel	46.5	2007	ZDHS	-
Proportion of population without access to Safe Water (%)	36.9	2010	LCMS	25.5
Proportion of population without access to improved sanitation facilities (%)	67.3	2010	LCMS	13
HIV Prevalence (%)	14.3	2007	ZDHS	<15.6

Source: MoH, 2013

Epidemiological situation

The country continued to face a high burden of communicable diseases and a growing burden of non-communicable diseases. HIV and AIDS, malaria and tuberculosis continue to be the major drivers of the disease burden. Other diseases include: diarrhoea (non-blood), ear, nose and throat infections, eye infections, intestinal worms, respiratory infections (pneumonia), respiratory infections (non-pneumonia), skin infections, trauma (accidents, injuries, wounds and burns) including anaemia. Table 2 shows the top ten major causes of morbidity in health facilities for the period 2010 to 2012. In 2013, the country experienced outbreaks of typhoid, measles and dysentery in some parts of the country. Malnutrition remains a serious problem among children under five years old. The proportion of underweight children is 15% while stunting is estimated to be 45% (ZDHS, 2007).

Table 2 : Top ten major causes of morbidity in health facilities (2010-2012)

Disease Name	Incidences per 1000 population by year		
	2010	2011	2012
Malaria	330	343	339
Respiratory Infection Non-Pneumonia	286	309	310
Diarrhoea Non-Bloody	80	86	85
Muscular Skeletal & Connective Tissue- Non Trauma	47	54	62
Trauma Other Injuries wounds	36	38	39
Digestive System Non-Infectious	32	37	39
Respiratory Infection Pneumonia	33	36	33
Eye Diseases Infectious	27	27	25
Skin Diseases Non-Infectious	22	23	26
Dental Carries	-	22	24
Genital-Urinary Diseases	33	-	-

Source: MoH, Annual Health Statistical Bulletin. 2012

Health care delivery system

The guiding principle of the health delivery system in Zambia is the provision of equity of access to cost effective quality health care as close to the family as possible. In its quest to attain the highest standard of health for the Zambian people, the health sector in Zambia strives to attain universal health coverage. The Ministry of Health and the Ministry of Community Development, Mother and Child Health are charged with the responsibility of delivering health care in Zambia. MoH is responsible for health policy formulation and oversees referral health services from Level 2 provincial hospitals up to Level 3 tertiary hospitals, health training institutions and health statutory boards. MCDMCH is responsible for provision of Primary Health Care (PHC) services, from community, health posts, health centres and district hospitals.

Community ownership and participation are important pillars of the health system in the governance and delivery of health services in Zambia. In this respect, the Ministry of Community Development Mother and Child Health (MCDMCH), has established structures to facilitate broad-based community ownership and participation.

Health services in Zambia are delivered mainly through the public and private and are complimented by faith-based organisations under the coordination of the Churches Health Association of Zambia.

Socio economic situation

Zambia enjoys a stable multiparty democracy and a market-oriented economy. The development agenda is spelt out in the Sixth National Development Plan (SNDP) and the country hopes to be a prosperous middle income country by 2030 (Vision 2030). The Zambian economy is largely based on the mining of copper. However, the majority of the population (65%) lives in rural areas and is dependent on subsistence agriculture for its livelihood. The country has intensified its economic diversification from copper dependence to other sectors especially agriculture.

The progress in generating economic growth and micro economic stability has continued. Real GDP Growth was estimated at 7.3% in 2012 compared with 6.6% in 2011. The real GDP growth rate of 7.3% in 2012 was higher than the SNDP target 6% (MOF, 2013). In 2013 average annual inflation continued in single digit at 7% compared to 6.6% in 2012. The kwacha was rebased in 2013. In spite of the stated achievements in the economy, poverty is high at 60.5% (LCMS, 2010). Poverty impacts negatively on health.



CHAPTER 2

Programmes contribution to national priorities

HEALTH SYSTEMS STRENGTHENING

Human Resources for Health

During the year under review, the WHO Country Office and other partners supported the Ministry of Health to implement a number of interventions to increase the capacity to produce more health care workers nationally and to promote equitable distribution within the public health sector. The Ministry of Health received assistance from WHO during the process of development of the National Training Operational Plan (NTOP) and was also supported to create and establish the human resource observatory including assessment of the human resources health information system. WHO also worked with MoH to train more than 80 district and provincial health staff in the use of the Workload Indicator for Staffing Needs Tool (WISN). Table 3 shows the human resources establishment analysis for the period 2011-2012. During the period under review, there was an increase in the number of available positions within the government's funded establishment and the numbers of Health Care Workers in Zambia's public sector with a corresponding improvement in the budgetary allocation for salaries.

Table 3: Human resources establishment analysis (2011-2012)

SN	Cadre	Approved Establishment 2011	Approved Establishment 2012	Headcount Dec 2011	Headcount Dec 2012	Gap 2011	Gap 2012
1	Clinical Officers	4600	4813	1461	1630	3139	3183
2	Dentistry	833	865	263	307	570	558
3	Doctors	2891	2939	1076	1150	1815	1789
4	Nutrition	309	330	159	193	150	137
5	Biomedical Sciences	1960	2023	637	751	1323	1272
6	Pharmacy	997	1108	743	800	254	308
7	Physiotherapy	400	421	258	331	142	90
8	Radiography	448	483	268	305	180	178
9	Midwives	5900	6106	2745	2773	3155	3333
10	Nurses	16732	17497	7795	9575	8937	7922
11	Environmental health	1840	2063	1293	1461	547	602
12	Other health workers	5865	6115	1683	1859	4182	4256
13	Administrative	13846	15235	13581	13880	265	1355
TOTAL		56621	59998	31962	35015	24659	24983

Source: MoH, 2013

Health information systems

The Government of the Republic of Zambia (GRZ) implements a Health Information System (HIS) to monitor performance of the health sector investment plans as part of the Sixth National Development Plan (SNDP). MoH together with Cooperating Partners jointly developed support systems for improved health service delivery, such as the Health Management Information System (HMIS), which is the routine part of the overall HIS. WHO supported the review of the District Health Information System (DHIS), the development of the e-Health Strategy and provided technical assistance for review of questionnaires for the 2013 Zambia Demographic and Health Survey (ZDHS). In addition, technical support was provided to MoH for strengthening of the Civil Registration and Vital Statistics System in Zambia.

WHO also provided technical support to MoH for the update of the African Health Observatory (AHO) – an integrated web-based data storage facility to facilitate effective sharing of knowledge in country among stakeholders. The WHO country office also worked in collaboration with WHO/AFRO and WHO/HQ in Geneva to support the process of development of a concept note for data quality for Monitoring and Evaluation and to review and incorporate the 11 indicators for the Commission on Information and Accountability for women and children's health scorecard. WHO sponsored officials from the Ministry of Health to attend a multi-country workshop through which they were able to complete self-assessment of the current situation on accountability for health. The assessment enabled MoH to develop a roadmap to implement the accountability framework according to country specific needs and priorities. WHO provided USD 250,000 for validation and implementation of activities for this roadmap.

Leadership and governance

The health sector in Zambia uses the Sector-Wide Approach (SWAp) for the coordination of sector development. The International Health Partnership (IHP+) principles have not been fully adapted at country level, a situation which calls for more advocacy by WHO. The sector follows the five-year NHSP which outlines the priorities for the period 2011-2015. WHO supported the development and the signing of a new Memorandum of Understanding (MoU) between Cooperating Partners (CPs) and the GRZ in January, 2013. The new MoU outlines how future engagements will be conducted and

defines the accountability required between partners in terms of technical and financial support towards implementation of the NHSP.

WHO supported Ministry of Health to develop the Governance Action Plan (GAP), the Governance Management and Capacity Strengthening Plan (GMCSP) and the National Health Policy (NHP) 2013 and conducted capacity development for MoH staff on how to develop the Patient Safety Policy.

WHO also participated in various health sector coordination meetings such as the SWAP coordination meetings, the Sector Advisory Group (SAG) and the United Nations Development Assistance Framework (UNDAF) meetings.

Health Care Financing

Health care financing is an increasingly important policy issue in Zambia. Currently, the Zambian health sector is highly supported by partners and efforts are in place to develop a health care financing strategy. The strategy will inform the Ministry of Health (MoH) and Ministry of Community Development, Mother and Child Health (MCDMCH) on health sector financing. The major focus of the strategy include estimation of the current levels of financing for health care, mobilization of more funding to provide optimal health care services. WHO provided USD 40,000 to support this important initiative.

Given the importance to understand how resources are allocated and spent within priority health programs and population groups, WHO trained 30 staff from 10 provinces on the use of the new National Health Accounts (NHA) producer tool and the System of Health Accounts (SHA), 2011 methodology. WHO also provided technical support for the development of a social health insurance scheme in Zambia including a business plan with specific milestones.

WHO's Global Perception Survey

A global communications consultancy (Grayling), undertook on behalf of WHO a perception exercise in 2013. The aim was to obtain a worldwide-representative, time-sensitive, quantitative and credible assessment of WHO's perceived value to key external stakeholders and WHO staff. Zambia is one of the countries that participated in this survey. The survey showed overall positive ratings and that stakeholders value WHO's role,

leadership, work and contribution globally, including the reforms underway to improve areas where there were some concerns expressed.

Furthermore, 80% of external stakeholders saw WHO as being either indispensable or important for their organization, whilst 94% of WHO employees considered WHO as being either indispensable or important for improving people's health. Two thirds of both external stakeholders and WHO employees perceived WHO first and foremost as providing leadership on health matters. Ninety per cent saw WHO as the most effective organization when it comes to influencing policy for improving people's health at the global level.

There was little discrepancy between responses from the various regions and categories of stakeholders, thereby indicating that perceptions of WHO globally and across stakeholders were relatively uniform. Although the majority of respondents have confidence in WHO and its work, 40% of employees and 24% of external stakeholders expressed declining confidence and/or consistent disappointment with WHO. Whilst no single stakeholder category was strikingly negative of WHO, the survey demonstrated that NGOs tended to be more critical.

The survey provided useful findings on areas that WHO needs to pay attention to further improve how others perceive the organisation. The findings will be incorporated into the development of a WHO global communications strategy as part of the Organization's reform. More information can be obtained on the WHO website www.who.int.

ESSENTIAL DRUGS AND MEDICINES

WHO continued to work with the Ministry of Health and the Zambia Medicines Regulatory Authority in ensuring adequate supply and access to quality assured medicines and allied substances in the country. The major areas of cooperation with national authorities in 2013 included; capacity development and periodic assessments of the capacities of the National Medicines Regulatory Authority; training of national regulators; identifying strengths and gaps in the systems and

working with the local regulators to design possible interventions to improve quality. WHO also provided technical and financial support to develop policies, to develop good pharmacy practice guidelines and Standard Operation Procedures, to promote best practices in the pharmaceutical sector; to train pharmacy managers in various fields and to formalize traditional medicine practice in the country.

Promoting Good Governance for Medicines (GGM)

The WHO Country office provided technical and financial support for implementation of the Medicines Transparency Alliance (MeTA) Phase II project in Zambia. The project is aimed at increasing access to quality assured medicines through promoting transparency and accountability in medicines management at all levels of service in both private and public institutions. The funding for MeTA project is from DFID. WHO provided funding for training of procurement officers and pharmacists from Levy Mwanawasa General Hospital, Lusaka District Health Office and University Teaching Hospital on management of the medicines supply chain. The training was also intended to increase awareness on the need for a transparent and accountable strategy for increasing access to quality assured essential medicines. WHO also sponsored a 13 week series live phone in radio programme on the Zambia National Broadcasting Corporation. The programme also contributed to increasing public awareness and stimulated public discussion by communities on issues concerning availability of safe and quality essential medicines.

Pharmacovigilance

In an effort to promote medicines safety in the country, WHO continued to build capacity for strengthening post marketing surveillance. A total of 43 frontline health workers from the Southern and North-Western Provinces were trained in Pharmacovigilance. The training contributed to improvement in both the quality and quantity of Pharmacovigilance reports received from Southern Province. The Zambia Medicines Regulatory Authority supported training for the Copperbelt, Central and Eastern Provinces. However, there is need to scale up this training to all provinces in order to increase the impact on reporting on Pharmacovigilance. In 2014 WHO will support national health authorities to assess the increase and quality of pharmacovigilance reports from districts.

WHO supported training of two officers from the Zambia National Medicines Regulatory Authority (ZAMRA) and another officer from Zambia National Blood Transfusion Services (ZNBTS) in developing capacity for blood regulatory systems. The training of the officers resulted in commencement of preparatory processes for formal regulation of blood establishments. The regulation of blood establishments by ZAMRA will contribute to strengthening systems in blood products production and safety as per international standards stipulated by WHO. This expanded role of ZAMRA will require extensive stepwise investment in human capital and infrastructure in order to fulfil their expected role in helping ZNBTS attain world class services. ZAMRA will also regulate In-Vitro Diagnostics (IVDs) used in blood establishments to ensure Good Manufacturing Practices are implemented as per WHO standards. This will require training of regulators and amending registrations in order to include IVDs on the list of products which are regulated by ZAMRA.

Traditional Medicine

Traditional Medicine still plays a vital role for many Zambians. However, it is not integrated into the mainstream health system and the legislation on traditional medicine is not yet in place. The WHO Country Office sponsored meetings which provided a forum for in-country dialogue among stakeholders on the development of a formal bill to regulate the practice of traditional medicine in the country. A draft bill was developed which is still being debated by stakeholders. The WHO Regional Office for Africa supported the commemoration of the 2013 Africa Traditional Medicines Day on the 31 August 2013 under the theme **“Achieving universal quality health care coverage through increased investments in research and development”**. This advocacy event helped to raise public awareness about the important role traditional medicine plays in health development and to advocate for action to increase investments by public and private actors in line with the theme.

Promoting rational use of essential medicines

WHO continued to support activities aimed at promoting rational use of essential medicines in the country. Financial and technical support was provided to the

Ministry of Health for review of the Essential Medicines List (EML), the Zambia National Formulary (ZNF) and Zambia Treatment Guidelines (STGs). In order to facilitate the review of the EML, WHO sponsored three officers from the Ministry of Health to train in techniques for reversing and updating the National Essential Medicines List (EML). EML is key in ensuring that appropriate medicines relevant to a country are made available to meet the population's public health needs. WHO provided financial support for the official launch of the EML, ZNF and STGs on 20 November 2013 by the Minister of Health, Hon. Dr. Joseph Kasonde.

WHO supported the country to increase equitable access to quality assured essential medicines for Neglected Tropical Diseases. The WHO Country Office coordinated drug donations from WHO/ HQ and other donors. In 2013 Zambia received Diethyl Carbamazepine and, Mebendazole and Albendazole. A system of reporting on the utilization of these drugs has been established through Provincial Health Pharmacists with the support of the Deputy Director for Pharmaceutical Services in the Ministry of Health.

Collaborations in the Pharmaceutical Sector

WHO played a key role in promoting collaboration within the pharmaceutical sector. WHO worked with the MoH and other Cooperating Partners in implementing a Pharmacy Mentorship programme which was funded by Clinton Health Initiative (CHAI). The programme was aimed at improving the total quality of pharmaceutical services at all levels in health facilities. The mentorship took a holistic approach in tackling the entire pharmacy practice at the hospital and health center levels. For every participating site, from selected districts, pre and post-mentorship assessments were done which allowed for the evaluation of the impact of the training based on a number of indicators. This approach was aimed at ensuring total quality improvement in pharmacy. This evaluation proved that the mentorship programme is effective. However, for sustainability, there is need to invest more in developing a large pool of mentors at the district level throughout the country.

WHO also worked in collaboration with the University Teaching Hospital (UTH) and other Cooperation Partners to develop a concept paper on the establishment of a Centre of Excellence in Pharmacy Practice at UTH main

pharmacy. The UTH Pharmacy Centre of Excellence is intended to assist establish a sustainable in-service training programme for pharmacists and pharmacy technologists across all aspects of pharmacy practice. Trainers for this programme will be mainly local experts in the industry under the UTH Pharmacy. However, international trainers will be invited to assist design and implement the programme. WHO is providing leadership in this programme.

The Ministry of Health with support of Cooperating Partners formulated a new National Medicines and Medical Supply Chain Management Strategy for the country in 2013. The strategy is streamlining the function of Medical Stores Limited to become the entity responsible for forecasting, quantification, selection, storage and distribution. The role of partners is to ensure transparency and accountability in the processes. Medical Stores has embarked on decentralizing the storage to hubs (regional distribution centers) as a way of increasing distribution efficiency (last mile delivery concept) of essential medicines in the country. With support from Cooperating Partners, the first regional hub was established in Choma to service the Southern Province. The last mile delivery concept is the approach which will ensure that every service delivery point in the country receives the essential medicines directly from the hubs under the supervision of Medical Stores Limited.

DISEASE PREVENTION AND CONTROL

Communicable diseases are the most common cause of illness, disabilities and death in Zambia. While these diseases present a serious threat to the well-being of Zambian communities, there are well known interventions that are available for controlling them, as long as accurate data on outbreak of such diseases and the necessary resources and logistics are made available in a timely manner. WHO continued to be a key partner providing the necessary support to government for disease prevention, surveillance and response activities.

International Health Regulations 2005

The International Health Regulations (2005) was adopted by the 58th World Health Assembly in May 2005 and came into effect on 15 June 2007. State Parties had up to 2 years to conduct situation analysis and develop plan of action from the time the regulation came into effect on 15 June 2007. The 56th WHO Regional Committee for Africa called for implementation of the regulations in the context of Integrated Disease Surveillance and Response (IDSR). Zambia is among the 194 countries bound by IHR (2005) which have not been able to meet the deadline. With support from the WHO Country Office, the Ministry of Health requested for extension of the deadline. A country situation analysis was conducted and a plan of action developed which were submitted to WHO/AFRO for advice.

Integrated Disease Surveillance and Response

In 2002 Zambia adopted the WHO recommended Integrated Disease Surveillance and Response (IDSR) strategy for disease surveillance and response. The national IDSR strategy incorporates surveillance for viral hemorrhagic fevers and yellow fever.

Yellow Fever

Yellow fever is a notifiable disease in Zambia under the Public Health Act Cap 295. The disease was considered endemic in Zambia at the time the Act was drafted in 1995. Zambia's potential for yellow fever transmission is unclear because the last sero-prevalence studies were conducted in the 1950s. Although Zambia lies within the yellow fever endemic belt in Africa, it has not recorded a confirmed case of the disease. However, its proximity to Angola and the Democratic Republic of Congo places the Western and North-Western Provinces at risk. Furthermore, Zambia is home to various species of mosquitoes including *Aedes* species, the vector responsible for yellow fever transmission. Yellow fever vaccination is not part of the routine national immunization program in Zambia. The only section of the population that is routinely vaccinated against yellow fever that of Zambians travelling abroad, in line with the requirements of the International Health Regulations (2005). This therefore implies that if yellow fever does exist in Zambia, the vast proportion of Zambians remains susceptible to the disease.

In 2010, the Western and North-Western Provinces of Zambia were designated as YF low risk regions by a WHO Technical Working Group. Prior to this reclassification, Zambia was classified as a Yellow Fever no risk country. Following the re-classification of the two provinces as low-risk for yellow fever transmission, WHO worked closely with the Ministry of Health to conduct a risk assessment survey in the two provinces and to initiate active surveillance. The total cost of the risk assessment and other related activities was 265,928 USD. The contribution of WHO was 235,928 USD out of which 170,000 USD was contributed by the WHO Regional Office for Africa (WHO/AFRO), 65,928 USD by the WHO Country Office, 30,000 USD by the Inter-Country Support Team for Eastern and Southern Africa (WHO/IST/ESA) and 30,000 from the Ministry of Health.

Examples of specific activities supported by WHO are detailed below.

- Recruitment of a Principal Investigator (PI): The Minister of Health requested WHO to recruit and supervise a Principal Investigator (PI) on behalf of the Ministry. The PI was responsible for finalization of the protocol, field work for risk assessment, data analysis and report writing.
- Training of laboratory staff: WHO recruited a laboratory expert from the Institute Pasteur, Dakar, Senegal, to provide on-the-desk training to laboratory staff on the identification and diagnosis of yellow fever and related flaviviruses. Two trainings were conducted. The initial training was held from 13-19 February 2013 before field work for risk assessment while the follow up training was conducted from 10-24 August to supervise and support initial testing of serum samples for both IgG and IgM antigens.
- Training of research assistants: WHO recruited a total of twenty-five research assistants to support information collection during the risk assessment field work. The training was conducted from 22-27 April 2013 at a cost of 30,000 USD. Two consultants were recruited by WHO to support the local team of experts to conduct the training. One of the external experts was an entomologist from the Institute Pasteur, Dakar (IPD), Senegal and the other was a Medical Officer for yellow fever based at the WHO Inter-country Support Team for West Africa (WHO/IST/WA) in Ouagadougou, Burkina Faso.
- Provision of logistics for risk assessment: WHO provided the necessary 30,000 USD for logistical support and procurement of necessary supplies including lubricants for all the vehicles during the two weeks long field work. Out of a total of twelve

vehicles for field work, ten were provided by WHO and two by the Ministry of Health.

- Yellow fever certificates, International Health Regulations booklets, International travel and Health booklets: WHO provided a total of 5,000 yellow fever vaccination certificates at a cost of 4,098 USD, a total of 50 International Health Regulations booklet and 50 International Health and travel booklets to MOH.
- Entomological component: WCO provided over USD 40,000 to the MoH to conduct entomological surveillance during the yellow fever risk assessment in North-Western and Western provinces. The funds enabled MoH to train three research assistants from the Tropical Diseases Research Centre (TDR) and the National Malaria Control Centre NMCC). WCO also supported training of six environmental health technologists at district level and facilitated shipment of samples for identification of mosquito specimens to Institute Pasteur, Dakar (IPD) in Senegal.
- Shipping of samples to IPD: After the initial testing of serum samples at the University Teaching Hospital Virology Laboratory in the country, a total of 1045 IgG negative and 600 IgG positive samples required further testing using Plaque Reduction Neutralizing Test (PRNT). WHO provided the necessary logistical, financial and technical support for shipment of the samples to IPD during the second week of September 2013.

Guidelines and training modules for IDSR

WHO provided financial support amounting to ZMW 50,912 to MoH to conduct a five day meeting for finalization of the Integrated Disease Surveillance and Response (IDSR) technical guidelines including the participant and facilitator training modules. WHO also contributed ZMW 110,000 towards printing of 1,100 copies of the IDSR technical guidelines and modules. The Ministry of Health used the guidelines to train provinces in IDSR. The guidelines were also used to train clinicians and laboratory technologists from North Western and Western provinces in preparation for implementation of active surveillance for yellow fever following their classification as low-risk transmission areas for yellow fever. This training was in addition to the two training workshops which took place in November 2013 before the yellow fever risk assessment.

Neglected Tropical Diseases (NTDs) control

Neglected Tropical Diseases (NTDs) are usually not associated with high rates of mortality but often cause life-long disability and economic consequences. They usually affect poor communities which are located in under-served remote areas. The following activities were supported by WHO towards NTDs control.

Mass Drug Administration (MDA): Seven out of the ten provinces in the country were targeted for a Mass Drug Administration (MDA). WHO supported the training of trainers in the seven provinces. Over 40,000 tonnes of drugs were handed over to the Government in preparation for the MDA.

Piloting of a teacher's manual for de-worming in school children: WHO provided both technical and financial support amounting to ZMW 23,500 towards the development and finalisation of a protocol for piloting of a Teacher's Manual on de-worming in school children. The teacher's manual will be tested for suitability as a guideline for use by teachers during de-worming of school children.

Training of Ministry of Community Development, Mother and Child Health (MCDMCH) on the use of the NTDs e-Hub: The WHO country Office facilitated the training of staff from MCDMCH which was organized by AFRO and HQ. The e-Hub serves as the forum for information sharing among NTD focal points in WHO and Ministries.

Non Communicable Diseases

Developing countries are under-going an epidemiological transition from communicable or infectious to non-communicable diseases. The burden of NCDs in Zambia is increasing. According to WHO estimates for 2008, NCDs in Zambia are responsible for 27 percent of all deaths in the country and 46.7 percent of these deaths occur in people under the age of 60. Zambia has the second highest rate of cervical cancer in the world. The common NCDs include cardiovascular diseases, diabetes mellitus (Type II), cancers, chronic respiratory diseases, epilepsy, mental illnesses, oral health, eye diseases, injuries (mostly due to road traffic accidents and burns) and sickle cell anaemia. Most of these health conditions are associated with lifestyles, such as unhealthy diets, physical inactivity, alcohol abuse and tobacco use, while some are also associated with biological risk factors, which run in families.

WHO provided both financial and technical support toward revision and finalization of the NCDs Strategic Plan 2013-2025. A total of ZMW 71,730.00 was spent towards the five days meeting which was held from 16-20 September. The revision of the strategic plan involved incorporation of the twenty-five indicators from the WHO Global NCDs plan. WHO also supported the World Heart Day commemoration which falls on 23 September, 2013.

Emergency crisis and risk management

The country has occasionally experienced relatively small occurrence of sudden onset disasters, mostly floods and drought. Despite local cultural awareness and resilience in flood and drought prone areas, the country remains highly vulnerable to flooding especially in the four main river basins. Chronically poor sanitary conditions in most districts exacerbated by flooding lead to increased risk of outbreaks such as cholera and other diarrhoeal diseases. Stagnant floodwater also greatly increases the risk of malaria and tends to disrupt the normal operations of essential health care systems.

WHO facilitated the participation of officials from the Ministry of Health at a workshop on induction briefing for Disaster Risk Management and Disaster Risk Reduction which was held in September 2013 in Harare, Zimbabwe. The participants were oriented on the use of the Hospital Safety Index (HSI) and how to conduct a health Country Capacity Assessment (CCA). Following the orientation of the country team, the WHO Country Office provided funding to MoH to develop tools for the CCA and HSI. The Ministry of Health has planned to conduct a CCA and HSI in 2014.



EXPANDED PROGRAMME ON IMMUNISATION (EPI)

WHO continued to support government to implement the immunisation vision and strategy in the context of the Decade of Vaccines (DoV), 2011-2020 as illustrated in the Global Vaccines Action Plan (GVAP). The plan is targeted at ensuring that more people are reached with vaccines including the introduction of new and underutilised vaccines.

Routine Immunisation

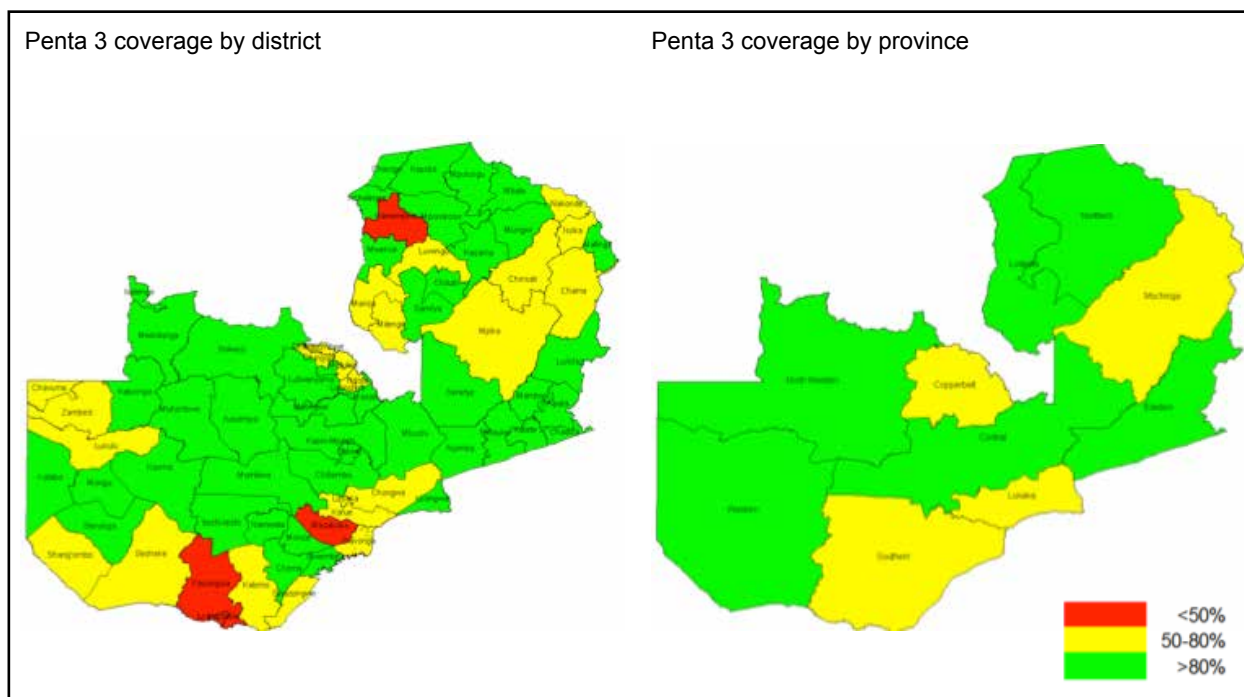
WHO's support to the immunisation programme in Zambia was focused on the implementation of the country's comprehensive Multi-Year Plan (cMYP), 2011-2015. The cMYP was updated to align it with the Six National Development Plan (SNDP), 2011-2015 and the National Health Strategic Plan (NHSP), 2011-2015. WHO in collaboration with UNICEF and other partners supported the development of an

immunisation improvement plan aimed at reversing the declining trends in immunisation coverage. The plan was incorporated in the cMYP. Additionally, WHO provided technical support in routine immunisation data extraction and management to enhance timeliness and completeness of reporting for administrative data. This data was obtained from the newly transformed web-based District Health Information System tool 2 (DHIS2). WHO in collaboration with Merck Vaccine Network Zambia (MVN-Z) supported training for Mid-level Managers (MLM) for health training institutions and selected districts.

The global target for immunisation coverage is 90% at national level and 80% in every district. Sixty percent of the districts in Zambia achieved eighty percent (>80%) coverage for Pentavalent 3rd dose immunisation while six percent achieved less than fifty percent (<50%) coverage for Pentavalent 3rd dose immunisation. The country's achievement in immunization coverage for pentavalent vaccine for the third dose by district and province is illustrated in figure 1.



Figure 1: Immunisation Coverage by District and Province, 2013



Source: MoH/HMIS, 2013

Introduction of New Vaccines

In an effort to further reduce under five morbidity and mortality from vaccine preventable diseases and to reach more people with vaccines, the country introduced four new vaccines in the routine immunisation system. The vaccines include: Pneumococcal Conjugate Vaccine (PCV10), rotavirus vaccine, a second dose of measles vaccine (MCV2) and the Human Papilloma Virus Vaccine (HPV) which is administered to girls in grade 4 or children aged 10-14 years old who are not in the formal school system. PCV10 is administered in the schedule together with pentavalent vaccine at 6, 10 and 14 weeks of age while rotavirus vaccine is given at 6 and 10 weeks. A second dose of measles vaccine is administered at 18 months of age. WHO provided technical and financial support during the introduction of the vaccines which included the development of new vaccines health workers' field guides, training of health workers, development of training and communication materials and implementation of social mobilisation activities.

Disease Surveillance

WHO continued to provide financial and technical support for active surveillance activities for poliomyelitis eradication and measles accelerated control, including sentinel sites for rotavirus and streptococcus pneumoniae. Zambia sustained the certification surveillance standard for the polio eradication initiative and the elimination status for maternal and neonatal tetanus. To date, the country has more specific information on invasive bacterial disease (IBD) generated by the sentinel site at the University Teaching Hospital. This has been made possible through the country's capacity to provide serotypes for streptococcus pneumoniae to the Regional Reference Laboratory (RRL) at the National Institute on Communicable Diseases (NICD) in South Africa. Out of the serotypes of streptococcus pneumoniae identified in Zambia, a total of 5 (50%) are found in PCV10 while a total of 7 (53%) are found in PCV13.

Support for EPI Laboratory operations

The Technical Services Agreement (TSA) drawn between the Ministry of Health through the University Teaching Hospital (UTH) and the World Health Organization facilitated smooth operations of the Virology Laboratory a host to polio, rotavirus and measles EPI laboratories.

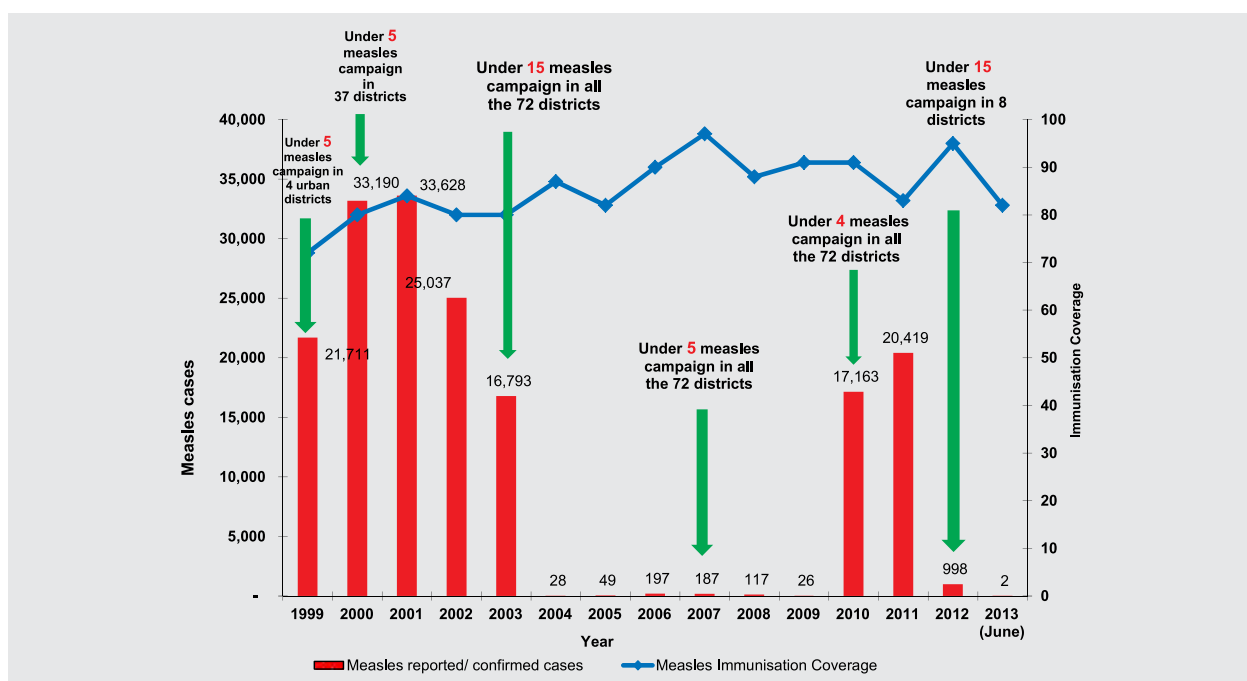
WHO also supported the bacteriology laboratory at the University Teaching Hospital through the provision of reagents for operations of Paediatric Bacterial Meningitis (PBM) surveillance sentinel site. In addition, the laboratory received a donation of a lap top computer, desk top computer and printer from WHO. Zambia hosted two laboratory assessment and accreditation missions. In collaboration with WHO/ AFRO and NICD, an evaluation of the Paediatric Bacterial Meningitis (PBM) surveillance sentinel site was conducted which showed that the performance was optimal. However, in order to sustain the gains, it was recommended that the epidemiological surveillance unit of the Ministry of Health should conduct regular supportive supervision visits and hold data harmonization exercises for both laboratory and clinical sections of the hospital. WHO supported the surveillance activities for poliomyelitis eradication and measles accelerated control, including sentinel sites for rotavirus and streptococcus pneumoniae. MOH, and WHO worked in collaboration with the Regional Reference Laboratory at NICD in South Africa to conduct

a genotyping exercise for streptococcus pneumoniae and rotavirus. It is envisaged that additional sentinel sites could be functional on the Copperbelt in the near future.

Measles control and surveillance

Zambia successfully conducted measles supplemental immunisation activities (SIAs) in September 2012 and the impact has been observed in the drastic decline for measles incidence in 2013. Out of the 183 samples that were serologically tested, only 2 (1.1%) were IgM positive for measles (one from Mbala district and another from Kitwe district) while 50.3% (91/181) of measles negative samples were IgM positive for rubella. Out of the investigated cases, twenty two percent had been vaccinated with measles vaccine. The epidemiological picture of measles control in Zambia can be summarized in figure 2 which shows immunization coverage and measles cases before and after measles supplemental immunisation activities. Zambia has not experienced any measles outbreak in the year 2013, a direct reflection of the impact of the successful national measles campaign which was conducted in September 2012. There is however, a need to intensify measles case-based surveillance in order to achieve optimal standard for non-measles febrile rash illness detection rate which currently is less than 1 per 100,000 population.

Figure 2: Measles cases and immunisation and campaigns, 1998 to 2013



Source: MoH/HIMIS, 2013

Paediatric Pneumonia and Meningitis Surveillance

WHO has continued to support the country to conduct surveillance for paediatric bacterial meningitis (PBM) at the sentinel surveillance site at the University Teaching Hospital which was initiated in 2006. This site provided baseline information for introduction of the new vaccine Haemophilus Influenza Type B in 2004 and the Pneumococcal Conjugate Vaccine (PCV10) which was introduced in 2013. The PBM surveillance sentinel site also received support in the post marketing surveillance to provide information on the impact of the newly introduced vaccines. WHO facilitated and supported the University Teaching Hospital to conduct serotyping for streptococcal pneumoniae at NICD in South Africa. The information on serotypes has assisted the country in proposing a switch over to PCV13 which has more serotypes that are also found in Zambia.

Rotavirus Surveillance

WHO also supported sentinel surveillance at the University Teaching Hospital (UTH) for rotavirus diarrhoea. As of September 2013, 548 children less than 5 years were investigated for the aetiology to establish the causative agent for the acute diarrhoeal hospitalisations at UTH. Thirty three percent (33%) of the cases were due to rotavirus.

Polio Eradication Initiative

Zambia continued implementing Acute Flaccid Paralysis (AFP) surveillance activities designed to provide evidence that there is no circulating wild poliovirus in the country and this is illustrated in the sustained certification level standard AFP surveillance as indicated in table 4.

Table 4: AFP surveillance core indicators, 2013

Provinces	2013 estimates <15 pop (million)	Annual Expected AFP Cases	All Reported cases in database	Only AFP Cases	Annualized Non-polio	AFP cases with 2 stools within 14 days	
						(0-14d)	%
Central	0.7	14	16	16	2.3	13	81%
Copperbelt	1.0	20	26	26	2.5	24	92%
Eastern	0.8	17	27	27	3.2	25	93%
Luapula	0.5	10	18	18	3.6	15	83%
Lusaka	12	25	25	25	2.0	23	92%
Muchinga	0.4	8	13	13	3.2	12	92%
Northern	0.6	12	13	13	2.2	13	100%
North-Western	0.4	7	12	12	3.3	12	100%
Southern	0.8	16	27	27	3.3	22	81%
Western	0.4	9	23	23	5.1	22	96%
Zambia	6.9	139	200	200	2.9	181	91%

Serious surveillance gap

Yellow for NPAFP rate - certification level BUT surveillance gap for stool adequacy

Green indicates provinces with operational + certification-level surveillance

Source: MOH, 2013

WHO provided financial and technical support to government for implementing the following AFP surveillance activities:

- Conducting active surveillance in the districts.
- Transport reimbursement for transportation of stool samples to the University Teaching Hospital (UTH).
- Sensitization of clinical officers on AFP surveillance activities, particularly for case investigation processes.
- Conducting quarterly risk assessment for polio and,
- Logistical support for polio vaccination during child health weeks in the context of increasing population immunity in polio high districts in the North-Western and Western Provinces which share borders with Angola and the Democratic Republic of Congo.

The country achieved non-polio AFP rate of 2.9 and stool adequacy of 91%. This achievement is a top priority for WHO in Zambia. National surveillance officers were provided with monthly logistical support to conduct both active surveillance and case investigation in all the ten provinces.

Logistics for EPI

In 2013, Zambia introduced the Pneumococcal Conjugate Vaccine, rotavirus vaccine and a second dose of measles vaccine in all the districts. In addition,

the Human Papilloma Vaccine (HPV) was introduced in three districts in Lusaka province on pilot basis. The increased number of vaccines being administered from 5 to 8 formulations entails increased vaccines storage space at all levels. WHO supported government in the procurement and installation of walk-in cold rooms in Luapula, Muchinga and Western provinces. Eight out of the total 10 provinces in the country have new cold rooms. North-Western and Lusaka provinces are yet to be covered in this cold chain expansion strategy.

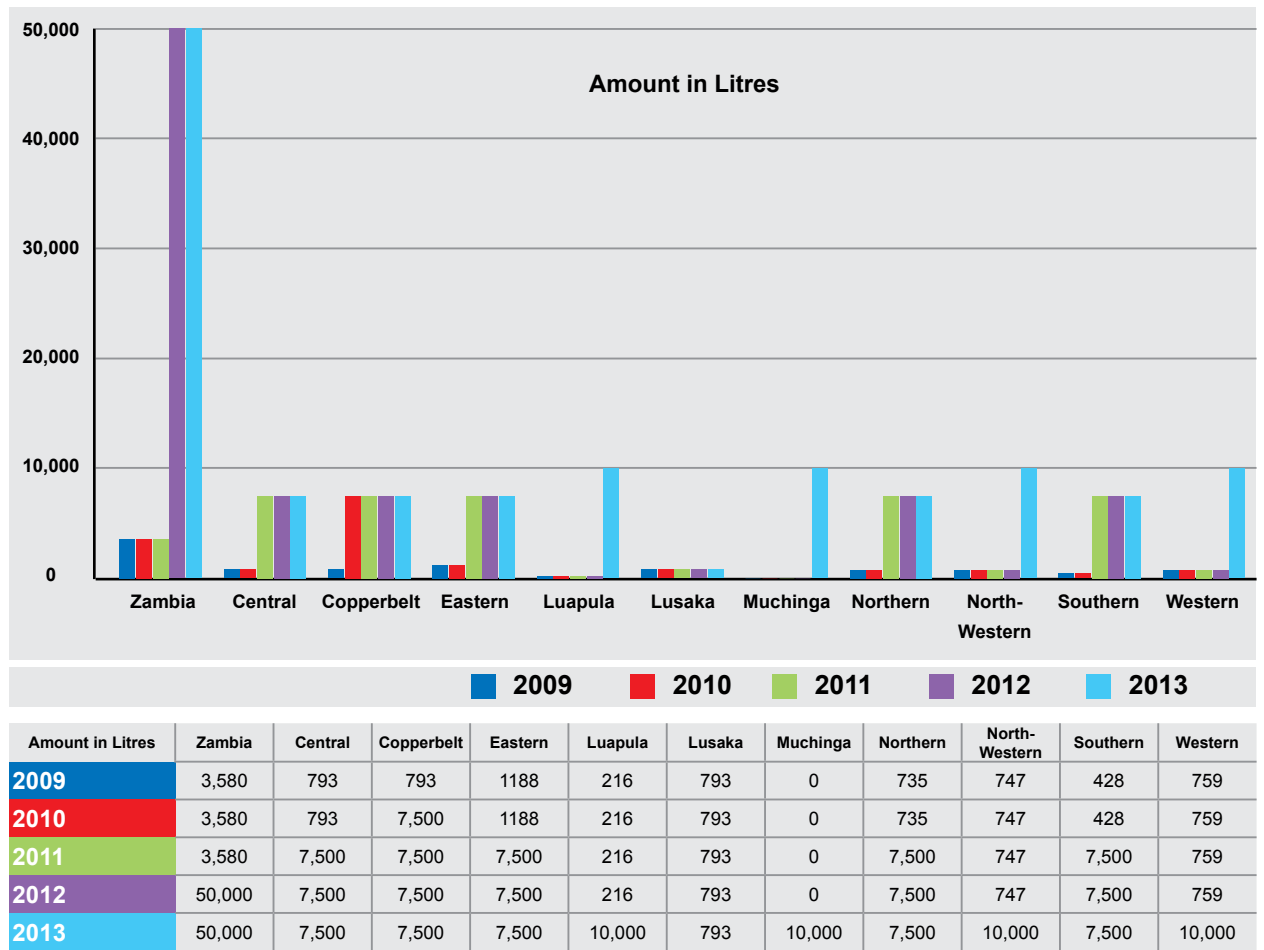
Expansion of the cold storage capacity for vaccines

The increased number of vaccines being administered in the routine immunisation system has increased from 5 to 8 formulations. This entails increased vaccines storage space. The WCO in Zambia continued to provide financial and technical support for expansion of vaccines logistics capacity expansion in 2013. Walk-in cold rooms have been installed in 8 provinces out of the ten provinces in the country. The central level Vaccine Workshop has been installed with 5 new walk-in cold rooms. The national vaccines storage capacity has improved from 3,580 in 2012 to 50,000 in 2013 as indicated in figure 3.



The newly installed cold room in Chinsali, Muchinga Province

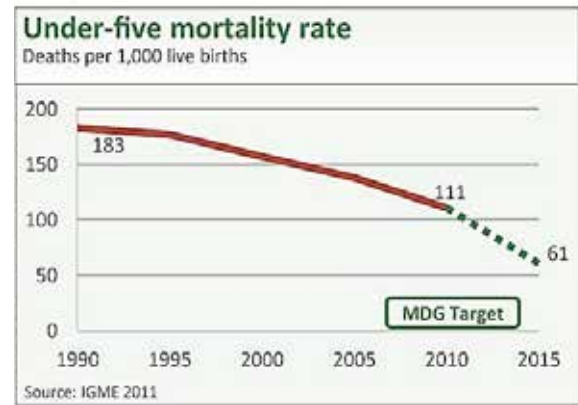
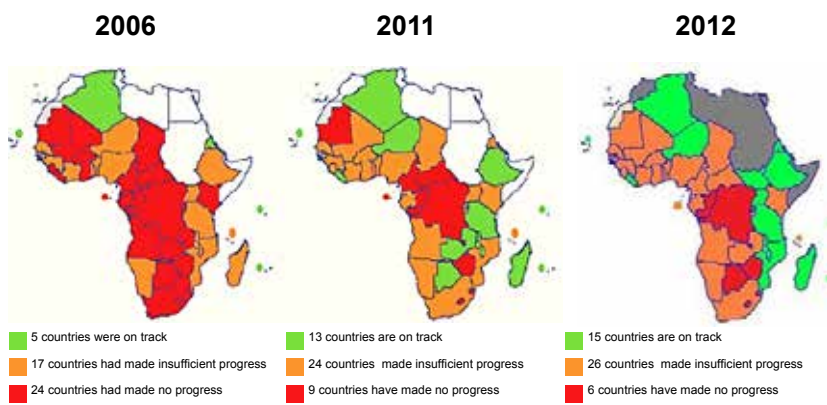
Figure 3: National cold chain capacity in Zambia



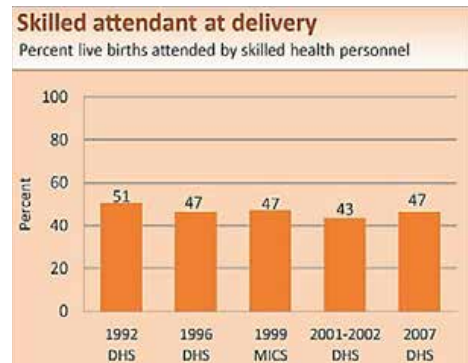
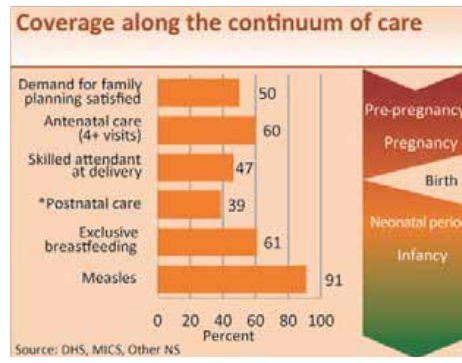
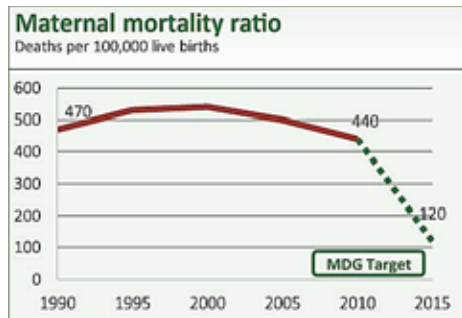
Source: MCDMCH, 2013

Figure 4: Summary of MDG Progress, Zambia

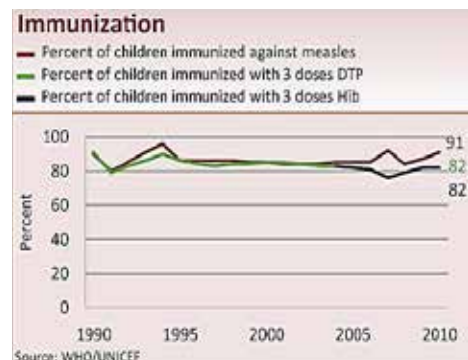
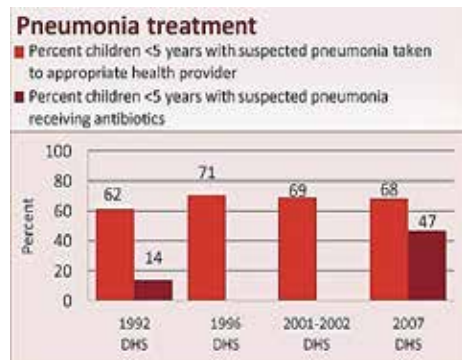
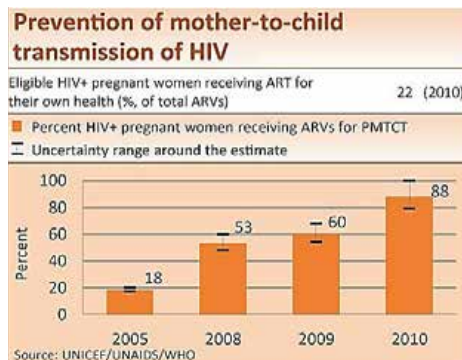
Progress towards MDG 4



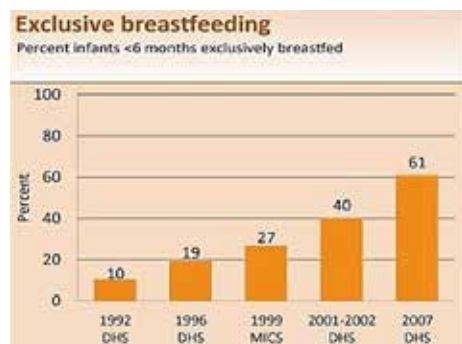
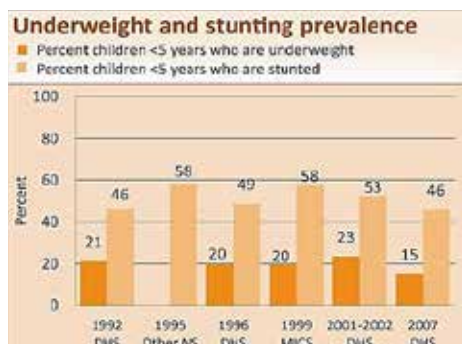
MATERNAL AND NEWBORN HEALTH



CHILD HEALTH



NUTRITION



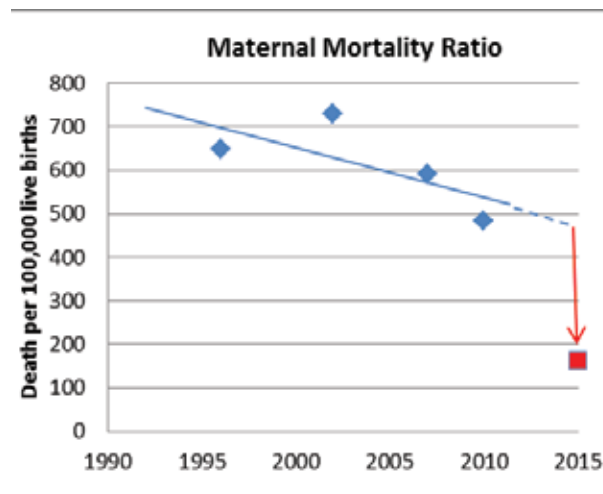
Note: Based on 2006 WHO reference population

MATERNAL HEALTH

The Maternal Mortality Ratio (MMR) in Zambia is 591 per 100,000 live births (ZDHS, 2007). This figure is above the MDG target of 162.3 deaths per 100,000 live births by 2015 as indicated in figure 5. The 2010 census estimated the MMR to be 483 deaths per 100,000 live births. According to the Ministry of Health, 38 women die every month on average during pregnancy and childbirth.



Figure 5: Maternal Mortality Ratio and projection to 2015



Source: Zambia MDG progress report, 2013

The WHO Country Office supported the MoH and the MCDMCH both financially and technically in the implementation of MNCH interventions aimed at accelerating progress in reducing maternal morbidity and mortality. The support was also intended to improve the quality of health services.

Safe Abortion

Unsafe abortion is among the top 5 causes of maternal mortality in Zambia and has contributed to slowing progress towards the attainment of MDG 5. In November 2012, Zambia expressed interest in combating unsafe abortion at a WHO meeting which was held in Nairobi. At this meeting, WHO advocated for more resources for the prevention of unsafe abortion. In an effort to support government fulfil its commitment to improving the comprehensive abortion care programme in Zambia, WHO provided technical support for the dissemination of the second edition of the WHO guidelines entitled *“Safe Abortion: technical and policy guidance for health systems”*. The guidelines include evidence based recommendations on clinical care, service delivery strengthening, legal and policy considerations for safe abortion. In addition, the WHO Representative, Dr. Olusegun Babaniyi officiated at the launch of the documentary *“Conversation on abortion”* a valuable tool intended to raise awareness on the importance of preventing unsafe abortion and raising public awareness about the silent pandemic of unsafe abortion.

WHO CIDA H4+ Programme

Within the framework of the United Nations Development Assistance Framework and the delivering as one UN initiative in Zambia, WHO provided leadership and strategic direction for the implementation of the UNDAF Outcome 3 which relates to human development encompassing health, nutrition, water and sanitation, education and social protection. Through the UNDAF, WHO provided leadership, financial and technical support to the Ministry of Community Development, Mother and Child Health for the implementation of the CIDA UN H4+ maternal, newborn and child health (MNCH) initiative. The initiative was implemented in five districts which included Chadiza, Chama, Serenje, Kalabo and Lukulu. Health providers from the five districts were trained in Emergency Obstetric and Newborn Care (EMoNC) in order to improve the levels and quality of skilled attendance at birth. The WHO CIDA UN H4+ 2013 work plan included the procurement of posters and mounting of bill boards to ensure visibility for the programme in all the five districts.



Demonstrations on the neonatal model



Demonstrations on the female model

WHO also provided strategic leadership and supported the preparation and facilitation of the Mid-Term Review (MTR) of the CIDA UN H4+ programme in October 2013. The MTR involved interviews with different players at all levels of the health system. The MTR revealed that the CIDA H4+ initiative was relevant for Zambia and is well integrated into the national development plans and that its catalytic nature has facilitated resource mobilisation. However, it also revealed that there are still inequities regarding access to institutional deliveries due to long distances, human resource challenges and the inadequate referral system. The MTR recognized the good UN H4+ partnership and coordination. WHO also provided technical and financial support for the hosting of a stakeholder's review and planning meeting for the CIDA UN H4+ in 2013. This meeting resulted in development of the 2013 CIDA UN H4+ report, the draft 2014 country plan and a draft presentation on the 2013 inter-country meeting which was held in Freetown, Sierra Leone.

Skilled Birth Attendance

Zambia continues to face critical shortages of human resources for health particularly in rural areas. This is a major challenge for the delivery of quality maternal new born and child health services. One of the critical Interventions for making pregnancy safer is ensuring that pregnant women have assisted deliveries by skilled attendants. However, in Zambia the availability of skilled

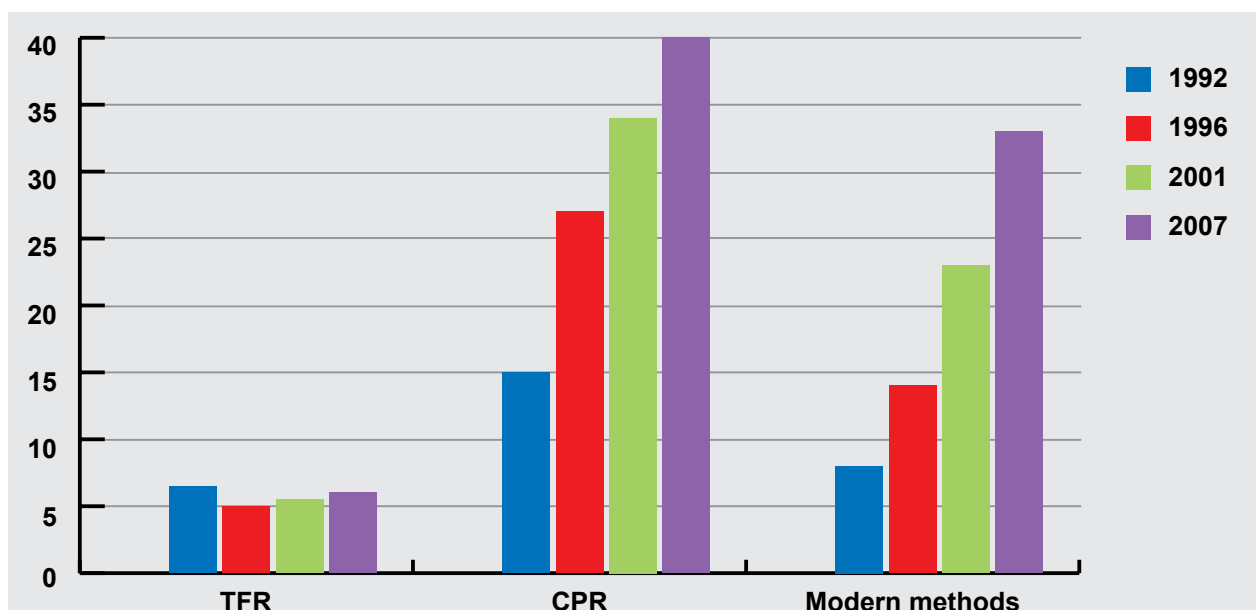
attendants at births remains low at only 46.5% (ZDHS, 2007). In order to increase the population with access to facilities with skilled birth attendants, WHO developed a proposal to the Swedish International Development Agency (SIDA) to provide funding for midwifery training scholarships for nurses in rural areas of Zambia.

WHO actively participated and supported the MoH to develop the National Training Operational Plan (NTO), 2013-2016 whose objective is to address the human resource crisis by supporting training institutions to increase their capacity to produce increased numbers of graduates for different cadres of health care providers. WHO also supported the development of the Annual Operational Plan for human resources in line with WHO recommendations for the scale up of human resources for health contained in resolution 62 of the WHO Regional Committee for Africa.

Family Planning

The Total Fertility Rate (TFR) for Zambia is 6.2 with variations between the urban (4.3) and the rural (7.5). The Contraceptive Prevalence Rate (CPR) is at 41% for all methods and 32.7% for modern family planning methods. Analysis of trends shows a stagnant TFR despite the increase in CPR as indicated in figure 6. The Unmet need for family planning remains high and is estimated to be 27%. There is low uptake of long acting contraceptive methods.

Figure 6: Total Fertility Rate and Contraceptive Prevalence Rate trends



Source: ZDHS, 2007

Although family planning is one of the most cost-effective ways to prevent maternal, infant, and child mortality, rural areas have more challenges in accessing family planning services. In July 2012, Zambia participated at the London Summit for Family Planning and committed to scaling up high-impact family planning programs and to work towards ensuring that the population has access to a range of high quality, affordable, acceptable, and safe contraceptive methods. In 2013 WHO supported government to develop a costed National Family Planning Scale up Plan (2012– 2020) in response to the government's commitments for the 2012 London Summit on family planning. In February 2013, government launched a national family planning campaign to advocate for action and create public awareness in order to improve uptake of family planning services.

The MCDMCH in collaboration with Implementing Best Practices (IBP) consortium and WHO developed analytic case studies to facilitate the documentation of best practices which will promote learning within and outside the country and which can be used for increasing access family planning.

National Emergency Obstetric and Newborn Care (EmONC) services assessment

The government of Zambia has proposed to conduct an EmONC assessment so as to have information on progress made since 2007 when EmONC was adopted as a national strategy. In 2013 WHO provided technical support towards the development of Terms of Reference and a detailed budget for the process of conducting the activity. WHO also provided technical guidance for a study which focused on the implementation of the Dual Testing and Elimination of Congenital Syphilis (DTECS) in Zambia.

Maternal Death Surveillance Report

WHO provided technical support for the development of a national Maternal Death Surveillance and Reporting road map.

Maternal, New born and Child Health Roadmap

WHO provided financial and technical support for finalising the national roadmap for Maternal, Newborn and Child Health which was launched in 2013.

Sexual Gender Based Violence (SGBV)

WHO has continued being a member of the UN joint programme on Gender Based Violence (GBV). WHO mobilised a total of USD 150,000.00 for implementation of activities in 2013. Working in collaboration with the United Nations Population Fund (UNFPA), a situation assessment on Gender Based Violence was initiated in six selected districts so as to contribute to the strengthening of capacity for gender, equity and human rights (GER).

WHO supported the advocacy effort against Gender Based Violence by the Zambian First Lady, Dr. Christine Kaseba Sata who is the WHO Goodwill Ambassador against Gender Based Violence from 2013-2014. The WHO Representative participated at the launch of a "One Stop Centre" for Gender-based Violence (GBV) by the First Lady at Solwezi General Hospital in the North Western Province of Zambia.



The WHO Ambassador against Gender-Based Violence, Dr. Christine Kaseba, First Lady of the Republic of Zambia. (Second from left, front row)

CHILD AND ADOLESCENT HEALTH

Child growth monitoring by community health workers

Child and adolescent health is one of the public health priorities in the National Health Strategic Plan 2011-2015. Zambia has high infant and under five mortality levels. According to the Zambia Demographic and Health Survey 2007, Infant Mortality was estimated to be 70 per 1,000 live births and Under Five Mortality was 119 per 1000 live births. Malnutrition is also a major threat to child survival with stunting levels estimated to be 45.4% and underweight at 14.6% (ZDHS, 2007). The majority of child deaths in Zambia are as a result of preventable diseases such as diarrhoea, malaria, pneumonia, malnutrition and HIV/AIDS. The major challenge is to achieve nationwide coverage of effective child survival interventions in order to reduce child mortality. The health of adolescents also presents many challenges. Many die due to accidents, suicide, pregnancy related complications and other illnesses that are preventable and treatable. Many serious diseases in adulthood have roots in adolescence. For example, tobacco use, sexually transmitted infections, HIV, poor eating habits lead to illness or premature death later in life.

The role of WHO has remained that of advocating and supporting the implementation of child survival interventions particularly the Expanded Programme on Immunization (EPI), Integrated Management of Childhood Illness (IMCI), the Infant and Young Child Feeding (IYCF) strategy, Prevention of Mother to Child Transmission of HIV (PMTCT) including improving children's access to Anti-retroviral Therapy (ART). WHO also played a key role in the development of the national adolescent health strategic plan and guidelines.



Newborn Care

WHO participated in the development and finalization of the Zambia Newborn Health Care Framework 2013 which was launched in April 2013. The MCDMCH is in the process of adapting WHO guidelines on Pregnancy, Child birth, Postpartum and Newborn care in order to incorporate interventions that are highlighted in the Newborn Health Care Framework. The WHO Country Office also sponsored country participants to attend a consultative meeting on the development of the Global "Every Newborn" Action Plan which was held in Nairobi, Kenya. The global plan is expected to be launched in 2014.

Integrated Management of Childhood Illnesses (IMCI)

WHO continued to support the Ministry of Community Development, Mother and Child Health in scaling up the Integrated Management of Childhood Illnesses (IMCI) strategy. Currently, IMCI coverage is estimated to be only 30% and the country has not yet achieved the saturation of having 80% of health workers looking after sick children. The major challenge in scaling up IMCI is the high cost of training health workers at district and lower levels.

The government has adopted the WHO IMCI Computerized Adaptation and Training Tool (ICATT) for scaling up IMCI in pre-service. The ICATT will be introduced in pre-service health training schools. In order to facilitate the introduction of ICATT in training schools, WHO supported the adaptation of the ICATT training tool for Zambia and provided financial support for training of 20 trainers of trainers. The participants included lecturers from Chainama College of health sciences, clinical instructors from district hospitals and district community medical officers. Chainama College of health sciences was able to secure computers to facilitate the commencement of the training. The college brings the number of nursing schools that were oriented in ICATT to 18 out of the total of 20. The schools will introduce the training in their curriculum in the next academic year in 2014.

Prevention of Childhood Obesity

In recognition of the increasing burden of Non-communicable diseases, there has been a focus on trying to prevent childhood obesity. The WHO country Office in collaboration with the WHO Regional Office for Africa provided financial and technical support to MoH to conduct a workshop which was aimed at building capacity for a national multi-sectoral group on the use of WHO guidelines on addressing childhood obesity. The WHO guidelines on childhood obesity include: *“Prioritizing areas for action in the field of population-based prevention of childhood obesity”* and *“WHO guide to population based approaches to childhood obesity”*. A total of 20 participants were drawn from the ministries of health, education, gender and child development, agriculture and Livestock, youth and sports, National Food and Nutrition Commission, World Food Programme and World Health Organization (HQ, AFRO and WCO). The forum was also used to identify priority areas for action including activities and projects that could be undertaken in line with the priorities.

Prevention and control of pneumonia and diarrhoea

Diarrhoea and pneumonia continue to be among the leading causes of death in children under five years of age. The WHO Country Office in collaboration with WHO/HQ provided technical support to Mazabuka district to develop an implementation plan for the prevention and control of pneumonia and diarrhea in line with the integrated Global Action Plan for prevention and control of pneumonia and diarrhea (GAPPD). The plan was integrated into the district plan. The district was able to share the plan at a symposium on GAPPD which was conducted during the 7th Health Research Conference in Lusaka.



Awareness campaign on elimination of diarrhoea in Zambia

Adolescent Health

WHO provided financial and technical support to MoH and MCDMCH to conduct the adolescent health situation analysis. The situation analysis report formed the basis for developing the Adolescent Health Strategic Plan 2011-2015. The Adolescent Health Strategic Plan was finalized and launched in 2013. The MoH and MCDMCH are in the process of finalizing adolescent health guidelines which will also be disseminated to health facilities and other points of service for adolescent health.

Research

Zambia is among 4 countries that were selected by WHO to conduct a child survival case study which is aimed at determining factors which have led to a decline in child mortality in some countries and factors that have hindered decline in child survival. WHO convened a workshop in Lusaka for 20 participants from Kenya, Sierra Leone, Zambia and Zimbabwe to plan for the study. The research was conducted and the results will be available in the first half of 2014.

Policies, strategies and guidelines

WHO with other partners in health spearheaded the updating of the Maternal Newborn and Child Health Roadmap 2011-2015 which was launched in April 2013.

Planning and Monitoring

WHO provided support to MCDMCH to conduct a workshop to facilitate the review and planning for the implementation of activities in the five CIDA H4+ supported districts. This included the finalization of the monitoring evaluation indicators. The participants were from national, provincial and districts levels and the UN H4+ partners. Monitoring of the implementation of activities and the key indicators in the five CIDA H4+ supported district was also conducted on quarterly basis in collaboration with INESOR and the UN agencies. WHO also participated in the external mid-term review of the CIDA H4+ project.

WHO mobilized funds from GlaxoSmithKline (GSK) for Mkushi district to accelerate attainment of MDG 4 and 5. The funds were disbursed through Churches Health Association of Zambia (CHAZ). In 2013, WHO also supported MCDMCH, CHAZ and GSK to monitor

implementation of planned activities in the district. The district has since recorded a marked decline in MMR, one maternal death was recorded in the whole district in 2012.

NUTRITION

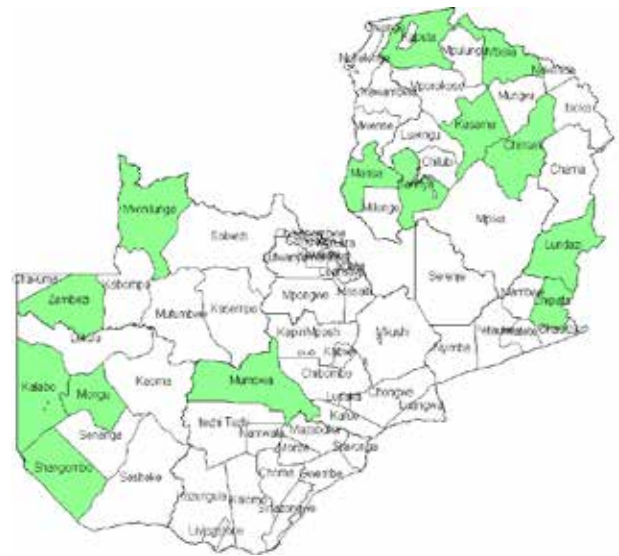


Malnutrition is a major public health concern in Zambia. The country has high levels of stunting among children 6-59 months, estimated to be 45.4%, while underweight and wasting are estimated to be 14.6% and 5.5% respectively. The burden of other infectious but preventable diseases is high and contributes significantly to child morbidity and mortality. This is compounded by high rates of micronutrient deficiencies particularly for vitamin A deficiency (53%) and 46% for iron deficiency anaemia (NFNC, 2003).

Accelerating Nutrition Improvements Project

Through a grant obtained from the Canadian International Development Agency (CIDA) amounting to \$574,000, WHO provided funds and technical assistance to the National Food and Nutrition Commission (NFNC) for Accelerating Nutrition Improvements (ANI) in Africa project. These funds will be utilized in the 14 targeted districts indicated in figure 7 and to monitor and evaluate the on-going 1000 Most Critical Days Program (MCDP).

Figure 7: Districts targeted for the 1000 Most Critical Days Programme (MCDP) to scale up nutrition



Source: MoH, 2013

Through the CIDA grant for scaling up nutrition in the selected districts, WHO provided a total of \$70,000 to the NFNC to conduct the following activities:

1. **Nutrition Baseline:** The concept note for collection of district level representation data at community level was finalised. The data planned to be collected will include the following outcome categories: Anthropometry, mortality, morbidity, dietary diversity score and household food security. The training of enumerators and data collection was conducted in November 2013.
2. **Nutrition Surveillance:** Periodic surveillance system was initiated through the development of the surveillance concept note; selection of wards (one per district); identification of indicators for use and indicator definition to aid in collection of data from different contact points.
3. **Surveillance, Monitoring and Evaluation Framework:** The NFNC developed a framework that will ensure convergence of monitoring, evaluation and surveillance systems from the Ministries of Health, Community Development, Mother and Child Health (MCDMCH) and other line ministries. The draft document highlights areas required for capacity building, use of data in advocacy, planning and delineation of different systems at different levels. The document will be finalized in 2014.



Breastfeeding is best for baby

Infant and Young Child Nutrition

Zambia is among the countries that were able to provide a report on Comprehensive Implementation Plan for Maternal Infant and Young Child Feeding to the Sixty Fifth World Health Assembly. The report was comprised of five actions and progress that had been made at country level. These included: creation of a supportive environment for the implementation of comprehensive food and nutrition policies; inclusion of effective health interventions with an impact on nutrition in national nutrition plans; development of policies and programmes outside the health sector that recognize and include nutrition; provision of sufficient human and financial resources for the implementation of nutrition interventions and monitoring and evaluating the implementation of policies and programmes.

HEALTH PROMOTION

Zambia has a high burden of communicable diseases and a growing burden of Non-Communicable Diseases. Outbreaks of diarrhoeal diseases are common especially in urban settlements with poor access to clean water, sanitation and waste disposal. The need for healthy policies, guidelines and standards to

guide implementation of health promotion cannot be overemphasized. Equally, there is need to strengthen behaviour change activities and to foster the participation and empowerment of individuals and communities for better health. The increased need to address Social Determinants of Health (SDH) also called for improvements in mechanisms to facilitate multi-sectoral action, coordination, resource mobilization and capacity building for health promotion.

Capacity building for health promotion implementation

In 2012 WHO provided both financial and technical assistance to the Ministry of Health for revision of the national guidelines for health promotion programme implementation at district level. In 2013, the guidelines were printed and distributed to all provincial and district offices countrywide. WHO also supported the implementation of an orientation meeting for provincial health education officers on the implementation of health promotion strategies particularly those aimed at addressing risk factors for NCDs, Social Determinants of Health and Health-in-All Policies (i.e. the use of multi-sectoral approaches in health promotion) and the New WHO/AFRO health promotion strategy.

Technical support was provided for implementation of health promotion activities for priority health programmes which also included implementation of communication strategies. WHO also provided technical and financial support for the National Health Promotion Technical Committee quarterly multi-sectoral meeting. During the period under review, the committee developed Terms of Reference for health promotion IEC working groups for priority health programmes, conducted review of IEC materials developed by partners and provided a forum for review of health promotion activities for each quarter including joint planning for activities.

Tobacco control

The WHO Country Office supported advocacy for implementing the WHO Framework Convention on Tobacco Control (WHO FCTC) and implementation of activities related to its provisions. The World No Tobacco Day (WNTD) 2013 was commemorated on the 31st May 2013 under the theme **“Ban tobacco advertising, promotion and sponsorship”**. WHO continued to advocate for the enactment of the Tobacco Control Bill of 2010. The MoH received financial assistance



to conduct a stakeholder's advocacy meeting on the enactment of the tobacco control legislation and the implementation of Article 13 of the WHO FCTC which calls for comprehensive bans on all tobacco advertising, promotion and sponsorship by Member States in line with the WNTD 2013 theme.

The country office facilitated a mission from WHO/AFRO and WHO/HQ to provide technical assistance to the Ministry of Finance and the Zambia Revenue Authority to prepare for the introduction of the WHO Tax Simulation Model (TaXSiM) for the fiscal year January-December 2014. Officials from the Ministry of Finance and the Zambia Revenue Authority underwent relevant training on the use of the new tax system from 21-25 May 2013. A draft policy brief was prepared for proposed policy options of uniform specific and mixed excise systems for presentation to the Tax Policy Unit at the Ministry of Finance. This project is expected to continue in 2014 in order to allow for approval of the policy change by parliament.

Addressing alcohol misuse and psychoactive substance abuse

The WHO country office supported the Ministry of Health to print health education materials on prevention of tobacco use and other psychoactive substances among young people. Two documents namely "*Smart Youths do not abuse Drugs: Drugs are harmful to your health, do not abuse them*" and "*Hey Guys don't be cheated, Tobacco kills*" were printed under the umbrella title "**Zambia Health Information Package**. The booklets were distributed to schools, NGOs, Faith-based organisations, youth organisations and other community based organisations. Both booklets contain information about risk factors, effects of the substances on the

physical and emotional health of young people, social consequences and prevention methods.

The WHO Country Office provided financial and technical support towards the development of national guidelines on the management of alcohol, and substance use disorders for primary health care workers. The guidelines were adapted from the WHO guidelines "mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialised health settings". The smoking cessation chapter was adapted from the United States Department of Health and Human Services "*Clinical practice guideline on Treating Tobacco Use and Dependence*". These guidelines will be used by physicians, psychiatrists, clinical officers, nurses, social workers and community health workers.

Communication strategies and social mobilization

The WHO Country Office provided technical support to the Ministry of Community Development, Mother and Child Health for social mobilization activities for the Expanded Programme on Immunisation. Social mobilization activities were conducted for the introduction of three new vaccines namely; Human Papilloma Virus vaccine, Pneumococcal vaccine (PCV) and Rotavirus respectively. The activities conducted included; the printing and distribution of posters, leaflets and information packages; development of two training videos on pneumococcal vaccine and Rotavirus vaccines for health workers; development of messages for dissemination on radio and television; conducting advocacy meetings for partners and stakeholders; conducting ministerial press briefings; providing orientation to journalists on the introduction of new vaccines and organizing the launch of the vaccines.

Through membership to IEC technical working groups for priority health programmes, WHO provided technical support for implementation of existing programme specific communication strategies. The activities implemented include: development of health learning materials, capacity building for health workers in communication, orientation of journalists in communication for specific health programmes, implementation of radio and TV programmes and support for health campaigns.



World Health Day 2013 campaign

Health campaigns and commemoration of health days

The WHO Country Office provided financial and technical support for the commemoration of the World Health Day on 7th April 2013, under the theme **“Prevent High Blood pressure”**. WHO also provided technical support for the commemoration of the World Malaria Day on 25th April 2012 under the theme **“Invest in the future: Defeat Malaria”**. The Zambia-Zimbabwe Malaria Cross-border Initiative was launched during the WMD commemoration. The events were intended to help the two countries to accelerate malaria control efforts towards malaria elimination by 2015.

Zambia joined the international community to celebrate the Nelson Mandela International Day, also known as Mandela Day, on Thursday July 18. The United Nations in Zambia lined up activities targeted to benefit prisoners on this day. The WHO Country Office Staff Association members donated old clothes and a total of ZMW 750.00 which was used to purchase food stuffs and personal hygiene material to support prisoners who are on parole but are still in prison. WCO also conducted a health camp to provide health services to prisoners such as blood pressure checks, diabetes, Voluntary Counselling and Testing (VCT) for HIV, eye checks, and other related services.

Actions to improve the visibility of WHO and Media outreach activities

The WCO continued with efforts of enhancing WHO's visibility through the production of the WHO Country Office (WCO) electronic Newsletter, Press Releases, contributing to the United Nations Newsletter and WHO/AFRO Website. Local media were also engaged in health through a media mailing list. Journalists from

various media institutions were invited to participate in various meetings organized by WHO and accompanied the WHO Country Office Teams on tours to Eastern, Muchinga and North-Western provinces. This led to wide publicity of WHO's work through both electronic and print media news coverage. It also improved the understanding of health issues by journalists. The WCO has continued to be represented on the United Nations Communication Group and to participate in the implementation of the joint United Nations Communication Plan.

HIV AND AIDS

Overview of the HIV epidemic and targets of the national HIV Response

Zambia has an HIV prevalence of 14.3%. Although the country has made significant progress in the HIV and AIDS response as a result of the high impact interventions in place, new infections continue to occur. HIV infection is more prevalent in urban areas (20%) compared to rural populations (10%). Women are more affected (16.1%) compared to men (10%). An estimated 16.4% of pregnant women are HIV positive and 10% of HIV transmission is from infected mothers to children during pregnancy, birth or breastfeeding.

The National AIDS Strategic Framework 2011-2015 is targeted at achieving the following by 2015: to reduce sexual HIV transmission infections by 50% (from 82,000 to 40,000); to provide antiretroviral therapy to at least 95 per cent of women, men and children living with HIV in need of treatment and to reduce new infections among children by 90%.

The role of WHO was to support MOH, MCDMCH and NAC to implement various interventions particularly the provision of safe blood, the expanded availability of antiretroviral (ARVs) for the treatment of HIV infected persons, Prevention-of-Mother-to-Child Transmission of HIV (PMTCT) and male circumcision (MC).

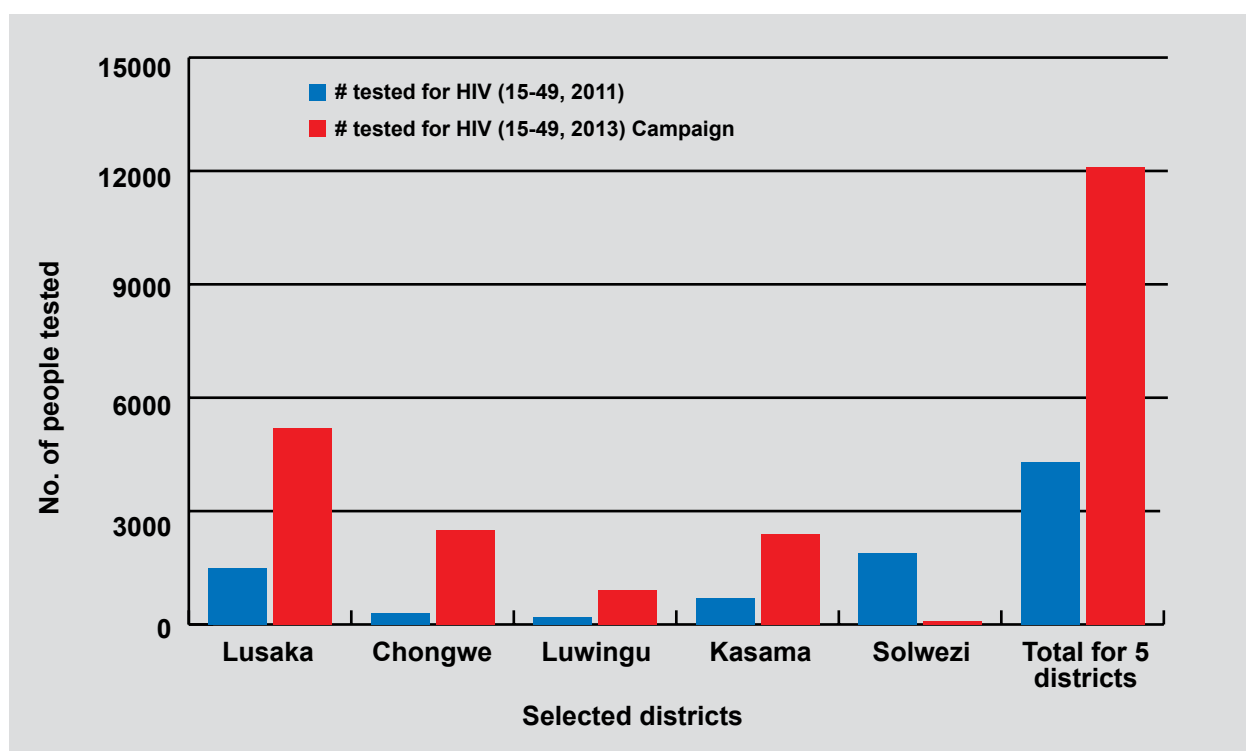
HIV Testing and Counseling (HTC)

According to the UNGASS report for 2011, only 22.8 per cent of the population have been counselled and tested. In an effort to scale up HIV Testing and Counselling (HTC), WHO provided technical and financial support

for the HIV Testing Campaign in 5 model districts which included; Lusaka, Chongwe, Solwezi, Luwingu and Kasama. The total number of people tested in all the five districts during the two-week campaign was 121,194 (69%) out of the monthly target of 174,739 (figure 8). The positivity rate varied between 0.5% and 9.1%. The HTC campaign resulted in increased uptake of HTC and the number of people referred to HIV prevention and treatment services. A post campaign evaluation was conducted to identify challenges and gaps in HTC programme implementation. This process will inform future national planning.



Figure 8: Number of people tested by districts during HTC in 2013



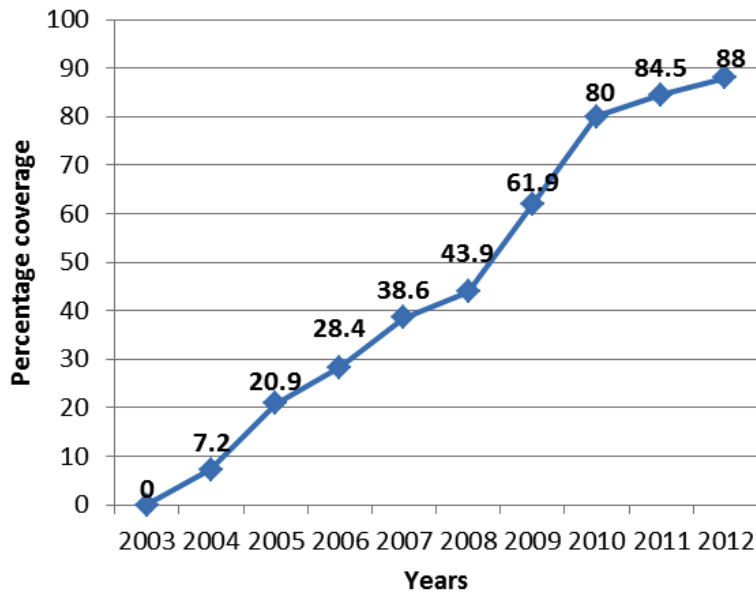
Source: MoH, 2013

Prevention of Mother to Child Transmission of HIV (PMTCT)

Zambia is moving towards elimination of Paediatric HIV. This policy shift has led to an increase in the estimated number of pregnant women attending ANC and who are tested for HIV. In 2012, a total of 688,060 (94%) out of the 723,436 pregnant women who attended ANC services at least once were tested for HIV. The coverage of PMTCT for the period 2005-2012 is shown in figure 9. The number of women living with HIV who delivered in 2012 was 81,727 out of which 88% received efficacious ARVs for PMTCT compared with only 58% in 2009.

In 2012, 48,188 (47%) of infants received Early Infant Diagnosis (EID) by the age of eight weeks. The percentage of infants tested for HIV at two months of age increased from 21% in 2010 to 57% in 2012. A number of strategies have been used to improve EID including the use of SMS technology to send laboratory results to facilities, recording information in the national Dry Blood Sample (DBS) register and the use of the EID system for monitoring and patient tracing.

Figure 9: PMTCT Coverage (2005-2012)



Source: MoH, 2012

In order to improve coverage of PMTCT, WHO contributed financial and technical support for scale up of PMTCT activities in 10 districts with a high prevalence of HIV. This activity was made possible through a grant from the OPEC Fund for International Development (OFID). The districts received financial assistance for training of health care providers and strengthening monitoring and evaluation systems including data collection and validation. The funding also enabled the districts to integrate PMTCT services with MCH services. A total of two hundred and seventeen (217) health workers and community volunteers from the 10 districts were oriented on the use of the safe motherhood card and registers. The exercise improved health care provider knowledge and skills on follow up of the mother baby pair including retention into care at both facility and community levels. In addition, a total of two hundred and twenty one (221) health workers from the 10 districts were trained and oriented on how to implement the new 2010 guidelines on option B+. The health workers were equipped with knowledge and skills on management of HIV through the continuum of care, Early Infant Diagnosis and DBS collection.

WHO also provided funds for community meetings which were aimed at sensitising communities on PMTCT, the importance of early antenatal booking and the role of men in the PMTCT programme. A total of 248 community volunteers from 10 districts were also oriented on basic PMTCT Infant and Young Child Feeding guidelines.

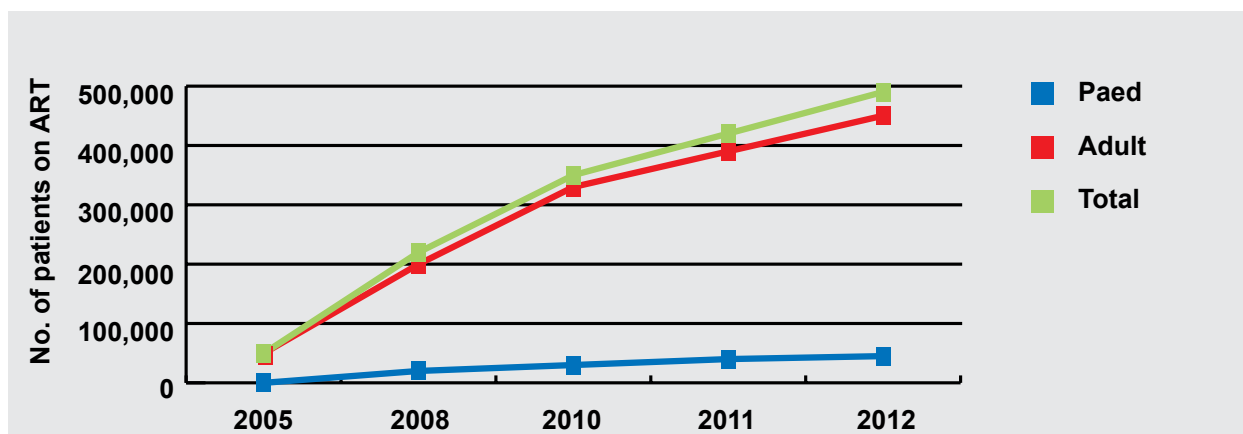
Monitoring and Evaluation for PMTCT

WHO convened a review and planning meeting for the 10 districts receiving the OFID PMTCT grant to align district plans to OFID activities. The participants included District Information Officers, District Medical officers, PMTCT coordinators and Maternal and Child Health Coordinators. The meeting allowed the districts to review data for PMTCT performance in 2012 and this data formed a baseline for performance monitoring for the OFID Grant period. WHO also provided resources to four (4) of the 10 districts to conduct data audit meetings for review of MCH and PMTCT data for quarter 1 and 2 of 2013. These meetings enabled the districts to review district PMTCT data collection tools such as antenatal, postnatal and safe motherhood registers, to assess the levels of understanding of data elements and to identify gaps in data management. Seven out of the 10 districts conducted monitoring and support visits to low performing facilities.

Scaling up Anti-Retroviral Treatment

At the end of 2012, 446,841 (93%) accessed the lifesaving drugs out of the total of 481,545 adults who were eligible for ART in the country. Zambia recorded an increase in the number of children and younger adolescents (<15 years) who were put on ART from 18,040 in 2008 to 34,084 in 2012. However, this number represented only 34% of children and adolescents (<15 years) who were in need of treatment.

Figure 10: Number of patients (adults & children) on ART in Zambia, 2005-2012



Source: MoH, 2012

Normative Guidance, Policy and Guidelines

WHO worked in collaboration with other partners to provide technical and financial support for development of various policies and strategic plans. The guidelines and protocols for PMTCT were reviewed and updated. The PMTCT Option B+ policy brief was costed. The Option B+ business case, a short term implementation plan and site assessment tools were developed to facilitate and manage implementation and transition from Option A to Option B+ regimen. In addition a costed National HIV Testing and Counselling Operational Plan (2013-2015) was developed through financial support from UBRAF and technical assistance from WHO. This plan articulates strategic areas that will improve uptake of HIV counselling and Testing (HTC) in Zambia and to facilitate the attainment of universal testing and counselling targets.

WHO also provided leadership and coordination in the adaptation of the 2013 consolidated HIV guidelines. The MoH and NAC received financial and technical assistance to support a stakeholders' consultative meeting which was aimed at building consensus on the draft HIV guidelines. Participants included experts from government, CDC, USG funded HIV programme implementing partners, the UN and civil society organisations.

Monitoring and Evaluation

WHO provided technical support to the National AIDS Council to review the National AIDS Strategic Framework (2011-2015), a process which will further guide the HIV response in Zambia. As the technical lead partner on treatment, care and support pillar, WHO supported the design of the Joint Mid-Term Review (JMTR) concept, the development of data collection tools, collection of data in Mpika and Samfya districts of Muchinga province and the write up of the review report. WHO continued to provide technical support to government to monitor health situations and trends. In 2013, WHO supported the compilation of the Global AIDS Response Progress Report and the 2012 ARV survey report on Zambia. In addition WHO participated in the development of the HIV Estimates and Projections for 2013 and beyond. The WHO Country Office participated at the HIV Estimates and Projections Regional training in South Africa which resulted in the development of the country estimates on HIV prevalence, HIV incidence, HIV-related deaths in children and adults among others.

WHO also supported the data quality assessment of the PMTCT programme findings which are being used to develop protocol for the national PMTCT impact study. WHO provided technical support at the National HIV Prevention Convention, National Paediatric ART Review Meeting and the 8th Annual National ART Technical Update Meeting. These are platforms where new information on ART and other HIV interventions was shared among key health workers and stakeholders involved in the HIV response.

Resource Mobilisation

The programme continued to attract financial support from government and different partners including the USAID, GFATM UBRAF. The WHO country office supported reprogramming of the GFATM round 8 and 10, the development of the 97.7 million dollar Round 8 and 10 HIV and AIDS Phase 11 Consolidated Grant which aims at securing and sustaining equitable access to ART commodities and services.

Technical Support to UNDAF

WHO provided technical support in joint UNDAF work plan programming. WHO led the progress review of the 2012 UNDAF work plan implementation and provided leadership and coordinated the designing of a more streamlined 2013 work plan.

Voluntary Medical Male Circumcision

In 2007, the World Health Organization made a recommendation that Voluntary Medical Male Circumcision (VMMC) be included as an additional HIV prevention strategy. This followed evidence from three large, randomized controlled trials that indicated that adult Voluntary Medical Male Circumcision (VMMC) reduces men's risk of HIV acquisition by at least 60%. Reaching, and then maintaining, 80% prevalence of male circumcision among men 15 to 49 years old could prevent 340,000 million HIV infections by 2025, saving an estimated US\$2.4 billion in lifetime HIV treatment costs.

Zambia has a high prevalence of heterosexually transmitted HIV and a low prevalence of male circumcision. According to the 2007 Demographic and Health Survey, only 13% of Zambian males aged 15-49 were circumcised. The voluntary medical male circumcision programme has seen rapid scale up over the past few years. To date, 608,357 men have been circumcised since the inception of the programme in 2007.

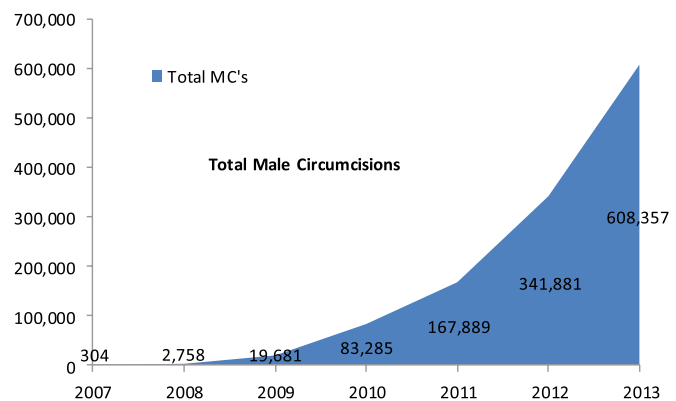
National targets for voluntary medical male circumcision

The target for 2013 was to circumcise 270 000 males. By the end of October, since inception of the programme in 2007, 43.8% of the 608,357 MCs were done in 2013 (figure 11). A total of 266,476 had been circumcised bringing the total number of MCs done to 608.357.



MC providers prepare a client for circumcision in Eastern Province. Photo courtesy of Mr. Royd Kamboyi

Figure 11: Cumulative total for Male Circumcision: 2007-2013.



Source: MoH, 2013

This success recorded in 2013 was as a result of effective coordination at national and sub national levels and in resource allocation for both static and outreach MC services by all stake holders; effective supply management system and an improved reporting system.

Monitoring & Evaluation

In order to strengthen the monitoring and evaluation pillar of the male circumcision programme, the MCDMCH recruited the M&E officer to coordinate inputs from all the provinces. The programme has seen improved data management and reporting due to linkages with provinces and other implementing partners. Further, the M&E system does not only capture data on MC numbers, it is now mandatory to report on routine

basis data on moderate and severe adverse effects and HIV testing. Adverse events rate stand at less than 1% while of all the men accessing MC services over 95% are tested for HIV. In the third quarter of the year, a bottleneck analysis was conducted at policy, programme and site levels. The results will be disseminated to all the concerned stakeholders after data analysis is completed in order for it to contribute to programme planning in the next year.

Programme Coordination

In order improve coverage of MC in Northern, Muchinga, Central and Luapula provinces, provincial MC coordinators were recruited in these provinces.

Annual Programme Review Meeting

WHO and other partners jointly financed the annual VMMC programme review meeting for all the 10 Provincial Health Offices and 72 District Health Offices and other key implementing partners. The primary objective of the meeting was to discuss the successes, challenges and the way forward for 2014. The meeting also provided an opportunity to discuss key issues such as quality, M&E, and coordination in the programme.

Technical guidance during Mid-Term Expenditure Frame Work

WHO provided technical guidance to the health sector on the key areas which needed to be focussed upon to accelerate the scale-up of VMMC services during the planning period for national provincial, districts and facility levels.

Resource mobilization

WHO provided technical assistance support to the MCDMCH for developing a funding proposal which was submitted to Global Fund for funding amounting to (\$ 1.1 million). Among the items included in the request were MC re-usable instruments, tents for outreach activities as well as vehicle for the VMMC programme.

MALARIA

Malaria is endemic throughout Zambia. However, transmission patterns are varied in the country (figure 12). Therefore, provinces such as the Northern and Luapula provinces have high malaria transmission, with

parasite rate above 15 per cent, while other provinces such as the Southern province experience low malaria transmission, with parasite rate as low as less than one per cent in some areas. The national malaria programme continued to attract financial support from different partners including; the USAID, President's Malaria Initiative, UK Department for International Development (DFID) and The Global Fund to scale up promotive, preventive and curative malaria services nationwide.

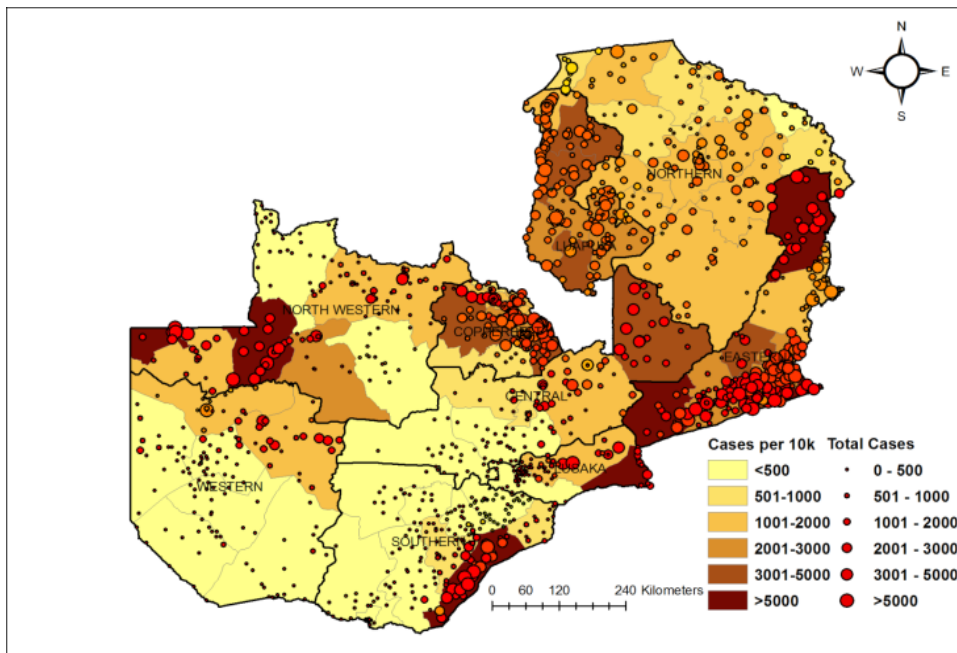


Key malaria issues in 2013

The key issues and actions that needed attention in 2013 were as follows: The malaria prevention and treatment targets to achieve universal coverage with malaria interventions was not realised. Also, the national malaria strategic plan 2011-15 was due for a mid-term review in line with the national malaria action plan. However, there were no dedicated funds for implementing this activity. This called for WHO to support resource mobilisation to undertake the MTR. Another issue was that WHO developed new guidelines on IPTp which needed to be incorporated into Zambia's national IPTp guidelines.

Furthermore, there were limited choices or options for the treatment of severe malaria in the malaria programme and limited capacities for surveillance monitoring, evaluation, and operations research, especially for entomological monitoring. Also, the NMCP experienced low funding to support IRS. To address all these issues, WCO provided technical assistance to MOH, which contributed to the following achievements in 2013.

Figure 12: Total malaria cases in Zambia, 2012.



Source: MoH, 2013

The goal and strategies

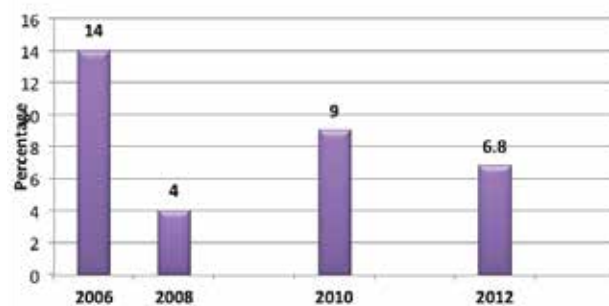
The goal of the national malaria programme is to reduce malaria case incidence rates by 75% of the 2010 baseline by 2015. This aspiration is in line with the World Health Assembly (WHA) and the Roll Back Malaria (RBM) targets. The following strategies are in place in Zambia:

- Malaria prevention using Insecticide Treated Long-lasting Nets (LLINs), indoor residual spraying (IRS) and intermittent preventive treatment in pregnancy (IPTp).
- Prompt diagnosis and treatment with efficacious antimalarial medicines.
- Surveillance monitoring, evaluation, and operations research (SMEO).
- Advocacy and social mobilisation.
- Efficient programme management.

Programme impact

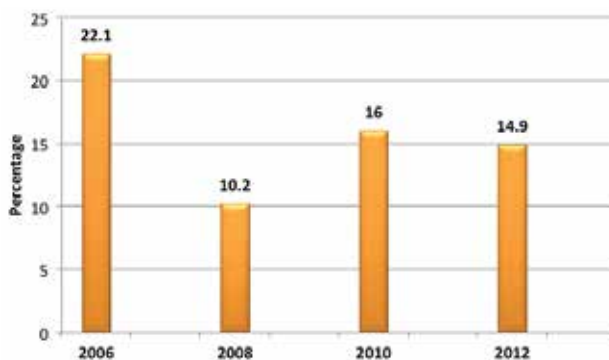
Zambia's NMCP has continued to record a reducing trend for malaria morbidity and mortality over the past five years. For example, the prevalence of severe anaemia i.e., Hb<8 g/dl among children 0-59 months declined by half from 14% to 7% between 2006 and 2012 as indicated in figure 13. This decline was true even in rural areas of Zambia. Similarly, parasite prevalence has reduced from 16.3% in 2006 to 8.2% in 2012 (figure 14).

Figure 13: Severe anaemia (Hb<8g/dl) prevalence among children under five years



Source: Malaria Indicator Surveys 2006, 2008, 2010 & 2012

Figure 14: Malaria parasite prevalence in children under five, 2006-2012.

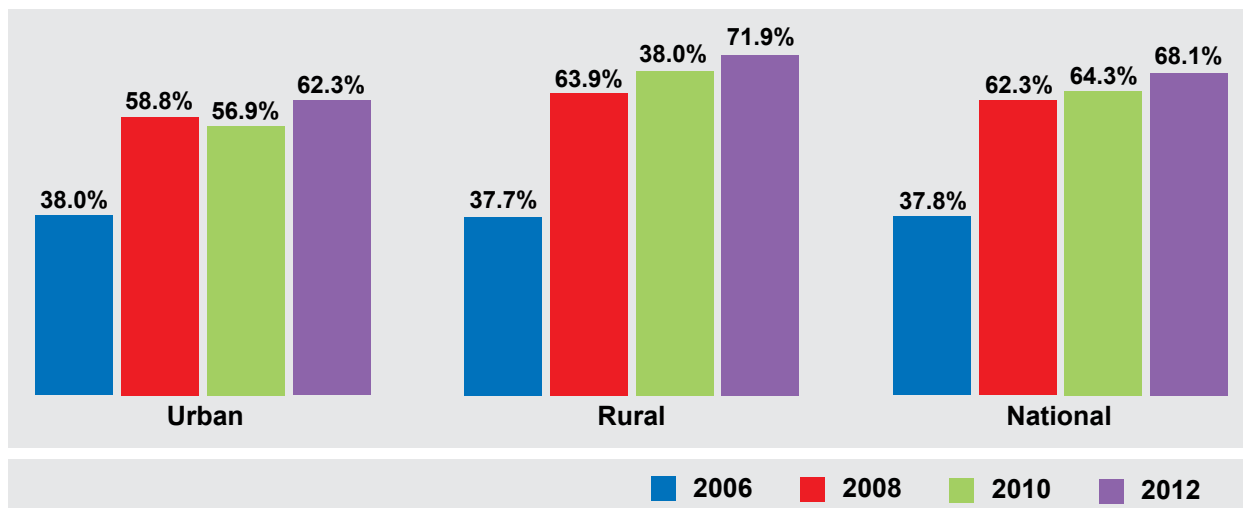


Source: Malaria Indicator Surveys 2006, 2008, 2010 & 2012

Intervention coverage

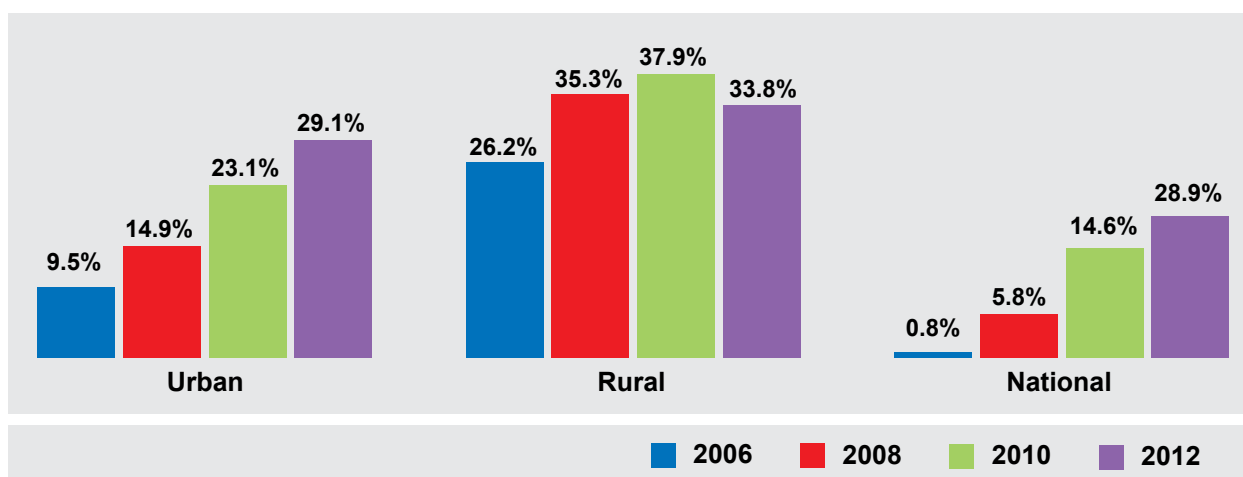
The proportion of households with at least one ITN increased from 38 percent in 2006 to 68 per cent in 2012 / 2013. More encouraging, the use of ITNs by children under five years of age doubled from 24 per cent to 50 percent in the same period and the proportion of pregnant women using ITNs also increased from 25 percent to 58 per cent.

Figure 15: Household ownership of at least one ITN distribution by rural and urban areas, 2006-2012.



Source: Malaria Indicator Survey, 2012

Figure 16: Households sprayed within previous 12 months in urban areas, 2006-2012



Source: Malaria Indicator Surveys 2006, 2008, 2010 & 2012

Malaria programme review

WHO provided technical assistance to the MoH and MCDMC to develop a concept note to undertake a Mid Term Review (MTR) of the national malaria strategic plan (NMSP) 2011-2015, and its extension to align it with the health sector national strategic plan 2011-2016. In addition, WHO supported MoH and partners to mobilise a sum of USD 17,000 to convene a national stakeholder consultative meeting at Chaminuka in Lusaka, Zambia and to compile a report on the MTR 2013. To facilitate

this process, WHO in coordination with MACEPA developed terms of reference (TORs) to engage a consultant to provide oversight to the whole process of MTR.

Policies, guidelines, strategies

WHO provided technical support to revise the national policy on severe malaria guidelines. These revisions included the introduction of injectable artesunate as a new antimalarial alternative to quinine.

Joint malaria planning and reporting at country level

WHO provided technical assistance to the United States President's Malaria Initiative (PMI) in-country and external team of experts to compile a Malaria Operational Plan (MOP) for the fiscal year 2014-2015 and to disseminate this comprehensive malaria plan at a national stakeholder's meeting in Lusaka in 2013. WCO in collaboration with the MoH partners conducted forecasting and quantifications of malaria commodities (LLINs, IRS, RDTs, antimalarials) for the period 2013-2015.

WHO facilitated the compilation of the World Malaria Report, 2013 which was disseminated in collaboration with the Inter Country Support team (IST) for Eastern and Southern Africa (ESA) and AFRO. WHO also facilitated the development of a National Malaria Communication Strategy which avails methods for disseminating messages to different target audiences to ensure programme impact.

Surveillance, monitoring and evaluation, operations research (SMEO)

WHO provided technical assistance to compile the therapeutic efficacy tests monitoring (TET) report and to share it with IST/ESA [Eastern and Southern Africa (ESA)] and WHO/HQ. The report showed a 99% efficacy of the first-line antimalarial medicine *Artemether lumefantrine* in two high transmission areas of the Eastern Province of Zambia.

In terms of support to generate evidence, WHO provided technical assistance to the hosting of a national research conference in Lusaka in October, 2013 at which forum several findings on malaria plus other communicable and non-communicable diseases were presented.

Advocacy and community support

WHO provided technical assistance by availing reference technical documents to the NMCP to facilitate the training of 1,200 community health workers in malaria home management in 27 districts. This capacity building of health workers ensured continued supply of all anti-malarial commodities i.e. more than 8 million courses of ACTs and 8 million RDTs were purchased.

WCO provided technical assistance to plan advocacy activities during the commemoration of the World Malaria Day (WMD) 2013. Zambia-Zimbabwe WHO Country Offices jointly facilitated this event and supported Zambia and Zimbabwe NMCP/MoH to co-launch a cross-border malaria initiative on the 25th April 2013 in Livingstone. Zambia's WHO Representative, Dr. Olusegun Babaniyi, and the minister of health, Dr. Joseph Kasonde, together with the Zimbabwe minister of health participated in this historical ground breaking event.

Technical support to WHO/AFRO

WHO supported the production of the first-ever WHO-AFRO guidelines for conducting malaria MTR. Two other countries, namely; The Democratic Republic of Congo (DRC) and Senegal also participated in the development of these WHO guidelines.

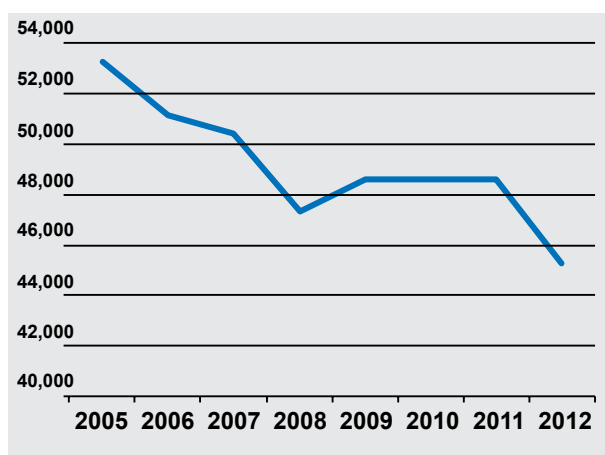
National and Regional partnerships

WCO provided technical assistance to the Country Coordination Mechanism (CCM) to review financial and technical assistance for malaria, HIV and Aids and tuberculosis. The gaps were presented to the Global Fund (GF) and used to develop a national malaria proposal. WHO provided technical assistance to the development of the Roll Back Malaria (RBM)-African Regional Network (SARN) action plan for malaria prevention and elimination agenda covering the period 2013 to 2020.

TUBERCULOSIS

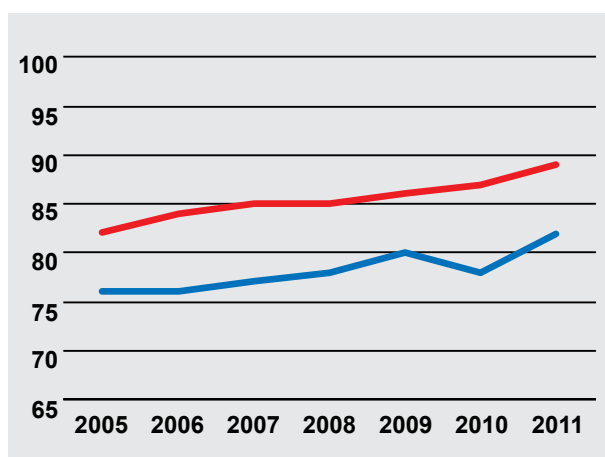
The burden of TB disease in Zambia remains high. However, there has been a steady decline in TB notifications since 2005 as indicated in Figure 17. In 2012, TB notifications were 347 per 100,000 population compared to 444 per 100,000 population in 2011. The country has attained global targets on case detection and treatment success rates of 70% and 85% respectively. In 2011 the case detection rate was 73% while the treatment success rate was 87% (Figure 18). The population coverage of TB diagnostic and treatment services is low due to the vast geographical landscape which makes it difficult to reach populations particularly in remote rural areas.

Figure 17: TB notifications, 2005-2012



Source: MOH, 2012

Figure 18: TB cure and treatment success rates, 2005-2011



Source: MOH, 2012

WHO's support to the country in 2013 was focussed on expanding access to TB services. This was achieved through enhancement of DOTS delivery by training health workers and community health providers, improving quality of services through provincial and technical review meetings and engagement of the community in TB prevention and control. Key activities and achievements are as follows:

Training of Health workers

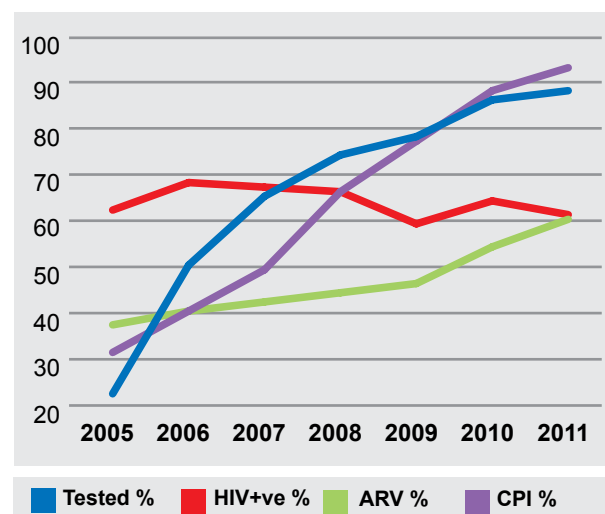
WHO provided technical and financial assistance for training of health care workers, community health workers and prison officers in North-Western, Northern, Muchinga and Western provinces. The training was intended to improve case detection and treatment at the treatment centres in health facilities and at community level. A total of 79 Health Care Workers, 77 community

health workers and 62 prison officers were trained in the 3 provinces. In addition, WHO supported the Copperbelt and Central provinces to train 125 community volunteers on the 3Is initiative in Kitwe, Ndola, Kapiri Mposhi, Kabwe and Chibombo districts. The 3Is is a WHO initiative which is aimed at enhancing TB case finding among HIV/AIDS clients, promoting infection control at all levels including the community and provision of isoniazid preventive therapy in HIV positive people.

TB/HIV collaborative activities

Since the introduction of TB/HIV collaborative activities in Zambia in 2006, there has been a marked increase in uptake of services for testing and treatment as indicated in figure 19. In 2012, 87% of TB patients were tested for HIV, 61% of which were co-infected. Of the co-infected, 93% were put on co-trimoxazole preventive therapy (CPT) and 60% on Anti-Retroviral Therapy.

Figure 19: TB/HIV data, 2006-2012



Source: MOH, 2012

National TB Prevalence Survey

WHO provided financial and technical support to the Ministry of Community Development, mother and Child health in August 2013 to conduct a pilot TB prevalence survey which facilitated the review of the tools and processes for the full survey. The national TB prevalence survey started in October 2013. As a member of the survey steering and advisory committee, WHO is providing technical support to the implementation team. WHO also procured 3 vehicles to facilitate the implementation of the survey.

Technical review meetings and Supervision

Technical and financial support was provided to the national TB programme (NTP) to conduct a national review of the performance of the programme in 2012 and to prepare a plan for improving the provision of TB/HIV services. An orientation on childhood TB was provided to all participants from national, provincial and district offices including those from other implementing partners. Technical and financial support was provided to the Copperbelt provinces to perform support supervision in all the districts.

World TB Day

The Country office provided technical and financial support in planning and commemoration of the World Tuberculosis Day which was held on 24 March 2013 in Mansa, Luapula province. The theme was “**Stop TB in my lifetime.**”







CHAPTER 3

Administration and Finance

HUMAN RESOURCES

The staff establishment of the WHO Country Office in Zambia is comprised of International staff, National Professional Officers and Administrative staff as indicated in table 5. The country office currently has a total workforce of 38 staff comprised of the Country Representative who is an international staff, 26 program staff and 11 administrative staff who form the Country Support Unit (CSU). The program staff comprises 71% of the total workforce while the administrative staff comprises 29%.

In 2013, the human resource structure of the office did not change significantly. Four National Professional Officers were recruited in 2013. The following recruitments were done in 2013:

- National Surveillance Officer for Western, Central and Southern provinces of Zambia, Mrs Annie Mtonga was recruited following the retirement of Mrs Della Buumba who served in the same capacity.
- National Professional Officer, Making Pregnancy Safer, Dr. Sarai Malumo was recruited following the retirement of Mrs Patricia Kamanga who served in the same capacity.
- National Professional Officer for Male Circumcision, Dr. Albert Kaonga.
- National Professional Officer for Nutrition, Ms. Chipso Mwela.

The WCO plans to continue strengthening its own office capacities. Therefore, plans are underway to convert most of the staff that are on the Special Service Agreement (SSA) to fixed term appointments in 2014.

Table 5: WHO Country Office staff list, 2013

No	NAME	TITLE
A. COUNTRY REPRESENTATIVE		
1	WHO Representative	Dr. Olusegun Babaniyi
B. COUNTRY SUPPORT UNIT		
2	Operations Officer	Mr. Mbaulo Musumali
3	WR Administrative Assistant	Ms. Flovian Chituta
4	Finance Assistant	Ms. Annie Sikazwe
5	Finance Clerk	Ms. Rosemary Chabala
6	Procurement and Travel Assistant	Ms. Mutembo Siboonde
7	ICT Assistant	Ms. Jessie Chime
8	Human Resources Clerk	Ms. Charity Sipangule
9	Office Clerk	Mr. Jerry Katobemo
10	Senior Driver	Mr. Worried Mwansa
11	Driver	Mr. Ignatius Tembo
12	Driver	Mr. Mike Njeleshi
C. NATIONAL PROFESSIONAL OFFICERS		
13	National Professional Officer – Disease Prevention and Control	Dr. Peter Songolo
14	National Professional Officer – Managerial Process for health development Networks	Mr. Solomon Kagulula
15	National Professional Officer – Child and Adolescent Health	Dr. Mary Katepa Bwalya
16	National Professional Officer – Expanded Program on Immunization (EPI) / Team leader	Dr. Helen Mutambo
17	National Professional Officer – Tuberculosis	Dr. Mwendaweli Maboshe
18	National Professional Officer – Health Promotion	Ms. Nora Mweemba
19	National Professional Officer – Malaria	Dr. Freddie Masaninga
20	National Professional Officer – Making Pregnancy Safer	Dr. Sarai Malumo
21	National Professional Officer – EPI Logistics	Mr. Abrahams Mwanamwenge
22	National Professional Officer – HIV	Dr. Susan Zimba Tembo
23	National Professional Officer – Male Circumcision	Dr. Albert Kaonga
24	National Professional Officer – Essential Drugs and Medicines	Mr Billy Mweetwa
25	National Professional Officer – Nutrition	Ms. Chipu Mwela
26	National Surveillance Officer (South, Central and West regions)	Mrs. Annie Mtonga
27	National Surveillance Officer (Lusaka, North and East regions)	Mrs. Patricia Mwambi
28	National Surveillance Officer (Luapula, Northwest and Copperbelt regions)	Mrs. Rufaro Chirambo
29	National Surveillance Officer (NSO) based at country office	Mr. Belem Matapo
30	Laboratory Scientist	Mrs. Idah Ndumba
31	Laboratory Scientist	Mrs. Mazyanga Liwewe
D. PROGRAM SUPPORT STAFF		
32	EPI Secretary	Mrs Annie Zulu
33	EPI Data Clerk	Ms Edna Banda
34	EPI Driver	Mr. Chiwego Chiputa
35	EPI NSO Driver	Mr. Bernard Samake
36	EPI NSO Driver	Mr. Swarty Hichimi
37	EPI NSO Driver	Mr. George Sinkamba
38	MPN/DPC Secretary	Ms. Mwiche Nachizya

INFORMATION & COMMUNICATION TECHNOLOGY

The country office is well placed in terms of Information and Communication Technology. In 2013 the WCO made a major overhaul of its ICT infrastructure in readiness for the WHO Global Synergy. New desktop and laptop computers that meet the WHO global synergy requirements were procured to replace those which were non-compliant. Additionally, all staff were successfully migrated to the WHO global email with the new domain and extension of *@who.int*. The country office is also migrating to CISCO Unified Communication manager platform for voice and video communication. Equipment has been procured through WHO/AFRO and migration is set for early 2014. The country office also continues to maintain its website located at <http://www.afro.who.int/en/zambia/who-country-office-zambia.html> and <http://www.who.int/countries/zmb/en/>.

PROGRAM BUDGET & WORKPLAN IMPLEMENTATION

Programme budget

WHO globally implements a two year budget cycle. The year 2013 was the second and last year of the 2012/13 biennium. Out of the total of US\$12,692,000 approved budget for the biennium, a total of US\$ 12,526,401 was actually received by the country office. Table 6 presents a summary of the WCO programme budget for the biennium.

Table 6: Summary of WCO Budget 2012/13 Biennium

Strategic Objective	Planned Costs (US\$)	Award Budgeted (US\$) (Amount received and budgeted)
01	4,868,173	4,896,675
02	2,972,831	2,539,580
03	208,661	158,063
04	1,796,081	1,799,184
05	1,225,000	398,784
06	202,000	163,691
07	106,000	61,013
08	166,000	161,245
09	113,000	99,200
10	798,305	700,526
11	261,818	259,012
12	742,712	711,730
13	603,112	577,698
Grand Total	14,063,692	12,526,401

Work plan implementation

As of 16th December 2013, the total amount that was obligated/disbursed was US\$12,112,635 representing a budget implementation rate of 97%. Table 7 provides a summary of implementation rate by strategic objective.

Table 7: Work plan budget implementation, 2013

STRATEGIC OBJECTIVE	DESCRIPTION	% Budget Implementation Against Award Budgeted (Amount received)
01 Communicable Diseases	To reduce the health, social and economic burden of communicable diseases	95%
02 HIV, TB and Malaria	To combat HIV/AIDS, Malaria and Tuberculosis	98%
03 Chronic Non Communicable Diseases	To prevent and reduce disease, disability and premature death from chronic non communicable diseases, mental disorders, violence and injuries and visual impairment	100%
04 Child Adolescent, maternal, sexual and reproductive health and ageing	To reduce morbidity and mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote active and healthy ageing for all individuals	97%
05 Emergencies and disasters	To reduce the health consequences of emergencies, disasters, crises and conflicts, and minimize their social and economic impact	100%
06 Risk factors for health	To promote health and development, and prevent and reduce risk factors for health conditions associated with use of tobacco, alcohol, drugs and other psychoactive substance use, unhealthy diets, physical inactivity and unsafe sex	98%
07 Social and economic determinants of health	To address the underlying social and economic determinants of health through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive, and human rights-based approaches	96%
08 Healthier environment	To promote a healthier environment, intensify primary prevention and influence public policies in all sectors so as to address the root causes of environmental threats to health	96%
09 Nutrition and safety	To improve nutrition, food safety and food security, throughout the life-course, and in support of public health and sustainable development	97%
10 Health systems and services	To improve health services through better governance, financing, staffing and management, informed by reliable and accessible evidence and research	98%
11 Medical products and technologies	To ensure improved access, quality and use of medical products and technologies	99%
12 WHO leadership, governance and partnership	To provide leadership, strengthen governance and foster partnership and collaboration with countries, the United Nations system, and other stakeholders in order to fulfill the mandate of WHO in advancing the global health agenda as set out in the Eleventh General Programme of Work	99%
13 Enabling and support functions	To develop and sustain WHO as a flexible, learning Organization, enabling it to carry out its mandate more efficiently and effectively	94%
Grand Total		97%

DIRECT FINANCIAL CONTRIBUTION (DFC)

Direct Financial Contribution are funds that are disbursed by WHO to line Ministries in government, mostly to the Ministry of Health and Ministry of Community Development Mother and Child Health to cover the cost for implementation of activities in the technical cooperation programme with WHO. During the 2012/13 biennium, the country office disbursed a total of US\$ 2,615,956 under the Direct Financial Cooperation (DFC). In 2013, a total of One million one hundred and sixty seven five hundred and twenty six United States Dollars (US\$ 1,167,526) was disbursed to the government of the Republic of Zambia as DFC.

OFFICE ACCOMMODATION AND TRANSPORT

The WHO Country Office based in Lusaka and is located at the United Nations Annex Building on plot no. 4609 at the corner of Andrew Mwenya and Beit roads in Rhodes Park.

The WHO Country Office embarked on improving its fleet of transport in 2013 due to increased requests for technical support from government and the need to strengthen logistical capacity of the programmes. A total of five vehicles were purchased to replace those that had a high mileage and which were uneconomical to maintain. Efforts have continued to improve the existing fleet and to manage it more effectively and efficiently.

MAJOR COORDINATION MEETINGS

1. MOH/WHO coordination meetings are held every Thursday of each month. The meetings are chaired by the Permanent Secretary, Ministry of Health. The WHO Representative and Disease Prevention

- Control Officer attend the meeting.
2. Staff Meetings of the World Health Organization are held monthly and are chaired by the WHO Representative.
3. The WHO Representative is a member of the board of the Tropical Diseases Research Centre, a research institution based in Ndola, Copperbelt Province.
4. The Heads of UN Agencies in Zambia meet once each month.
5. UN Administrative officers meetings are held monthly.
6. Health Sector Advisory Group (SAG) are held twice a year. The objective of the SAG meetings is to support government ownership and leadership for the NHSP 2011-2015. It also seeks to promote coordinated sector policy dialogue and technical support on strategic issues in health. Members include the UN, bilateral and multilateral partners and the civil society. It is chaired by the Permanent Secretary of the Ministry of Health.

WHO COUNTRY OFFICE RETREATS IN 2013

Retreats for Professional staff

The WHO Country Office organized retreats for professional staff every quarter in 2013 to review the status of implementation of activities and to allow programme officers to present highlights of progress, challenges and proposed solutions for improvement in their areas of work. The retreats were held in February, September, October and November. These meetings contributed to effective delivery of WHO's support to government because they provided a forum for regular monitoring of implementation rates for programmes, capacity building activities such as training in GSM and the use of software packages to improve report writing and management of information. In November, the retreat was focused on the review of the bi-ennial plan 2012-2013 in relation to achievements, challenges and recommendations for the 2014-2015 biennium. The meeting also addressed the biennium closure in relation to DFCs, Travel, Procurement and leave in line with WHO/AFRO deadlines and the compilation of the annual report for 2013.

Staff Association Retreat

The WHO Country office also organized a retreat for all staff in August through the initiative of the Staff Association and support of the WHO Representative. The retreat was intended to renew and refresh the WHO Country Office spirit in its desire to accomplish its mission in Zambia and to discuss strategies for improving the WCO team performance. The retreat has been instrumental in improving staff morale and motivation and promoting team work. The Staff Association also facilitated discussions on issues of staff empowerment and fostered relations with banks to provide competitive loans to staff. The staff retreat also served as a forum for election of new office bearers and discussion of the constitution of the association.



FAMILIARIZATION VISITS TO PROVINCES BY THE WHO REPRESENTATIVE

Table 8: Familiarization visits to provinces by the WHO Representative

Date	Mission	Objectives/Purpose	Comments
February 12th-15th	The WHO Representative, Dr. Olusegun Babaniyi visited the Eastern Province Medical Office (PMO).	The mission was undertaken to gain a better insight of how health development challenges were being addressed in the province and to identify areas for further collaboration and support through the Technical Cooperation Programme with Government.	Dr. Babaniyi had a meeting with the Provincial Minister, Hon. Malozo Sichone (MP), The Permanent Secretary, Mr. Bert Mushala and the Provincial Medical Officer, Dr. Kennedy Malama. Dr. Babaniyi was taken on a conducted tour of Chipata General Hospital, and School of Nursing. Dr. Babaniyi donated a Desktop computer to support Integrated Disease Surveillance and a Blue Trunk Library containing a collection of books on several health topics for reference by health professionals.
June, 20th	The WHO Representative Dr. Olusegun Babaniyi visited Solwezi, the Provincial HQ for North Western Province.	The mission was undertaken to attend the official launch of the One Stop Centres for Gender-Based Violence in Solwezi by First Lady of the Republic of Zambia, Dr. Christine Kaseba, who is the WHO's Goodwill Ambassador against Gender-Based Violence (GBV) from October 2012 to October 2014.	The One Stop Centres are meant to provide services to victims of GBV in order to mitigate the impact by bringing the services as close to the community as possible. This is in line with the Anti-Gender-Based Violence Act No. 1 of 2011 which provides for the protection and support of survivors of GBV.
July, 16th	The WHO Representative, Dr. Olusegun Babaniyi conducted a familiarisation tour of the Lusaka Apex Medical University (LAMU)	The visit was intended to understand the operations of the university and provide support to facilitate the smooth running of the institution in its quest to attain its objectives of increasing the numbers of health professionals in Zambia.	Dr. Babaniyi had a meeting with the Vice Chancellor Professor Munkonge, the Dean of Students Professor Everiste Njelesani and staff of LAMU. During this visit, a donation was made to the school which included a reconditioned Toyota land cruiser Prado, a desktop computer and a Blue Trunk Library containing reference books on various health topics.
Dec 2nd - 6th	The WHO Representative, Dr. Olusegun Babaniyi visited Muchinga Province Medical Office (PMO). Muchinga is a newly established province in Zambia	The mission was undertaken in order to gain a better insight of the health situation in the province and how health development challenges were being addressed. More specifically, the visit was undertaken to provide support for strengthening Integrated Disease Surveillance in the province.	Dr. Babaniyi had a meeting with the Acting Permanent Secretary, Ms Beatrice Mbewe, the District Commissioner, Ms Evelyn Kangwa, the Provincial Medical Officer, Dr. Charles Chungu and staff at the provincial office. Dr. Babaniyi donated a Toyota Hilux vehicle and a desktop computer to support Integrated Disease Surveillance and a Blue Trunk Library containing a collection of books on several health topics for reference



CHAPTER 4

Major challenges, lessons learnt and recommendations

CHALLENGES

Zambia has made significant progress in terms of political and socio-economic development since its independence in 1964. However, the country has a high burden of communicable diseases and an increasing burden of Non-communicable Diseases. HIV and Aids, TB and malaria are the major drivers of the disease burden. Maternal and Child mortality remain unacceptably high. Malnutrition is also a major threat to child survival.

Apart from a high disease burden, the Zambian health sector is affected by various challenges and constraints which have made it difficult to adequately improve health service delivery to desired levels. The poor social-economic situation and high poverty levels remain a threat to health. The major challenges include: critical shortages of qualified health workers, limited funding to the health sector which is below the 15% recommended by the Abuja declaration, the country's large geographical area and diverse epidemiological disease patterns which present a challenge in ensuring provision of universal access to cost effective, quality assured health services to the communities, weak systems and capacities for timely gathering and analysis of information including scaling up of the Integrated Disease Surveillance and Response and erratic supply of essential drugs and medical supplies.

The country also has challenges related to the poor state of health infrastructure, equipment and transport system, inequities in distribution of resources between urban and rural areas, limited resources for sustaining mechanisms for community participation and weak mechanisms and policies for addressing Social Determinants of Health.

Human Resource for Health (HRH)

Shortages of human resources for health remain a critical challenge to Zambia's quest to provide equitable cost effective health services at all levels of health service delivery. The available human resources in Zambia stands at 58% of the total establishment (MOH, 2012). In 2012,

out of the total establishment for doctors, only 39% was filled; for nurses 54% was filled and 45% for midwives. The shortage of human resources for health is due to a number of reasons which include: the slow rate of recruitment of health workers due to fiscal limitations, low outputs of different categories of health workers from training institutions compared to actual needs, mainly attributable to the fact that most of the training institutions do not have sufficient infrastructure and facilities to enrol adequate numbers of trainees. Brain drain, increasing needs for motivation and retention of health workers continue to affect the health sector. The shortage of healthcare workers is compounded by uneven workforce distribution, with rural areas having lower staffing levels compared to urban areas.

The critical shortage of human resources for health negatively impacts the delivery of health services and health indicators. The shortage constrains both the pace and scope of implementation of health programmes including scale-up of interventions, particularly for maternal, child health and nutrition. The shortage of midwives has contributed to low levels of skilled birth attendance in Zambia, estimated to be 46.5% (ZDHS, 2007). This contributed to high levels of maternal mortality thereby slowing progress towards attainment of the MDG 5.

Health care financing

Allocation of the GRZ budget to the health sector for 2013 increased to 11.3% compared to 9.3% in 2012. However, this is still below the Abuja target of 15%. The delayed establishment of the social health insurance remains a constraint in mobilising more resources as well as sustaining results based financing scheme in Zambia.

Geographical challenges

Zambia's large geographical area and diverse epidemiological disease patterns present a challenge in terms of the country's desire to provide universal access

to cost effective, quality assured health services to the communities particularly those in hard-to reach areas. Many communities are not able to access health services as close to where they live as possible. The difficult terrain and scattered populations present challenges in transportation and provision of referral services to health facilities.

National health information and surveillance systems

Integrated Disease Surveillance and Response (IDSR) is the cornerstone of disease prevention and control. It provides information which forms a basis for rational decision-making and implementation of evidence based public health interventions for addressing and responding to priority communicable diseases. Currently, IDRS has not been scaled-up nationwide and there are weak systems or capacities for timely gathering and analysis of information. Inadequate resources constrain effective specimen transportation from the field to the laboratory at the University Teaching Hospital and transportation of positive specimens to WHO Reference Laboratories located outside the country for confirmation or differentiation.

Supply chain management of essential drugs

The new National Supply Chain Management Strategy is not yet fully functional to give the full benefit of improved availability of medicines in the country partly due to limited resources.

Social Determinants of Health

In 2012, the World Health Assembly passed resolution 68.5 which endorsed the Rio Political Declaration on Social Determinants of Health. Policies and mechanisms for ensuring a multi-sectoral approach to addressing Social Determinants of Health are not well defined and developed. Existing efforts for collaboration with different sectors such as education, housing, agriculture, industry, and environment are needed. This inter-sectoral collaboration on health should be reinforced by the implementation of the concept of *health-in-all policies*.

Community participation

Community participation is critical in ensuring high coverage of Primary Health Care (PHC) activities which include promotive, preventive, curative and rehabilitative activities. The major challenge has been the realisation and sustainability of community participation which is dependent on availability of resources for sustained engagement, empowerment and motivation of communities. Many programmes such as IMCI,

immunisation, HIV and AIDS, TB and malaria continue to face this challenge, particularly the retention of community volunteers.

LESSONS LEARNT

WHO's leadership in health

The role of WHO in providing leadership in health matters in line with its mandate remains cardinal. The participation of different levels of the organisation, particularly the WHO Inter Country Support Teams (IST), WHO/AFRO and WHO/HQ in important health events enhanced the support given to government and the quality of outputs. For example WHO provided the necessary leadership, guidelines and standards for the mid-term review of the National Health Strategic Plan, National Malaria Strategic Plan, the National TB Strategic Plan and the National AIDS Strategic Framework (NASF) 2011-2015. These were updated in line with national, regional and global trends, goals and targets. Equally, WHO's timely response in supporting government to conduct a risk assessment following the re-classification of the country as low-risk for yellow fever is another example of its effective leadership in addressing priority health issues. WHO also supported the development and the signing of a new Memorandum of Understanding (MoU) between Cooperating Partners (CPs) and the GRZ in January 2013.

Partnerships

Partnerships in health are important for resource mobilisation and coordinated support to government and help to reduce duplication of efforts. The introduction of four new vaccines in the national immunisation system in 2013 was made possible through strong partnerships. The implementation of the CIDA UN H4+ maternal, newborn and child health (MNCH) initiative is an excellent example of the UN partnership in Zambia within the framework of the United Nations Development Assistance Framework (UNDAF) and the delivering as one UN initiative in Zambia. The CIDA UN H4+ initiative improved resource mobilisation for joint action targeted at accelerating progress towards the attainment of Millennium Development Goals 4 and 5. The Joint Annual Reviews (JAR) continue to present a common platform for assessing health programmes and permits partners to pursue common health development agendas.

Stewardship by the national health authorities

The stewardship role of the GRZ remains critical in coordination of partners. For example, the Sector Advisory Group meetings played a pivotal role in coordination by providing a forum for partner's participation and contribution to the national health development agenda.

RECOMMENDATIONS

Human Resources for Health (HRH)

There is increasing need for coordination of efforts on production of human resources from public and private sectors by MoH and MOE. For example, three additional universities are training medical doctors. The coordination should ensure a systematic approach to ensuring that the institutions are producing the required numbers to meet the needs. On-going efforts for recruitment of staff and implementation of retention schemes should be supported through adequate budgetary allocations.

Health care financing

It is recommended that GRZ comes up with a deliberate policy to increase allocation to the health sector to the 15% Abuja target by the end of the current National Health Strategic Plan. There is need to quickly finalise the health care financing policy as this will guide future resource mobilisation for the health sector in Zambia.

National health information and surveillance systems

Following the restructuring of the Ministry of Health and in particular the Directorate of Public Health and Research to the Directorate of Disease Surveillance and Research, it was found that the directorate had to refocus or streamline its activities in order to become responsive to the new mandate. It is therefore recommended that the Ministry of Health should request for technical support to develop and cost a strategic Plan for disease surveillance and research.

The World Health Organization should continue to work with national authorities to mobilize technical assistance and resources to build capacity for scaling-up IDSR nationwide. In addition, WHO should support national efforts aimed at strengthening the capacity of laboratories to diagnose diseases. GRZ should make adequate

provision for establishing a transport fund for sending specimens from the field to the virology laboratory at University Teaching Hospital (UTH), and for sending positive specimen to WHO Reference Laboratories for confirmation/differentiation.

Supply chain management for essential medicines

It is vital to increase investment into the new Supply Chain Management Strategy, particularly setting up monitoring systems and training managers at all levels in modern techniques for managing an efficient and effective national supply chain.

Social Determinants of Health

Existing efforts for collaboration with different sectors such as education, housing, agriculture, industry, and environment need to be strengthened. The inter-sectoral collaboration on health should be reinforced by the implementation of the concept of *health-in-all policies*.

Community Participation

In order to strengthen PHC activities, the Government of the Republic of Zambia has created the Ministry of Community Development Mother and Child Health to promote community involvement in health. This should be supported by all stakeholders as an opportunity for implementing sustainable interventions.

The role of WHO

WHO will continue to enhance its capacities to deliver on its core functions by strengthening the programme units and the Country Support Unit in order to ensure efficient, accountable and transparent response to the country's health priority needs. The 2014-2015 biennial budget will be aligned with priorities in the NHSP including supporting the on-going agenda of accelerating efforts towards the attainment of the Millennium Development Goals. It is important to mention here that a special focus will be laid on efforts to address the rising burden of NCDs in the 2014-2015 biennium, particularly increasing public awareness and education on risk factors, research, monitoring the trends of NCDs and strengthening systems for care of patients. WHO will also foster and support the development of policies and mechanisms for addressing social determinants of health and implementation of the concept of *health-in-all policies*.

ANNEXES

Annex 1

Selected publications by staff at WCO in 2013

1. **Cannabis use and its socio-demographic correlates among in-school adolescents in Zambia**, Seter Siziya, Adamson S Muula, Chola Besa, **Olusegun Babaniyi**, **Peter Songolo**, Njinga Kankiza, Emmanuel Rudatsikira. Italian Journal of Paediatrics 2013, 39:13
2. **Distribution of cancers in Zambia: Evidence from the Zambia National Cancer Registry (1990–2009)** Cosmas Zyaambo, Selestine H. Nzala, **Olusegun Babaniyi**, **Peter Songolo**, Ellen Funkhouser and Seter Siziya; Journal of Public Health and Epidemiology, February 2013, Vol. 5(2), pp. 95-100.
3. **Alcohol consumption and its correlates in a mining town of Kitwe, Zambia**, Cosmas Zyaambo, Adamson S. Muula, **Olusegun Babaniyi**, **Peter Songolo**, Emmanuel Rudatsikira and Seter Siziya; American Medical Journal 4 (1): 260-265, 2013.
4. **Prevalence and predictors of tobacco use in a mining town in Kitwe, Zambia: A 2011 population-based survey**, Cosmas Zyaambo, **Olusegun Babaniyi**, **Peter Songolo**, Adamson S. Muula, Emmanuel Rudatsikira, Seter Siziya, Health Journal, Vol. 5, No. 6, 1021-1025, (2013)
5. **Challenges in the control of Human African Trypanosomiasis in the Mpika district of Zambia**, Victor Mwanakasale, **Peter Songolo** and Victor Daka; BMC Research Notes, Vol (6):180; 2013
6. **Mapping the geographical distribution of lymphatic filariasis in Zambia**, Enala T. Mwase, Anna-Sofie Stensgaard, Mutale Nsakashalo-Senkwe, Likezo Mubila, James Mwansa, **Peter Songolo**, Sheila T. Shawa, Paul E. Simonsen, PloS NTD, 2013.
7. **District specific correlates for hypertension in Kaoma and Kasama rural districts of Zambia**, D Mulenga, S Siziya, E Rudatsikira, V M Mukonka, **O Babaniyi**, **P Songolo**, A S Muula; Rural and Remote Health 13: 2345; 2013
8. **Prevalence and correlates for smoking among persons aged 25 years or older in two rural districts of Zambia; Olusegun Babaniyi, Peter Songolo**, David Mulenga, Adamson S Muula, **Mazyanga L Mazaba-Liwewe**, Chola Besa, Namaunga Chisompola, Emmanuel Rudatsikira, Seter Siziya; Int J Child Health Hum Dev. 7(2), 2013
9. **Clinical presentation of human African Trypanosomiasis – links with varying virulent strains of human trypanosomes; two case reports**. Victor Mwanakasale, **Peter Songolo**, **Olusegun Babaniyi**, Pere Simarro. Journal of medical Case Reports, 2013
10. **Impaired fasting glucose level and diabetes in Kaoma and Kasama rural districts of Zambia: prevalence and correlates in 2008-2009 population based surveys; Olusegun Babaniyi, Peter Songolo**, Emmanuel Rudatsikira, Adamson S Muula, David Mulenga, **Mazyanga L Mazaba-Liwewe**, **Idah Ndumba**, **Freddie Masaninga**, Seter Siziya; Archives of Medicine, 2013
11. **Cholera epidemiology in Zambia from 2000 to 2010: Implications for improving cholera prevention and control strategies in the country**; O. Olu, O. **Babaniyi**, **P. Songolo**, **B. Matapo**, E. Chizema, M. Kapin'a-Kanyanga, E. Musenga, O. Walker; East African Medical Journal, Vol. 90 No. 10, October 2013.
12. **Sex with stitches: assessing the resumption of sexual activity during the post circumcision wound-healing period**. Paul C. Hewett, Timothy B. Hallett, Barbara S. Mensch, Kumbutso Dzekedzeke, **Susan Zimba-Tembo**, Geoffrey P. Garnett, Petra E. Todd. AIDS.2012; 26: 749-756.

ANNEX 2A

Selected Technical Mission to Zambia, 2013

Date	Mission	Objectives/Purpose	Name(s) of Traveller(s)
April 24-26	Facilitate introduction of the use of WHO tools for Prevention of Childhood Obesity	To build capacity of a national multi-sectoral group on the use of the tool " <i>Prioritizing areas for action in the field of population-based prevention of childhood obesity</i> " and identify priority areas of action; and to use the tool " <i>WHO guide to population based approaches to childhood obesity</i> " to identify activities and projects that can be undertaken to ensure that action is taken in identified priority areas.	Leo Nederveen, WHO/HQ Odete Cossa, WHO/IST/ ESA
May 21 -24	Final stakeholder meeting on feasibility of establishing a sub-regional poison centre	To hold a final consultation on feasibility of establishing a sub-regional poison centre WHO/ HQ)	Dr Joanna Tempowski; Mrs Hawa Senkoro WHO/ IST/ West Africa; Nick Edwards (Consultant)
May 25-31	WHO/MOF Collaboration on Tobacco taxation	To provide technical support to the Ministry of Finance, Zambia, and Zambia Revenue Authority with regards to the training and implementation of the WHO Tax Simulation Model (TaXSiM) for the budget proposal for the fiscal year January December 2014.	Ms Nigar, Nargis WHO HQ/NMH, TFI Mr. Emmanuel Koffi Nti WCO Uganda, TFI
June 3-7	Dual Testing and Elimination of Congenital Syphilis (DTECS)	Provide technical support to MCDMCH for the project funded by Bill and Melinda Gates Foundation whose aim is to strengthen the evidence base for Dual Testing and Elimination of Congenital Syphilis (DTECS), in particular to estimate the burden of disease, analyze the previous attempts to eliminate congenital syphilis, analyze country level readiness, develop scenario-specific costing models and explore the potential of advanced diagnostic technologies in strengthening dual elimination of syphilis and HIV.	Dr CHEN, Xiang-Sheng - Consultant WHO Dr Nicole Salisbury - PATH Ichikawa, Yuki - Path Intern
June 10-14	Child Survival Case Study workshop	To support the completion of proposal and plan for implementation of the Child Survival Case study	Dr. Kasonde Mwinga AFRO Dr. Teshome Desta IST/ ESA
August 10-16	Mid-Term Review of the National Health Strategic Plan 2012	To support the Mid-Term Review of the National Health Strategic Plan 2012	Schmets, Gerald, P. G. M., Francisca Meier, Frank Terwindt (WHO/HQ)

Date	Mission	Objectives/Purpose	Name(s) of Traveller(s)
August 26-27	Mission by the Office of the US Global AIDS Coordinator (OGAC), USAID GHO, KNCV, FHI360 & CDC Atlanta.	To finalize the M& E tools for the 3Is project in Zambia.	Representatives from the Office of the US Global AIDS Coordinator (OGAC), USAID Global Health Office, KNCV, FHI360 and CDC Atlanta.
August 27 -30	Support development of an implementation plan in a district.	To support the MCDMCH to develop an implementation plan for integrated Global Action Plan for the prevention and control of pneumonia and diarrhoea in Mazabuka district.	Dr. Samira Aboubaker HQ Dr Jose Amador consultant HQ
Sept 16 -20	Monitoring and evaluation mission on the programmatic management of drug resistant TB.	To support the monitoring and evaluation of the programmatic management of drug resistant TB (PMDT) implementation in Zambia.	Mission by Green Light Committee (GLC) Consultants.
Sept 9-13	Mid-Term Review of the National Malaria Control Program Strategic Plan 2011-15	To support the Mid-Term Review of the National Malaria Control Program Strategic Plan 2011-2015 and the updating of the strategic plan to 2016	Dr. Josephine Namboze Dr. Odette Corssa Ms Cloe Massetti (WHO IST ESA)
Sept 9- 13	Implementation of the ANI project.	To review progress made on implementation of the ANI project. The mission reviewed progress achieved in implementing the ANI project. Special emphasis was placed on the Detailed Implementation Plan (DIP), the sentinel site surveillance concept and Indicator framework.	Dr. Mercedes De Onis WHO/HQ Dr. Hana Bekele IST ESA
October 9 -16	Conduct MTR in the five districts supported by CIDA H4+	Conduct external mid-term review (MTR) for the five CIDA H4+ supported districts conducted by the Ipact consortium selected as the independent evaluation team (IET) to carry out MTR & final evaluation of the implementation of the H4+ CIDA supported activities	Lovney Kangur, Ipact Etheline Enoch, Ipact
October 14 – 18	Documenting best practices in family planning as part of the Implementing Best Practices (IBP) initiative	To provide technical support and guidance to the process of documenting best practices in family planning as part of the Implementing Best Practices (IBP) initiative, as Zambia was proposed as an IBP focus country in 2011 in line with the IBP strategic plan of 2012-2016.	Ados May - IBP secretariat, Washington, DC Dr. Odongo Odiyo, East, Central and Southern Africa Health Community.

ANNEX 2B. Selected Technical Missions by WCO to other countries, 2013

Date	Country visited	Objectives/Purpose	Name(s) of Traveller(s)
28 Jan 1 Feb 2013	Dar-es-Salam, Tanzania,	The Global Drug Facility (GDF) mission was undertaken with the following aims: Determine the drug needs of the country and prepare the drug request for the coming year as well as address issues raised by GDF Technical Review Committee (TRC) and/or during previous missions. To provide technical support for the programme management, case management, and drug management.	Dr. Mwendaweli Maboshe Consultant, Drug management (Egypt)
23 Feb to 8 Mar 2013	Windhoek, Namibia.	To support the Mid-Term Review of the National TB Programme.	Dr. Mwendaweli Maboshe
Apr 7-22	Windhoek, Namibia	To assess the organization and the implementation of vaccine preventable diseases (VPD) surveillance at all levels (including sentinel surveillance sites for PBM and Rotavirus.	Mrs Rufaro Chirambo
Jun 10-14	Geneva, Switzerland.	To participate in the Strategic and Technical Advisory Group (STAG), TB TEAM and Global Fund meeting.	Dr. Mwendaweli Maboshe
Jul 7 -12 th	Planning and consultative, Johannesburg, South Africa	To facilitate at the SARN-RBM Annual Constituencies planning and consultative meeting in Johannesburg, South Africa.	Dr. Freddie Masaninga
27 Jul to 11 Aug	ICATT training workshop in Nakuru, Kenya	To facilitate training of Kenyan participants in the use of IMCI Computerized Adaptation and Training Tool (ICATT) and to complete adaptation of the Zambian ICATT	Dr. Mary Katepa-Bwalya
Aug 27 to 6 Sept	Mission on review/revision of malaria strategic plans for Ghana	Mission on to provide technical assistance during the Mid-Term Review of Ghana's National Malaria Strategic Plan	Dr. Freddie Masaninga
Sept 14-21	Training workshop on programme management for child health programmes, Mutare, Zimbabwe	Supported the government of Zimbabwe in training trainers on managing programmes to improve child health using the WHO developed guidelines and training materials	Dr. Mary Katepa-Bwalya

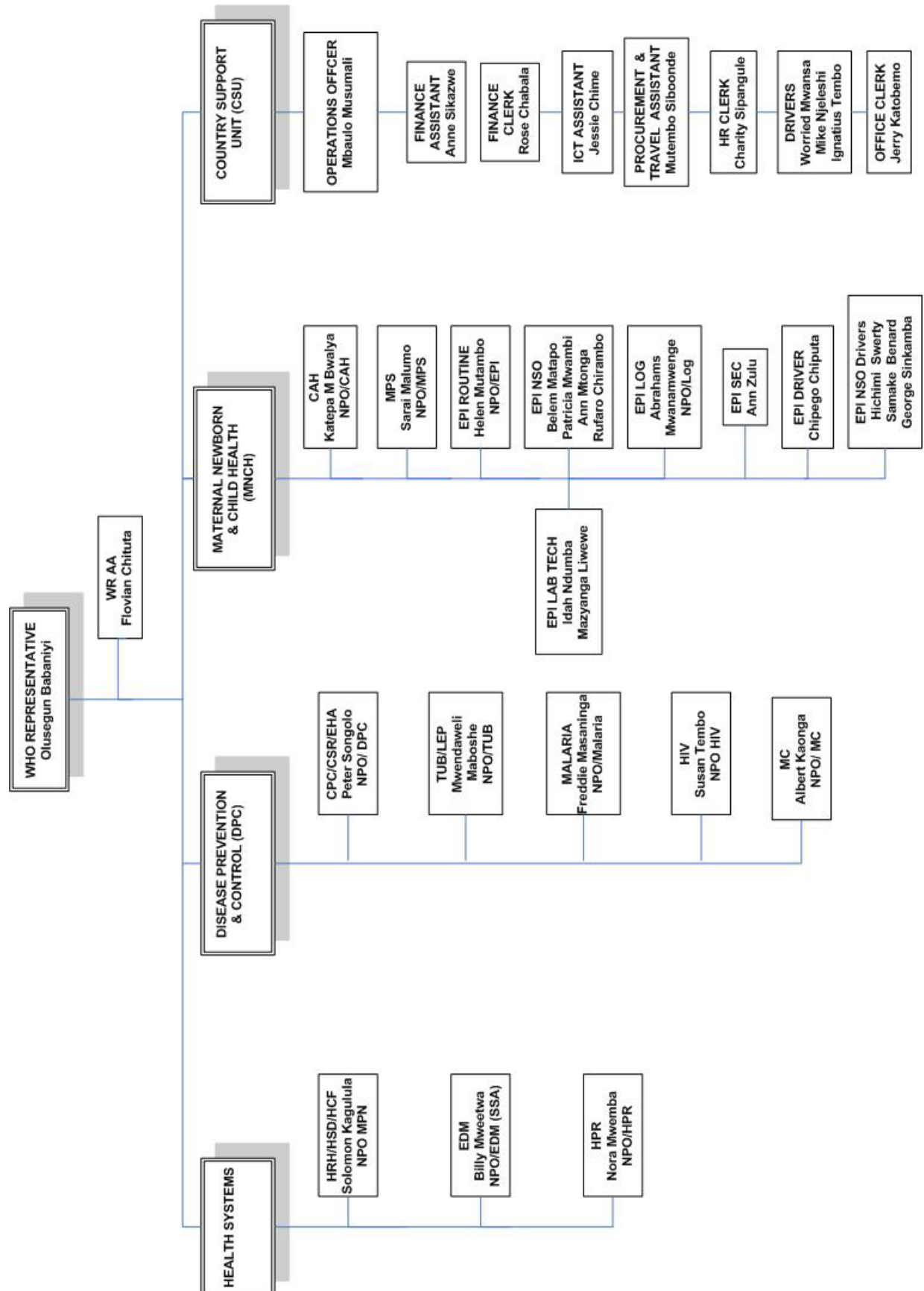
Date	Country visited	Objectives/Purpose	Name(s) of Traveller(s)
Sept 23-27	Geneva, Switzerland	To attend the Global Meeting for WHO Regional and Country Essential Medicines and Health Technology Advisers.	Mr. Billy Mweetwa
Oct 14-16	Nairobi, Kenya,	WHO was part of the Zambian team at the African TB programme managers' meeting on Global Fund new funding model Orientation.	Dr. Mwendaweli Maboshe
14 Nov to 1 Dec	Training workshop on ICATT, Durban, South Africa	Facilitated and supported the South African National Department of Health in orienting and training 110 health workers from provinces, districts, regional training centres and academia in ICATT.	Dr. Mary Katepa-Bwalya
Dec 4-7	Lusaka	Review National Malaria Strategic Plan 2011-2015, Chaminuka Zambia. To facilitate costing of the National Malaria Strategic Plan 2011-2015, Chaminuka Zambia.	Dr. Freddie Masaninga

ANNEX 3

World Health Days & health campaigns supported in 2013

Dates	Health Day/Campaign	Theme
27th March	World TB day	"Stop TB in my lifetime"
17th April	World Health Day	"High Blood Pressure"
23rd - 25th May	Safe Motherhood Week	'Preventing Obstetric Fistula through Family Planning'
31st May	World No Tobacco Day	"Ban tobacco advertising, promotion and sponsorship".
13th-14th June	Pharmacy Awareness Week	Pharmacy health promotion week
9th July	National Voluntary Counselling Test Day	"Reaching Everyone, Everywhere with Annual HIV Counselling Services".
18th July	Nelson Mandela International Day	The day remembers Mandela's achievements in working towards conflict resolution, democracy, human rights, peace, and reconciliation. The day is also a global call to action for people to recognize their ability to have a positive effect on others around them.
25th April	World Malaria Day	"Invest in the future: Defeat Malaria".
1st-31st August	Male circumcision campaign	Male circumcision
31st August	Africa Traditional Medicines Day	"Achieving universal quality health care coverage through increased investments in research and development"
23rd Sept	World Heart Day	"Adopting a life-course approach to the prevention of CVD.
1st December	World AIDS Day	'Getting to zero new infections, AIDS deaths, discrimination'.

Annex 4. Organizational structure - WHO Country Office Zambia 2013









**World Health
Organization**

World Health Organisation, UN Annex Building Plot 4609,
Corner of Beit/Andrew Mwenya Roads, Rhodes Park.
P.O. Box 32346, Lusaka, Zambia.
Tel (+260-211) 255322/255336, 255398, Fax 252863
Email: afwcozmregistry@who.int