

WORLD HEALTH ORGANIZATION (WHO) COUNTRY OFFICE FOR GHANA



ANNUAL REPORT 2015

May 2016

Table of Content

Preface	5
Chapter 1: GENERAL INFORMATION	6
1.1 GENERAL PROFILE AND DEMOGRAPHY	6
1.2 SOCIO-ECONOMIC ENVIRONMENT	6
1.3 HEALTH SYSTEM IN GHANA	7
Chapter 2: HEALTH SERVICES ADMINISTRATION	8
2.1 INTRODUCTION AND OVERVIEW OF HEALTH POLICY	8
2.2 HEALTH CARE FINANCING	9
2.3 INTERNALLY GENERATED FUNDS.....	10
2.4 GOG FINANCING OF HEALTH SECTOR.....	10
2.5 EXTERNAL FINANCE SUPPORT.....	12
2.6 HUMAN RESOURCES FOR HEALTH DEVELOPMENT AND MANAGEMENT.....	12
2.7 HEALTH SECTOR REGULATION.....	14
2.8 DEVELOPMENT PARTNERSHIPS AND HEALTH DEVELOPMENT IN GHANA.....	15
2.9 COOPERATION WITH THE UN SYSTEM IN GHANA.....	15
Chapter 3: COMMUNICABLE DISEASES	17
3.1 HIV-AIDS.....	17
3.2 MALARIA.....	19
3.3 TUBERCULOSIS.....	20
3.4 NEGLECTED TROPICAL DISEASES (NTDs).....	22
3.4.1 BURULI ULCER.....	22
3.4.2 SCHISTOSOMIASIS.....	23
3.4.3 HUMAN TRYPANOSOMIASIS (HAT).....	23
3.4.4 YAWS.....	23
3.4.5 SUPPORT FOR MASS DRUG ADMINISTRATION (MDA).....	24
3.5 EXPANDED PROGRAMME ON IMMUNIZATION (EPI).....	24
3.5.1 ROUTINE EPI/NEW VACCINE INTRODUCTION.....	24

3.5.2	POLIO ERADICATION INITIATIVE.....	25
3.5.3	VACCINE PREVENTABLE DISEASE (VPD) SURVEILLANCE.....	27
Chapter 4:	NON-COMMUNICABLE DISEASES.....	29
4.1	MENTAL HEALTH.....	29
4.2	FIGHT AGAINST EPILEPSY INITIATIVE.....	30
4.3	DISABILITIES AND REHABILITATION.....	30
4.4	NUTRITION.....	31
Chapter 5:	PROMOTING HEALTH THROUGH THE LIFE COURSE.....	34
5.1	REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH.....	34
5.1.1	REPRODUCTIVE HEALTH.....	34
5.1.2	MATERNAL, NEWBORN AND CHILD HEALTH.....	35
5.1.3	ADLOESCENT HEALTH.....	37
5.1.4	HEALTHY AGEING.....	38
5.1.5	GENDER, EQUITY AND HUMAN RIGHTS MAINSTREAMING.....	39
5.2	HEALTH AND ENVIRONMENT.....	41
5.3	SOCIAL SETERMINANTS OF HEALTH.....	44
Chapter 6:	HEALTH SYSTEM.....	46
6.1	NATIONAL HEALTH POLICIES, STRATEGIES, AND PLANS	46
6.2	INTEGRATED PEOPLE-CENTRED HEALTH SERVICES	47
6.3	PATIENT SAFETY.....	47
6.4	ACCESS TO MEDICAL PRODUCTS AND STRENGTHENING REGULATORY CAPCITY ..	48
6.4.1	DEVELOPMENT/REVIEW OF POLICIES AND GUIDELINES.....	48
6.4.2	SUPPORT FOR THE REVIEW OF A LIST OF MEDICINES FOR VAT EXEMPTIONS.....	49
6.4.3	STRENGHTENING OF MEDICINES REGULATORY SYSTEM.....	49
6.4.4	SUPPORT TO THE NATIONAL BLOOD SERVICE.....	49
6.4.5	SUPPORT TO THE MINSTRY OF HEALTH AFTER CMS FIRE.....	50
Chapter 7:	PREPAREDNESS, SURVEILLANCE AND RESPONSE.....	51
7.1	ALERT AND RESPONSE CAPACITIES, IHR, IDSR.....	51

7.2	EBOLA.....	52
7.3	CHOLERA.....	54
7.4	MENINGITIS.....	56
7.5	YELLOW FEVER.....	56
7.6	INFLUENZA.....	57
	Chapter 8: TRANSPARENCY, ACCOUNTABILITY AND RISK MANAGEMENT.....	58
8.1	MANAGEMENT AND ADMINISTRATION	58
8.2	IT INFRASTRUCTURE.....	59
8.3	OPERATIONAL AND LOGISTICS SUPPORT.....	60

Preface

The World Health Organization (WHO) is the agency of the United Nations system which has the constitutional mandate by the Member States to direct and coordinate international health work. Its mission is “the attainment by all peoples of the highest possible level of health”

Dr Owen Kaluwa is the WHO Representative (WR) to Ghana. He took over from Dr Magda Robalo who had been reassigned to the Regional Office in August 2015. The Country office has staff strength of 33 comprising of 14 Professional staff (including the WR) and 19 general staff made of administrative staff and drivers etc.

In Ghana, WHO aligned to the WHO Global Programme of Work provides support to the Government and other stakeholders through six programme categories which are:

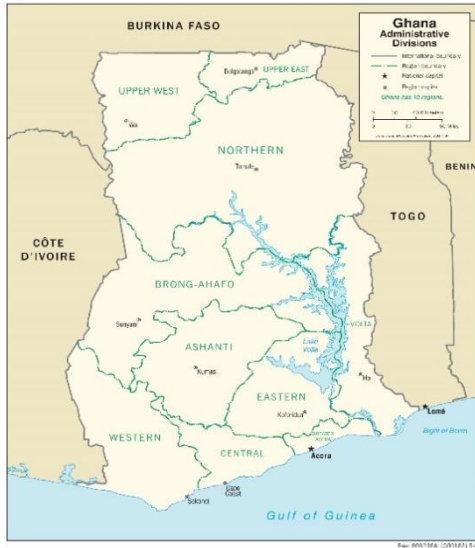
1. **Communicable Diseases Control.** Five programmes come under the disease control. They are HIV/AIDS, Malaria, Tuberculosis Neglected Tropical Diseases (NTDs) and Vaccine-Preventable Diseases (VPDs) including immunization;
2. **Non- Communicable Diseases Control.** The Non-Communicable Diseases (NCD) cover programmes such as Mental Health, Violence and Injuries, Disabilities and Rehabilitation, and Nutrition;
3. **Promoting Health through the Life Course** – The main programmes are Reproductive, maternal, newborn, child and adolescent health (MCH), Healthy ageing, Gender, equity and human rights mainstreaming, Health and the Environment and Social determinants of health ;
4. **Health Systems** - This covers National health policies, strategies, and plans; Integrated people-centred health services; Access to medical products and strengthening regulatory capacity and Health system information and evidence;
5. **Preparedness, Surveillance and Response.** These are alert and response capacities, Epidemic- and pandemic-prone diseases, Emergency risk and crisis management; Food Safety and Outbreak and crisis response; and
6. **Corporate Services and Enabling Functions.** They cover leadership and governance, strategic planning, resource coordination and reporting; strategic communications; transparency, accountability and risk management; and management and administration.

Chapter 1: GENERAL INFORMATION

1.1 GENERAL PROFILE AND DEMOGRAPHY

Ghana is located on the west coast of Africa, sharing borders with three French-speaking countries: Burkina Faso to the north, Cote d'Ivoire to the west and Togo to the east. On the south are the Gulf of Guinea and the Atlantic Ocean, which form the coastline of Ghana (Figure

Figure 1: Map of Ghana



1- map of Ghana). The country is stratified into 3 vegetative zones. These are (i) coastal lands (ii) deciduous forest from the south towards the middle belt and (iii) savannah regions in the north towards Burkina Faso. Ghana has a tropical climate throughout the year with two major seasons – a dry (Harmattan) season and a wet (rainy) season.

Administratively, the country is divided into 10 regions and 216 decentralized districts, covering an estimated population of 27,758,108 with varied population density among the regions. The National population density is estimated to have increased from 79 per square kilometer (km²) in 2000 to 102 in 2010 and 116 in 2015.

Each of the 216 Metropolitan, Municipal and District Assemblies (MMDAs) is headed by a politically appointed District Chief Executive (DCE), who is also the head of the District Assembly, the highest political and

administrative authority in the district.

1.2 SOCIO-ECONOMIC ENVIRONMENT

Ghana's economic status changed from developing country to lower middle-income country on 1st July 2011 after the rebasing of its national income in 2010. Ghana's Gross Domestic Product (GDP) was pushed from 25,602.5 million cedi (US\$ 18,029.90 million) to 44,799 million cedi (US\$ 31,548.40 million) and consequently its per capita income from 1,069.89 cedi (\$753) to 1,872.07 cedi (\$1,318.36) after the rebasing. This was done to reflect the additional income from oil exploration, forestation and telecommunication advancements.

The economy of Ghana expanded sluggishly during 2015 with real GDP estimated to expand from 31.2 billion cedis in 2014 to 32.5 billion cedis in 2015 recording a growth rate of 4.1% in 2015 as compared to 4.0% in 2014

The declining economic performance in 2015 is also depicted in the general increasing price levels as shown by the increasing inflationary rates. The annual inflation rate rose from 17% in 2014 to 17.7% in 2015. The poor economic performance had ripple effects on most segments of the national economy such that some sectors had budget allocations far below what they used to receive. The stagnation in economic growth continued fiscal challenges and the sharp

depreciation of the local currency had implications on the implementation of programmes and projects towards the attainment of desirables under post Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). In order to ameliorate the economic downturn, the Government signed a three-year aid deal with the International Monetary Fund(IMF) in April this year 2016, to help fix economic problems and also increase credibility among investors.

Table 1: Basic Economic Performance Indicators for Ghana 2010-2015

		2010	2011	2012	2013	2014*	2015**	Average Growth 2010-2015)
Real Growth Rates	GDP at basic prices (%)	7.9	14	9.3	7.3	4	4.1	7.8
	Non-oil GDP (%)	7.6	8.6	8.6	6.7	4	4.2	6.6
	Health and Social Work (%)	11.2	5	10.9	7.8	-1.7	10.9	7.4
	Yearly to Year Inflation (%)	10.8	8.7	11.2	13.5	17	17.7	13.2
	Public Debt GDP Ratio (%)	45.7	43.4	49.8	55.6	70.2	69.2	55.6
Real (2006 Constant Prices)	GDP at basic prices (GH¢ million)	22,423.6	25,573.4	27,949.9	29,993.8	31,188.4	32,458.8	28,264.7
	Non-oil GDP (GH¢ million)	24,036.0	26,113.9	28,371.7	30,268.0	31,464.8	32,789.0	28,840.6
Nominal at basic prices	Nominal GDP (Non-oil) (GH¢ million)	46,042.1	56,070.1	69,666.5	85,974.5	105,550.4	125,206.3	81,418.3
	GDP at basic prices (GH¢ million)	41,876.1	54,394.2	70,626.7	87,389.7	103,939.4	120,372.2	79,766.4

1.3 HEALTH SYSTEM IN GHANA

Ghana has a well-developed health system with twenty three agencies under the Ministry of Health (MoH). The National Health Policy (NHP) developed in 2007 in line with the Primary Health Care Approach and Regional strategies to provide direction towards the attainment of Universal Health Coverage. is yet to be revised or updated.

Ghana recognizes community-based health planning and services (CHPS) approach as the national strategy for addressing gaps in access to quality health services at the community level. The CHPS policy was revised together with the development of implementation guideline and roadmap.in 2015.

Health service in Ghana is delivered following a three-tier arrangement levels which are primary, secondary and tertiary levels. There are also three levels of management in the Ghanaian health sector. These are central or national headquarters, regional and district.

Chapter 2

HEALTH SERVICES ADMINISTRATION

2.1 INTRODUCTION AND OVERVIEW OF HEALTH POLICY

The health sector of Ghana is driven by the National Health Policy (2007) and the Health Sector Medium Term Development Plan (HSMTDP) 2014-2017 which are annualised into Programme of Work (POW). The HSMTDP and the POW have been developed as the health sector's response to Government's medium term development policy framework - Ghana Shared Growth and Development Agenda (GSGDA). The GSGDA recognised the health sector as a key contributor to ensuring that Ghana has a healthy human capital to support national development. The Ministry of Health delivers its mandate of making quality health care accessible to all people living in Ghana through its twenty three agencies which fall within three broad categories of service providers, regulators and colleges. The implementation of the POW and other partnership arrangements are guided by the Common Management Arrangement which is jointly developed by the Ministry and its agencies in collaboration with development partners including bilateral, multilaterals and civil societies. The health sector identifies dialogues to be very critical for smooth implementation of programmes and projects hence the provision of a framework for dialogue for sector stakeholders. Prominent among the dialogue structures include:

- i. The Inter-Agency Leadership Committee (IALC) which brings together the heads of the MOH and its agencies to improve communication and coordination within the framework of performance improvements, adherence to policies and accountability for better and more effective implementation of health sector activities. The IALC works as health leaders in the Ministry of health who develop a shared and common agenda with periodic evaluation in the spirit of their mandate to ensure that their agencies contribute to the meeting of health sector goals and outcomes as stipulated in the various HSMTDP and POW.
- ii. The Health Sector Working Group (HSWG) was instituted as a coordination mechanism that provides opportunity for all key stakeholders at managerial and senior levels in the sector including agencies, DPs and Civil societies to be engaged for effective engagement and information sharing. The HSWG meets monthly and the outputs which are fed into other sectoral coordination groups like IALC and vice versa.
- iii. Inter-Agency Coordinating Committees (ICCs) is one of the decentralised sectoral dialogue platform that provides the forum to discuss technical issues on specific diseases/themes.
- iv. The sector holds one annual summit during March-April of each year where sector performance for the previous year is reviewed and discussed using holistic assessment tool which is a sector performance appraisal framework agreed among the Ministry, its agencies, other government Ministries, Department and Agencies like Ministry of Local Government and Rural Development, Ministry of Finance, NDPC and key stakeholders especially development partners.

- v. Three Business Meetings are held immediately after the Summit, August and November with the participation of key sector partners at senior management and technical level and Ministry of Finance. The Business Meetings usually discuss stakeholders' (DPs) commitments to implementation of the sector programmes and projects, updates on budgets and disbursement schedules of government and DPs

In the implementation of its programmes and in line with the overall national public sector financial reforms, all closely related programmes and activities are reorganised into budget programmes and sub-programmes. These budget programmes and sub-programmes are then linked to definite and measureable results framework or output. Each agency of the Ministry falls under one of the Budget Programmes and Sub-Programmes, for which the various agencies have their detailed specific plans based on their mandate to achieve the targets set out for each year as stipulated in the HSMTDP.

2.2 HEALTH CARE FINANCING

Since the inception of the implementation of the Health Sector Medium Term Development Plan in 2010, total budget allocation for the health sector has been growing nominally at 55% per annum till 2015, with the highest per annum growth of 53% achieved in 2013 in comparison to the lowest of 22% and -1% growths noticed in 2014 and 2015 respectively as shown in Table 5. In 2015 Government of Ghana remains the biggest financier of the sector by contributing almost 60% (GoG and National Health Insurance Fund (NHIF)). This is followed Internal Generated Funds (IGF) from households being responsible for 24% and external financing accounting for 17%. This trends predates the introduction of HSMTDP I.

Source of Funds	Table 5: Trends in Budgeted Expenditure for Health Sector by Sources of Funding												Change by Source of 2015 over 2014	
	2010		2011		2012		2013		2014		2015			
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%		
GoG	408.5	28.85	411.6	22.80	513.3	22.44	555.8	15.88	1,208.8	28.24	1,351.68	31.78	12%	
NHIF Statutory Funding	480.9	33.96	477.7	26.46	682.1	29.82	917.9	26.23	926.6	21.65	1185.67	27.87	28%	
IGF	208	14.69	507.5	28.11	468	20.46	1,831.4	52.33	1,363.6	31.86	1,003.78	23.60	-26%	
Devt Partners	318.6	22.50	408.5	22.63	624.1	27.28	194.5	5.56	781.26	18.25	712.78	16.76	-9%	
Total	1,416	100	1,805.3	100	2,287.5	100	3,499.6	100	4,280.26	100	4,253.92	100	0.05	
Year on Year Growth of Available Resources			30%		27%		27%		53%		22%		-1%	

2.3 INTERNALLY GENERATED FUNDS

Internally Generated Fund (IGF) is non-taxable revenue that is generated through the activities of public health facilities like hospitals and health centres as an additional source of funding. The aim of introducing IGF into public hospitals in 1985 is to help alleviate financial difficulties confronting the health sector in delivering quality health care. The generation, management, and utilisation of IGF are anchored in several pieces of legislation notably MDA (Retention) of Funds Acts, Act 753 Of 2007, Fees and Charges (Amendment) Instrument of 2011; LI 1986, Part III of the Financial Administration Act, Act 653 of 2003, Part II of the Financial Administration Regulation L.I. 1802 of 2004, and Non-tax Revenue Act. These legislation instruments mandate public health facilities to collect and retain all IGF for its operations. Since the mid-2000s, IGF has become the major source of finance to public health facilities constituting over 75% of their total receipts.

IGF which is composed largely of payments for service rendered by MOH agencies to their clients is very prominent as a source of financing for the health sector over the years. IGF as a source of funding the health sector has increased nominally from 108.3 million cedi or 9.9 percent in 2009 through 208 million cedi (14.7 percent) in 2010 to a high of 1,831.4 million cedi (52.3 percent) in 2013. Since 2014 IGF has been declining from 1,363.6 million cedi 31.9 percent to 1,003.78 million cedi (23.6 percent). The decline in 2015 was over a quarter of 2014 value.

As depicted in Table 5, IGF is still very dominant despite its proportional fall from 31.9 percent in 2014 to 23.60 percent in 2015. IGF which comprises of household expenditure or out of pocket payment (OOP) from patients and NHIS reimbursement is very important source of funding for health facilities. It is expected that with the introduction of NHIS in 2003, the OOP proportion of IGF should be lesser than the current 40 percent, though NHIS remains the dominant contributor to IGF. There is no clear evidence to explain the fall in IGF and same explanation can be given for why OOP remained at 40 percent despite the implementation of NHIS in Ghana.

2.4 GOG FINANCING OF PUBLIC HEALTH SECTOR

Financing in the health sector is expended in three broad classified areas; Employee Compensation, Goods and Service and Assets. As depicted in Table 6 Employee Compensation which is made up of salaries and salary-related allowances, social security, gratuities and others paid to workers in the health sector has been the cost driver for the expenditure. Budgets for goods and services which is the amount of money that government pays for running its operations and for delivering services to the public is on the decreasing trend. It reached a low of 0.83 percent in 2015 from another low of 1.65 percent in 2014. In immediate earlier years budgets for goods and services were higher than 15 percent. Assets which consume less than 2 percent of all budgets include capital expenditure on major infrastructure projects such as health facilities, offices, health training institutions, transport, water systems, plant and machinery among others.

Table 6: Trends in Budgeted Expenditure for Health Sector by Expenditure Categories (Million Ghana Cedi)

	2014	Percentage of Budget 2014	2015	Percentage of Budget 2015
Wages and Salaries	1,122.79	26.23	1271.84	29.90
Goods and Services	70.59	1.65	35.29	0.83
Capital Expenditure	15.44	0.36	44.55	1.05
Other Government(NHIL)	926.60	21.65	1185.67	27.87
Internally Generated Funds	1,363.60	31.86	1003.78	23.60
Development Partners	781.26	18.25	712.78	16.76
TOTAL (GH¢)	4,280.29	100	4253.92	100

Ghana was a signatory to the Abuja Declaration signed in April 2001 pledging to commit at least 15 percent of its annual budget to improve the health sector. As indicated in Table 7, since 2009 Ghana has not met the Abuja Declaration. The highest level of 13.5% was attained in 2014 with the least of 9.8% in 2009. This calls for a concerted efforts and continuous reminder for government to meet its commitment to the health sector. Related is the health share of domestic resources which is erratic with the highest of 11.1% attained in 2013 as against the lowest of 6.5% in 2012 as indicated in Table 7 and Graph 5

Table 7: Progress towards Abuja Target (2010 – 2015)						
	2010	2011	2012	2013	2014	2015
Abuja Target	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Health Share of Total Government Budget	11.1%	11.6%	10.7%	12.5%	13.5%	14.1%
Health Share of Domestic Resources	7.6%	8.4%	6.5%	11.1%	10.4%	10.8%

Source: Budget Statement Appendix Tables, (2010 – 2015)

2.5 EXTERNAL FINANCE SUPPORT

The health sector of Ghana like other sectors benefits from external financial support, which may come from bilateral donors and multilateral institutions which may be intergovernmental, private, non- governmental and foundations among others. External financial support to the health sector of Ghana is on downward trend for the past decade despite its prominence in early years till late 2000s. As depicted in Table 5, external financial support declined between 2014 and 2015 but with the lowest value of 5.6 percent recorded in 2013. The downward trend of support in its current form from Development Partners is expected to continue into the future with Ghana becoming a lower middle income country in 2011. Development partners support the health sector in recent times comes through four main mechanisms Grants, Earmarked Funding, Sector Budget Support, and Mixed credits. The grant is dominated usually by bilateral like KOICA. Earmarked is used by most DPs including multilaterals like AfDB, GAVI, GFTAM, UNAIDS, UNFPA, UNICEF, WFP, WHO, World Bank though bilateral like the DFID, JICA, RNE, USAID also uses this mechanism. Sector Budget Support is currently used mainly by DANIDA, EU and JICA though others like the DFID and RNE also ever use this funding instrument. Loans/Mixed Funds is provided mainly by commercial and financial institutions to finance capital investments like construction, rehabilitation, expansion and equipping of health facilities

2.6 HUMAN RESOURCES FOR HEALTH DEVELOPMENT AND MANAGEMENT

The number of health workforce in the public sector keeps increasing. The Integrated Personnel and Payroll Database (IPPD of government indicates that the Ministry of Health has a total of 94,696 workers (including Health Trainees) on its payroll as at December 2015. As shown in Table 8 nurses (all types) accounted over 50 percent of total health workforce followed by midwives. Medical Doctors were 3,164 accounting for 3.3 percent of all HW, with pharmacists being 666 or 0.7 percent. The current number of health workforce is 10.2 percent over and above the number registered in December 2014. To rationalise the number of health workers, the Ministry of Health has completed the volume one of sector Staffing Norm based on WHO's Workload Indicator for Staffing Needs (WISN) which covered all categories of health facilities; Teaching Hospitals, Regional Hospitals, Specialised, District Hospital, Polyclinic, Health Centre, and CHPS using GHS and CHAG facilities. Sixty four types of clinical staff were covered as against fifty two non-clinical staff were covered in the analysis for the development of the staffing norms. National disseminations in three cities in the northern, middle and southern belts were conducted to firm up the staffing norm. Also completed was a Human Resource, Recruitment and Distribution plans.

The Ministry had a total of 129 specialists trained and 12,524 health professionals passing out from various health training institutions. These include: 26 fellows (surgeons); 62 physicians and 41 surgeons were trained by the College of Physicians and Surgeons; 3,393 Post Basic Health Professionals and 9,131 Basic Health Professionals. Also one tutor has been sponsored to pursue an MSc course in Orthotics and Prosthetics to strengthen capacity at the Orthotics and Prosthesis School in Nsawam.

In pursuit of government’s plan to upgrade and accredit of health training schools, all diploma awarding schools (Diploma in General Nursing, Midwifery and Community Nursing) under the Ministry have been affiliated to Kwame Nkrumah University of Science and Technology.

Two specialised health schools have been established and operational in 2015. These were Mental Health Nursing School in Yendi with an initial intake of 50 students, and Orthotics and Prosthesis school in Nsawam in collaboration with CHAG.

The Ministry has completed guidelines for postgraduate medical training for the sector. Other guidelines and tools for human resources development completed in 2015 included:

- Curricula for eight (8) courses (Women’s Health, Emergency Nursing, Neuroscience, Pediatric Nursing, Palliative Nursing, Oncology Nursing, Haematology Nursing and Neonatal Nursing). The courses are taught at the College of Nursing and Midwifery
- Tools and guidelines for clinical training in Nursing and Midwifery
- CPD courses in Family Planning and Basic Emergency Obstetric and New Born Care for tutors in Nursing and Midwifery Schools.

The ministry has also started the piloting of E-learning in ten midwifery training schools in 2015, with the plan to scale up to all schools when the pilot is completed.

The lack of health sector conditions and schemes of service has been a bone of contention between the ministry as employer and health workers leading to several work stoppage by members of Ghana Medical Association in public facilities. The conditions and schemes of service have been developed during the year and negotiations for some category of health staff have started.

Table 8: Status of Selected Health Workforce On Government Payroll As At Dec. 2015

Category	Regions										Total	% of Total HWF
	AS	BA	CR	ER	GAR	NR	UE	UW	VOL	WR		
Professional Nurse	3,219	1,228	1,454	1,466	4,279	1,597	1,059	435	1,147	978	16,862	17.8%
Enrolled Nurse	2,981	1,285	1,551	1,114	2,245	2,625	845	896	939	1,782	16,263	17.2%
Community Health Nurse	2,372	1,493	1,565	2,038	2,016	992	1,113	772	1,783	1,670	15,814	16.7%
Midwife	1,281	483	383	600	973	408	311	219	465	459	5,582	5.9%
Medical Doctors	760	166	136	183	1,468	154	46	25	130	96	3164	3.3%
Pharmacist	160	45	34	64	204	45	15	11	41	47	666	0.7%
Total of ALL HEALTH WORKFORCE	17,154	8,347	8,235	9,038	18,950	8,821	5,094	3,593	7,904	7,560	94,696	100%
Regional Proportion of all HWF	18.1%	8.8%	8.7%	9.5%	20.0%	9.3%	5.4%	3.8%	8.3%	8.0%	100.0%	

2.7 HEALTH SECTOR REGULATION

The Ministry of Health has eight regulatory agencies that regulate health professional standards, pharmaceuticals, medical and non-medicinal products, food and establishment and regulation of health facilities, equipment and devices in the country to ensure improved quality of service. These agencies include Medical and Dental Council, Nursing and Midwifery Council, Pharmacy Council, Traditional and Alternate Medicine Council, Allied Health Council, Food and Drugs Authority, Health Facility Regulatory Authority and Psychology Council. They seek to ensure that acceptable standards are maintained in the procurement and use of health commodities and health products as well as health services. They must also ensure that strict compliance of health professionals and health facilities to agreed standards as prescribed and upheld in their code of ethics.

In 2015, about 1,712 applications for pharmacies and Over the Counter Medicines Sellers (OTCMS) were processed. Two hundred and eighty-eight (288) pharmacy and 6,826 OTCMs applications on the other hand could not be processed. Two thousand, six hundred and thirty-eight (2,638) pharmacies & 2,154 OTCMS were inspected. Approval was given to 158 pharmacies and 451 OTCMs to operate whilst licenses for 1,549 pharmacies and 6,826 OTCMS were renewed. A Monitoring and audit of 450 OTCMS facilities was conducted. 380 food processing plants were inspected for good manufacturing practices.

During the year under review the Pharmacy Council registered 206 qualified pharmacists and 201 Pharmacy Technicians. A total of 404 pharmacists were also trained on Reproductive Health Care in Ghana. Out of the planned 10,000, a total of 8,970 (89.7percent) were trained. Over the Counter Medicines Sellers (OTCMS) were also trained nationwide on Malaria Management. 2,137 additional (OTCMS) were trained in Eastern, Northern and Volta Regions on NHIA accreditation. A total of 1666 of all categories of pharmaceutical service providers were trained nationwide on Supply Chain Management and Trends in Malaria Diagnosis and Case Management as part of the Ministry's continuing education programme

The development of a code of practice for the allied health professions was started during 2015.

The foods and drug authority reported that about 70 percent of fake and expired medicinal products identified were safely disposed off during the year and so also were 1,178 unwholesome food products which were safely disposed off.

2.8 DEVELOPMENT PARTNERSHIPS AND HEALTH DEVELOPMENT IN GHANA

The health sector of Ghana benefits extensively from the partnerships and collaborations with other stakeholders who are keen in seeing to attainment of positive health outcomes. The main partnership is with Development Partners who are bilaterals or multilaterals, Global health initiatives, foundations, NGOs and civil societies among several others. The health sector coordinates it Development Partners using mechanisms agreed in Common Management Arrangement with the most used one being the Health Sector Working Group. The bilaterals in 2015 in the health sector of Ghana include Denmark International Development Agency (DANIDA), Department for International Development (DFID) of the United Kingdom, the European Union (EU), Japan International Cooperation Agency (JICA), The Korea International Cooperation Agency (KOICA), the Kingdom of the Netherlands, and United States Government (USG). The multilaterals include African Development Bank (AfDB), International Labour Organisation (ILO), UNAIDS, UNFPA, UNICEF, WFP, WHO, and the World Bank. GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) which is represented by Country Coordination Mechanism (CCM) are some of the funding mechanisms available to Ghana health sector. There are some DPs including the West African Health Organisation (WAHO) who do not have physical presence in the health sector of Ghana but do support at certain times depending upon the circumstances. The DPs supports are mainly in the form of finance which may be budget support (sector and general), project funding, which is directed towards a specific activity or investment, such as specifically for Malaria, Tuberculosis and Health System Strengthening which may or may not pass through government systems. DPs also provide technical assistance, which can include the provision of training, expert consultancy advice, and support for particular activities. This assistance usually aims at system's strengthening. Other key stakeholders in health development in Ghana include the private sector currently dominated by civil societies which are represented by Ghana Coalition of NGOs in Health and the Private Health Sector Alliance of Ghana (PHSAG).

2.9 COOPERATION WITH THE UN SYSTEM IN GHANA

There are twenty six entities operating in Ghana under the United Nations with some of them also serving as regional or sub-regional offices and they are the FAO, IAEA, IFAD, IFC, ILO, IMF, IMO, IOM, UNAIDS, UNDP, UNDSS, UNEP, UNESCO, UNFPA, UN-Habitat, UNHCR, UNIC, UNICEF, UNIDO, UNODC, UNU-INRA, UN Volunteers, UN WOMEN, WFP, WHO and World Bank. The key objective of the United Nations system in Ghana is to support the country towards its vision of advancing equitable economic growth, reducing poverty and achieving human development in consonance with its mission statement which states that *"The United Nations Country Team works coherently and effectively to support Ghana in achieving the Millennium Development Goals, advancing equitable economic growth and reducing poverty, through capacity development, strengthening of accountability systems and the delivery of quality social services, with a focus on the most deprived and vulnerable populations"*. Health development features prominently in the attainment of the country's vision for which the UN system is supporting. In supporting the national development aspirations as captured in the GSGDA in conjunction with international development goals and global orientations, the UN system in Ghana in recent times has been focussing its development assistance on ensuring

equitable economic growth, constructive social protection, equal political and social participation, and multifaceted human development of which health development is key. The UN system in Ghana supports the government through its United Nations Development Assistance Framework (UNDAF) 2012-2016 which has four thematic areas of Food Security and Nutrition; Sustainable Environment, Energy and Human Settlements; Human Development and Productive Capacity for Improved Social Services; and Transparent and Accountable Governance which are further into eleven outcome areas. Two of the outcome areas are directly health and five are health related. The remaining four have some connotation for health development. Five UN entities which are directly involved in the health sector of Ghana are UNAIDS, UNFPA, UNICEF, WFP, WHO, and the World Bank, though others may come in to support at certain times directly or through the UN Resident Coordinators office.

Chapter 3: COMMUNICABLE DISEASES

HIV/AIDS, TUBERCULOSIS AND MALARIA

WHO supported the health sector with the requisite technical assistance to deliver control strategies for TB, HIV and Malaria which fall under the Disease Control Cluster. In line with the Millennium Development Goal 6 (MDGs), the national goals of the control of these diseases are to reduce death and illness due to HIV, TB and Malaria.

3.1 HIV/AIDS

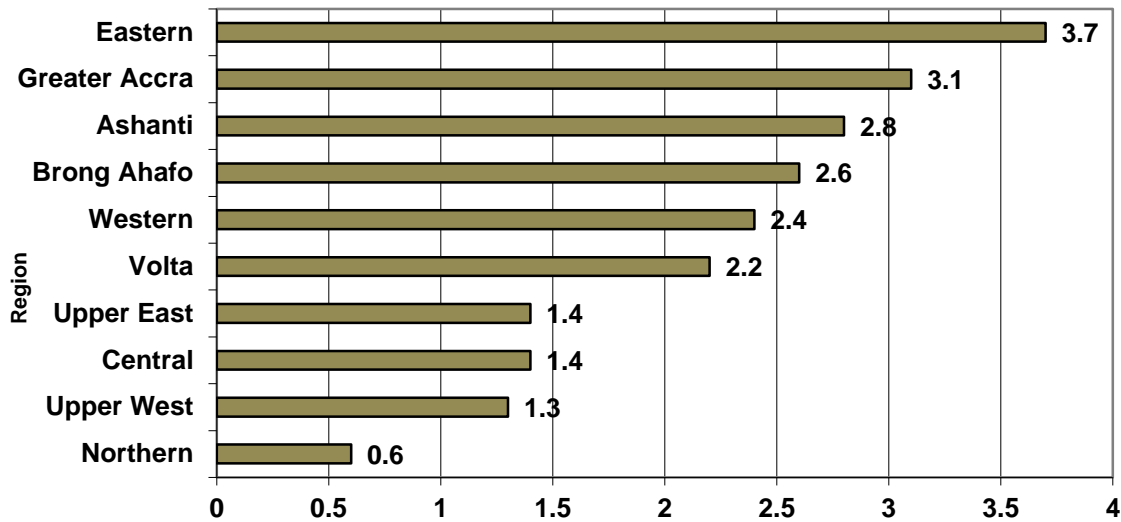
The control of HIV, TB and Malaria has seen significant progress over the past years including last year. Ghana with an estimated population of 27.2 million people (2014) has a current HIV prevalence of 1.47 % in the general population which is a marked reduction from the 3.7% at the initial stages of the pandemic. There are about 250,232 Persons Living with HIV/AIDS (PLHWA). Fifty-nine percent (148, 237) of these are females and 21,223 (8% of the total numbers infected) are children.. Prevalence of HIV among pregnant women is 1.6%.

Despite the high immunization coverage (90%) and high ANC attendance in the country, overall HIV testing provided within ANC settings is less than 80% and the proportion of pregnant women given ARV is less than 70%. As of December 2014, a total of 83, 713 clients out of which 4581 were children were receiving ARVs. Early infant diagnosis (EID) is low at 17% with a low Pediatric ART coverage of 11%. Adherence to ART at 12 months is 72% which is generally low.

Other challenges include the low condoms distribution, access to quality diagnostics services, issues of stigma for TB and HIV patients, inadequate follow up of clients, and quality data for decision making use as well as general funding gaps for universal coverage for HIV/AIDS regarding the new WHO treatment recommendations. Many of these challenges are attributed to inadequate human resource and commodity insecurity.

In view of these challenges, WHO and Partners are assisting the Ministry of Health to develop policies to address the system issues that impact on the delivery of HIV services. These include plans to develop task sharing policies for effective use of human resources. WHO in collaboration with UNICEF again as part of the joint UN effort is assisting with the development of a paediatric acceleration plan to address many of the gaps in paediatric HIV care.

Fig 2.1: HIV PREVALENCE BY REGION – 2014



WHO/JUTA SUPPORT AND ACTIVITIES TO THE HEALTH SECTOR

WHO in collaboration with other JUTA members supported the adaptation and rolling out of the national ART and PMTCT guidelines which have been revised in line with the WHO recommendations. Support was provided the review of the National Strategic Plan for HIV Response (2011-2015) and for the development of the new strategic plan spanning 2016 – 2020 which is on-going.

JUTA supported the Global Fund processes through the Country Coordinating Mechanisms (CCM) activities of grant making negotiations, field missions and oversight for the grant implementations.

WHO supported the response to a fire outbreak at the Central Medical Stores that caused massive damage to HIV, TB and Malaria medications and logistics. The National HIV/AIDS Control Program was supported with 38,500 HIV test kits from the Africa Region Office.

WHO has been a member of the HIV drug resistance working group which developed the National HIV Drug Resistance Management Plan and remains an active member of the HIV Technical Working Group that meets quarterly.

WHO as the convener for the PMTCT and Treatment Cluster facilitated cluster meetings and hosted the second joint JUTA quarterly meeting. WHO attended the annual JUTA retreat with other members to discuss progress in the year and draft a new work plan for 2016. This retreat was held on 22 -24 November at Ada.

CAPACITY BUILDING AND INTERNATIONAL WORKSHOPS - WHO also provided support for national capacity building through workshops and meeting that included the following:

- Workshops on HIV Strategic Information and on Adolescent HIV in Uganda.
- Workshop on subnational HIV estimates organized by the National Estimates Team in collaboration with NUAIDS

- International Conference on HIV/AIDS and STI in Africa (ICASA).

3.2 MALARIA

Malaria is a preventable and treatable disease yet it continues to remain the leading cause of OPD attendance. While the entire Ghanaian population of about 27.2 million is at risk of malaria, children less than five years are most at risk.

There was however substantial progress in malaria control in the year. Parasite prevalence declined further from 27.5% (MICS 2011) to 26.7% in 2014 (GDHS, 2014). Malaria morbidity constituted 30.9% of all outpatients (OPD) attendance decreasing from 10,597,651 cases in 2012 to 8,453,557 cases in 2014.

ITN ownership increased from 32.6% (2008 GDHS) to 68.3% (2014 GDHS) and usage among children under-fives from 28.2% (2008 GDHS) to 58.8% (2014 GDHS).

Proportion of pregnant women who receive at least two doses of Sulphadoxine-Pyrimethamine (SP) for intermittent preventive therapy increased from 43.7% (GDHS 2008) to 67.5% (GDHS 2014). There has been remarkable progress in malaria case management with a 97% reduction in malaria case fatality rate from 14.4% in 2000 to 0.5% in 2014 (NMCP Annual report)

There are still challenges with access to quality services including diagnostics, behavioral change with regards to the low LLINs usage, quality data for decision making and a general funding gap for universal coverage for malaria interventions.

Fig 3.2 Net ownership and Usage

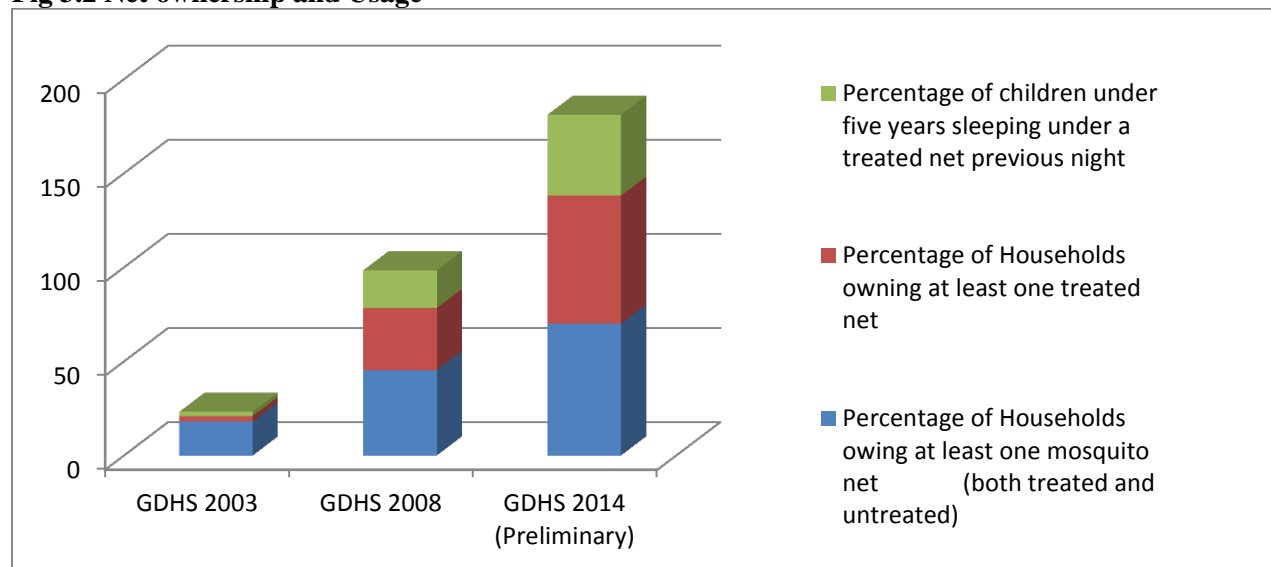
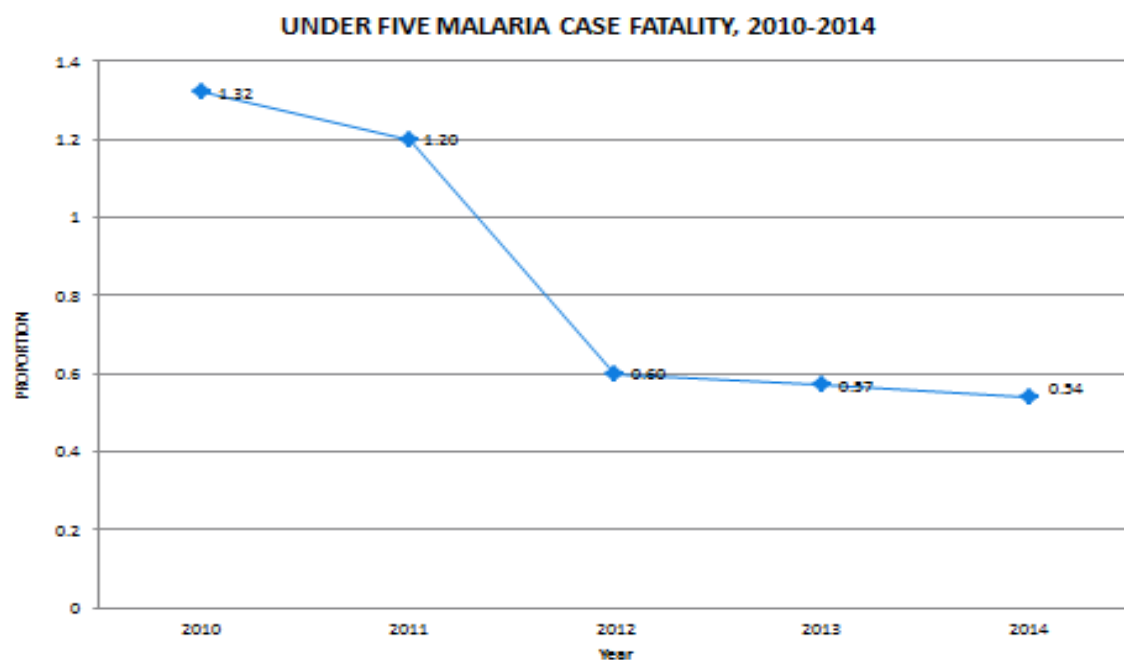


Fig 3.3 Declining Case Fatality Rate of malaria



Source: DHIMS

WHO support - WHO supported the piloting of Seasonal Malaria Chemoprevention in the Upper West Region. As part of the CCM activities, there was an oversight visit to the Anglogold Ashanti Indoor Residual Spraying program in the Upper West Region to get information at first hand on operations and for verification purposes.

Dashboard reviews - WHO as a member of the technical oversight committee has supported the quarterly dashboard reviews which assess the principal recipients of Global Funds with respect to financial, managerial and programmatic performance.

WHO provided support for the following Capacity Building and International Meetings:

- The RBM CARN & WARN Program Managers' Meeting, 04 -09 May, 2015 at Cotonou, Benin attended by Deputy Program Manager and National Professional Officer.
- Six week Training Course Planning and Managing Malaria Control Programs for AFRO Anglophone countries on 01 Sept -10 October, 2015 in Ethiopia.
- The 13 Annual Meeting of the ANVR, 14-16 October, Brazzaville Congo. The Program Area Network (PAN) Meeting for Malaria, 14 -16 December, Montreux, Switzerland.

3.3 TUBERCULOSIS

Tuberculosis control has progressed, with cure rates for new smear positive TB increasing from 22% in 1996 reaching the recommended WHO level of 85% in 2010. Patient defaulter rate decreased from 11% in 2005 to 2.6% in 2010 (WHO target is 5%). Case detection rate has however remained low at 22%

based on new figures from the prevalence survey findings which has also showed a general population prevalence of 264 per 100,000 population almost three times the WHO estimated 92 per 100,000 population based on country data.

WHO in collaboration with Partners supported the National TB Program through the process of grant making to the signing of grant. Major activities supported by WHO included Stakeholders' Meeting on Childhood TB held in Accra in August 2015.

Greenlight Committee Mission (GLC)

WHO facilitated GLC mission in October to assess the programmatic management of MDR TB (PMDT) in Ghana in August by Dr Osman El Tayeb –PMDT Expert and Mrs Ellen Munemo – Laboratory Expert. The management of MDR TB was found to be facing some programmatic challenges. Findings and recommendations have been appropriately shared and a follow up mission has been planned for 2016.

COMMEMORATION OF THE WORLD TUBERCULOSIS DAY 2015

Ghana joined the world to commemorate World TB day on 24th March 2015 at Ministry of Health conference room under the theme “**Reach, Treat, Cure Everyone: The Changing phase of the TB Epidemic in Ghana**”. The event educated the public about the devastating health and economic consequences of TB and advocate for early treatment seeking. It also called for continued investment in TB control with the threat of TB/HIV co-morbidity and MDR TB. Under the theme, the country intends to position itself to reach out to find the missed TB cases using modern diagnostic equipment such as the Digital imaging and Gene Xpert machines .



Dr Magda Robalo, WR and the Director General Dr Ebenezer Appiah-Denkyira

WHO provided support for the following Capacity Building and International Meetings

- Childhood TB Workshop and National TB Managers' Meeting, Johannesburg 20 -24 April, 2016.

- Global Workshop on Implementing the End TB Strategy, Geneva.

Partnerships and Resource Mobilization for HIV, TB and Malaria

WHO together with Partners such as UNICEF, UNAIDS, USAID (PMI) supported the country with resource mobilization and funding for the control of HIV, TB and Malaria. The Global Fund which is a major funder of these diseases approved funding support of about USD 300 million for the control of these diseases. The Executive Director of the Global Fund Mark Dybul was in country during the grant signing event.



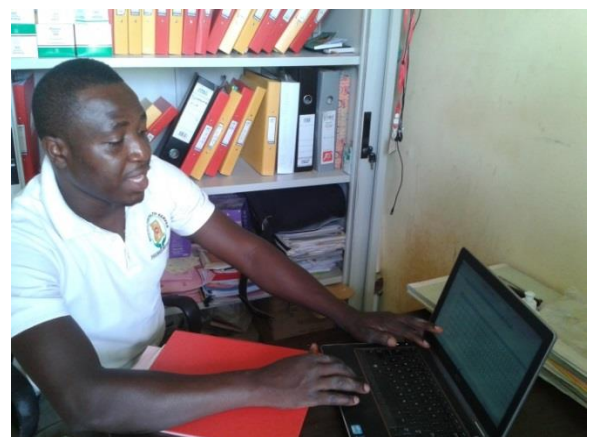
The CCM Chair, the Global Fund Executive Director and the WR, Dr Magda Robalo at the Grant signing discussions

3.4 NEGLECTED TROPICAL DISEASES (NTDs)

WHO provides technical and policy support to the development and implementation of plans and strategies for the control of priority Neglected Tropical Diseases (NTDs). Two categories of NTDs are reported in Ghana. These are (i) the Preventive Chemotherapy (PCT) diseases which include Lymphatic Filariasis, Onchocerciasis, Trachoma, Schistosomiasis and Soil Transmitted Helminthiasis and (ii) the Case Management diseases which consist of Buruli ulcer, Yaws, Leprosy and Human African Trypanosomiasis. WHO support for NTD in Ghana is mainly in the area of research and surveys, surveillance and mapping, delivery of drugs for Mass Drug Administration and planning.

3.4.1 BURULI ULCER (BU)

WHO with funding from American Leprosy Mission supported BU treatment clinical trial in Ghana for the third year running. The study, coordinated by physicians from Komfo Anokye Teaching Hospital, is comparing the use of streptomycin (one of the conventional medicines for BU treatment given by injection) and clarithromycin (which is taken by mouth) for the treatment of BU in 3 sites in Ashanti Region (Agogo, Tepa and Nkawie) and one in Central Region (Upper Denkyira). By the end of 2015, 209 out of expected 332 patients (63%) had been recruited. The results from the study will subsequently inform guidelines for the treatment of BU which mainly affects children from poor rural communities. If Clarithromycin is proven to be as effective as Streptomycin, it will make the



The focal point for the BU trial in Tepa elaborates on the study data entry software

treatment of BU safer and more patient-friendly.

3.4.2 SCHISTOSOMIASIS

Schistosomiasis is prevalent in all districts of the country. Strategies for schistosomiasis control however recommend that highly endemic communities with prevalence levels of over 50% require annual treatments with praziquantel for the school-aged population and whole communities including the high risk adult populations such as fishermen and irrigation farmers. Building up on support in previous years in which similar exercises were conducted in 7 regions, in 2015, WHO supported the NTD program to undertake Schistosomiasis mapping exercise in the remaining 3 regions Greater Accra, Central and Western to select high-risk schistosomiasis endemic communities. A total of 511 communities from the 3 regions were identified to be highly endemic with schistosomiasis. With the completion of the selection of schistosomiasis endemic communities in all 10 regions, about 3398 high-risk communities with a prevalence of 50% or more have been selected from 72 districts. This will facilitate mobilisation of adequate drugs and other resources to ensure that all school-aged children and adults from these high risk communities are treated according to the WHO recommended guidance to achieve sustainable control of schistosomiasis in Ghana.

3.4.3 HUMAN AFRICAN TRYPANOSOMIASIS (HAT)

HAT commonly known as sleeping sickness is mostly transmitted through the bite of an infected tsetse fly. The last time a case was identified in Ghana was 2013. As part of efforts to eliminate the disease, it is important to strengthen surveillance in areas where cases have been reported so that potential cases are picked up. To this end WHO has been supporting HAT sentinel surveillance in 3 health facilities in Takoradi, Western Region and one in Akuse, Eastern Region. In 2015, WHO supported the establishment of two more sentinel sites in Dodowa (Greater Accra) and Atua (Eastern Region). A total of 208 suspected cases were tested from the 6 sentinel sites in the year, none of which came back positive.



HAT Program Officer receiving logistics for sentinel sites

3.4.4 Yaws

Yaws is a chronic bacterial infection affecting the skin. Occuring mainly in poor communities in warm, humid tropical regions, Ghana is one of the endemic countries. Even though the disease is rarely fatal, it can lead to chronic disfigurement and disability. It can be treated by a single oral dose of Azithromycin which holds promise for eradication through mass treatment exercises in affected communities. WHO is currently supporting a trial in Ghana testing the treatment of Yaws with a lower dose of Azithromycin in 4 districts (Ayensuano, Upper West Akyem, West Akyem in Eastern Region and Nkwanta North in Volta Region). By the end of 2015, a total of 395 patients were recruited out of 400 expected (41%). *(Picture –Upper West Akyem District Yaws trial team undertakes case search activities in a primary school)*

3.4.5 SUPPORT FOR MASS DRUG ADMINISTRATION (MDA)

The integrated NTD programme with the support of its partners and stakeholders undertake mass



Upper West Akyem District YAWS trial team undertakes case search activities in a Primary School

drug administration as one of the key strategies for the prevention, control and elimination of PCT NTDS. WHO's logistical support enables the delivery of procured and donated drugs for the MDA exercise. In 2015, this translated into more than \$1.42 million worth of drugs being cleared and delivered. MDA was undertaken for lymphatic filariasis, schistosomiasis, onchocerciasis and soil transmitted helminths with coverage of 80 % of the targeted population in 2015

3.5 EXPANDED PROGRAMME ON IMMUNIZATION (EPI)

INTRODUCTION - The year 2015 was a very challenging one for the Expanded Programme on Immunization (EPI) in Ghana. Factors such as (i) The central medical store fire outbreak in the early part of the year that destroyed large quantities of EPI syringes, needles, child health records and other immunization logistics; (ii) Vaccine shortage due to Government default on the immunization co-financing with the Gavi Alliance for the supply of vaccines; (iii) Limited funding for routine immunization services; etc largely affected Immunization service delivery during the year.

In spite of the challenges faced in recent times, the country has been able to sustain the gains achieved in the past in terms of (i) break in transmission of wild polio virus since November 2008 (ii) no measles death since 2003 and (iii) MNTE validation since 2011.

WHO provided funds totaling USD\$1,307,391 to support EPI activities in the country. Out of this amount, polio eradication activities amounted to US\$1,110,670 (85%) and other EPI activities US\$196,721 (15%). WHO support for EPI has usually been in the areas Routine EPI and New vaccines; (ii) Polio Eradication initiative and (iii) Vaccine preventable disease (VPD) surveillance as briefly discussed below:

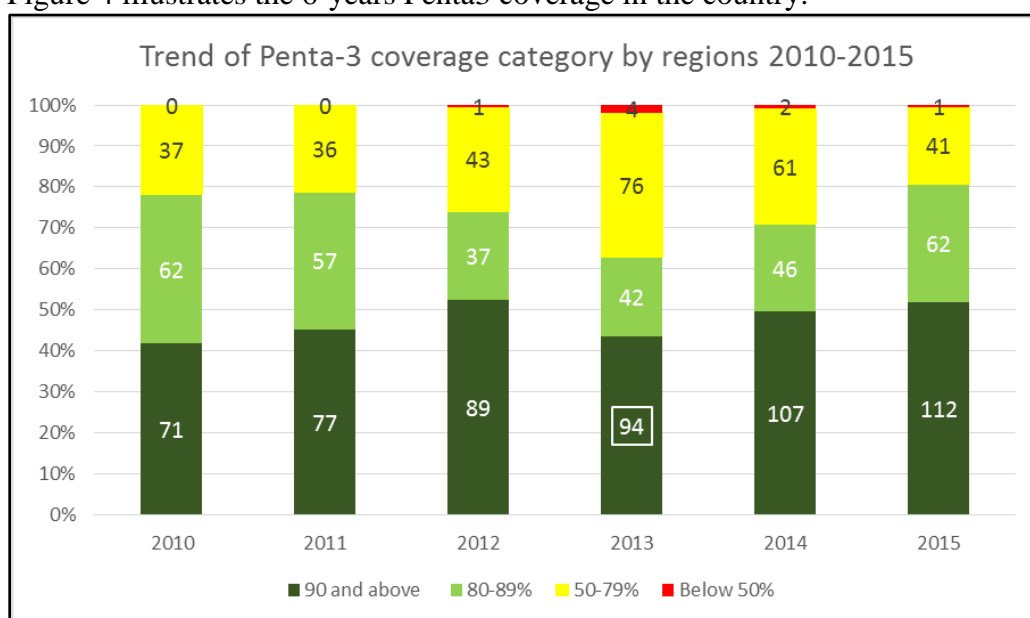
3.5.1 ROUTINE EPI/NEW VACCINES INTRODUCTION – WHO support for

Routine EPI in 2015 covered activities such as:

- Workshop on Gavi Alliance transition Plan and Joint Appraisal Report development
- African Vaccination Week and Integrated Child health promotion activities
- Workshop on DVDMT-DHIMS data harmonization to improve EPI data quality and management.
- Procurement of one new generator set to Adukrom health centre in the Eastern region to provide electricity for service delivery to the community and many others to strengthen the reaching every child approach in all districts.

- Launching of national policy on viral hepatitis control and the commemoration of world hepatitis day in July 2015.

Figure 4 illustrates the 6-years Penta3 coverage in the country.



3.5.2 POLIO ERADICATION INITIATIVE

1. **Synchronized Polio NID** - WHO provided support for one round of synchronized polio sub-NID in October targeting 2,884,996 children (0-59months). It was integrated with Vitamin A supplementation, AFP case search and Guinea worm case search in 108 districts (representing 50% of total districts in the country).

Table 9 below is the summary of the integrated polio sub-NIDs and the vitamin a campaign conducted in 2015. A total of 2,888,841 children (representing 100.1%) were reached with the OPV. The Vitamin A supplementation recorded 95.6% coverage.

Table 9: Summary of Integrated Polio sub-NID In 2015

Polio Eradication Technical committees – Technical Advisory committees such as national

Regions	Campaign districts	Campaign Target		Children Served		Campaign Cov(%)		AFP Cases	Suspected GWorm Cases
		Polio	Vit A	Polio	Vit A	Polio	Vit A		
Ashanti	15	358,691	322,822	363,422	309,659	101.3	95.9	2	0
Brong-Ahafo	5	93,814	84,433	99,645	86,061	106.2	101.9	3	0
Central	9	244,133	219,720	242,253	208,103	99.2	94.7	4	0
Eastern	16	368,782	331,904	370,181	318,668	100.4	96.0	1	0
Greater Accra	9	699,843	629,859	694,612	598,056	99.3	95.0	3	0
Northern	10	279,582	251,624	278,118	241,854	99.5	96.1	2	0
Upper East	8	159,293	143,364	162,977	137,293	102.3	95.8	1	3
Upper West	10	127,618	114,856	119,081	105,964	93.3	92.3	1	0
Volta	21	364,026	327,623	370,508	314,887	101.8	96.1	14	0
Western	5	189,184	170,266	187,684	160,922	99.2	94.5	0	0
National	108	2,884,966	2,596,469	2,888,481	2,481,467	100.1	95.6	31	3

polio expert Committee (NPEC), National Certification Committee (NCC) and Task Force on poliovirus containment (TFC) received WHO support. Key activities by these committees included quarterly meetings for classification of AFP cases and submission of Polio eradication activity reports. Ghana successfully submitted documentation of outbreak investigation documentation to the African Regional Certification Commission (ARCC) in June in Abidjan Cote d'Ivoire, to show the country has regained polio-free status following the 2008 poliovirus outbreak.

Active AFP surveillance – WHO support for AFP surveillance during the year covered activities and services such as: (i) Monthly data validation and reconciliation meeting where Data managers and programme coordinators from the VPD programmes meet to validate their data before submission to stakeholders.(ii) Financial support to selected regions to strengthen active surveillance activities in poor performing districts and (iii) Provision of teaching materials and IEC materials to enhance VPD surveillance activities at all levels. The table 10 below shows the summary of AFP performance indicators for the year 2015. The Non-polio AFP rate was 2.63 with stool adequacy of 75%. The worst performing region for Non-polio AFP rate was Ashanti (1.13) as against the standard requirement of 2 and that of stool adequacy was Brong Ahafo (50%) as against a requirement of 80% and above.

Table 10: AFP performance Indicators for 2015

Region	Population aged <15 yrs	Total 'non-polio' AFP cases reported <15 yrs	Non-polio AFP rate/100,000 pop	Total AFP cases with 2 adequate stool samples	% AFP cases with adequate stool samples
Ashanti	2,293,844	26	1.13	22	79
Brong Ahafo	1,087,487	44	4.00	33	50
Central	1,077,291	37	3.36	34	77
Eastern	1,227,027	18	1.44	18	95
Greater Accra	1,961,972	28	1.44	25	78
Northern	1,201,388	29	2.42	26	79
Upper East	466,562	32	7.11	31	94
Upper West	323,985	10	3.33	10	83
Volta	1,006,575	31	3.10	27	71
Western	1,101,794	54	4.91	52	80
Ghana	11,747,927	309	2.63	278	75

* per 100,000 population aged less than 15 years.

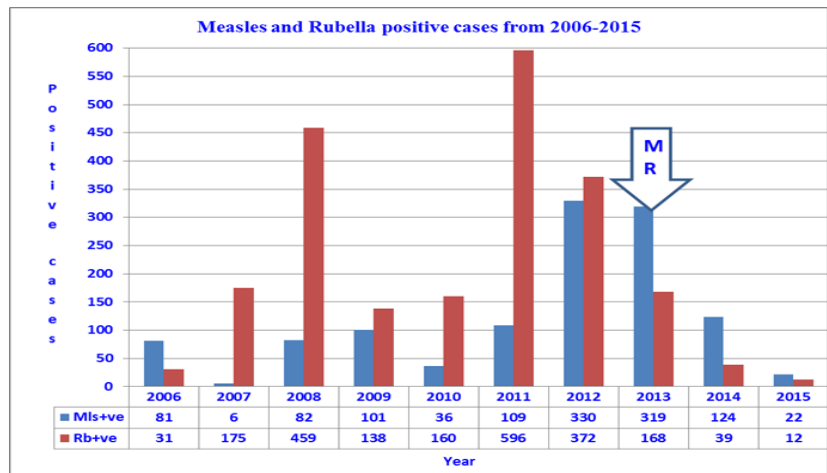
Polio Laboratory Containment Survey and validation - The National Task force on Containment of Wild poliovirus was reconstituted and supported by WHO to conduct national survey of laboratories using the WHO recommended guidelines in the Global Action Plan (GAP) III. The objective was to identify laboratories which are likely to keep infectious materials detrimental to the polio eradication initiative as we approach the polio end game (2018). A total of 758 labs were surveyed throughout the country. The WHO Regional Reference Lab at Noguchi was the only lab found storing potentially infectious materials. Validation of the Laboratory containment of infectious materials was also conducted and report submitted to AFRO.

3.5.3 VACCIINE PREVENTABLE DISEASE (VPD) SURVEILLANCE

WHO also provided support for other VPD surveillance in addition to AFP surveillance which are briefly described below:

1. **Measles-rubella (MR) elimination** – WHO provided support for MR elimination in the form of (i) supply of reagents to the national public health reference laboratory for confirmation of suspected cases. (ii) technical and financial assistance for the development of 5-year measles-rubella elimination strategic plan for Ghana (iii) technical and financial assistance for 3-day workshop to develop roadmap for surveillance of congenital rubella syndrome (CRS)

Experts from IST West and CDC facilitated the 3-day workshop which was attended by Pediatricians, Ophthalmologists, Epidemiologists and other health professions from the public health division and the following 4 teaching hospitals – Accra, Cape Coast, Kumasi, and Tamale. As part of the roadmap, the CRS sentinel surveillance is to be established and implemented at these 4 teaching hospitals to draw lessons for national rollout. The 3-day workshop also provided guidelines for the launching and implementation of the new measles-rubella elimination surveillance mode.



2. **Typhoid fever surveillance pilot project** – WHO HQ successfully conducted a study in Komfo Anokye, Agogo Presbyterian and Korle Bu Hospitals on the feasibility of integrating Typhoid fever surveillance into the existing Invasive Bacterial Disease (IBD) sentinel surveillance in the country. Ghana is among 4 countries (Burkina Faso, India, Bangladesh and Ghana) selected by WHO HQ for the pilot study on possible integrating of Typhoid fever surveillance into the IBD surveillance in preparation for future introduction of Typhoid fever vaccine into the routine immunization programme.
3. **Diseases targeted for new vaccines** – WHO continued to provide support for new vaccine diseases surveillance through (i) support for monthly surveillance activities and laboratory

kits for Rotavirus diseases, Hib and pneumococcus diseases surveillance at sentinel sites in Korle Bu and Komfo Anokye Teaching Hospitals. (ii) Two-day meeting to review Intussusception monitoring at Korle Bu and Komfo Anokye Teaching Hospitals and the Rotavirus vaccine impact and effectiveness study also ongoing in the country.

4. ***MNT Elimination*** - Support was also provided for the development of MNT Elimination Sustainability plan for Ghana to introduce School Td vaccination programme in collaboration with the School Health Education Coordinators of the Ghana Education Service and also introduce the Protection at Birth method of monitoring mothers Td vaccination coverage.

Chapter 4: NON-COMMUNICABLE DISEASES

4 NON-COMMUNICABLE DISEASES

Non-communicable Diseases (NCD) are usually chronic diseases that are not passed from one person to another. The types of non-communicable diseases include cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as asthma) and diabetes. NCDs are among the leading causes of reported institutional deaths in recent years and constitute a growing health problem in Ghana.

In relation to cancer, cervical cancer is the leading cause of cancer related morbidity and death among females in Ghana. Cancers figure among the leading causes of morbidity and mortality worldwide, with approximately 14 million new cases and 8.2 million cancer related deaths in 2012.

Ghana was selected among the 10 countries to benefit from WHO/AFRO - Bill & Melinda Gates Foundation (BMGF) “Reducing Cervical Cancer Burden in Selected High-Burden Countries in the African Region project”. This project overall goal is to reach 25% cervical cancer screening coverage for women aged 30-49 years. In 2015, activities implemented included supporting the participation of 2 people from Ghana in an expert meeting in Brazzaville Congo to finalize training materials on the cervical cancer prevention and control, the development of a country specific action plan for cervical cancer control, pilot-testing of cervical cancer control costing toolkit in Ghana in collaboration with a technical expert from WHO AFRO and the presentation of the results of toolkit testing and lessons learnt at a meeting in Montreaux, Switzerland. This tool will help countries cost their cervical cancer prevention and control programs appropriately. Activities in the action plan will be rolled out in 2016.

4.1 MENTAL HEALTH

Evidence from across the world confirms that integration of physical and mental health services improves accessibility, early detection and provides comprehensive care for physical and mental comorbidities and better health outcomes. It is therefore essential that all levels of health care providers are trained to be able to manage common mental health disorders.

The WHO Mental Health gap Intervention Guide (MHGAP) manual, designed for use by non-specialized health providers in low resource settings has evidence-based guidelines and protocols for such a purpose. WHO supported the adaptation of manual to the Ghana setting as well as the initial training of trainers of health staff in its use. The 25 trained comprising doctors, nurses and physician assistants were from 5 regions Greater Accra, Eastern, Western, Central, and Volta will cascade the training to all levels.



Plenary session in the MHgapIG adaptation



Participants in the TOT observing a role play session

4.2 FIGHT AGAINST EPILEPSY INITIATIVE

The fight Against Epilepsy Initiative Project has been ongoing and the achievements so far have included the engagement of various stakeholders including the Minister of Health, Director General of the GHS, Regional and District Directors of the implementation sites. Also opinion and community leaders, traditional and faith based healers, some private health facilities and



Minister of Health, Mr Alex Segbefia in discussion with participants at one of the workshops

Basic Needs (Civil Society Organization) have been engaged in implementing the project in the five regions (Greater Accra, Volta, Northern, Eastern and Central) and the ten districts. Since project inception, over 700 healthcare providers have been trained in the management of epilepsy. This includes doctors, physician assistants, nurses, pharmacists. The project has enabled over 4000 people living with epilepsy to gain treatment.

Sensitization meetings have been held for faith and traditional healers, and over 20 000 people have been educated on epilepsy

as part of community awareness strategies. The initiative has demonstrated that there are simple, cost-effective ways to treat epilepsy in resource-poor settings, therefore significantly reducing treatment gaps. Expanding the skills of primary care and non-specialist health professionals at the community level to diagnose, treat and follow up people with epilepsy, and mobilizing the community to better support people with epilepsy and their families can be achieved. The 4 year project of the Fight against Epilepsy Initiative came ended at the end of 2015.

4.3 DISABILITIES AND REHABILITATION

- 1 **Eye Care** - The Universal Eye Health Global Action Plan 2014-19 endorsed by the World Health Assembly in May 2013 has as the main goal reducing visual impairment as a public health problem and securing the access to rehabilitation services for the visually impaired. The strategy is through the improvement of access to comprehensive integrated eye care services. In order to support countries identify gaps and needs in eye care service provision to facilitate the implementation of the Action Plan and to set national policies and plans, WHO developed the comprehensive Eye Care Service Assessment Tool (ECSAT). WHO supported the conduct of the survey on status of eye care services in Ghana using the ESCAT. The survey revealed the prevalence of blindness to be 1.64% (Male: 0.62% Female: 1.02%). The data from the survey will be used to update Ghana's National Eye Health Plan.

In 2015, Ghana hosted the Orientation Meeting on the implementation of the Global Action Plan 2014-19 for the Eye Health (GAPEH) organized by WHO. The aim was to sensitize countries in adopting the GAPEH and in using global and regional guidance and tools to

strengthen prevention and management of eye diseases in the framework of their health systems. It was attended by 35 participants from Eritrea, Ghana, Kenya, Malawi, Namibia, Nigeria, Swaziland, United Republic of Tanzania, and Zambia.

4.4 NUTRITION

Brief introduction - The Ghana Demographic Health Survey (DHS), 2014 illustrates that some gains have been made in Nutrition with stunting currently at 19%, Underweight 11% and Wasting 5%. The exclusive breastfeeding rate is 52%, but complementary feeding remains a challenge with only 13% having an acceptable minimum diet. The iron deficiency anemia remains high with 66% of children under five with anemia and 42% of women 19-49 years are anemic. The national nutrition policy has been drafted but is yet to be submitted to cabinet. Key strategies are the Infant and Young Child Nutrition Strategy, Micronutrients Strategy; the Vitamin A strategy and Iron Deficiency Anemia Prevention and Control Strategy, Food Fortification Strategy, Communication Strategy for Universal Iodized Salt.

In 2015 the key issues facing the programme was the finalization of the national nutrition multi-sector plan in order for the nutrition policy to be submitted to cabinet for approval. The country also faced challenges concerning maternal, infant and young child feeding, particularly appropriate complementary feeding and the prevention and control of micronutrient deficiencies.

The key areas of intervention are maternal Infant and young child nutrition, Vitamin A supplementation, Iron and Folic acid supplementation, Food Fortification (iodized salt, wheat flour and Vegetable Oil fortification) and the management of acute malnutrition.

The priorities for 2015 for the government were the finalization of the training materials on essential nutrition actions which covered maternal infant and young child nutrition and the training of a core team of trainers, the decentralization of the Baby Friendly Hospital Initiative Accreditation process and building the capacity of regional and district teams for the scaling up of the nutrition actions.

Objectives intended for the year - For 2015, in line with the 2014/2015 biennial plan the main objectives were:

- Support the development of a plan based on the global maternal infant and young child nutrition comprehensive plan.
- Support the development, adaptation and updating of national guidelines based on global norms, standards and guidelines

Key activities supported, major outcomes/achievements – The following were some of the outcomes and achievements:

- 1 ***Development of a Nutrition Sensitive Strategic Plan.*** In 2014 the Ghana Health service (GHS) put together a task team with WHO to develop the nutrition specific interventions component of the costed multi-sector strategic plan for the national nutrition policy. The task team held a series of workshops that resulted in the nutrition specific interventions of the multi-sector strategic plan developed as well a draft M&E matrix and outcome indicators developed, and targets set for a 5 year period (2015-2020). In 2015, the team worked to

finalize the costed work plan. The work plan though a standalone work plan will be a component of the national multi-sector costed plan to be submitted with the nutrition policy for approval.

- 2 ***Finalization of Food Safety Policy*** - In 2015 the Food and Drugs Authority of the Ghana Health Services supported by FAO and WHO convened a stakeholders meeting that adopted the National Food Safety Policy. The food safety policy was developed on the basis of a food safety situation analysis conducted in 2010 with the technical and financial support of WHO. The elaboration of the policy was supported jointly by WHO and FAO. The goal of the National Food Safety Policy is to bring coordination into the regulation of food safety and define the role of stakeholders to ensure public health and facilitate trade in food. The country is in the process of developing a strategic plan for the implementation of the policy supported by WHO.
- 3 ***Adaptation of the WHO evidence-based guidelines on the prevention and control of micronutrient deficiencies.*** Ghana has reviewed and made recommendations for the adaptation of the WHO evidence-based guidelines on the prevention and control of micronutrient deficiencies. The Ghana Health Service supported by WHO and partners set up a task team that reviewed 11 guidelines on Vitamin A and Iron/Folic Acid supplementation and 2 guidelines on food fortification. The task team reviewed the guidelines, made recommendations on operational factors and built consensus on appropriate mechanisms for its implementation. The report of the task team was adopted at a stakeholders meeting in December 2015. The next step is the endorsement of the recommendations by policy makers in the health sector for its implementation.

WHO further supported the efforts of the Ghana Health Service to build capacity of health workers for scaling up nutrition actions in the country. Some of the outcomes are

- 1 ***Finalization of Essential Nutrition Actions Training Materials*** - The Essential Nutrition Actions (ENAs) framework encompasses 7 proven interventions targeting the first 1,000 days, i.e. from conception up to 2 years of age but also represents a comprehensive strategy for expanding coverage to increase public health impact. The ENAs are implemented through health facilities and community groups. Ghana recognizes the need to engage health workers at the different levels of service delivery and has embarked on building the capacity of nurses and midwives to aid in the delivery of key nutrition interventions. To this effect the ENAs Training Package has recently been reviewed and adapted for Ghana. One of the major adaptations is the development/enhanced maternal nutrition component. WHO worked on the task team that carried out the review and adaptation process and also the train the trainers. The ENAs training package has been finalized this year by the task team for the roll out of the training and implementation in the country.
- 2 ***Decentralization of the Baby Friendly Hospital Initiative Accreditation Process*** - Ghana embarked on the Baby Friendly Initiative (BFHI) in 1993 and has made some gains amidst challenges. There is an increased general knowledge about benefits of breastfeed in general and of exclusive breastfeeding specifically. Despite these gains the exclusive breastfeeding rate is 52% and breastfeeding within the first hour of birth for about half of newborns are delayed. The proportion of Baby Friendly Health Facilities to date stands at about 35 percent and thus the need to re-strategize. The Ghana Health Service has embarked on a process of

decentralizing the process in order to increase number of accredited but also ensure integration and ownership by regions and district health directorates. The decentralization process will require building the capacity of health workers. Two WHO/UNICEF training courses in Lactation Management and training of BFHI assessors were conducted last year for regional health teams by the Ghana Health Service with the support of partners. Health workers were also oriented on the revised WHO/UNICEF BFHI assessment tools, the assessment process and the roles of the assessment.

3 **Advocacy in Nutrition** - WHO participated in advocacy activities carried out for the commemoration of World Breastfeeding Week 2015 with the **Theme “Breastfeeding and Work –Let’s Make it Work.**

This included the official launch of the week. Awareness was created on the benefits of breastfeeding for both maternal and child health and the fact that lack of adequate maternity protection affects the effectiveness of breastfeeding. Ghana has not yet ratified the ILO Convention 183 that calls for a minimum of 14 weeks of maternity leave and breastfeeding arrangements at work, it was therefore advocated for adequate maternity leave, provision of space at work for milk expression and workplace crèches. WHO also supported the Ghana Infant Nutrition Action Network (GINAN) which oriented women groups, 80 participants in total on the latest in global Maternity Protection entitlements and raised awareness on the need for Government to ratify the ILO Convention 183 and recommendation 191 in full. The Women Groups were also provided them with information on optimal Infant and Young Child Feeding (IYCF) practices and the need to advocate for adequate breastfeeding arrangements at the workplace.

Chapter 5:

PROMOTING HEALTH THROUGH THE LIFE COURSE

5.1 REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH

WHO provides technical support to the Ministry of Health/Ghana Health Service (GHS) for planning, implementation, monitoring and evaluation of Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) programmes in the country. WHO is working to improve access to, coverage and quality of health services for pregnant women, newborns, children and adolescents along the continuum of care. Ghana's maternal mortality ratio is currently 380 per 100,000 live births and the Neonatal mortality rate is 29 per 1000 live births. Inadequate access to quality skilled delivery, emergency obstetric and newborn care and family planning has been identified as some contributing factors. WHO has supported the MDG Acceleration Framework (MAF) - Ghana Action Plan to redouble efforts to overcome bottlenecks in implementing interventions that have proven to work in reducing maternal mortality. The MAF focuses on improving maternal health at the level of both community and health care facilities through the use of evidence-based, feasible and cost-effective interventions in order to achieve accelerated reduction in maternal and newborn deaths. The three key priority interventions identified are improving family planning, skilled delivery and emergency obstetric and newborn care.

5.1.1 REPRODUCTIVE HEALTH

Reproductive Health indicators project - Monitoring of reproductive health indicators is imperative for the Health Sector to track the progress of interventions in the midst of scarce resources. In Ghana, monitoring and evaluation within the Ghana Health Service depends largely upon monthly routine service data generated from all districts and sub-districts. There were calls for an improvement in the existing health information system for better decision-making and support to the health system to deliver on key interventions.

The World Health Organization's (WHO) initiative, Strengthening Measurement of Reproductive Health Indicators in Africa supported the Ministries of Health (MoH) of Ghana, Nigeria, Kenya, Uganda and Zimbabwe to revise existing information systems, to incorporate selected family planning and safe abortion care indicators and to strengthen national information systems for routine monitoring. The objectives of the project were:

- To revise the existing data management tools to strengthen the monitoring of Reproductive Health services including comprehensive abortion care
- To pilot the use of the revised data management tools for Reproductive Health services including comprehensive abortion care
- To incorporate the revised data management tools in the Nationwide District Health Information Management System (DHIMS)

The Ghana team reviewed facility level registers ensuring tools exist to capture data on the relevant reproductive indicators including comprehensive abortion care and clarified indicators' definitions. Updated tools included questions regarding the sources of reproductive health information to identify most popular media to utilize while spreading reproductive health

messages. Additionally, the team conducted intensive training of healthcare workers on the use of reviewed registers and tools. Five districts were chosen for the pilot; Akwapim North and Atiwa Districts in the Eastern region and Sagnarigu, East Mamprusi and West Mamprusi in the Northern region.

WHO Ghana hosted the finalisation and dissemination meeting for the Strengthening Reproductive Health Indicator Project. Ten countries were hosted by the mission team from WHO Head Quarters: Ghana, Kenya, Nigeria, Uganda, Zimbabwe, Ethiopia, Malawi, Sierra Leone, Tanzania and Zambia. The next steps are to incorporate these indicators into the District Health Information Management System (DHIMS2) and a national roll out of the use of these indicators. The new indicators include:

- Number of Family Planning service delivery point per 500,000 population
- Number of other sources of Family Planning information, services and supplies per 500,000 population
- Proportion of abortions managed using medication
- Proportion of reproductive healthcare providers trained to provide safe abortion services to full extent of law



Participants at the Reproductive Health Indicators project finalization and dissemination meeting: 14 – 15 December 2015, Accra, Ghana

5.1.2 MATERNAL, NEWBORN AND CHILD HEALTH

Integration of PMTCT Services into MNCH Programme - HIV infection among children has remained a challenge in the Africa region and Ghana is no exception. It is estimated that there are close to 3 million children living with HIV in the African Region making up nearly 12% of the total HIV positive population in the Region. All these children must have access to HIV care and treatment without which they have a very high mortality. Unfortunately, there is insufficient identification and limited access to HIV/AIDS services for children and adolescents.

The Prevention of Mother to Child Transmission (PMTCT) program has been a key strategy to reduce the number of cases of HIV+ children but this strategy is not enough to rapidly identify

and increase the number of HIV+ children on treatment because a large number of women miss being tested during pregnancy . There is therefore the need to look for HIV positive children beyond the PMTCT cohort; this will involve active search, testing and treatment of paediatric HIV. Other strategies for consideration are testing at birth and point of care testing at sick child clinics; both out and inpatients. In Ghana, Early Infant Diagnosis coverage is around 20% and paediatric anti-retroviral treatment is around 26%. Integrating HIV and MNCH services into a single delivery setting is critical for addressing the persistent and huge gap in identification and treatment of HIV infected children.

WHO supported program officers from the Ghana Health Service to Entebbe, Uganda (15 – 18 September 2015) to participate in a workshop to step up the pace for HIV prevention in adolescent and HIV care and treatment in children and adolescents in the African Region and also a regional consultation on eMTCT and Paediatric Care in West and Central Africa (16-18 November 2015) Dakar, Senegal. Following this, WHO provided technical assistance for a national stakeholder consultation on integration of PMTCT Services into MNCH Programme and development of national acceleration plan for Paediatric HIV Services (This was funded by UNICEF). The meeting was to build consensus amongst policy makers and other stakeholders on integration of PMTCT, EID and Paediatric HIV into MNCH and EPI Services. Some proposed avenues for integration were:

- Antenatal clinic
- Labour and delivery
- Postnatal clinic
- Family planning services
- IMNCI (iCCM)
- Nutrition (CMAM, IYCF, SAM)
- EPI (Immunisation)
- Sick child clinics(Out/Inpatients)
- Child Welfare Clinic

Monitoring of the supply chain of PMTCT commodities In the year 2014, the National AIDS Control programme (NACP) dashboard showed only 46% of women attending ANC were tested for HIV (PMTCT testing), 10% coverage for Early Infant Diagnosis (EID) and 34% coverage for Anti-retroviral prophylaxis (ARV) for HIV positive pregnant women. These data compared to the national targets showed a low coverage. The bottlenecks with the supply and distribution of commodities seem to impinge negatively on the PMTCT programme in Ghana. The erratic supply of test kits was mentioned as a major factor for the low coverage of testing of pregnant women.

Against this background, an End User Monitoring Team was set up to conduct a supply chain monitoring of PMTCT commodities focusing initially on test kits' procurement supply chain management, using the National Procurement Master Plan as a general guide. WHO was a key partner in this exercise which assessed the procurement processes, identified the challenges and bottlenecks hindering the supply and distribution of commodities and made recommendations to improve the supply chain management. Other partners included representatives of CCM, NAP+ Ghana, GHS/FHD, GHS/ NACP, MoH, USAID, UNICEF and UNAIDS.

National Newborn stakeholders' forum - The 2014 GDHS showed that Ghana's neonatal mortality had declined marginally by 3 percent over the 15-year period preceding the survey, from 30 to 29 deaths per 1,000 live births. Neonatal mortality make up 71% of infant mortality

and 48 percent of under-five mortality. To address this challenge, Ghana launched the National Newborn Health Strategy and Action Plan (2014-2018) which is an integrated, comprehensive, and data-driven road map to measurably improve services and care for newborns by 2018. Every year, MoH/GHS under the coordination of National Newborn Sub-Committee (NNSC) holds a National Newborn Stakeholders' meeting to take stock of the progress of the implementation of National Newborn Strategy and Action Plan. WHO as a partner on the NNSC, supported and participated in the fourth Newborn Stakeholders Meeting in Accra, from the 28th to the 30th of July, 2015 under the theme “**Born Too Soon, Born Too Small, Help Us Live.**” This forum raised awareness about the importance of improving care for preterm and low birth weight babies and advocated for resources to improve their care.

Maternal Health Records booklets - The Ghana Health Service suffered the loss of stocks of Maternal Health Records (MHR) booklets in a fire outbreak at the Central Medical Stores. These booklets are used to record information on Mothers and their babies during antenatal, delivery and the postpartum periods and so help track the progress of their health status. To help remedy the situation to avoid its negative impact on maternal health care delivery, the WHO supported the Family Health Division of the Ghana Health Service (GHS) with the printing of 75,000 copies of the Maternal Health Records booklets for nationwide distribution.



Presentation of Maternal Health Records booklets by Dr Mrs Roseline D. Doe (Maternal and Child Health officer for WHO) to Safe motherhood program officers of the GHS

5.1.3 ADOLESCENT HEALTH

Adolescent health and development is a key component of universal access to reproductive health. The 2010 Population and Housing Census indicated that there are 5,526,029 adolescents in Ghana, constituting about 22.4 per cent of the total Ghanaian population. Adolescents have special physical, physiological, psychological and reproductive health needs hence the need for health care providers of adolescent sexual and reproductive health (ASRH) to receive special training in this area. The WHO as a member of the technical committee for adolescent health, provided technical assistance to the Adolescent Health and Development Programme to promote adolescent friendly sexual and reproductive health services in Ghana. There were the review and adaptation of various key documents:

- Review the existing Adolescent Health and Development Program training manual for health care providers to reflect current evidence based recommendations on Adolescent Sexual and Reproductive Health. The review also aimed to reduce the volume of the manual while maintaining the quality of its contents so that it can be used for a foundational training lasting for fewer days.
- Adaptation of the WHO Adolescent Job Aid reference tool for health service providers in Ghana. This is intended to contribute to ensuring that the knowledge, skills and positive attitudes acquired from the adolescent health training programmes are effectively applied in the work place setting.
- Supported the Nursing and Midwifery Council in their curricula review to include Adolescent Health and Development in the curricula of the pre-service institutions.

Review and development of key RMNCH documents - WHO provided technical support for the review and/or development of the following documents to promote RMNCH in the country:

- Ghana Family Planning Costed Implementation Plan (2016 – 2020)
- National Family planning protocol
- Training Modules and Manuals for implementation of a Task-sharing initiative
- The Ghana Integrated Management of Neonatal and Childhood Illness (IMNCI) chart booklet

Commemoration of Family Planning and Child Health Promotion week - The WHO joined the Ministry of Health, the Ghana Health Service and other partners in the commemoration of the 2015 Family Planning week from 28th – 30th September 2015. The theme for the celebration was **“Family Planning: Know your options”** and the objective was to encourage the patronage of family planning services to promote reproductive health and ensure socio-economic development. Activities also included a family planning fair which featured exhibitions from partners in family planning and reproductive health issues in Ghana. Two key documents were also launched:

- Ghana Family Planning Costed Implementation Plan (2016 – 2020)
- National Condom and Lubricant Strategy (2016 – 2020)

The child health promotion week to deliver integrated child survival interventions at all health facilities was celebrated from 11th – 15th May 2015. The theme for the week celebration was **“I am a newborn, keep me clean, help me live”** with a focus on infection prevention in the newborn

5.1.4 HEALTHY AGEING

Globally, there has been a steady increase in life expectancy due to improvements in living conditions and progress in medicine. In sub-Saharan Africa, the population of elderly people is projected to reach 67 million by 2025 and 163 million by 2050 from the estimated 43 million in 2010. The consequence of this is that the number of elderly people entering a period of their lives when they face increased risk of chronic diseases and disability is also increasing. WHO supported the participation of a representative from the Ministry of Health in a regional consultation (23 -25 September 2015 Brazzaville, Congo) to:

- Review the status of health care needs and accessibility to health care services of older people in the Member states of WHO Africa
- Examine and identify successful policies and practices including relevant health environment and long term care programmers that addresses the health needs of older populations
- Develop a framework of action for strengthening / promoting the health of older people in WHO Africa region

WHO also supported the participation of a representative from the Ministry of Health in a global consultation on WHO Global Strategy and Action Plan on Ageing and Health (29 – 30th October 2015, Executive Board Room, WHO Headquarters, Geneva)

The Strategic Objectives for ageing and health for the next five years 2016 -2020 will be:

- Fostering healthy ageing in every country
- Aligning health systems to the needs of the older population
- Developing long-term care systems
- Creating age-friendly environments
- Improving measuring, monitoring and understanding

Following this, WHO will support the country to elaborate a national plan on ageing to help promote the health of older people in the country.



Participants at the WHO Regional Consultation on a Strategic Framework for Active Healthy Ageing in the African Region, Brazzaville, Congo 23 -25 September 2015

5.1.5 GENDER, EQUITY AND HUMAN RIGHTS MAINSTREAMING

Participatory Gender Audit – WHO Country Office - The United Nations Ghana is committed to gender equality and has gender mainstreaming as a cross cutting issue in the implementation of a variety of interventions by various UN agencies. A UN system wide Participatory Gender Audit (PGA) was conducted to advance gender equality within the organization of the UN in Ghana and in its programming.

With technical support from ILO Geneva, 26 UN Ghana staff members including the Gender Focal person for the World Health Organisation Ghana Country office, were trained in participatory gender audit (9-13 March 2015). This was followed by the conduct of agency specific audits using the ILO Gender Audit Kit (guidelines and questionnaires).

A Participatory Gender Audit (PGA) of the WHO country office was conducted from 15th June – 6th July 2015 to assess how well gender is mainstreamed in its programming. The objectives were to:

- Assess how well WHO is doing in taking gender into consideration in its organization and programming process
- Provide a baseline for progress on gender mainstreaming and to inform the development of a gender action plan for WHO
- Identify critical gaps and challenges facing WHO in mainstreaming gender and recommend ways of addressing them and new and more effective strategies
- Document WHO's good practices towards the achievement of gender equality

The recommendations from the audit report are to be implemented to further enhance gender mainstreaming in WHO's programming processes and also to better support capacity building of partner organizations to mainstream gender in their programming.



A cross-section of WCO staff in a workshop during the Participatory Gender Audit

Celebration of UN Days - The WHO through the UN Gender Team (UNGT) supported and participated in the celebration of UN days. On the 8th of March 2015, the United Nations celebrated globally the **International Women's Day** under the theme "Empowering Women - Empowering Humanity: Picture It!". In Ghana, the day was celebrated under an adapted local theme "Breaking barriers towards Gender Equality and Women's Empowerment; Picture it". The WHO through the UNGT supported the Ministry of Gender, Children and Social Protection (MoGCSP) in leading the commemoration of the day in the country to promote the attainment of gender equality and women's empowerment. The United Nations Information Centre and the

Goethe Institut organized a photo exhibition on March 10 to mark International Women's Day. This activity was also supported by the UNGT. The objective of the exhibition was to encourage effective action for advancing and recognising women through picture stories and to create public awareness of women's achievements and contributions.

The UNGT supported the global action "Orange the World: End Violence against Women and Girls", which is aimed at raising awareness and mobilizing action to end violence against women and girls. The **16 Days of Activism** against Gender-Based Violence ran from 25 November (the International Day for the Elimination of Violence against Women) to 10 December (Human Rights Day).

5.2 HEALTH AND THE ENVIRONMENT

INTRODUCTION - According to the DHS 2014 in urban areas 53% have access to an improved source of drinking water compared to 69% of households in rural areas. Only 15% of Ghanaian households have an improved, not shared sanitation facility. More than one-quarter of households (26%) have a non-improved sanitation facility. (DHS 2014)

Ghana is signatory to a number of conventions and declarations including the Libreville Declaration for Environment and Health, with the Ministries of Health and Environment as the co-chairs of the Health and Environment Strategic Alliance. Ghana conducted the Situation and Needs Assessment (SANA) on health and environment in 2011 and subsequently developed the National Plans of Joint Action (NPJAs) in 2013.

Ghana's National Health Policy identifies that a safe and healthy environment including the quality of air, water and soil has major implications for the health of Ghanaians. The sector faces a number of challenges coupled with a multiplicity of institutions that play a key role. The key areas of Intervention are occupational health and safety, particularly of health worker, climate change and health, environmental health impact assessment of the extractive industry and water sanitation and health. The key government institutions collaborated with on the above are the Ministry of Health and Ghana Health Service, The Ministry of Water Resources, Works and Housing and the Ministry of Local Government and Rural Development.

Objectives intended for the year - In line with the 2014/2015 biennial plan the objectives for Public Health and Environment were:

- Support capacity building to assess health risks, develop strategies for prevention, mitigation and management of health impacts of environmental and occupational risks
- Support the implementing of a greed provisions that have implications for health in regional initiatives and multilateral agreements and conventions on environmental and sustainable development such as the Libreville Declaration on Health and Environment

Key activities supported, major outcomes/achievements - The following were some of the outcomes and achievements

- 1 **Training of Trainers on environmental and occupational health issues related with Artisanal and Small Scale Mining (ASGM)** - In October 2013 The Minamata Convention

on Mercury was signed in Japan to reduce mercury as a pollutant of the environment and address all the major sources of mercury pollution in the environment. The World Health Assembly in May 2014 adopted a resolution on Public Health Impacts of Exposure to Mercury and Mercury Compounds and identifies Artisanal and Small Scale Mining (ASGM) as a major source of mercury pollution. WHO has developed a draft training course on ASGM. This course, designed with both train-the-trainer (ToT) materials as well as direct training materials, was created for use in raising health care provider capacity to identify and respond to ASGM related environmental and occupational health issues.

A focus on how to address special needs of children has also been included. WHO/HQ, AFRO and the Ghana Country Office supported the Ghana Health Service to train a core team of trainers in build their capacity in the environmental and occupational health issues related to Artisanal Small Scale Gold Mining activities. The training was divided into two phases; the first phase of the training was the first 3 days where a core team of trainers were trained. The second phase the next two days served as an opportunity for the newly trained “trainers” to practice their skills on an additional set of participants. The training also served as a pre-testing of the training materials in an African country context. There were a total of 24 participants (including external experts) from 3 regions, Eastern, Ashanti and Greater Accra.

- 2 **Supported the development of minimum information model for a Health and Environment Integrated Surveillance System through the Healthy Environment Strategic Alliance** - Environmental monitoring is a planned systematic collection of environmental data to meet specific objectives and environmental needs. The aim of monitoring is to detect trends and changes so that remedial measures may be taken to achieve good environmental performance. In Ghana though environmental monitoring takes place at the regional level through the periodic Regional Environment Committees meetings, at the national level this has not been effected due to inadequate coordination among stakeholders. In terms of surveillance there is a separate Environment Surveillance System and a Health Surveillance but not an integrated system.

The GHS Service requested for support from WHO to develop a minimum information model for a Health and Environment Integrated Surveillance System. The WHO country office provided support for stakeholder consultations, through the Healthy and Environment Strategic Alliance (HESA) and the data managers of key institutions review and planning meeting. The stakeholder consultation resulted in a preliminary list of indicators developed for the system. Following the stakeholder consultation the HESA task team refined the indicator list, developed standard definitions and periodicity of reporting which was validated and finalized by the data managers meetings of key institutions. The minimum environment and health information model developed will be the basis for the integrated environment and health surveillance system.

- 3 **Joint UN (UN-Habitat, UNICEF, WHO, UNDP) Programme for Water, Sanitation and Hygiene in Disaster Prone Communities in the 3 Northern Regions (24 districts and 265 communities) ongoing (A Government of Canada Funded Project)** - Lack of WASH facilities presents immense challenges to disaster prone communities, including the prevalence of water borne, vector borne and sanitation related diseases. This affects the

health, productivity and livelihood of such communities, particularly women, children and the youth.

In June 2014, four UN Agencies, namely UN-Habitat, UNICEF, UNDP and WHO embarked on the implementation of a Joint Programme on WASH in Disaster Prone Communities in the 3 Northern Regions of Ghana funded by the Department of Foreign Affairs and Trade Department, Canada (DFATD). The framework for the implementation of the programme is the Joint UN programming approach. This approach is the collective effort through which the UN organizations and national partners work together to prepare, implement, monitor and evaluate the activities aimed at effectively and efficiently achieving the Millennium Development Goals (MDGs) and other international commitments.

For the reporting period WHO provided technical support for the start-up meeting held in Tamale 9-13 March 2015; 140 stakeholders from national, regional, district and community level from the 3 northern regions oriented on the programme components, governance, target area and outcomes. Technical support was also provided for the Joint UN WASH Programme in the three northern regions; about 90 communities in the three northern regions assessed 15-26 June 2015 for the impact of floods on water, sanitation and conditions facilities and key interventions for the implementation in the first phase identified. Key interventions carried out include the training of regional environmental health and educational staff. In the next biennium WHO will be instrumental in tracking water quality and the health status of the beneficiary communities in the three northern regions.

- 4 **Climate change and health vulnerability and adaptation assessment in three regions in Ghana developed (A GIZ Funded Project)** - WHO with funding from GIZ is supporting a Climate change and health vulnerability and adaptation assessment in 3 regions in Ghana. A proposal for a climate change and health vulnerability and adaptation assessment to be conducted in three regions in Ghana developed and approved. The main objective of the assessment is to generate information on the status of climate change and health in order to inform adaptation measures to be adopted by the health sector. A desk review has been conducted, a stakeholders meeting was held on 27 November, training of data collectors conducted, data collection completed for the 3 regions and data analysis and report being finalized.
- 5 **Global Analysis and Assessment of Drinking Water Financial Tracking (GLAAS TrackFin) of the Water, Sanitation and Hygiene (WASH) Sector** - In 2014, Ghana was among the first pilot countries to test Global Analysis and Assessment of Drinking Water Financial Tracking (GLAAS TrackFin) methodology, the results of which were presented and discussed at an inter-regional meeting in Morocco. In 2015, with support from WHO/HQ we supported the technical team meeting, where key Institutions represented on the team were briefed on the outcome of the inter-regional workshop and information provided on the products derived from the Global Analysis and Assessment of Drinking Water Financial Tracking (GLAAS TrackFin) Pilot Initiative and next steps including the next round of the GLAAS TrackFin. WHO in collaboration with IRC supported also the inter-regional workshop held in Ghana from 1-3 December, 2015 with 52 participants from thirteen countries, technical experts from UN agencies, NGOs and donor partners. The meeting provided participants with an overview of the GLAAS TrackFin Initiative, shared experience and lessons learned from the three pilot countries, Ghana, Morocco and Brazil and supported country teams to develop their plans for implementation of the GLAAS cycle 2016. The

GLAAS cycle 2016 and the GLAAS Global Coordination Platform were official launched. The next steps include supporting new countries to track finances to the Water, Sanitation and Hygiene Sector in interested 2nd phase countries, including Mali and Madagascar. Ghana will conduct the 2nd Round of GLAAS TrackFin in 2016.

- 6 Outlook for the following year** - In 2016, WHO with funding from Canada will support Ghana to implement the WASH in Disaster Prone Communities in the three northern regions of Ghana. The country will conduct the 2nd Round of Global Analysis and Assessment of Drinking Water Financial Tracking (GLAAS TrackFin) with support from WHO. WHO will support some capacity building in the regulatory framework and laboratory assessment and evaluation of household water treatment technologies. Environmental Health Risk Management and Impact Assessment efforts will also be supported by WHO.

5.3 SOCIAL DETERMINANTS OF HEALTH

In an effort to prevent chronic diseases and promote good health, WHO supported the Ministry of Health/GHS and other partners to raise public awareness of health issues and concerns and to motivate people to take positive action and responsibility for their health by adopting healthy lifestyles.

WHO also supported the strengthening of national capacity to plan, implement and evaluate setting-based health promotion programs for the reduction of the risks associated with leading causes of death, diseases and disability as well as advocacy for the creation of conducive environments and policies for promoting healthy lifestyles. Key activities supported and achievements were:

- Implementation of the WHO Framework Convention Tobacco Control- Improve leadership and coordination for Tobacco Control-TWG, TC-AICC Meetings, Trainings and Advocacy Activities
- Validation Meeting to finalize Draft Alcohol Policy and development of Legislative Instrument (LI) for the control of harm due to Alcohol use as stated in the Public Health ACT (ACT 851)
- Strengthening collaboration with Ghana Road Safety Commission and the Ghana Police Service in implementing Alcohol Control measures
- An advocacy and capacity development workshop convened to create awareness about social determinants of health among various stakeholders, identify key variables that promote health inequities, and foster inter-disciplinary collaboration.

World Health Day Celebrations - The theme for 2015 celebration was: ‘Food Safety; from farm to Plate’. The national launch was the major event that climaxed the celebration and this event took place at the Civil Servants’ Association Auditorium. The event was attended by about 500 people drawn from Health Institutions, Ghana Health Service, Foods and Drugs Authority (FDA), Ministry of Food and Agriculture, Traditional Authorities, Ghana Education Service and Development Partners (WHO, UNICEF, UNDP).

A presentation on Food Safety was done by officials from the FDA and the Ministry of Food and Agriculture mounted a picture exhibition on the food situation in Ghana. As part of activities for the day a short documentary on food safety was also shown.

The celebration was aired on several TV stations and this was a platform to provide the general public with relevant information on food safety.

Chapter 6: HEALTH SYSTEMS

6.1 NATIONAL HEALTH POLICIES, STRATEGIES, AND PLANS

The health sector of Ghana develops its policies, strategies and plans with the support of members of the Health Sector Working which includes its agencies, Development Partners and NGOs. Using the HSMTDP 2014-2017 which was derived from NDPC's GSGDA 2014-2017, the Ministry developed its 2015 Programme of Work (POW). WHO provided both financial and technical support for the development process. WHO's participation included its active involvement and chairing some of the various thematic working groups under the POW to ensure that the most desirable and achievable health goals and outcomes are captured under the various areas. The need for issues relating to MDGs and other global and regional declarations; mandates and resolutions are brought to bear on the POW. WHO also coordinated DPs' inputs and participation and also led some of the process in the POW development as WHO was the DPs' Lead during the POW development process.

One major planning and monitoring process in the health sector is the annual performance hearings held by the district, regional hospitals and health administrations and agency levels culminating in the development of the Holistic Assessment and the holding of annual summit. WHO participated actively in the district and regional performance hearing financially and technically and led some of three of the national level teams to the regions. WHO also contributed to the effectiveness of the annual summits by participating in the preparatory and organisational activities and the summit. All health summits are followed by MOH-DPs business meetings which discuss issues to sharpen out for implementation and captured in aide memoire. WHO led the DPs' during the first business meeting of 2015, aside technical officers participating in the various discussions and participating in the crafting of the aide memoire which is signed by the Ministry and the DPs.

There were two other business meetings held in August and November of 2015 aside the first one held in May 2015. These business meetings were preceded by Joint MOH-DPs Regional BMC visits to ascertain the status of implementation of key policy initiative of the sector and to also provide necessary information to aid discussions and decision making at the business meeting. WHO led two of such joint visits as well as providing technical support for the organisation of the business meetings.

Most of the health sector issues are tabled and discussed during the monthly health sector working group meetings (HSWG) with broad based participation from the health ministry and its agencies and other key stakeholders including DPs. Nine HSWG meetings were held in 2015 and WHO participated in all of them and played a leadership role till August 2015 when there was rotational change in the leadership of DPs. WHO led most of the technical discussions and provided technical inputs as may be required aside participating in deliberations regarding the agenda items for the meetings.

The Ministry of Health was supported by WHO both technically and financially in the finalisation of its 2013 Health Accounts which depicts the sources of funding for activities of the health sector and where the funds were spent. The emerging picture in the health financing

architecture of Ghana is that government has become the main financier of the sector accounting for over 50 percent followed by households and corporate contributing over 35 percent and Development Partners by less than 10 percent. Also the largest share of the funds are managed by government (70 percent) followed by households (27 percent) and DP (2%). Over 60 percent of the funds are spent on clinical care.

6.2 INTEGRATED PEOPLE-CENTRED HEALTH SERVICES

The Ministry of Health and its agencies has been developing its staffing norm using WHO's Workload Indicators for Staffing Needs (WISN). This process was supported by WHO technically and financially culminating in the finalisation of the volume one of the norms covering 116 cadres grouping comprising of both clinical and non clinical within public owned and CHAG facilities across CHPS, health centres, polyclinics, district, regional, teaching hospitals and psychiatric hospitals.

6.3 PATIENT SAFETY

WHO supported the development of a policy and strategy for quality assurance and patient



Technical Working Group for drafting the Quality and Patient Safety Policy

safety. A consultant was recruited to support this activity and participants were engaged in a technical working group from 26-29 October 2015. Additional stakeholders were engaged to further refine the scope of the policy and strategy. The purpose of this policy and strategy is to clarify an organizational structure for ensuring quality health care services that emphasize and ensure

patient safety practices to protect people from undue harm and promote a

work environment which responds to quality assurance and patient safety issues. The policy and strategy shall be applied in all health care facilities and service delivery points (both curative and preventive) in Ghana. The policy and strategy shall emphasize, concentrate and integrate quality and patient safety practices, reviewing standing policies, protocols and guidelines to assist in end-user orientation to integrating quality and patient safety practices in a people-centred manner. The policy and strategy have the following objectives:

- Outline a policy framework that utilizes the health systems blocks to ensure full integration of quality and patient safety issues in the health sector.
- Provide consensus on existing policy and recommendations for additional policy to strengthen quality assurance and patient safety practices.
- Offer a mechanism for monitoring the progress of quality assurance and patient safety initiatives for evaluation.

6.4 ACCESS TO MEDICAL PRODUCTS AND STRENGTHENING REGULATORY CAPACITY

6.4.1 DEVELOPMENT/REVIEW OF POLICIES AND GUIDELINES

- Review Standard Treatment Guidelines and Essential Medicines List

WHO supported the Ministry of Health through the Ghana National Drugs programme to review



the National Standard Treatment guidelines and Essential Medicines List. Two National Peer review meetings were held in Elmina and Accra as part of the review. A stakeholder consensus building meeting was organized for prescribers from the public, private, CHAG, and quasi government institutions and civil society organizations to build consensus on the document. An editorial committee has been set up to finalize the document for

Stakeholder Consensus Building Meeting for the STG and EML

printing. A web app will be developed for use of the guidelines. WHO will support the training of prescribers on the correct use of the STG and EML. The training will be undertaken next year for prescribers from Regional and Districts hospitals and focus will be laid on prescribing for Non communicable diseases.

- Review the Standards for Pharmaceutical Care (SPC) and Standard Operating Procedures (SOPs)

The Ghana Health Service through the office of the Chief Pharmacist reviewed the Standards for Pharmaceutical Care and the accompanying Standard Operating. These documents are to help enforce pharmaceutical standards in health facilities.

- Development of Antimicrobial Resistance Policy

The MOH and the Ghana Health service has been in the process of developing an Antimicrobial resistance policy. WHO/AFRO organized a consultative expert meeting for countries on combating Antimicrobial Resistance in the African Region. The objective of the meeting were to share country experiences in AMR policies, strategies and interventions, review the draft global AMR action plan and update countries on ongoing activities at global and regional level and propose activities for development of a draft work plan on the prevention and containment of AMR in selected countries of the African Region. After the meeting support was provided to align the country policy and

action plan to the WHO Global Action plan. Technical support was provided for raising awareness on antimicrobial resistance through a media sensitization and dissemination workshop, the organization of an African Conference on antibiotic use and resistance organized in collaboration with the University of Ghana and the Ministry of Health and the development of surveillance system for antibiotic use in three in hospitals and also to train staff to use the system to collect data on antibiotic use.

6.4.2 SUPPORT FOR THE REVIEW OF A LIST OF MEDICINES FOR VAT

EXEMPTION - The 2015 budget indicated that VAT on locally produced pharmaceuticals and some of the raw materials used for the production of these pharmaceuticals will be removed. Technical and Financial support was provided to the Ministry of Health to develop a list of essential medicines that will enjoy this tax relief in collaboration with local manufacturers. The list has been passed into an ACT of government found as the LI for Act 870 section 64 para 14(2) and 14(3) of the first schedule. VAT represents also 40% of the total tax elements for pharmaceutical products

6.4.3 STRENGTHENING OF MEDICINES REGULATORY SYSTEM - WHO supported the development of an Institutional Development Plan (IDP) for the Food and Drugs Authority from gaps identified in assessments in the area of both vaccines and medicines regulation. The development of the IDP considered the expected technical support and capacity building activities needed to raise the functionality of the NRA in addressing the documented gaps and building up on the strengths. The IDP considers areas such as strengthening Quality Management systems for all departments that are yet to be certified and the need for the recruitment of a quality manager to drive all quality activities. The FDA was advised to establish provisions for transparency and provide access to the public information suitable to the regulatory environment

6.4.4 SUPPORT TO THE NATIONAL BLOOD SERVICE - WHO continues to provide support to the country to strengthen the National Blood Service for the implementation of their plans, advocacy for integrating blood safety in the national health development plans, and strengthening the legal and regulatory framework for blood safety. Strengthening the Blood regulatory system is high on the agenda of the FDA. One of the requirements of the Food and Drugs Authority (FDA) in regulating blood services is the use of an appropriate system for efficient records and data management. The National Blood Service working in collaboration with the National Regulatory Authority (FDA) has been supported to develop and adapt tools for Quality Assurance and regulation of blood and



A group picture of dignitaries at 2015 WBDD.
Deputy Minister of Health, Dr Victor Bampoe with Dr. Magda Robalo

blood products. This activity comprised of the adaptation of a software application to support proper data management practices and traceability of donor data, purchase of laptops and laser printers to capture donor data at the area blood centres and the celebration of World Blood Donor Day. The new software application was configured with features that support proper data management practices and traceability of donor data which will help in improving quality management within the Blood Centre. The laptops will be used by blood collection teams to capture donor data when they move outside the Blood Centre to collect blood.

6.4.5 SUPPORT TO THE MINISTRY OF HEALTH AFTER CMS FIRE - The Ghana Central Medical Stores is the main public warehouse for medicines and other non-medicine consumables. It caters for about 30% of medicines for clinical care for the public sector and



Image of the CMS after the fire outbreak

about 70% of the products warehoused at the CMS are medicines and consumables for the programs (HIV, TB, Malaria, NTD, RH, EPI, NUT, etc.) which are mostly free of charge to patients. On the 13th of January 2015, the Central Medical Stores experienced a catastrophic fire-outbreak which destroyed medicines and other health products to a tune of about USD\$110M as well as buildings, store equipment, computers, records etc. The health products that were lost in the fire included essential medicines, medical

consumables, medical equipment, HIV/AIDS medicines and test kits, anti-malaria medicines/test kits, TB medicines, EPI consumables, insecticide treated bed nets, condoms and Ebola Personal Protective Equipment and relief food items among others.

As a precaution for the other regional medical stores WHO supported a rapid assessment of the 10 Regional Stores to determine measures put in place to evaluate and mitigate risks to an acceptable level. WHO then supported the development of a Risk Management Policy framework for the public health pharmaceutical warehouses in Ghana.

Chapter 7: PREPAREDNESS, SURVEILLANCE AND RESPONSE

WHO's strategic agenda on preparedness, surveillance and response has as one of its main focus areas strengthening national networks and systems capacity to anticipate, prevent, respond and control epidemics and other complex health emergencies as well as manage risks to health in other public health events. Technical support and advocacy for building core capacity for the International Health Regulations (2005) is also a priority. In the area of strengthening the integrated diseases surveillance and response system, priority is placed on capacity building and supporting preparedness and response to epidemic prone diseases such as meningitis, cholera and influenza. In 2015, WHO consolidated support for Ebola epidemic preparedness initiated in 2014.

7.1 ALERT AND RESPONSE CAPACITIES IHR, IDSR

The International Health Regulations (2005) provide a legal framework for actions to prevent the international spread of diseases. It (IHR 2005) entered into force on 15 June 2007. As part of the implementation process, States Parties are to ensure the existence of requisite core capacities to implement IHR 2005. As part of support for core capacity development, WHO provided assistance for the operational costs for the set-up of the IHR focal point secretariat including logistics such as computers and printers as well as hosting of the Ghana IHR website. The consultative meetings of multi-sectoral, multi-disciplinary IHR national coordinating was also supported.

To support integrated disease surveillance and response (IDSR) in Ghana, WHO signed an agreement with the School of Public Health, University of Ghana to provide support for the training of about 200 district and sub-district health and other staff from seven regions to strengthen disease control and surveillance systems in the country. The participants in this training benefited from skills in outbreak investigation and response, surveillance system evaluation, surveillance data analysis for action in a bid to strengthen the capacity at the district and sub-district level health for public health surveillance and response to public health emergencies. Funding for this program came from the Japan Government and Canada through the Joint UN EVD Program. *Dr Magda Robalo in the Agreement signing with Prof Adanu, Dean of SPH*



7.2 EBOLA

With the improving situation of the Ebola Virus Disease (EVD) outbreak in the affected West African countries, in tandem with the call to accelerate and strengthen preparedness, attention was also drawn to building a resilient health system that would help prevent and rapidly respond to emergencies and outbreaks to minimize such catastrophic consequences as witnessed in the EVD outbreak.

Ghana was among the list of priority countries targeted for programmes to roll-out longer term support. The criteria used to prioritize countries included geographical proximity to affected countries, trade and migration patterns, and strength of health systems. In line with the plan for these priority countries, WHO in Ghana provided technical support and normative guidance for the implementation along the lines of the following objectives:

- Effectively provide needed technical expertise to support health systems strengthening, implementation of International Health Regulations (2005) and enhance health security through resilient public health systems and infrastructure;
- Support capacity building of district and sub-district level health staff in public health surveillance, outbreak investigation and response to public health emergencies;
- Improve diagnostic capacity through supply of laboratory reagents and supplies;
- Enhance risk communication, health education and social mobilization
- Comprehensively monitor the coverage, quality and impact of preparedness, eventual response and systems building activities.

To augment WHO technical support to achieve these objectives, the country office recruited three international staff with expertise in advocacy and risk communication, health system strengthening and epidemiology. The staff contributed to WHO capacity to provide technical and normative guidance for consolidating Ebola preparedness and strengthening of the public health system in Ghana, to increase capacity to early detection and response to infectious diseases of epidemic potential and support advocacy, risk communication, health education and social mobilization programmes that utilize effective communication channels to inform the public and promote participation in prevention, preparedness and response activities. Resources to support implementation of the activities came from the Norwegian Government, Government of Japan, Canada through the joint UN EVD Program and WHO internal funds. The WHO Country support for Ebola preparedness up December 2015 amounted to \$2,193,596. Under the leadership of the Ministry of Health and with support from WHO and other partners, Ghana's preparedness rating increased to 64% from the previous score of 57% in the course of 2015.



Community sensitization in some fishing communities in the central region

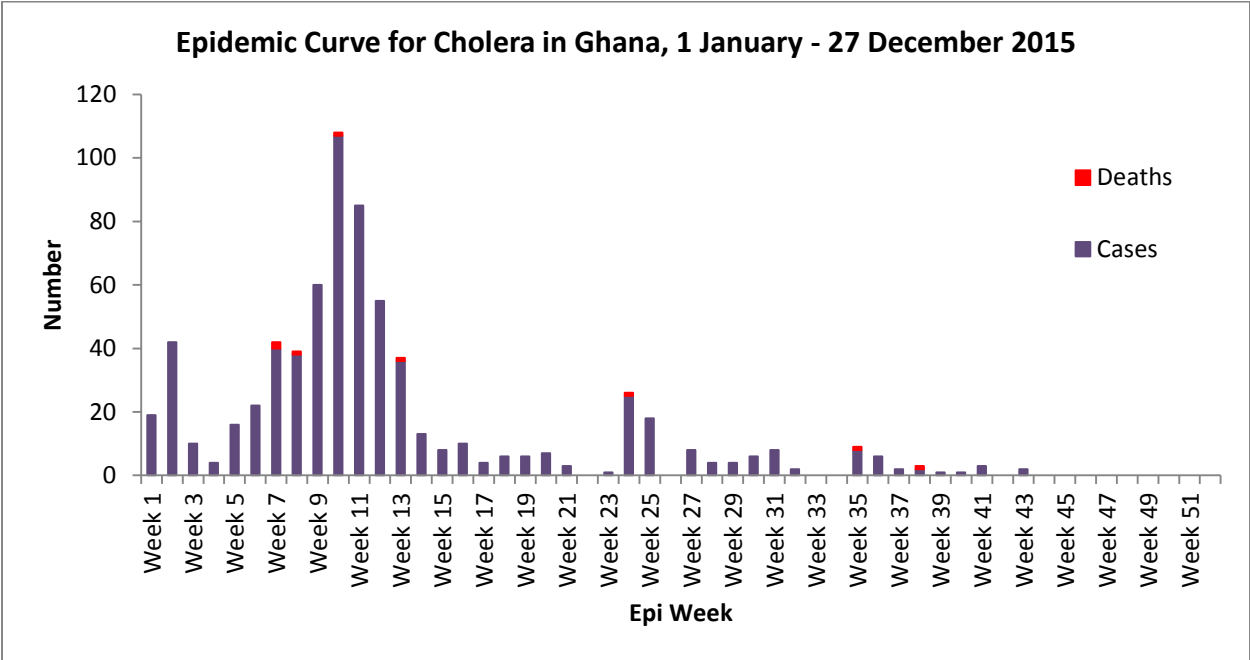
Table 1. WHO Support for Ebola preparedness and health system strengthening

Area of Support	Expected Activities	Achieved	Output
Coordination	Support effective coordination of preparedness and response activities	Regional EVD preparedness assessment missions carried out to all 10 Regions	EVD preparedness checklist and report completed for each region Regional EVD Preparedness and Response Plans updated
		Preparedness Strengthening Team (PST) Follow-Up Mission completed including logistics capacity assessment	PST Follow-Up Mission report, including findings and recommendations
		Partner coordination and preparedness update meetings held	Partners updated on EVD preparedness activities and progress
		Emergency Operations Center (EOC) capacity built to coordinate activities including contact tracing	Requisite software and hardware set up and tested at EOC
		Technical support staff in place and supporting EVD activities	Technical support (Coordinator & Logistician) provided to MoH, GHS and UNMEER EVD
Surveillance	Build capacity in surveillance, case investigation, contact tracing, data management	Orientation on Rapid Response Team (RRT) concept Technical support for capturing and analysing data on suspected cases of EVD recorded in the country	30 GHS Regional officers oriented on RRT concept Data entry template developed to facilitate data analysis and information to enhance EVD surveillance
		EVD case definition posters for use in communities and at health facilities designed and printed	46,000 community and 43,000 health facility case definition posters printed.
		Port Health and Airport clinic staff at Kotoka International Airport orientated on SOPs for screening for EVD and other public health events	Forty-five port health and Aviation clinic staff trained
		Training of health staff in public health surveillance and response conducted	Thirty-three district and sub-district level staff from Greater Accra region trained
		Mobile device based contact tracing system developed	Data collection equipment procured to develop and test electronic surveillance system
		EVD surveillance among pregnant women, mothers and children strengthened through enhanced surveillance	75,000 maternal and child health surveillance booklets printed and distributed
		Support provided to Ghana Field Epidemiology and Laboratory Training Program (GFELTP) to train 200 participants from 6 regions	MoU signed with University of Ghana, School of Public Health
Laboratory	Procure laboratory diagnosis	Support to Noguchi for procurement of reagents and staff costs for EVD testing provided	156 samples from suspected EVD cases tested negative for Ebola virus. 16% of the cases (25) were tested in 2015.
Case Management and Infection Prevention & Control (IPC)	Build capacity for prompt and effective case management, IPC, safe burials and psychosocial support	EVD Clinical training manual and guidelines for clinical management and safe and dignified burial available	3,000 EVD Clinical Pocket Guide printed and distributed Safe and dignified burial guidelines adapted EVD training guidelines synchronized
		International EVD case management expert recruited to support EVD activities	Relevant technical support on guidelines etc provided by EVD case management expert
		Ebola Treatment Center (ETC) capacity built to handle cases	ETC simulation drill conducted at Tema Hospital
		WASH Expert deployed to provide technical assistance for ETC construction	Technical assessment of ETCs under construction completed
Risk Communication and Social Mobilization	Support advocacy, communication, public information and education	formative research on public knowledge attitude and practices (KAP on Ebola among key audience groups conducted	Study findings on) relating to EVD Prevention and Medical care KAP in Ghana disseminated
		Vodafone Healthline Operators trained to provide EVD support to health workers	63 operators trained in EVD Infection Prevention and Control measures, psychosocial support, surveillance, contact tracing and EVD clinical management Health Worker hotline established
		A Risk Communication and Social Mobilization sub-committee retreat held to develop a RC&SM strategy	17 members of the RC & SM sub-committee participated. Final draft of RC&SM strategy developed
		Sensitization and advocacy meetings with influential groups on EVD supported	304 religious and traditional leaders from 6 regions trained on the EVD in the Greater Accra, Ashanti and Northern Regions.
		Docu-Drama on contact tracing produced to educate and sensitize public to EVD contact tracing process and purpose	Docu-drama produced and aired on 4 television stations in Ghana

		EVD advocacy and sensitization campaign carried out in 40 selected fishing communities in 9 districts in Central Region	9 district advocacy meetings 40 community durbars with about 15,000 community members reached
		EVD and food safety campaign included as part of World Health Day celebrations	Significant community and media coverage of World Health Day, with a focus on food safety
		EVD awareness raised at points of entry through printing and distribution of pull up banners	100 Pull Up banners printed and distributed to points of entry and health facilities
		Ministries of Communication and Health supported national EVD awareness-raising campaign dubbed "Ebola bi nti"	TV and Radio commercials translated in 7 languages: English, Akan, Ga, Ewe, Dagbani Hausa and Nzema. Ebola billboards in all 10 regions
		International health communications and advocacy expert recruited to support EVD activities	Communications and advocacy expert contract completed
		Community risk mapping, advocacy/and sensitization for increased awareness on Ebola conducted	306 (76women) from various identifiable groups and stakeholders and 7630 community members (4614 women) reached in 40 fishing communities
		EVD awareness created Nationwide leveraging national events	EVD awareness incorporated into World Health Day and National Immunization Day celebrations

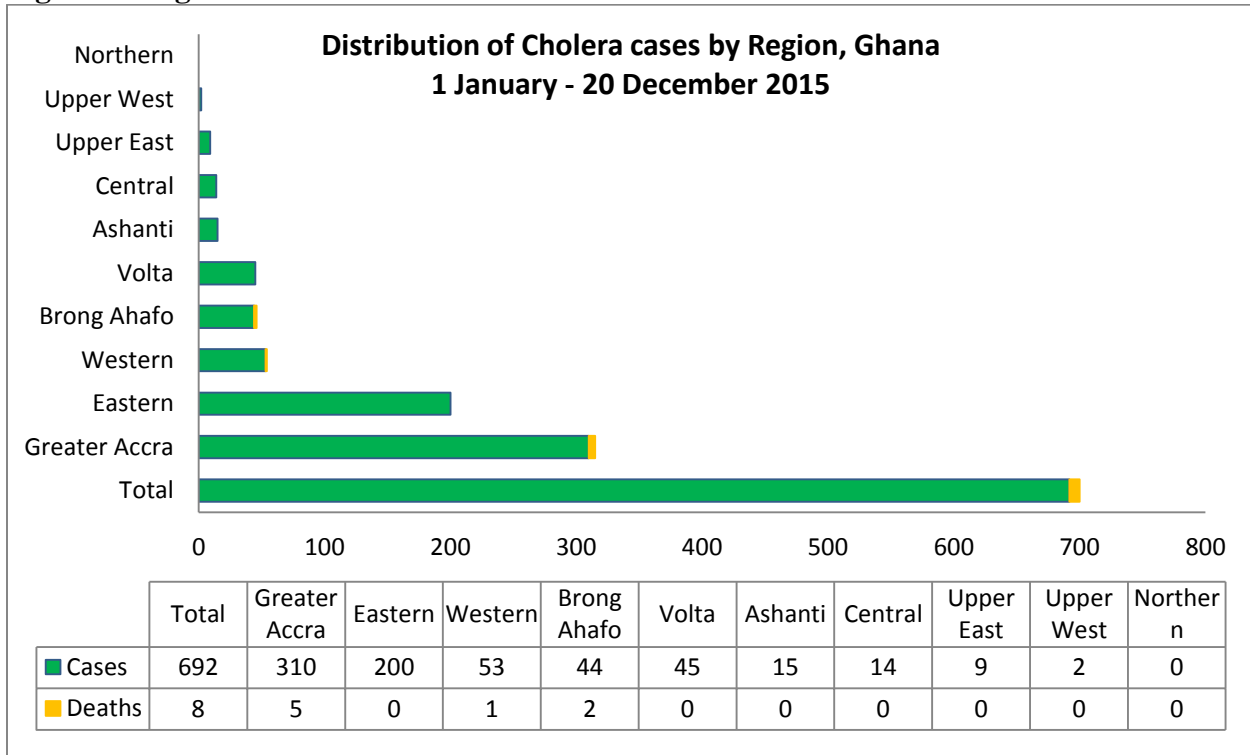
7.3 CHOLERA

The cholera outbreak that started in June 2014 protracted and spilled over to 2015. However after peaking in week 10 with 107 cases, there was a downward trend in numbers with the last case of cholera reported in week 43.



Cumulatively 692 cholera cases including 8 deaths (CFR = 1.2%) were reported from 34 districts in 9 (out of 10) regions in Ghana. No case of cholera was reported in Northern Region while Greater Accra Region was the hotbed with 310 cases.

Figure 2. Regional distribution of cholera cases in 2015



WHO support included laboratory logistics to facilitate timely diagnosis, technical expertise to support coordination, surveillance, data management and reporting, training of 33 surveillance officers on enhanced surveillance tools and reporting. Social mobilization activities involved collaboration with NADMO to hold advocacy and sensitization meetings with leaders of identified community based groups (including women) within the coastal districts in Central Region. Forty (40) community durbars were organized to reach out and educate over 12,000 community members in the nine coastal districts in the Central Region. Three diarrhoeal disease kits were procured and donated to the Ministry of Health to support case management.



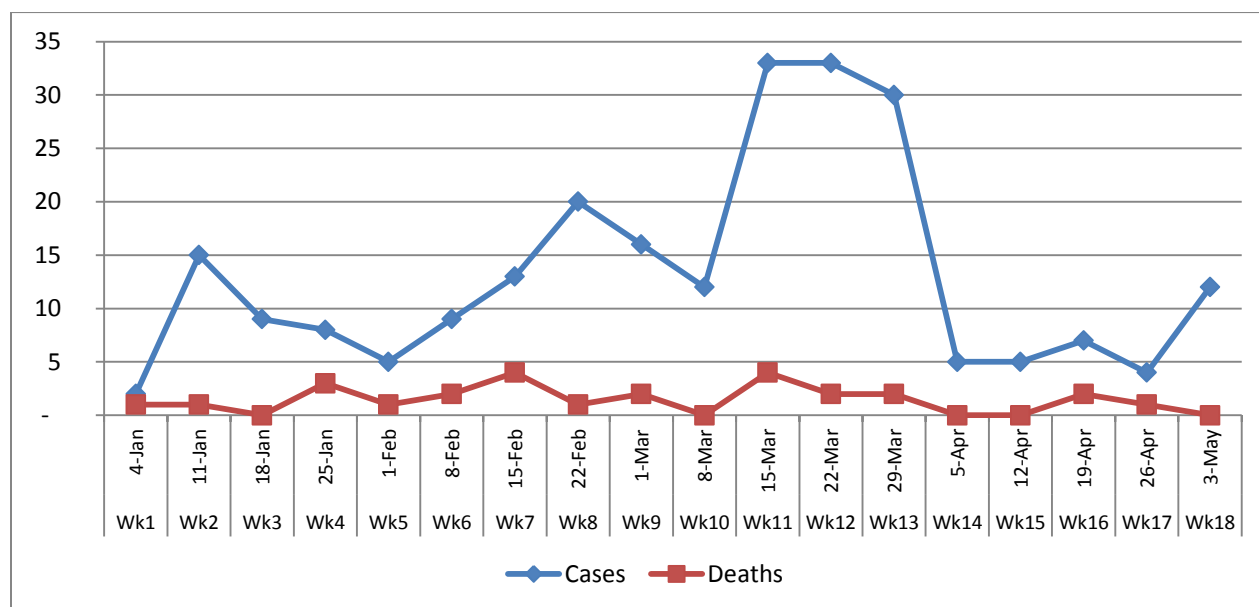
WR, right, presents the kits to the Deputy Minister

WHO provided technical support for the update Standard Operating Procedures (SOPs) for Prevention and Control of Cholera in Ghana as well as the field-testing of the document during training of rapid response teams from Greater Accra region.

7.4 MENINGITIS

In 2015, a total of 393 cases of meningitis, 44 deaths, case fatality rate of 11.2% were reported in the country. About 80% came from the Upper East, Upper West, and Northern Regions of Ghana which lie in the meningitis belt. Due to the mass vaccination campaign of persons aged 1–29 years with the Nm A Vaccine MenAfriVac in these three regions in the north, *Neisseria meningitidis* serogroup A (Nm A) is no longer identified as the causative organism. NmW was identified in 42% of the positive laboratory tests while *Streptococcus Pneumonia* accounted for 41%. As part of WHO support to strengthen surveillance, WHO made available meningitis laboratory diagnostic supplies to the Public Health Reference Laboratory for distribution to the 3 northern regions to support laboratory capacity for diagnosis.

Figure 1. Distribution of meningitis cases and deaths in Ghana by week, 2015



7.5 YELLOW FEVER (YF)

Yellow fever is a viral hemorrhagic illness transmitted by the mosquito. Vaccination is an effective preventive tool and a single dose of YF vaccine is sufficient to provide life-long protection against the disease. Consequently a booster dose of YF vaccine is no longer needed. Ghana lies in the YF endemic zone and reports sporadic cases every now and then. Surveillance for yellow fever is key for early detection and diagnosis for the necessary action. To strengthen surveillance WHO supported the country with diagnostic reagents for yellow fever and also supported shipment of samples for quality assurance testing by WHO Collaborating Centers. In the last quarter of 2015 an outbreak of yellow fever occurred in the Gonja West district of the Northern Region with 7 suspected cases 3 deaths being reported. Several response activities including enhanced surveillance and social mobilization to create awareness were initiated with the prospect of a reactive vaccination campaign in the district in 2016.

7.6 INFLUENZA

There were several outbreaks of avian influenza caused by H1N5 in Ghana with most of them occurring in Greater Accra regions. An estimated 50,000 birds were destroyed as part of control measures. To facilitate coordination of response activities WHO provided technical support and also assisted the National Disaster Management Organization to convene the multi-sectoral technical coordinating committee meetings to facilitate information sharing, planning and response activities among various stakeholders including the Veterinary Services, Ghana Health Services, Noguchi Memorial Institute for Medical Research (NMIMR) and development partners.

There was no case of transmission avian influenza to humans. Nevertheless, as part of Pandemic Influenza preparedness (PIP), WHO provided support to implement the country plan of action which aims to strengthen the laboratory capacity and surveillance for influenza among humans. The objectives are to strengthen influenza laboratory and surveillance and enhance national capacity data sharing. To this end support was provided to 2 staff of the National Influenza Center (NIC) in NMIMR to acquire updated skills in new technologies for influenza virus characterization at the WHO collaborating center, at Crick Worldwide Influenza Center, Francis Crick Institute, London, UK. WHO also facilitated the training on cell culture and influenza virus isolation for 2 staff from the Influenza laboratories in Nigeria and Cote D'Ivoire. Thanks to PIP support the weekly epidemiological bulletin produced by the Disease Surveillance Department is produced regularly and includes data from the flu sentinel sites. Activities at influenza surveillance sentinel sites have been boosted with staff oriented on updated surveillance protocols and support provided for specimen collection and transport to NIC. Four inactive Influenza Surveillance sentinel sites have been activated and are now sending samples to the NIC for testing while personnel from active sites are more motivated to adhere to the sentinel surveillance protocols. The outdated Influenza plan was updated with WHO support to incorporate an all hazards approach.



Training on Influenza virus diagnosis at Noguchi

Chapter 8: CORPORATE SERVICES AND ENABLING FUNCTIONS

TRANSPARENCY, ACCOUNTABILITY AND RISK MANAGEMENT

Transparency, accountability and risk management have been high on the WHO Reform Agenda and WCO Ghana has not been left out of this. A number of measures were taken during the period to mitigate risks as well as strengthen the office operations in the areas of transparency and accountability. The Office undertook an exercise to complete a risk identification and management register. This register will be updated annually. A Risk Management Team as recommended by AFRO, would be put in place soon to oversee this area.

Segregation of Procurement and Finance duties was completed with the reassignments of staff which also strengthened work in these two areas. Delays in the submission of DFC reports persisted in spite of several reminders to the beneficiaries. There is need for continuous engagement on the issue with the beneficiaries to improve the situation.

8.1 MANAGEMENT AND ADMINISTRATION

The general management and administration of the Office included implementing control framework and ensuring compliance, efficient and effective communication infrastructure; provision of operational and logistics support and complying with MOSS.

Human Resource Management - During the period under review, a new WR was reassigned to the Country Office in October. The WHO Ghana staff was strengthened to meet the work demand especially in the area of EVD and Emergency Preparedness and Response. Four (4) new international positions (EVD Coordinator, Epidemiologist, Medical Officer-Health Systems and Communications and Advocacy Officer) were created and filled. This brought the total number of staff in WCO Ghana to thirty-seven (37) with breakdown as follows:-

CATEGORY	NUMBER
International Staff	5
National Staff	32

Implement Control framework and ensure compliance - The office operations were in line with the rules and regulations of the Organization. The Office continued to strengthen internal controls by fully implementing the Country Support Unit (CSU) which led to the segregation of duties in the areas of procurement and finance.

Managing Expenditure Tracking and Reporting - In order to properly monitor the financial transactions of the Office and overall awards status of the Budget Centre, detailed awards' status reports were issued and shared with all programmes monthly. A summary of the 2014-15 budget status as of 30 December 2015 is as follows:-

Total Award-Budgeted US\$	Budget Implementation	Balance Available	% Budget Implementation
13,112,392.00	11,917,298.00	1,195,094.00	91%

Direct Financial Cooperation - Monthly status of DFC reports were issued and shared with IST/WA and also with all Technical Officers for follow-up actions with national counterparts. WCO Office engaged in some Direct Implementation of activities for and on behalf of the government so as to minimize the number of outstanding DFCs during the period. DFC details at the end of the year were as follows:

Total number of DFCs issued in 2015	Total amount of DFCs issued in 2015	Total number of outstanding DFCs as of 31 December 2015	Total amount of outstanding DFCs as of 31 December 2015
Seventy-Five (75)	\$2,027,838.59	Fourteen (14)	\$178,777.15

E-Imprest - The e-imprest system was well managed during the period and end-month closure reports were prepared and submitted to IST and AFRO monthly within the deadline dates. There were no outstanding unreconciled items at the end of the year.

8.2 IT INFRASTRUCTURE

WCO Ghana enjoyed an efficient and effective computing infrastructure during the period. In order to enhance efficiency and minimize costs, the office procured three network printers to replace existing 20 printers assigned individually to staff members. New Laptops and desktops were also procured to replace computers that were not up to WHO minimum standards due to aging.

Back up service - Document files were backed up daily and monthly during the year. A copy of the monthly backup is kept off site at one of the UN Sister Agencies.

The office has a second Internet connectivity from a local Service Provider. This Internet connection is operational 24-7 and also serves as backup for the primary Internet.

During the year the Primary Internet service provider upgraded their VSAT Modem equipment by replacing the two old Modems (one for receiving and the other for transmitting) to a new and modern one that has the capability of both transmitting and receiving.

Cisco Telephony System Migration - WHO initiated a project to deploy Cisco Unified Communication Manager (CUCM) solution and it is mandatory for all WCO's to migrate.

The project is to modernize WHO IT infrastructure and Services, improve efficiency of work processes and procedures, reduce cost and eliminate duplication of services.

Business Sunrise together with The IT focal point successfully implemented this migration in April 2015. Although all the network infrastructure required were of the minimum standard and upgrade could not be initiated due to possible relocation of the office, all the necessary equipment needed for the successful migration were in place and the office successfully migrated to the new Cisco Telephony System.

Challenges - One of the major challenges is the inadequate power supply when on the national grid. This has had serious effects on the IT equipment rendering most UPS non-functional as they absorb the surges. Two new 5KVA APC Smart UPS were procured for the servers to replace old ones.

8.3 OPERATIONAL AND LOGISTICS SUPPORT

1. **Office Accommodation** - The WCO Ghana office has been at its present location since August 1997. As the current premises is in a deplorable state and also can no longer accommodate the increasing number of staff members, there have been serious efforts to relocate the office within the shortest possible period. The relocation is expected to have some serious financial implications on the office's already over-stretched budget.
2. **Supply of Electricity** - The load-shedding exercise which was intensified during the year as well as the increase in electricity tariffs more than doubled the Office's electricity and fuel budget. The use of the new generator set was over-stretched to make up for the long hours of the load-shedding so as to ensure business continuity at all times.
3. **Office fleet of vehicles** - As of December 2015, the Office had ten (10) Vehicles, three of which were procured in 2015. The Office had six (6) over-aged and parked vehicles; four of which were disposed of during the year. The process is on-going for the disposal of the remaining two.
4. **Procurement of Goods and Services** - All suppliers had to go through competitive bidding to be selected for the supply of goods and services as per the rules. WHO shared suppliers for Security and Travel Agency services with other UN Agencies following LTAs issued and signed by the RC on behalf of all Agencies. More of such arrangements are underway so as to have better services in an efficient and effective manner.

An Annual Supplier Evaluation exercise is underway and should be completed by the end of January 2016. This would lead to the revision of the Supplier List and also to continue promoting more value for money in future transactions.

Some challenges in the local procurement of goods and services are in the areas of quality, timely delivery of goods and services and fluctuations in price quotes due to frequent exchange rate changes. The office has therefore, as much as possible, resorted to procurement through the e-catalogue system.

MOSS - SOPs in respect of office security have been enforced during the period including two fire drills in compliance with MOSS.

A MOSS assessment was undertaken and the Office was rated at 90% compliant. There is need for CCTV installation as indicated by the report.