



2016 ANNUAL REPORT



World Health
Organization

World Health Organization Ghana

EXECUTIVE SUMMARY

The WHO Country office for Ghana began the year 2016 with a three-day staff retreat in January at the Elmina Beach Hotel in the Central region under the leadership of the WHO Representative, Dr Owen Laws Kaluwa. The staff outlined priorities and strategies to strengthen WHO's contribution to the national health agenda during the year.

They also developed action plans on the 4 thematic areas of the Transformation Agenda - *(i)* Ethics, Pro-Results values *(ii)* Smart Technical focus, *(iii)* Strategic Operations and *(iv)* Effective Communication and Partnership to facilitate its implementation in Ghana.

Working in collaboration with the Ministry of Health/Ghana Health Service and other allied health institutions and stakeholders, the WHO country office, provided support aimed at achieving its mission which is attaining the highest level of health by the people in the country through its six operational areas which are *(i)* Communicable Diseases *(ii)* Non-Communicable Diseases, *(iii)* Promoting Health through the Life Course

(iv), Health Systems, (v) Preparedness, Surveillance and Response (vi) Corporate services and enabling functions. Notable among the support provided during the year were:

1. Release of funds amounting to US\$5.7million through the direct financial cooperation (DFC) for implementation of programmes.

2. In addition to the financial support, technical assistance was also provided to build capacity and instructional at all levels. The following are some of the achievement from the support provided:

- Development a National Adolescent Health Service Policy and Strategy (2016 – 2020) and a situational analysis to assess the current system of Maternal Deaths Review in Ghana;
- Commemoration of Child Health Promotion week and Africa Vaccination to promote preventive child survival interventions like Immunization, Vitamin A Supplementation, Growth monitoring, birth registration and ITN use.
- Development of the National Alcohol Policy and Legislative Instrument on Tobacco Control
- Development of a National Food Safety Plan and capacity building of regional and district level staff in water quality assessment and monitoring, disaster preparedness and response planning and health emergency preparedness in the three Northern Regions.
- Behaviour change communications materials developed for WASH in schools
- Review of Supply Chain Master Plan and implementation of activities in the Master Plan.
- Development of AMR Policy in “One-Health” and Surveillance System for Antibiotic use, Assessment of the Blood Regulatory System and Finalization of Patient Safety Policy. In addition there was Capacity Building of the Technical Advisory Committee of the FDA on Adverse Events Following Immunization (AEFI) causality Assessment and Finalization of the Standard Treatment Guidelines and Essential Medicines List

- Development of the Ghana Health Account 2014-2015 and the HRH Projection for selected cadres up to 2030
- Implementation of Treat All policy for HIV and Operationalization of policy to address the extensive human resource needs to achieve the Ghana 90-90-90 targets initiated
- Capacity building for the management of Multidrug Resistance TB (MDR-TB) and prevalence survey to establish the burden of Multidrug Resistance TB.
- Three months awareness campaign on Guinea Worm Disease and Cash Reward System aired on National Television as part of in-country post-certification activities
- Hosting of the African Regional Commission on Polio Certification (ARCC) in Accra in November and honouring the chairpersons of technical committees (NCC, NPEC and NTF) for dedicated services to polio eradication in Ghana.
- Strengthening Primary Health Care by donating a of a pick-up to the District Health Directorate-Wassa East District to support supervisory visits to the communities
- Strengthening capacity to improve immunization services including supervisory visits by donating a pick up vehicles to the Sekondi-Takoradi metro in the Western region for integrated child health and Surveillance activities
- Support coordination and supervisory activities of the Mental Health Authority by donating a Toyota Land Cruiser

- Support for Cervical cancer prevention and control with equipment and education materials
- Commemoration of key health-days such as World Health Day, World No Tobacco Day, World diabetes day to create more awareness on health living and life style.
- Meningitis outbreak investigations and response initiatives and mass Men A vaccination campaign in the three regions in the northern sector.
- Supported rapid containment of an outbreak of cholera that emerged in Cape Coast, Central region on 21 October 2016. WCO deployed an epidemiologist, a risk communication expert and a WASH specialist as part of the national rapid response team that provided technical support and guidance to the regional and district response. The high attack rate, rapidly evolving cholera outbreak was effectively controlled within 6 weeks of onset following intensive implementation of high-impact interventions.

During the year under review, the Operations officer, Mrs Sakyibea Akuffo-Parry got an international appointment and left the office. Unfortunately one of the Secretaries in the person of Ms Marian Laryea passed away after a short illness.

The country office owes a debt of gratitude to office of the Regional Director (AFRO) and IST for the support during the year. The office owes same gratitude to the Ministry of health, the Ghana Health Service, Development Partners and other stake holders for the collaboration and teamwork during the year 2016. The country office hopes to work with the same team spirit and enthusiasm in the year 2017 and beyond.

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CHAPTER 1

GENERAL COUNTRY PROFILE

1.1 GENERAL PROFILE AND DEMOGRAPHY

Ghana is a tropical country situated in the west coast of Africa and located between latitudes 4° and 11° N of the equator. Ghana shares common borders with neighbouring Togo to the East, Burkina Faso to the North, and

Fig. 0: Map of Ghana



Cote d'Ivoire to the West. The South is bounded by the Gulf of Guinea. At independence in

1957, Ghana's population was about 6 million, and increased to 6,726,815 in 1960 when the first post-independence census was conducted. The population of the country is estimated to reach about 28 409 576 as at 1st January 2017. Ghana's phenomenal population growth rate is as a result of the interplay of four main factors. These are the youthful age structure of the population which means that a large proportion of the population is concentrated in the reproductive or child-bearing ages; the persistently high fertility rates; the rapidly falling mortality rates and the volume, persistence and direction of migration flows in and out of the country. The level of fertility in Ghana though declining has still remained very high. The reported Total Fertility Rate (TFR) ranged from 6 and 7 between 1960 and 1988. The Ghana Demographic and

Health Survey (GDHS) reports show that there have been gradual but slight decline of the TFR from 5.5 (1993) through 4.6 (1998) to 4.2 (2003), 4.0 (2008) and later to 4.2 in 2014 which is considered very high when compared with 2.0 for most developed countries

Ghana has a pyramidal age structure due to its large numbers of children below 15 years of age. Over forty percent of the population is below age 15 while about 5 percent is above 65 years. Life expectancy at birth is estimated at 62.4 for both sexes; with 61.0 years for males and 63.9 years for females. The spread of population in Ghana is diverse with Ashanti region (19.5 percent) and Greater Accra region (16.1 percent) alone sharing 35.6 percent of the total. Also population density varies greatly in Ghana. Nationally, density is estimated to have increased from 79 per square kilometer (km²) in 2000 to 102 in 2010. Greater Accra still has the highest population density of 1,205 per square kilometer compared to 895 square kilometer in 2000, while Northern Region also still has the lowest density 35 per

very sparse. The density and population data has considerable implications for the kind of health professionals and providers required in the different regions and their distribution patterns nationally. Where the population is high and the density is high, the rule of synergy would require that staff and facilities are appropriately mixed to deliver more and better services. This is however not the case. There is a growing trend in rural-urban migration.

1.2 ADMINISTRATIVE PROFILE AND GOVERNANCE

Ghana has multi-party democratic political system with a presidency, a cabinet, a parliament, an independent judiciary system and a vibrant free press. These constitute national level structures with day-to-day functions administered through an established bureaucracy - ministries, departments and agencies (MDAs). The national institutions are responsible for policy and strategy development. For administrative and political purposes, Ghana is divided into ten regions: Ashanti, Brong-Ahafo, Central, Eastern, Greater Accra, Northern, Upper East, Upper West, Volta and Western Regions. Each region is headed by an appointed Regional Minister who represents the Head of State (the President of the country). The regional minister is assisted by a deputy regional minister and a Regional Coordinating Council (RCC). Among other things, they are supposed to co-ordinate and formulate integrated district

plans and programmes within the framework of approved national development policies and priorities within their regions. The country was divided into one hundred and thirty eight (138) administrative districts in 2004 and further divided into 170 in 2008 and 216 in 2012. Each district is headed by a District Chief Executive (DCE), who is nominated by the President and approved by the District Assembly. The DCE chairs the Executive Committee of the District Assembly whilst an elected Presiding Member presides over the District's Assembly meetings. The District Assembly is the highest political and administrative authority in the district. The districts are also divided into unit areas and are headed by elected executives who are responsible for their area of jurisdiction. The government since 1980s has been vigorously pursuing the policy of decentralization to allow decision on development to be taken at the grassroots rather than the previous phenomenon where decisions were taken from the central point (top) and allowed to flow down. The division of the country into regions, districts, unit committees and others has implication for health management and administration in the country. The health sector uses the same decentralization nomenclature up to district level as under government's political administrative system. The health districts are further demarcated into sub-districts which are also subdivided into Community Health Planning and Services (CHPS) zones which are presently the lowest level of service delivery. There are discussions to make CHPS zones coterminous with political unit committee levels for easy administration and coverage. Traditional administration co-exists with the modern governmental structure. The traditional areas consist of Kingdoms, Chiefdoms and Traditional Councils that have important roles to play in all socio-economic and political endeavours especially in rural areas.

Election 2016

The year under review was an election year for Parliamentarians and a President. Seven candidates contested for the Presidential slot. Nana Akufo-Addo of NPP was voted the President with 5,716,026 or 53.85 percent of the total votes cast.

Out of a total of 275 Parliamentary seats, NPP had 169 or 61.45 percent whilst NDC had 106 or 38.55 percent leaving none for the remaining fourteen parties which fielded candidates for parliament. The swearing in ceremony was planned for the 7th of January, 2017 as per the constitutional arrangements for Ghana.

1.3 SOCIO-CULTURAL-ECONOMICS

Ghana is making gradual but steady progress in its socio-economic development fronts as its Human Development Index (HDI) was estimated to have increased by 0.8% annually from 0.363 from 1980 to 0.467 in 2010 and further improving to 0.580 in 2014 thereby ranking the country 139 out of 186 countries with comparable data. Ghana's HDI is stipulated to be above the regional average of Sub Saharan Africa (SSA) which also increased from 0.293 in 1980 to 0.389 in 2010. Though Ghana is currently placed among Medium Human Development countries, it still ranks very low considering the average HDI (0.750). There are indications that Ghana's HDI will continue to improve in the coming years.

Ghana's national level of poverty has been improving as fell by more than half (56.5% to 24.2%), thereby achieving the MDG1 target in 2015. However, the annual rate of reduction of the poverty level slowed substantially from an average of 1.8 percentage points per year in the 1990s to 1.1 percentage point per year reduction since 2006. On the other hand, the rate of reduction of extreme poverty has not slowed since the 1990s and impressive progress in cutting extreme poverty was achieved even since 2006 (cut from 16.5% to 8.4%). This implies that relatively more progress has been made for the extreme poor in recent years than those living close to the poverty line. Households in urban areas continue to have a much lower average rate of poverty of 10.6 percent compared to 37.9 percent for rural areas. Also, urban poverty has dropped in recent years much faster than rural poverty and as a result the gap between urban and rural areas has doubled – rural poverty is now almost four times as high as urban poverty compared to twice as high in the 1990s. At the regional level, the Northern, Upper East, and Upper West regions continue to have the highest poverty rates. However, substantial progress has been achieved since 2006 in the Upper East region as poverty has dropped from 72.9 percent in 2006 to 44.4 percent in 2013. Of great concern is the Northern region which saw its high level of poverty fall only marginally from 55.7 percent to 50.4 percent. Since the 1990s overall, the Northern region has seen the smallest progress in poverty reduction. This is a major issue for the country given that the Northern region now makes up the largest number of poor people of any of Ghana's ten regions (1.3 million). Regarding the depth with which people live in poverty, or how far below the poverty line, the same three northern regions continue to have the highest levels of poverty depth, and Upper West and

Upper East also made important progress in reducing poverty depth since 2006 although the levels remain high. Surprisingly, four regions (Western, Central, Volta, and Ashanti) saw their poverty depth rise since 2006, meaning that not enough efforts are being made to improve the lives of the poor in those regions. It is also important to note that although the proportion of people living in poverty has declined by a quarter since 2006, the number of people living in poverty has only declined by 10 percent (from 7million to 6.4million), meaning that poverty reduction is not keeping pace with population growth. The relative high poverty rate in Ghana is also compounded by the fact that large majority of Ghanaians are rural peasant farmers and small scale traders in the informal sector with irregular income. Thus such poor people are more likely to get sick, stay sick and consequently have low productivity and income. The introduction and implementation of pro-poor and social protection programmes like National Health Insurance Scheme (NHIS), Livelihood Empowerment Against Poverty (LEAP), the Capitation Grant under Basic Education, School Feeding Programme, Free School Uniform and Free School Textbook, the Agricultural Input Support, the

Microfinance and Small Loans Centre (MASLOC), are some of the interventions which have contributed positively to poverty reduction in Ghana.

The Ghanaian economy has been performing poorly since hitting the highest Gross Domestic Product (GDP) growth rate of 14 percent in 2011 at the back of oil export. The following years were difficult ones that were characterized by slowing activity, accelerating inflation, and rising debt levels and financial vulnerabilities. The country's economic prospects were put at risk by the emergence of large fiscal and external imbalances, as well as by electricity shortages. GDP growth rate fell to 7.3 percent in 2013 and further to 4.0 percent in 2014 and 3.9 percent in 2015. Such poor performance necessitated the country to negotiate for US\$918 million International Monetary Fund (IMF) Extended Credit Facility (ECF) Programme for Ghana as a balance of payments support over three-year period to be disbursed in eight equal tranches. The package was to front-load fiscal adjustment to restore debt sustainability, focusing on containing expenditures through wage restraint and limited net hiring, as well as on measures to mobilize additional revenues; structural reforms to strengthen public finances and fiscal discipline by improving budget transparency, cleaning up and controlling the payroll, right-sizing the civil service, and improving revenue collection. Also it was to restore the effectiveness of the inflation targeting framework to help bring inflation back into single digit territory; and preserving financial sector stability. Unfortunately 2016 did not see much improvement in economic performance as GDP growth has worsened to 3.6 percent with further fiscal and external imbalances. The poor performance of the economy has impairing consequences for the health sector such that there was challenge with recruitment and payment of compensations for all health workforce, aside making resources available for supplies and equipment needed to provide health care. It was therefore not surprising that the health sector experienced a lot of work stoppage and strike by health workers making one demand upon another. Due to the economic constraints the country was not able to meet its financial commitments to development partners such as the Global Fund and Gavi among others which support the health sector with funding and procurement of health commodities.

CHAPTER 2

COMMUNICABLE DISEASES

2.1 HIV/AIDS

The national prevalence of HIV in 2015 was 1.61% with an ANC prevalence of 1.8%. This was a slight increase over the previous 1.47% in the general population in 2014. There was an estimated 274,562 Persons Living with HIV (PLHIV) out of these there were 12,803 new HIV infections made up of 10,606 adults and 2,197 children. There were 12,646 annual AIDS deaths out of which 1,423 were children under 15 years.

Key Activities Supported

- The Ghana 90-90-90 Roadmap Ghana has adopted the Treat All policy for HIV care in line with the new WHO recommendations. WHO in collaboration with partners supported the National HIV/AIDS Control Program (NACP) to develop the 90-90-90-roadmap with the focus to locate, test, treat and retain persons living with HIV/AIDS in care for universal coverage.

The treat all policy has extensive human resource implications. WHO is supporting the Ghana Health Service and the NACP to address this through the adoption and development of a task sharing policy guidelines for the efficient leverage of human resources to improve access to quality health care. This guideline which is a major achievement is about to be rolled out as part of the 90-90-90 Roadmap which will ensure geographic access to ART and at all levels.

- Joint UN Team on HIV/AIDS (JUTA) support for HIV/AIDS activities

WHO in collaboration with other JUTA members participated in the national joint monitoring of Prevention of Mother to Child Transmission of HIV (PMTCT). This is a periodic monitoring of PMTCT and Early Infant Diagnosis (EID) with regards to testing, treatment and care as well as commodities and supplies at the implementation levels. In collaboration with UNICEF, support

Pediatric HIV Acceleration Plan, an HIV Task Sharing Policy and Revision of treatment guidelines in line with new WHO recommendations.

Major Outcomes /Achievements. WHO in collaboration with UNICEF organized a capacity building and experience sharing workshop for the elimination of Mother to Child Transmission in Victoria Falls in the year under review for National HIV/AIDS Control Programs of which Ghana benefited. Capacity was built for PMTCT and Early Infant Diagnosis (EID) programming, integration of services and how to address programmatic gaps.

WCO engaged the services of a short term consultant to provide technical support to the NACP with the implementation of the 90-90-90 Roadmap. The main outcomes of this consultancy included technical support provided for:

- The reprogramming of Global Fund grants and addressing some implementation challenges

- Following up on recommendations EID and Paediatric HIV joint monitoring reports and
- Providing effective mechanisms for coordination of activities particularly among private sector and civil society.

Key Challenges and how to address them

Prevention of Mother to - Child Transmission (PMTCT) and Early Infant Diagnosis (EID) are beset with many challenges. Despite the high Antenatal Clinic (ANC) attendance and high coverage of immunization (90%) overall HIV testing services provided within ANC settings is low due indicating non integration of essential ANC services. For instance in 2015, out of 694,329 pregnant women tested 12,236 were positive and only 7,813(64%) were put on ARVs.

Low coverage of condom use and stigma for TB and HIV patients also remain major challenges in the HIV response. Other foreseen challenges include retention in care particularly with the introduction of the treat all policy

To address these challenges, priorities for the upcoming year will be for:

- **Strengthening HIV Testing Services (Diagnostics, Key Populations and Prisons).**
- **WHO will provide TA for the revision of the testing algorithm.**
- **Implementing a Differentiated Model of Care (DMOC)**
- **Supporting the implementation and monitoring of the developed task sharing policy.**
- **Supported the NACP as part of JUTA effort to improve on linking HIV positive mothers and HIV Exposed**

Infants to HIV treatment and care program and other support services.

2.2 MALARIA

WHO is supporting the country in the implementation of the 2014 2020 strategic plan of the National Malaria Control Program (NMCP) the main goal of which is to reduce the malaria morbidity and mortality by 75% by 2020 (using 2012 as baseline)



Key activities supported

• **Country Dialogue Processes for the Malaria Vaccine Pilot Implementation Program**

In January 2016, WHO published its policy position for RTS,S, the first malaria vaccine, recommending pilot implementations in distinct settings in sub-Saharan Africa to assess the programmatic feasibility of delivering the four-dose schedule, to evaluate vaccine impact on mortality and to further characterize vaccine safety in the context of a routine immunization. Ghana responded to the World Health Organization (WHO) call for national ministries of health to express interest in collaborating in the RTS,S/AS01 malaria vaccine pilot implementation programme and this was reaffirmed in March 2016.

Subsequent to this, there was the first country consultative visit by a joint team from WHO, PATH, and GSK with the objective to provide a detailed overview of the proposed pilot implementation and Phase IV study, to receive feedback from country stakeholders on the various components and to discuss next steps.

The meeting held from 12-14 October and facilitated by WCO was well attended by senior representatives from the Ghana Ministry of Health, the National Malaria Control Programme (NMCP), the Expanded Programme on Immunization (EPI), the Food and Drugs Authority (FDA), the Ghana Health Service Ethics Review Committee, various research organizations, UNICEF, WHO, PATH, and GSK.

The main outcome of this dialogue was the key areas identified for further country actions by the Technical Working Group (TWG). In this regard, WCO in collaboration with PATH facilitated an in-country workshop from 19-20 December for the TWG to carry out the following assignment:

1. Selection of PIP areas, clusters and hospitals
2. Outline a communication strategy
3. Develop a plan or roadmap for vaccine implementation
4. Discuss protocol development and submissions for ethical review
5. Regulatory approval

The main outcomes of this successful workshop were the draft plans outlined for the above components

and sites selected for the pilot implementation.

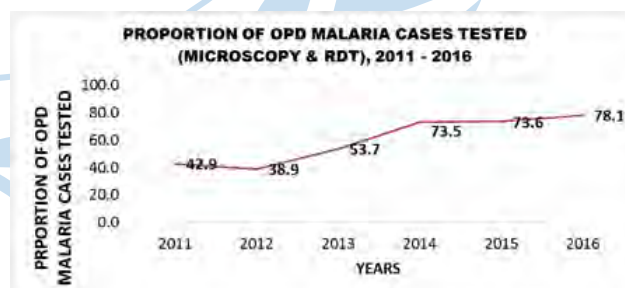
• **Malaria Surveillance, Monitoring and Evaluation (SME) activities.**

Under surveillance, monitoring and evaluation, WHO AFRO organized a capacity building workshop for NPOs and NMCP M&E officers at Kilimanjaro in the United Republic of Tanzania. This was to build capacity of NPOs and NMCP M&E officers for improving malaria surveillance, data collection, management, analysis and use for decision making. Aspects emphasized were the online data entry for the World Malaria Report and the use of the AFRO Real-time Strategic Information System (rSIS). In relation to this, WHO HQ supported the NMCP to conduct a rapid impact assessment of malaria interventions during the year findings of which are in the process of being published.

Major Outcomes/Achievements.

Malaria control in Ghana has seen tremendous achievements in the major impact and outcome indicators as shown below:

Fig. 2: Proportion of OPD Malaria Cases Tested, 2011-2016



• **Drug Resistance TB Survey**

WHO is supporting the country to establish the burden of Multidrug Resistance TB which is still not established in the country. This is being done through a prevalence survey being conducted by KCCR. WHO HQ supported the process with regards to the - data collection currently ongoing. (This information has never been available)

Major Outcomes/Achievements
There have been major successes with TB/HIV co-infection activities. There is a steady increase in TB patients enrolled into ART

Fig 6: Proportional Trend of Dual TB/HIV enrolled on ARV

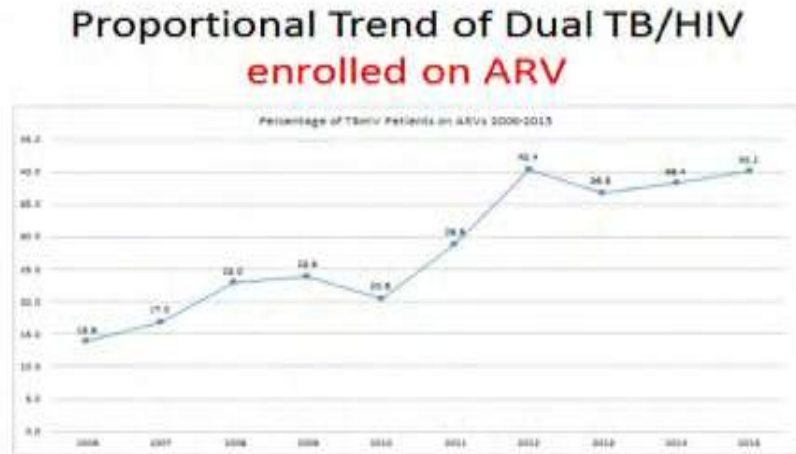
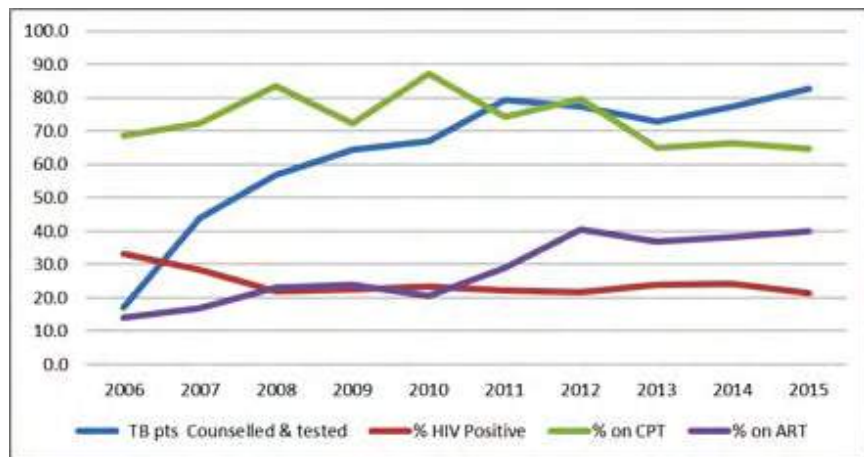


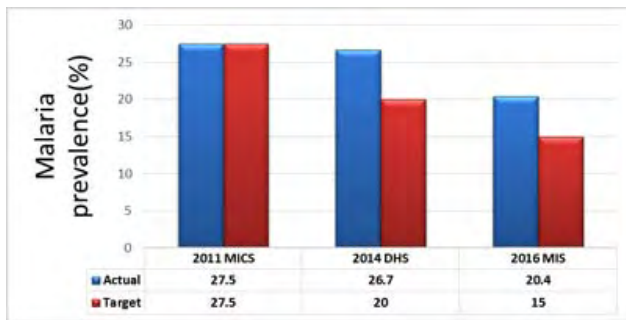
Fig 7: Outputs of Joint TB/HIV activities 2006-2015



- **Malaria Parasite Prevalence.**

The prevalence of malaria in Ghana is declining as demonstrated by the major surveys. The methodologies in these two surveys are standardized for malaria indicators.

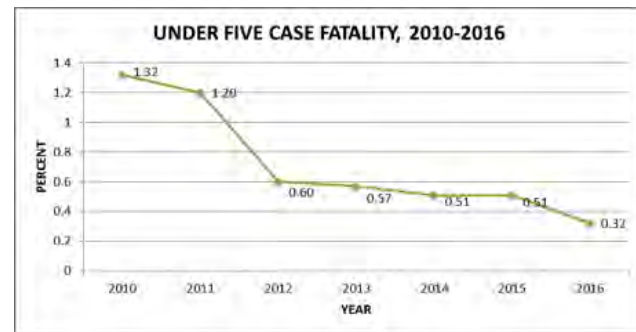
Fig.3: Malaria Parasite Prevalence, 2010-2016



- **Case Fatality Rate**

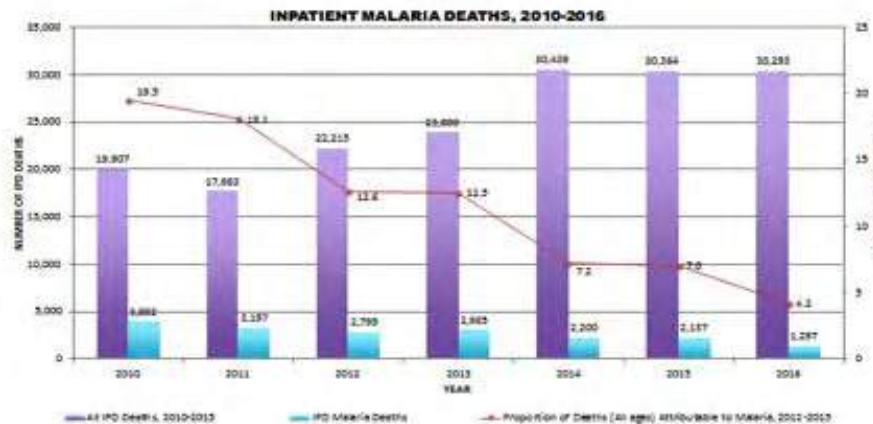
Case Fatality Rate is an indicator for mortality and particularly the quality of in patient under five malaria treatment. This has been declining over the decade as shown below.

Fig 4: Under five Case Fatality, 2010-2016



In patient malaria deaths have been generally decreasing as shown below:

Fig. 5: Inpatient Malaria Deaths, 2010-2016



Key Challenges and how to address them

Main challenges with malaria control have been:

- Insecticide resistance development which has affected all the current classes of insecticides.
- Lack of resources for scale up of:
 - ◆ *Indoor residual spraying*
 - ◆ *Seasonal malaria Chemoprevention*
- Procurement challenges particularly with SP leading to stock outs
- Change in human behavior with regards to use of LLINs, illegal mining with pit digging creating breeding sites for mosquitoes.

WCO is supporting the NMCP to address some of these challenges. Technical assistance is being provided for the development of an insecticide resistance management plan through the engagement of an expert. The NMCP in collaboration with the private sector has set up a malaria foundation which seeks to fill some funding gaps through private sector resource mobilization.

The next application for global fund grant will have as one of the priorities behavior change communication to address all behavior related challenges.

2.3 TUBERCULOSIS

WHO supported the National TB Control Program (NTP) with the requisite technical assistance to deliver control interventions towards the End TB Strategy.

Key activities supported

• TB Situation Room Mission

There was a joint WHO, USAID and Global Fund technical assistance mission carried out in February, 2015. The purpose of this mission was mainly to review the progress of the NFM grant implementation. It was also to identify potential bottlenecks to effective grant implementation and provide recommendations on identified gaps for effective implementation and scale up. This mission was very successful with several recommendations made for programmatic improvement.

• Greenlight Committee Mission (GLC)

The Greenlight Committee missions are a mechanism to support NTPs with technical experts in addressing programmatic management of Multidrug Resistance TB (MDR-TB). WHO provided a GLC TA mission in 4 - 8 July, 2016 to build capacity for clinicians and laboratory practitioners in the management of Multidrug Resistance TB (MDR-TB). These health professionals were taken through mechanism of drug resistance tuberculosis, diagnosis of drug resistance TB/molecular diagnosis, Drug susceptibility testing, short course regimen for MDR-TB and Infection control among others.



Training for Clinicians and Laboratory practitioners on Multidrug Resistance TB

Key Challenges and how to address them

- Shorter regimen for MDR-TB not adopted yet.
- New childhood drug formulation yet to be adopted
- TB screening among pregnant women at antenatal clinics not fully integrated
- Insufficient capacity for Community Health Planning services (CHPS) for TB management.

WCO is supporting the NTP through some measures to address challenges. These include:

- Building capacity for health providers particularly at the CHPS level
- Technical assistance for the adoption and decentralization of the shorter MDR-TB regimen.
- Improving access to Gene Xpert, revision of algorithm
- Reinforcing TB stigma reduction activities.

2.4 NEGLECTED TROPICAL DISEASES (NTDs)

The Neglected Tropical Diseases (NTDs) are divided into 2 main categories namely:

(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.



Discussions at BU drug trials site in Dunkwa on Ofin

WHO in 2016 maintained technical and logistic support for planning, research and surveys, surveillance and mapping, delivery of drugs for Mass Drug Administration and planning. In line with promoting an integrated strategy to address case management NTDs, WHO supported the participation of the Ghana program managers of these diseases in the First Joint Meeting of National Programme Managers On Case Management of NTDs, Cotonou, Benin. Technical support was subsequently provided for the development of an integrated case management strategy for Ghana.



Participants in the integrated NTD case management strategy development workshop

Buruli Ulcer (BU)

For the fourth year running, WHO continued the support of the drug trial for BU treatment comparing the use of streptomycin (one of the conventional medicines given by injection) and clarithromycin (which is taken by mouth). The study, funded by American Leprosy Mission is taking place in Agogo, Tepa and Nkawie in Ashanti Region and Upper Denkyira in Central Region in collaboration with Komfo Anokye Teaching Hospital and Kumasi Center for Collaborative Research. Recruitment of patients ended in 2016 with total of 252 patients recruited. The study will wind down in 2017 once the one year follow up for outcomes is over. Preliminary results from the study indicate that clarithromycin combination is just as effective as streptomycin for treatment of BU. This will make treatment so much safer and patient-friendly for those affected by BU which is usually children from poor rural communities.

WHO is also supporting researchers in the Chemistry Department of the University of Ghana to conduct a study on a rapid diagnostic test to diagnosis Buruli Ulcer. The test detects mycolactone, the toxin that causes tissue damage in Buruli ulcer. This test has the potential to facilitate rapid testing of BU at the point of care instead of waiting several days for results from sophisticated tests available only at reference laboratories usually far removed from BU endemic communities.

Human African Trypanosomiasis (HAT)

HAT, another name for sleeping sickness was last diagnosed in Ghana in 2013. The disease is transmitted through the bite of an infected tsetse fly. In working towards elimination status, it is important to demonstrate that there is a robust surveillance system capable of picking up potential cases. WHO is currently supporting HAT sentinel surveillance in Dodowa (Greater Accra), Akuse and Atua (Eastern Region) and 3 health facilities in Takoradi, Western Region. In 2016, 973 suspected cases were tested in these sites using a rapid diagnostic test (RDT).



Interaction during a monitoring visit to a HAT sentinel site in Takoradi

More sensitive tests carried out in the WHO Collaborating Center in Burkina Faso ruled out HAT in 36 cases identified as positive by the RDT. In 2017, there are prospects of setting up new sentinel sites in Ashanti and Upper West Regions monitor whether old foci are indeed rid of HAT.

Yaws

Ghana is endemic for yaws, a chronic bacterial infection that affects the skin countries and usually affects children in poor communities living in warm, humid tropical regions. The disease is rarely fatal but can lead to chronic disfigurement and disability. A single oral dose of Azithromycin is now the treatment of choice and this has prospects for eradication by 2020 as per the WHO roadmap for NTDs.

The WHO-led study in Ghana to assess whether a lower dose of Azithromycin is just as effective as the current dose was completed in 2016 with about 400 participants enrolled. Two Noguchi Memorial Institute for Medical Research staff were supported to undergo laboratory training on Yaws testing in CDC Atlanta. The results from the study are expected in 2017. WHO collaborated with the Ghana Yaws Eradication Program to develop a documentary on yaws which seeks to education people on how the disease can be prevented and treated.

The documentary can be accessed on the following link

<https://www.youtube.com/watch?v=5jaboolVUgg&feature=youtu.be>



YAW'S ERADICATION

A Single Dose of Azithromycin cures YAWS



Schistosomiasis

Schistosomiasis also known as bilharzia is a water-borne disease transmitted during contact with water bodies infected by the parasite. The disease can be found in all districts of the country. Preventive chemotherapy using mass drug administration (MDA) for school-aged children and adults in high risk affected areas is an important control strategy.

Education on the disease and how it can be prevented are important for the success of Schistosomiasis control program. WHO provided 20,000 educational booklets which were distributed to schools in the high-risk communities. The booklets which contain information on disease transmission, prevention and control activities helped to facilitate the 2016 MDA.

Onchocerciasis

Onchocerciasis commonly known as river blindness is an eye and skin disease caused the parasitic worm *Onchocerca volvulus*. Onchocerciasis. Infected people may show symptoms such as severe itching and various skin changes with some developing eye lesions which can lead to permanent blindness. In Ghana, Greater Accra Region is the only region found not to be endemic for onchocerciasis. WHO supported a survey in 113 selected sentinel villages in 9 regions to determine onchocerciasis prevalence and assess the effectiveness of the MDAs as the country plans towards onchocerciasis elimination. The findings which showed a prevalence ranging from 0 to 38.2% in the sites assessed, are guiding the NTD program and stakeholders on strategies to improve elimination activities in areas of high prevalence.

Support for Mass Drug Administration (MDA)

The integrated NTD programme with the support of its partners and stakeholders undertake mass 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 2016, this translated into more than \$5 million worth of drugs being cleared and delivered. MDA was undertaken for lymphatic filariasis, schistosomiasis, onchocerciasis and soil transmitted helminths with coverage of 81 % of the targeted population in 2016. Transmitted assessment surveys (TAS) are conducted among school children to monitor transmission of the filarial parasite that causes lymphatic filariasis, also known as elephantiasis. Technical support was provided during the TAS conducted in some schools in Accra. None of the schools recorded a positive test during the exercise



Testing of Class 1 pupils in a primary school in Accra during a lymphatic filariasis transmission assessment survey

Guinea Worm Eradication Programme

The Ghana Guinea worm (GW) Programme has achieved a Post Certified status for 2 years and is well integrated into the National surveillance system i.e. Integrated Disease Surveillance and Response (IDSR). The Country was certified GW 'free' by WHO on January 2017 and no active case or imported has been recorded. Programme objective for the year under review was to carry out GW Post Certification Surveillance activities and Public Awareness of the disease including the National Cash reward.

Key activities supported

- Ghana participated in the Programme Manager meeting for Post Certified countries in March, 2016 in Lome. (Togo) The meeting reviewed the global situation and POA for 2016.
- Field and Support visit were made by the National Technical team to all 10 regions during the year to discuss inputs of GW in Regional Plans and prioritizing rumour investigations.
- Rumour registry: All regions with the exception of 2 (Central and Upper West) reported a total of 97 rumours, all were investigated of which 96 (99%) was within 24 hours.

Table 12: Guinea Worm Reporting and Investigation

GUINEA WORM RUMOUR REPORTING & INVESTIGATION				
Region	# Cases	# Investigated	No. Investigated in 24hr	% Investigated in 24hr
Ashanti	2	2	2	100
Brong-Ahafo	2	2	2	100
Central	0	0	0	0
Eastern	2	2	2	100
Greater Accra	1	1	1	100
Northern	47	47	46	98
Upper East	4	4	4	100
Upper West	0	0	0	0
Volta	2	2	2	100
Western	37	37	37	100
Total	97	97	96	99

Major Outcomes/Achievements

- All 216 District reported on GW; at the health facility level 95% was achieved (3,493 out of 3679 facilities)
- A packaged support in GW Post Certification Surveillance and Awareness was provided to Kwahu Afram Plains North (KAPN) district in the Eastern region (Hard to reach/At risk). A total of 75 health staff and about 200 village volunteers including the Island communities were oriented on GW post certification surveillance. The Awareness campaign included 3 month Public Service Announcements on radio, health talks for religious and identifiable groups in the district.



- A plan and budget support was for GW infection in dogs search / survey in formerly endemic villages in November 2016 was rescheduled to first quarter of 2017 due to Cholera outbreak and national presidential and parliamentary elections. The survey was to verify and establish the absence or otherwise if this emerged issue prevailing in the remaining endemic countries

2.5 VACCINE PREVENTABLE DISEASES

Every year, WHO provides support (financial and technical) for vaccine preventable disease (VPD) prevention and control in Ghana through (i) the strengthening of the routine immunization activities which focuses on the reaching every child (REC) approach (ii) supplemental immunization activities (commonly referred to as mass vaccination campaigns) and (iii) Vaccine Preventable Disease (VPD) surveillance. These supports are provided to (i) reduce morbidity, mortality and disability due to vaccine preventable childhood killer diseases and (ii) sustain the gains made in the past through immunization.

The year 2016 was a challenging one as in previous year but with the collaboration with partners such as WHO, UNICEF and the government of Ghana, through the national immunization programme (NIP) was able to sustain most of the gains achieved by the Immunization programme in the country. Notable among the immunization gains are (i) interruption in transmission of wild polio since November 2008 (ii) no measles deaths record since 2003 (iii) MNT Elimination since October 2011, and (iv) significant reduction in the incidence of diarrhea following the introduction of rotavirus vaccine in 2012.

• Documentation

WHO provided technical support for the preparation/ finalization of relevant documents on the immunization programme in the

country. These documents were (i) the WHO-UNICEF Annual Joint Immunization Report (ii) Polio Annual Progress Report (APR) (iii) Gavi Joint Appraisal Report (iv) Immunization Transition implementation and (v) Revised EPI Policy and Immunization Field guide

• Routine EPI strengthening

Support for routine immunization covered a range of activities that included (i) effective collaboration with CDC Atlanta and the Government on the implementation of the CDC 2 Year Life Flagship programme that sought to improve measles second dose coverage and other interventions during the second year of life such as Vitamin A, meningococcal A conjugate vaccine etc. The support facilitated the conduct of the baseline study and the immunization data quality assessment (IDQSA). (ii) The 2016 African Vaccination Week in April and May during which awareness about the importance of immunization was heightened and more than 9000 children who missed some of the immunization doses were vaccinated to close some of the gaps. (iii) Support for workshops to assess causes of low immunization performance and high dropout rate in some districts which led

to the donation of a Toyota Hilux pick-up to the Sekondi-Takoradi Metro health directorate for outreach and services and supportive supervision. The Metro which recorded Penta 3 coverage of 46% in 2015 improved coverage to 54% in 2016. There is hope for further improvement in future. Table 1 is the national Penta3 coverage for 2016 as at end of November. No district in the Volta region is the only district now that has recorded below 50%. The most challenging region in 2016 is the Volta region.

Table 1: Penta 3 Immunization coverage, Ghana (as at Nov 2016)

Regions	Regional vaccination coverage (%)	No of Districts in region	District coverage performance 2016				% Dist with cov >=80%
			< 50 %	50-79%	80-89%	>=90%	
Ashanti	86	30	0	7	3	20	77
Brong-Ahafo	89	27	0	1	4	22	96
Central	79	20	0	7	3	10	65
Eastern	90	26	0	6	2	18	77
Greater Accra	79	16	0	6	3	7	63
Northern	95	26	0	1	8	17	96
Upper East	77	13	0	6	3	4	54
Upper West	72	11	0	6	2	3	45
Volta	76	25	1	6	14	4	72
Western	85	22	0	2	5	15	91
National	84	216	1	48	47	120	77

•New vaccine introduction

The country office provided the required support to the national programme to introduce the meningococcal A conjugate vaccine into the routine immunization programme on 01 November 2016 with the view to (i) contributing to the meningitis elimination programme of the African continent

and (ii) reducing the morbidity and mortality due to Men A in the country significantly. The new vaccine is given to children aged 18 months to align it with measles second dose all of which fall within the second year of life.

Accelerated disease control (vaccination campaigns)

WHO provided support for two Meningitis vaccination campaigns in 2016. The first was reactive campaign in the Upper west region during the outbreak in the region. A total of 136,002 (representing 98.6% of the target population) aged 2-29 years was vaccinated during the campaign. The second was Men A conjugate vaccine mini mass campaign in Northern, Upper East and Upper West Regions as part of the preparations towards the national introduction. Table 2 below is the summary of the coverage.

Region	Target	Chn vaccinated	Cov (%)
Northern Region	412,086	401,081	97.3
Upper East	157,403	169,186	107.5
Upper West	110,079	95,864	87.1
TOTAL	679,508	666,131	98

Polio eradication initiatives



WHO provided adequate support for polio eradication milestone and deadline activities. These activities included (i) the switch from tOPV to bOPV and the destruction of tOPV by incineration under supervision at the district levels. (ii) preparation and submission of Annual Polio Progress Report for 2015 submitted and National polio outbreak preparedness and response plan. The Country office also played host to the African Region Polio Certification Commission meeting in Accra from 21-25 November 2016. There was adequate support for activities of polio technical advisory committees such as the NPEC, NCC and NTF. The office also supported the Environmental sampling surveillance pilot project in collaboration with the Noguchi regional polio laboratory. Table 3: below is the summary of the AFP performance indicators for 2016. Though the country achieved the

national indicators of adequate stool >80% and non-polio AFP rate also >2 there are weaknesses in Ashanti and Greater regions where the non-polio AFP rates were below 2. The way forward is to strengthen regular monitoring visits to provide required assistance.

Table 3: AFP Performance indicators, 2016 - Ghana

Region	Population Under 15 yrs	Expected AFP	Reported AFP	Compatible	Annualized Non-Polio AFP Rate	% Timely Stools	% Stool Adequacy
Ashanti	2,355,778	47	40	0	1.66	95	93
Brong Ahafo	1,112,500	22	89	10	7.00	91	70
Central	1,110,687	22	32	3	2.55	88	84
Eastern	1,252,795	25	27	1	2.08	93	93
Greater Accra	2,022,793	40	38	5	1.45	79	74
Northern	1,236,229	25	52	0	4.00	96	96
Upper East	472,161	9	24	1	4.89	92	88
Upper West	330,141	7	10	0	2.57	90	90
Volta	1,031,740	21	30	3	2.48	90	90
Western	1,123,830	22	70	10	5.45	90	81
Ghana	12,048,653	241	412	33	3.04	91	83

Support for Operations research

WHO supported feasibility study of Oxytocin integration into EPI vaccine cold chain from the CDC small grants. This was in response to the joint call by WHO and UNICEF to all countries to integrate oxytocin into the EPI cold chain to ensure the drug maintains its potency until its final delivery. Oxytocin as a medicine is used by midwives during delivery. It prevents post-partum haemorrhage thereby saving the lives of mothers during delivery. It is a heat sensitive medicine which is recommended for storage within the temperature range of +20C - 80C just like the EPI vaccines.

Integrating oxytocin into EPI vaccine cold chain means managing oxytocin the same way as EPI vaccines to maintain its potency until final delivery. It was observed during the study that integrating the two commodities in the EPI vaccine cold chain is feasible in Ghana because some facilities were found already implementing the concept without many challenges.

Table 4 below shows the status of oxytocin found in the EPI cold chain during the study. Out of 86 fridges with oxytocin found in the facilities visited, 49 of them (42%) were in the EPI cold rooms suggesting that many facilities are already practicing the concept.

Table 4: Oxytocin stored in facility fridge

Oxytocin stored in Facility fridge	Facility				
	DHD n=30	Hosp n=30	HC n=60	Total n=120	%
EPI cold room	3	10	29	42	49
Maternity unit	0	20	24	44	51
Total	3	30	53	86	100

Collaboration with the Research Department of the ministry of health was initiated to advance the research agenda of the ministry. The WR participated in the workshop to launch the national research agenda of the country. This was followed with meetings with the Director of the Department on strategies to develop the collaboration between the office and the health research department of the Ghana health service.

Support for other VPD Control activities – In addition to surveillance for AFP, the office also provided adequate support for the surveillance of other VPDs such as measles-rubella, neonatal tetanus, rotavirus diarrhoea and paediatric bacterial meningitis through the sentinel surveillance system. Reagents were supplied for laboratory confirmation of measles and rubella cases. Table 5 is the summary of the suspected and confirmed measles-rubella cases from 2011 to 2016.

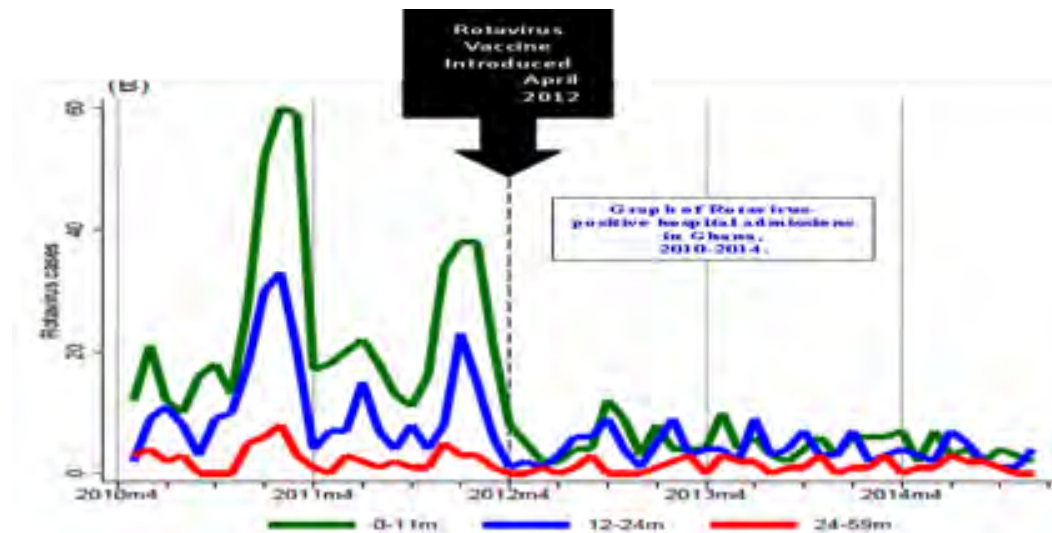
The office also supported the establishment of sentinel sites for the surveillance of congenital rubella syndrome at four teaching hospitals in Accra, Cape Coast, Tamale and Kumasi.

Table 5: Suspected and confirmed measles and rubella cases;2011-2016

Year	Suspected cases		confirmed cases -(IgM+ve)		percentage (%) confirmed	
	Measles	rubella	Measles	rubella	Measles	rubella
2011	1744	1635	109	596	6.2	3.6
2012	1423	1134	289	335	20.3	29.5
2013	1081	762	319	168	29.5	22
2014	1039	918	121	39	11.6	4.2
2015	1034	1004	23	12	2.2	1.2
2016*	1218	788	28	10	2.2	1.2

The office further supported the sentinel surveillance of Hib and rotavirus in Korle Bu and Kumasi. The graph below illustrates rotavirus diarrhoea positive hospital admission in Ghana from 2010-2014. Rotavirus vaccine was introduced in 2012 and the surveillance is implemented through two sentinel sites in Accra and Kumasi teaching hospitals. The graph shows significant decline in positive hospital admissions after the introduction of the vaccine in 2012.

Fig. 8: Rotavirus Diarrhoea positive hospital admissions; 2010-2014



CHAPTER 3

NON-COMMUNICABLE DISEASES

3.1 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.

With technical and financial assistance provided by WHO, NCD stakeholders technical working group meetings were convened to develop a budgeted Programme of Work (POW) for NCDs. The plan covered several areas including awareness creation, alcohol, substance abuse & mental health, physical activity and healthy diet.

Cancer

Cervical Cancer

In the area of cancers, WHO supported cervical cancer prevention and control as part of WHO/AFRO - Bill & Melinda Gates Foundation (BMGF) "Reducing Cervical Cancer Burden in Selected High-Burden Countries in the African Region project". Cervical cancer is among the leading causes of cancer related morbidity and death among females in Ghana and yet can be prevented by vaccination of adolescent girls and also treated often with very good recovery rates if discovered early.



Dr Roseline Doe on behalf of WHO presents the Donation of Cervical Cancer screening equipment to GHS

As part of the support to establish 10 functional cervical cancer screening sites in Ghana, WHO donated the following equipment to the Ghana Health Service 2 electro-surgical resection machines with accessories, 2 colposcopes and 2 cryotherapy guns with accessories. Subsequently training of 2 GHS nurses in cervical cancer screening using VIA and cryotherapy in Conakry, Guinea and 3 health staff in advocacy, IEC and strategic planning for cervical cancer prevention in Malawi were supported.

Support was then provided to develop educational materials to create awareness on cervical cancer prevention and control and increase demand for screening. All these capacity building efforts will serve to bring screening and early detection services closer to the doorsteps of women. One of the gaps for the NCD Programme was human resource constraint and support for activities.



3.2 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. The Mental Health Authority (MHA) was established in 2013. However limited funding has constrained their goal of scaling up mental health programmes across the country. During the year under review, WHO donated a Toyota Land Cruiser Vehicle to MHA to support and strengthen coordination and supervisory activities undertaken by the Authority.

Mental Health Day

The government of Ghana joined the rest of the world in commemorating this year's World Mental Health Day under the theme: "Dignity in Mental Health; Psychological First Aid for all"

Dignitaries at the function: Naa Bob Luga, Chief of Tibani Traditional Area (third from left), Dr Akwesi Osei, Chief Executive Officer, Mental Health Authority (fourth from left), Hon. Alhaji Amin Amidu, Upper West Regional Minister (fourth from right)

A grand durbar was organised to crown the dual programs World Mental Health Day and Mental Health Week at Jubilee Park on Saturday 15th October 2016. The durbar was preceded by a float on the principal streets in the Wa town-ship by students from Tertiary and Senior High Schools. The event was presided over by the Chief of Tibani traditional area, Naa Bob Logah.

A solidarity message by WHO was given by the Ms Joana Ansong, Health Promotion Officer on behalf of the Country Representative, Dr Owen Kaluwa. The students of Wa Nursing Training College staged a drama on the importance of seeking care for mental conditions from health facilities other than alternate sources such as healing camps which always turns out to be a waste of time and resources. There were also cultural performances as part of the function.

Fight Against Epilepsy Initiative

The Ministry of Health (MOH) and the World Health Organization (WHO) piloted an improved model of epilepsy care in Ghana from 2012-2015 when the pilot phase of the initiative ended. In 2016 four more districts were added as part of the nationwide scale up phase starting with two of the implementation regions, Eastern and Volta Regions. The aim of the initiative is to reduce the epilepsy treatment gap by improving care and services for people living with epilepsy and integrating epilepsy care into the primary health care system.

Activities in 2016 included regional level training of trainers and supervisors from 2 regions, training of primary health care providers by the trainee facilitators, training of community volunteers, holding community durbars, support supervision to ten implementing districts, and the development a national epilepsy care plan.

The purpose of the support supervision was to coach, mentor and teach staff trained in epilepsy management, how to identify and address challenges faced in managing cases to ensure adequate delivery of epilepsy interventions; improve their knowledge and skills in managing epilepsy cases; encourage and support them in their daily clinical work to improve the motivation of non-specialized healthcare providers to treat persons with epilepsy.

The visits were also to ensure that medicines, logistics and other support systems for epilepsy management were available.



Demonstration of the recovery position with facilitator



WHO focal person for FAEI during the training session

3.3 VIOLENCE AND INJURIES

WHO supported the participation of the focal point for Violence and Injury Prevention from Ghana health Service at the 4th Global Meeting of The Ministries of Health Focal Points for Violence and Injury Prevention, and the 12th World Conference on Injury Prevention and Safety Promotion in Finland. These meetings provided the opportunity to identify the priority steps needed to achieve the Sustainable Development Goals (SDG) targets on violence prevention and road traffic injury prevention.

A GHS staff member was supported to attend the Emergency Medical Teams Global Meeting in Hong Kong which highlighted EMT developments and good practice from the technical, clinical, training, legal, logistic and operational perspectives as well as the role of EMTs and Public Health Rapid Response Teams in the development of a stronger global health emergency workforce. There has been limited funding from WHO to support programmes and activities related to violence and injuries.

3.4 NUTRITION

According to the DHS, 2014, 11% of children under-five are underweight, 19% of children are stunted. The prevalence of wasting, i.e. acute malnutrition is 5%. In general the nutrition status indicators for children under-five have improved when compared to the previous DHS, 2008 and MICS 2011. In terms of micronutrient deficiencies,

the DHS 2014 found the prevalence of anaemia improved for women, reproductive age (42%), pregnant (44.6%) and lactating women (45%). The situation for children under-five is however alarming with a prevalence of 66%; 72% rural and 58% urban and worsening trend when compared to the MICS, 2011. Sixty-five percent of children under-five years suffer from Vitamin A deficiency (MOH 2008). Iodine deficiency disorders remain a public health problem due to suboptimal utilization of iodated salt. Exclusive breastfeeding rate is 52%.

Key activities supported

The objectives set for nutrition in 2016 included the following;

- Support Update / Revision of tools and guidelines for maternal and child nutrition undertaken
- Support advocacy for maternal, infant and young child nutrition
- Support training of health staff in maternal infant & young child nutrition supported

To achieve the above objectives, technical support was provided to the GHS for decentralizing of the BFHI accreditation process, advocacy activities and the development of training materials.

Major Outcomes/Achievements

The GHS has embarked on a decentralization process in order to increase number of accredited Baby Friendly Facilities not in compliance, reduce the cost

of accreditation and ensure integration and ownership by regions and district health directorates. WHO in collaboration with UNICEF supported the development of tools and guidelines for the decentralization of the Baby Friendly Hospital Initiative (BFHI), orientation of Baby Friendly Hospital Initiative (BFHI) Authority on the New Global Code Monitoring Initiative (Net Code) and built capacity of regional level health staff in the assessment and designation of health facilities as baby friendly.

In August 2016, the WHO/UNICEF supported the commemoration of World breastfeeding week 2016, theme breastfeeding a key to sustainable development. The week serves as an advocacy for the promotion and protection of breastfeeding the theme was also resonated well with stakeholders as we embark on the sustainable development goals and the official launch had the participation of government, development partners, NGOs, civil society organizations and the community.

Although some progress has been made in the reduction of the prevalence of anemia among women of reproductive age the rates are still high and even higher among children under-five. The Ghana health service with financial and technical support from USAID put together a task team to support the revision of anemia training materials and integrate the more current recommendations of WHO in iron and folate supplementation.

WHO participated in the work of the task team, which updated the training materials and have subsequently been used for trainings in the northern Ghana.

Key Challenges and how to address them

The WHO Nutrition Programme faced financial challenges and therefore the office could not provide any funds to support a number of GHS nutrition activities such as the development of some key strategies and training of health staff. Efforts to mobilize resources locally did not materialize. Continuous efforts are being made to develop partnerships both within and outside the organization to support the implementation of government programmes.

- National Food Safety Strategic Plan



CHAPTER 4

PROMOTING HEALTH THROUGH THE LIFE COURSE

4.1 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 319 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 three key priority interventions identified are improving family planning, skilled delivery and emergency obstetric and newborn care.

Key activities supported

•Situational Analysis of Maternal Deaths Review in Ghana

Ghana's maternal mortality ratio (MMR) stands at 319/100,000LB (UN Estimates 2015). Although Ghana did not meet its MDG 5 target of 185/100,000LB, there has been a reduction in MMR of about 58%. Effective Maternal Death Review/Audit (MDR) followed by appropriate actions to address the avoidable factors identified in the review was critical to improving maternal health and ending preventable maternal deaths.

Currently, maternal deaths are reviewed / audited at the facility level and reported to the DHMT and then the RHMT and Family Health Division of Ghana Health Service. Ghana after over a decade of MDR is at the threshold of transitioning to Maternal Death Surveillance and Response (MDSR) and to set up a National Committee for Confidential Enquiry into Maternal Deaths (NCCEMD). This is an important priority intervention in the current Health Sector Medium Term Strategic Plan. To do this, there was an urgent need to conduct a situational analysis to assess the current system of MDR to identify its achievements, challenges and gaps and also to serve as the basis and baseline for transitioning to MDSR and the setting up of a NCCEMD.

Technical and financial assistance was provided to the Ghana Health Service/MOH to conduct the situational analysis. The current status of MDR in Ghana has been assessed and a road map for MDSR and NCCEMD is being developed.

- **Integration of PMTCT Services into MNCH Programme and MIP joint monitoring**

Prevention and ultimate elimination of Mother to Child transmission of HIV (PMTCT) is one of the main interventions in the national response against HIV. Although there has been some progress in PMTCT services in the country, the end term evaluation report revealed challenges especially to meet the 90% target of ARV coverage for HIV positive women, low level of Early Infant Diagnosis (EID) and Pediatric ART services for children affected and infected by HIV. 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.

Malaria in pregnancy causes serious morbidity and sometimes mortality in pregnant women, their fetus and newborns. WHO revised the recommendations on the package of interventions for controlling malaria and its effects during pregnancy. These includes the promotion and use of insecticide-treated nets (ITNs), the administration during pregnancy of intermittent preventive treatment with sulfadoxine-pyrimethamine (IPTp-SP), and appropriate case management through prompt and effective treatment of malaria in pregnant women. Ghana has adopted these recommendations and is implementing them.

A joint monitoring of the PMTCT, EID and Pediatric ART program activities and malaria in pregnancy services was conducted as a collaborative work between Ghana Health Service (GHS) and partners. The main purpose of the joint monitoring was to review the current status of PMTCT/EID/Pediatric ART, and MIP services in the country from a common stakeholder perspective and to assess among other things, the extent to which regions are complying with the directive to dispense ARVs and initiate EID services at sub-district level and

the recommendations on Malaria in Pregnancy interventions. Challenges like delay in conducting EID and receiving test results at the lower levels and periodic shortages of test kits and Anti Retro Virals are being addressed and this has improve theses services. Integration of PMTCT and MNCH services has seen a good boost.

- **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 and to address the common causes of neonatal mortality in Ghana. WHO as a partner on the NNSC, supported and participated in the fifth Newborn Stakeholders Meeting in Accra, from the 26 - 28 July, 2016 under the theme: **“Save Me from Asphyxia; Help Me Breathe, Help Me Live”**. The theme focused on birth asphyxia and care around the time of birth with technical presentations made by obstetricians, midwives and paediatricians. The stakeholder meeting with participation from high level officials of Ministry of Health, Ghana Health Services, academia, development partners, media and members of civil society took stock of key achievements and reviewed the challenges in order

to find appropriate solutions to address the issues of newborn health care in Ghana. Newborn health has been made a priority in the country with more efforts and resources geared towards improving the survival and wellbeing of newborns.

Child Health Promotion week

Ghana has over the years integrated the Africa Vaccination Week (AVW) with Child Health Promotion Week (CHPW) as one of the sustainable ways of improving coverage of preventive child survival interventions. It is used as a week of advocacy, awareness creation and service delivery to improve coverage of preventive child survival interventions like Immunization, Vitamin A Supplementation, Growth monitoring, birth registration and promotion of ITN use.

This year's theme for the country was “Good Life, Start Right; Close the Immunization Gap”

- Commemoration of with the slogan 'Stay Polio Free'. WHO as a key partner supported Ghana's Ministry of Health / Ghana Health Service to observe the week. During the week-long celebration, awareness on these interventions was heightened and uptake has increased.



Healthcare providers participating in CHPW activities

- **Development of a National Adolescent Health Service Strategy and Policy (2016 – 2020)**

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 a specific service policy and strategy to guide the provision of care to this group. The Ghana Health Service/MOH has been supported to develop a Service Policy and Strategy to provide the blueprint for implementing evidence-based interventions and address areas for improvement to achieve the Adolescent Health and Development Program's goals and objectives. The UKAID through the Palladium Group also supported the process.

- **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:

- National Family Planning protocols has been reviewed taking into account the WHO

medical eligibility criteria

- Operational plan for the Sexual and Reproductive Health Policy for young people in Ghana

- Implementation Plan for the National Newborn Health Strategy (2014 – 2018)

- National Safe Motherhood Protocol

- **Capacity Building and Workshops**

WHO also provided technical and/or financial support for national capacity building through workshops and meetings:

- Training of regional trainers and Nurse tutors in Adolescent Health and Development to build their capacity to conduct downstream training for healthcare providers of adolescent sexual and reproductive health

- First Scientific Conference and first Annual General Meeting of Ghana College of Nurses and Midwives; WHO hosted one parallel section to discuss WHO-Led Global network to improve quality of care for mothers and newborns and also the work of WHO

- Family Health Division annual performance review conference; Delivered keynote address on Universal Health Coverage for Maternal, Newborn, Child and Adolescent Health within the Africa context

- Supported participation of the National Child Health Coordinator and the President of the Paediatric Society of Ghana in the WHO regional meeting on dissemination of WHO

guidelines on the management of Possible Severe Bacteria Infection (PSBI) where referral is not possible to policy makers, program managers and implementers; Addis Ababa, Ethiopia

- Supported the participation of the Executive Director - PPAG, the Program manager for Adolescent Health - GHS and an officer of the School Health Program - MOE/GES in the regional consultation to take stock of progress made in school health in the African region and provide inputs into the global guide to accelerate actions for health of adolescents; Brazzaville, Congo
- Supported the participation of the Head of Clinical Care Unit – NACP, a Program officer - Safe motherhood and a Lecturer, School of Medicine and Dentistry; University of Ghana in the WHO regional workshop for dissemination of WHO newly released guidelines for management of sexually transmitted infections and antenatal care; Ouagadougou, Burkina Faso



Ghana's delegation at the regional dissemination meeting of the WHO guidelines for management of sexually transmitted infections and antenatal care

4.2 GENDER, EQUITY AND HUMAN RIGHTS

• 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.

A Participatory Gender Audit (PGA) of the WHO country office was conducted 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

A section of the staff retreat was dedicated to gender mainstreaming, equity and human rights in programming and all WCO staff were oriented and briefed on the participatory gender audit that was carried out in the office. Based on the identified capacity gaps, a formal training for staff was planned. The recommendations from the audit report are being 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.

- **Celebration of UN Days**

The WHO through the UN Gender Team (UNGT) supported and participated in the celebration of UN days.

- **International Women's Day**

On the 8th of March, the United Nations celebrated globally the under the theme "Planet 50-50 by 2030: Step It Up for Gender Equality". This was to focus on gender equality, women's rights and women's empowerment in order to build momentum for the effective implementation of the new Sustainable Development Goals.

The UN Gender Team, produced a video compilation of messages from Heads of Agencies that focused on underserved women who need attention in the context of the SDGs. The video was distributed to a number of radio and TV stations for their use and was also posted on social media platforms. The overall message was: "Leaving no woman in Ghana behind"

<https://www.unghana.org/site/>

https://www.youtube.com/watch?v=_tfxFdCvJyA

- **16 Days of Activism against Gender-Based Violence**

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). WHO supported in putting out media messages to create awareness.



- International Day of the Girl Child (IDGC)



The year's IDGC observed on October 11 focused on the importance of data in highlighting the challenges and opportunities faced by girls in their daily lives, as well as the need for a "Global Girl Data Movement" to address gender gaps in data collection, analysis, dissemination and use. It emphasized the rights of girls and the relationship between progress for girls and progress towards achieving the Sustainable Development Goals (SDGs). Thus the theme for the celebration was "Girls' Progress = Goals' Progress".

As part of events to mark the Day, the United Nations Gender Team (UNGT) of the UN system in Ghana held a press briefing and also held a forum to interact with students to encourage and motivate them on the need to aspire to greater heights in their every endeavour. The events created the needed awareness of the Day, shared information on gender-related issues facing our community and increased understanding on gender concerns or challenges amongst the youth.

The UNGT is made up of staff/focal points from the UN offices, agencies and programmes in the country whose purpose is to provide overall direction and guidance to the UN System in Ghana to advance gender equality in the country.

Key challenges

- Inadequate funding for some programs
- Technical officers handling multiple major programs which sometimes makes it difficult to give each program adequate attention

4.3 HEALTH AND THE ENVIRONMENT

In Ghana, 89% of population has access to water (JMP 2015 Update) and only 15% use improved sanitation facilities (JMP 2015). Contaminated water causes about 10,000 deaths annually through diarrhoeal diseases (MICS 2011). The sector has a number of policies including Environment Sanitation Policy 2009, the Water Policy 2007, Healthcare Waste Management Policy and Guidelines for Health Institutions 2006, currently being revised and Occupational Health and Safety Policy and Guidelines.

While access to water continues to improve, the low coverage of sanitation at the household remained a challenge. In the health sector capacity building on risk assessment and environmental health impact assessment remained a priority.

Key activities supported

The objectives set for environment and health in 2016 included the following;

- Support the implementation of Joint UN Programme on WASH in Disaster Prone Communities in the three Northern Regions
- Support environmental risk assessment and health impact management
- Support the update, adaptation and dissemination of policies and strategies in WASH

The activities supported in the area of WASH in Disaster Prone Communities (DPC) included capacity strengthening of regional and district level staff in water quality assessment and monitoring, disaster preparedness and response planning and health emergency preparedness in the three Northern Regions. WHO also supported Water Safety Planning and the development of behaviour change materials for WASH in schools. WHO/HQ and AFRO also provided technical and financial support for capacity strengthening in Household Water Treatment and Safe Storage and tracking finance to the WASH sector.

- Water Quality Assessment and Monitoring Workshop

Regional training workshops for the Water Quality Assessment and Monitoring were conducted in Northern, Upper East and Upper West Regions for the WASH in DPC districts. Participants of the workshop were regional level staff (Environmental Health, Community Development, NADMO, School Education Programme (SHEP), Community Water and Sanitation Agency (CWSA), district level (Environmental Health Officers and Engineers). The workshops resulted in the training of 30 participants in Northern Region, 24 in Upper East Region and 32 in Upper West Region.

• Workshop on Orientation of Water Safety Planning (WSP) Template and Field Testing

Under the WASH in DPC programme WHO supported the development of Water Safety Plans (WSPs) template for small towns and rural water systems. WSPs are recommended by WHO as the most effective means of consistently ensuring the safety and acceptability of a drinking water supply. They require a risk assessment of all the steps in the water supply from catchment to consumer, monitoring of the risk management control measures. The WSP template was accompanied by monitoring tools and training materials which were field tested in a workshop. A total of 31 participants; from seven WASH in DPC districts in the three Northern Regions participated in the workshop. Following the workshop the template was piloted in 6 districts in the 3 Northern Regions, lessons from the pilot districts will inform the scale-up of WSPs in other 6 districts.



Community Entry, WSP field testing



Orientation Workshop on WSP template

• Disaster Preparedness and Response Workshop

In collaboration with UNDP Regional training workshops were conducted in Northern, Upper East and Upper West Regions for the WASH in DPC districts. Participants were regional level staff (Environmental Health, Community Development, NADMO, School Education Programme (SHEP), Community Water and Sanitation Agency (CWSA) and Red Cross, district level (Environmental Health Officers, Disease Control Officers, Planning Officers, NADMO and Community WASH). National level was represented by MLGRD, MWRWH, NADMO and WHO. Two out of the three regional training were conducted with financial support from WHO, with 47 participants in Upper East Region and 63 participants in Upper West Region trained.

• Health Emergency Preparedness and Response Training Workshop

A series of trainings in health emergency preparedness and response were organized for the three regions in Northern Ghana. The training package covered an overview of WASH in DPC programme, introduction to Integrated Disease Surveillance and Response (IDSR), principles and practices of preparedness and response to public health emergencies as well as data analysis with emphasis on the District Information Management System (DHIMS). The trainings were delivered through a combination of approaches including lectures (short presentations), plenary discussions, group work, etc. Participants had the opportunity to have hands on experience on data analysis of their respective districts on water and sanitation related diseases which revealed a number of gaps and the need to re-validate data entered into DHIMS 2 and to analyse data locally to detect disease outbreaks. A total of 158 participants trained; 38 Upper East Region, 66 Upper West Region and 54 Northern Region.

• WASH in Schools

The WASH in DPC Programme is implementing a “WASH in Schools” component to ensure safe water and gender-segregated and appropriate sanitation facilities are developed and sustainably managed in beneficiary schools. Furthermore, schools will be a key dissemination point for hygiene promotion. The “WASH in Schools” component, under Ghana Education Services, School Health Education Programme GES/SHEP, will complement the Community Led Total Sanitation (CLTS) approach to reinforce disaster resiliency in communities with the introduction of the Values-Based WASH Education (VB-WASH-Ed) approach for schools and communities to reinforce health and hygiene messaging.

WHO supported the School Health and Education Programme (SHEP) to develop and print Behaviour Change Communication Materials for use in Schools (e.g. school health clubs) in the WASH in DPC Districts in Northern, Upper East and Upper West Regions.



BCC materials to support WASH in schools

• Supporting National Household Water Treatment and Safe Storage (HWTS) Strategy

Household water treatment and safe storage (HWTS) is an important public health intervention to improve the quality of drinking-water and prevent water-borne disease. When effective methods are used correctly and consistently, HWTS can reduce diarrhoeal disease by as much as 45 % (WHO, 2014). In order to comprehensively assess effectiveness of HWTS products to reduced pathogens in water significantly for health gains, in 2014 the WHO established the International Scheme to Evaluate Household Water Treatment Technologies (the Scheme). Ghana also developed a National HWTS Strategy in the same year.

As part of the capacity building objectives of the Scheme and to support Ghana with the implementation of the National HWTS Strategy, two workshops were held in Ghana in 2016. The first workshop provided a platform to strategize on the regulation and implementation of HWTS in Ghana. The outcome was the development of a roadmap of follow up actions to strengthen coordination and implementation among HWT stakeholders especially those with regulatory mandates.

The purpose of the 2nd workshop was to develop a regulatory framework for HWTS products. The 25 participants included key stakeholders and partners working in policy, regulations, evaluation and monitoring of HWT products.

Participants were introduced to HWTS technologies regulations, oriented on tools to evaluate HWTS products against a national framework and trained on the key steps/procedures in developing a national regulatory framework. The stakeholders identified priority follow-up actions that included the need to develop a standard for HWTS performance, reactivating the HWTS technical working group and designating a laboratory for test of HWTS performance.



National Stakeholders Capacity Building Workshop on HWTS Regulatory Framework

• **WASH GLAAS TRACKFIN II**

The Water, Sanitation and Hygiene (WASH) Trackfin initiative is one to define and test a globally accepted methodology to track financing to WASH at the national level, so as to improve understanding of current expenditure in the WASH sector, providing the evidence for decision-making. The output of this initiative is a WASH Accounts which provides a comprehensive picture of WASH sector financing, similar to the Health Accounts.

In 2014 Ghana was among 3 countries supported by WHO to pilot the TrackFin Methodology. Following a successful pilot phase the country agreed to conduct the WASH Accounts biennially. For the 2nd round of the WASH TrackFin, WASH Accounts for the 2013-2014 were developed, the results of which have been validated, disseminated at a stakeholders meeting and the report finalized.



GLAAS Trackfin Technical Committee Workshop to Finalize WASH Accounts Report

• **Inception Meeting on Urban Health and Short Lived Climate Pollutants (SLCP) Reduction Project**

The Urban Health and SLCP Reduction Project - catalysing widespread action to implement SLCP reduction strategies by mobilizing the health sector and demonstrating health benefits in cities is being piloted in Accra, Ghana.

In November 2016, the WHO/HQ and AFRO in collaboration with WCO supported the

inception workshop for an Urban and SLCP project in Ghana. There were over 50 key stakeholders and partners; both international and local present at the workshop. Participants were oriented on the project and the role of the partners and government. The meeting agreed to focus on three main areas in the Accra pilot, household and energy, transport and land use and waste. The implementation of the project starts in 2017.

Key Challenges and how to address them

The implementation of the national plans of action for both the health and environment was a challenge due to the lack of funding. The office experienced some delays in the provision of some technical support to the GHS and this resulted in some planned activities not implemented during the year. These activities have been programmed for implementation in 2017.

4.4 SOCIAL DETERMINANTS OF HEALTH

In this area of work, support was to strengthen capacity for multi-sectoral and multi-stakeholder action to address the social determinates of non-communicable diseases in particular.

Key activities supported

• **Framework convention on tobacco control (FCTC) implementation**

In 2016, a national workshop on International Trade and Investment Law, Tobacco Control and Health convened from 15-17 June with the support of AFRO. This was attended by representatives from the Attorney General's Department, Foods and Drug Authority, Ghana Health Service and Civil Society Organizations, Ghana Revenue Authority among others. Emerging issues for discussion included International Trade Agreements and their



implications for tobacco control; explanations on the implications of the relevant WTO disputes to facilitate tobacco products regulations; relevant procedural aspects of ensuring compliance with WTO laws; linkages between regional trade agreements and WHO FCTC

• **Legislature on Tobacco Control**

During the year under review, the Legislative Instrument (LI) on Tobacco Control was finally laid at the floor of Parliament after several reviews on 21 November, 2016 for passage into law within 21 days.



Participants at the Function

• **Celebration of World No Tobacco Day, 2016**

Ghana celebrated World No Tobacco Day on 31st May 2016 in an Exhibition on Pictorial Warnings organized by the Vision for Alternative Development (VALD), The Ghana Health Service and its partners, including WHO, with the theme "Get Ready for Plain Packaging" at the GNAT Hall, in Kumasi in the Ashanti Region of Ghana.

• **World Health Day Celebration, 2016**

Ghana joined the rest of the international community to commemorate World Health Day under the theme "Stay Super, Beat Diabetes."

As a way to "stay super" and "beat diabetes", WHO in collaboration with the Ministry of Health, Ghana Health Service and the Diabetes Association of Ghana organized health walk on Saturday 02 April 2016 ahead of the World Health Day celebrations on 7 April 2016. Dr Owen Kaluwa, WHO Representative for Ghana and some WHO staff joined the community in Ghana in the health walk meant to



Dr Kaluwa and other WHO staff who participated in the health walk



Cross section of participants in the health walk

encourage Ghanaians to regularly engage in physical activity as one of the ways to "beat diabetes"

On 7 April 2016, a media briefing was organized at the National Theatre. Every year on this day, the World Health Organization draws the attention of the global community to public health challenges that require concerted action by all. It is also a special day for WHO because it is on this day that the Organization was established back in 1948. The event was characterized by

speeches, song and dance, testimonies by a person living with diabetes and free screening exercise. In attendance was her Excellency Danish Ambassador to Ghana Tove Degnbol, officials of Ecobank Ghana Ltd., Organized groups and the Media.



Dr Kaluwa granting interviews to the Media



Minister for Health and other Dignitaries



CHAPTER 5

HEALTH SYSTEMS

5.1 NATIONAL HEALTH POLICIES, STRATEGIES, AND PLANS

The Ministry of Health has been implementing its second four year Health Sector Medium Term Development Plan (HSMTDP) 2014-2017. The year under review saw the development of 2016 Programme of Work (POW) which had been done in conjunction with Development Partners (DPs) including World Health Organisation. This Annual POW had twenty key policy initiatives envisaged for implementation during the year. It was however imperative that to implement the major policy initiatives required huge budgetary resources which could not be mobilised in view of the tight fiscal space which had been confronting the country.

1. Accelerate the implementation of the revised CHPS strategy
2. Increase in the establishment of midwifery training schools and managing the production of midwives
3. Redistribution of critical health personnel (infrastructure, housing and incentives)
4. Construction of regional hospitals in each of the regions currently without a regional hospital
5. Construction of district hospitals and polyclinics especially in the districts that currently lack such health facilities
6. *Ensure sustainable healthcare financing arrangements that protect the poor*
7. *Improve efficiency in the provider-payment mechanisms through capitation*
8. *Explore new financing mechanisms in addition to the NHIL*
9. *Strengthen public financial management and accountability systems*
10. *Implementation of PPP arrangement*
11. *Implementation of the Supply Chain System*
12. *Implementation of the PMTCT Option B plus strategy*
13. *Proposal to establish an infectious Disease Control Centre*
14. *Plan to mitigate the impact of graduation from major Global Health Initiatives (e.g. Gavi, GF)*
15. *Implementation of the Framework Convention on Tobacco Control (FCTC)*
16. *Infection Prevention and Control*
17. *Continuous implementation of the MAF strategy*
18. *Implementation of key interventions in the New born care strategy*
19. *Scale up pre hospital care services (ambulance services)*
20. *Response to proposed health sector decentralisation*

To facilitate the implementation of the POW, the major policy initiatives were further distilled into six priority focussed areas which were discussed and agreed between government and stakeholders including DPs such as the World Health Organization:

1. *Expansion of coverage of the CHPS programme*
2. *Attainment of equity targets in the distribution of human resources for health (implement the HR staffing norms)*
3. *Reduction in institutional maternal and neonatal deaths*
4. *Implement the supply chain master plan*
5. *Adoption of improved health financing mechanisms*
6. *Control and prevention of communicable, non-communicable diseases, emergencies and improvement in healthy lifestyles and regenerative health*

The implementation of the POW is monitored through a number of mechanisms including joint MOH-DP Monitoring Visits, quarterly Business Meetings and Health Summit which was held in May where sector performance for the previous year was 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.

• **Financing the Health Sector**

The 2016 POW was financed from three main sources which are Government of Ghana (GoG), Internally Generated Funds (IGF) and External Sources mainly DPs Funds. As depicted in the Table 6 below a total allocation of 3,104 million cedi was

made available to the Ministry, out of which GOG accounted for 2,138 million cedi (68.9%). This was followed by Internally Generated Funds (IGF) with contribution of 572.3 million cedi (17%) with DPs funds being 413.6 million cedi (13.3%) and 25 million cedi (0.8%) from the Annual Budget Funding Amount (ABFA) from oil revenue. Health Service Delivered consumed the largest proportion of the total allocation 1,691.7 million cedi (54.4%) followed by Management and Administration being given 697.5 million cedi (22.5%). Tertiary and Specialized Services also consumed over 14%, followed by Human Resource Development and Management with 5.8% and 3/1% to Health Sector Regulation. IGF continued to be the major source of funding for service delivery for most of the Agencies.

Table 6: MoH 2016 Budget by Programme and Source of Funds

Programme	GoG	IGF	ABFA	Donors	Total	% of Program
Management & Administration	261,231,517	-	22,785,805	413,516,479	697,533,801	22.5
Health Service Delivery	1,614,153,967	75,303,284	2,214,195	-	1,691,671,446	54.5
Tertiary and Specialised Services	219,508,364	219,410,552	-	-	438,918,916	14.1
Human Resource Devt. and Management	27,583,065	132,443,443	-	86,770	180,113,278	5.8
Health Sector Regulation	15,943,461	80,099,479	-	-	96,042,940	3.1
Grand Total	2,138,420,374	527,256,758	25,000,000	413,603,249	3,104,280,381	100
Percentage of Source	68.9	17.0	0.8	13.3	100	

The bulk of sector budget allocation is expended on Compensation as depicted in Table 6 where 2,208, million cedi (71.1%) of total allocation of the sector is spent on compensation alone. Goods and Services on the other hand was allocated 580.6 million cedi (18.7%) and Capital Expenditure having 315.3 million cedi (10%).

Table 7: MoH 2016 Budget by Programme and Economic Classification

Programme	Compensation	Goods & Services	Capex	Total	Percentage of Programme
Management and Administration	261,026,154	217,097,775	219,409,872	697,533,801	22.5
Health Service Delivery	1,628,996,844	19,832,333	42,842,269	1,691,671,446	54.5
Tertiary and Specialised Services	257,133,270	151,231,660	30,553,986	438,918,916	14.1
Human Resource Development and Management	28,983,098	150,124,493	1,005,687	180,113,278	5.8
Health Sector Regulation	32,240,163	42,311,039	21,491,738	96,042,940	3.1
Grand Total	2,208,379,529	580,597,300	315,303,552	3,104,280,381	100
Percentage of Source	71.1	18.7	10.2	100.0	

As shown in Table 7 in 2016, 2,138.4 million cedi (99.2%) of GOG allocation went to compensation. Also GOG alone accounted for almost 96% of compensation with the remaining 4% coming from IGF. About 60% of Goods and Service was derived from IGF is spent on implying how IGF is essential for running of the health sector. Development Partners funds were spent mostly on good and services and capital expenditure with nothing on compensation

Table 8: MoH 2016 Budget by Source and Economic Classification

Sources	Compensation	Goods & Services	Capex	Total
GoG	2,120,518,059	17,600,000	302,315	2,138,420,374
Internally Generated Funds (Incl. NHIS)	87,861,470	345,812,755	93,582,533	527,256,758
Donors	0	217,184,545	196,418,704	413,603,249
ABFA			25,000,000	25,000,000
Total	2,208,379,529	580,597,300	315,303,552	3,104,280,381
Percentage of Economic Classifications	96	1	0	97

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 IV, since 2009 Ghana has fell below 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 IV.

Table 9: Progress towards Abuja Target (2010 – 2015)

Table 9: 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)

In other to improve upon the attainment of the Abuja Declaration, and improve health financing in Ghana WHO supported the Ministry to establish national network of advocacy champions for adequate health financing under the chairperson of the immediate ranking member of the parliamentary select committee on health. Other members of the network include civil societies and well-meaning citizens who are interested in health financing

• 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 VII, external financial support declined between 2014 and 2016 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

Table 10: Trends in Budgeted Expenditure for Health Sector by Sources of Funding

Source of Funds	2010		2011		2012		2013		2014		2015		2016		Change by Source of 2016 over 2015
	Amt	%	Amt	%	Amt	%	Amt	%	Amt	%	Amt	%	Amt	%	
GoG	408.5	28.8	411.6	22.8	513.3	22.4	555.8	15.9	1,208.8	28.3	1,351.7	31.8	2,138.4	68.5	58.20
Internally Generated Fund (Incl. NHIS)	688.9	48.7	985.2	54.6	1150.1	50.3	2749.3	78.5	2,290.2	53.5	2,189.5	51.4	572.6	18.3	-73.85
Devt Partners	318.6	22.5	408.5	22.6	624.1	27.3	194.5	5.6	781.3	18.2	712.8	16.8	413.6	13.2	-41.98
Total	1,416	100	1,805	100	2,288	100	3,500	100	4,280	100	4,254	100	3,124	100	-26.56
Year on Year Growth of Available Resources			27%		27%		53%		22%		-1%		-27%		

5.2 INTEGRATED PEOPLE-CENTRED HEALTH SERVICES

According to the WHO Framework on Integrated people-centred health services (IPCHS) implies putting the comprehensive needs of people and communities, not only diseases, at the centre of health systems, and empowering people to have a more active role in their own health. The vision for the Framework on Integrated people-centred health services is a future in which all people have equal access to quality health services that are co-produced in a way that meets their life course needs and respects their preferences, are coordinated across the continuum of care and are comprehensive, safe, effective, timely, efficient, and acceptable and all carers are motivated, skilled and operate in a supportive environment

Five interwoven strategies are recommended by WHO to be implemented in order to achieve this vision. Health authorities are encouraged to select those policies and interventions that best fit their national, sub-national or local needs and to customize them to match their priorities, capabilities and resources. These five strategies are 1) Engaging and empowering people and communities; 2) Strengthening governance and accountability; 3) Reorienting the model of care; 4) Coordinating services within and across sectors; 5) Creating an enabling environment.

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. The year under review saw WHO participating actively to strengthen the coordination mechanisms at the national/central level through activities listed under Common Management Arrangements for the implementation of the HSMTDP.

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

programmes. These budget programmes and sub-programmes are then linked to definite and measurable 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. WHO has been engaged in the processes leading to the firming up of activities.

• **Human Resources for Health**

The availability of the right numbers of health workforce with appropriate skill mix is essential for the delivery of the desirable health services. WHO has supported MOH and agencies forecast HRH needs for the sector for the next 15 years up to 2030. A draft forecast report based on projected population size and growth rate, burden of disease, growth in terms of expansion of service in depth and spread, attrition and other factors that affect health sector's need for health have been developed to determine how many health workers the health sector of Ghana will need in five to fifteen years for the sector to meet its strategic goals in relation to UHC and SDG.

Also related is the development of Staffing Norm which WHO supported the Ministry to develop in 2014 using WHO's Workload Indicator for Staffing Needs (WISN) which covered all categories of health facilities; Teaching Hospitals, Regional Hospitals, Specialised, District Hospital, Polyclinic, and Health Centre 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. Though CHPS, Health Training Institutions, District and Regional Health Administrations, and Central levels of GHS and MOH were not covered under the current Staffing Norms, the result was used to undertake HRH gap analysis in GHS facilities in six regions. Efforts to mobilise resources to complete the Staffing norm and to undertake the HRH gap analysis in the remaining four regions were initiated. It is expected that with the Staffing Norm, HRH projection and gap analysis, the Ministry will make administrative decision on how to proceed with HRH issues in addressing some of the key challenges.

- **Capacity building**

WHO provided technical and financial assistance in building the capacity of 358 executives and members of Ghana Coalition of Non-Governmental Organisations in Health (GCNH) nationwide during the year. The capacity building was geared towards the membership of twenty implementation partners of GCNH who were implementing activities for immunisation under GAVI Health Systems Strengthening support. The capacity building was on how to initiate a community of change practices to improve our service delivery (mobilisation in communities, creating demand for immunisation service seeking behaviour and influencing programmes/policies in the health sector). The skills of the participants were also built and strengthened in project management practices, proposal development and report writing. This activity was done in order to for the members of the GCNH to improve upon the implementation of their activities and to report appropriately.

The capacity of 252 staff comprising of 208 Finance offices and 44 internal auditors was built in 2016. The participants were from all

levels of GHS including Regional Health Directorate, District Health Directorates, Hospitals, Polyclinics and Health Centres within Greater Accra Region. The support which was in the form of finance and technical was to provide participants with the introductory tools to effectively understand and discuss Public Finance Management (PFM); and to be able to assess the impact of PFM performance on their Budget Management Centres (BMCs) and programmes of interest. Further it was to allow for discussion and interaction with other participants who may share common challenges.

- **Community Health Planning and Services**

Ghana has been implementing the Community-based Health Planning and Services (CHPS) programme since late 1990s. Considered one of the pragmatic strategies for achieving universal health coverage of a basic package of essential primary health services, CHPS has gained international recognition. Led by a Community Health Officer and supported by volunteers drawn from the area of service, the CHPS strategy is a breakthrough in enhancing community involvement and ownership of primary health care interventions towards

achieving universal health coverage (UHC). The ministry decided to relook at the CHPS and its implementation and thereafter developed a new CHPS policy with the aim of attaining the goal of reaching every community with a basic package of essential health services towards attaining Universal Health Coverage and bridging the access inequity gap by 2020. WHO supported the process of the development of the CHPS policy as well as a roadmap to accelerate its implementation.

5.3 ACCESS TO MEDICAL PRODUCTS AND STRENGTHENING REGULATORY CAPACITY

Access to Medicines and other health technologies remain the biggest challenge for achieving Universal Health Coverage. In Ghana WHO has supported the development of policies (mostly situated in the National Medicines Policy) and strategies to assist in achieving access to medicines. These include the development of clinical guidelines and essential medicines lists, setting up Drugs and therapeutic committees in health facilities, capacity building for the National Regulatory agency and support to the National Health Insurance scheme for reimbursement activities.

Key activities supported

- **Development of AMR Policy in “One-Health” Approach**

Available data suggest that there is increasing prevalence of resistance to antimicrobials and a marked

decrease in development of new antimicrobials with novel mechanism of action. The threat of antimicrobial resistance (AMR) is ever increasing with serious implications on health indicators. It is against this background that the Ministry of Health has led the development of an Antimicrobial Resistance Policy in the spirit of “One Health” working together with the Food and Agriculture Organization and the Organization of Animal Health that is represented by the Veterinary Services Division of the Ministry of Food and Agriculture. Other stakeholders involved in the development of the policy include the Environmental Protection Agency, Civil Society Organization, Academia, Ministry of Fisheries and Aquaculture.

The AMR policy has been developed to improve awareness and understanding of AMR through effective communication, education and training. It seeks to strengthen knowledge and evidence base through national surveillance and research and improvement of laboratory services for culture and sensitivity. It also seeks to reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures. It is expected that the use of antimicrobial agents in humans, plants and animal health would be optimized in the ‘one health’ approach through specific interventions in Responsible Use of Antimicrobials in humans, veterinary and aquaculture as well as in the environment and industry. The policy seeks a systemic balance between access and excess to preserve antimicrobials for current and future generations.

• **Assessment of the Blood Regulatory System**

In order to improve the availability of safe blood products in all Member States, the WHO Regional Office for Africa adopted in 2001 a regional strategy for blood safety (resolution AFR/RC51/R2).

The Ghana Food and Drugs Authority requested support from the WHO to assess the regulatory system and provide recommendations to strengthen the capacities for blood regulation in the country. A team of four consultants from AFRO, WHO/HQ and Health Canada came down to undertake the assessment. This involved assessment of the core functions in relation to Licensing and/or registration of blood establishments; Licensing and/or registration of manufacturers and distributors of plasma-derived medicinal products; Approval of blood and blood components (product and/or process approval); Approval of plasma-derived medicinal products; Regulatory oversight of associated substances and medical devices including in vitro diagnostics; Access to a laboratory independent of manufacturers; Control of clinical trials; System for lot release of plasma-derived medicinal products; Regulatory inspections and enforcement activities; Vigilance systems; Ensuring traceability and record keeping by manufacturers for all regulated products and International cooperation. There is close cooperation with the National Blood Service (NBS) in Ghana (an agency under the Ministry of Health) however a clear differentiation of the tasks and duties of NBS as the operator and FDA Ghana as the regulator has still to be defined in some areas.

• **Technical Support for Pharmaceutical sub-committee for NHIS review**

Ghana's NHIS was established in 2003 with the objective of providing financial access to basic health care services for residents without having to pay out of pocket at the point of health care services delivery. In September 2015 the President of the Republic of Ghana commissioned a technical committee to review the scheme and make recommendations for reform with the view to making the scheme more efficient, equitable, sustainable and ensure user satisfaction. Sub-committees were formed to critically analyse the issues and provide workable recommendations to support the reforms. The WHO country office was invited to provide technical assistance to the Pharmaceutical sub-committee. The critical issues identified by the pharmaceutical sub-committee included but not limited to fraud, abuse and overuse of pharmaceuticals through irrational prescribing, high medicine prices due to an inefficient supply management system, high financing costs due to payment delays from NHIA to service providers and on to suppliers causing another significant price increase. The committee proposed the following reforms:

- Reviewing the benefit package and introducing reimbursement limits and other tools to ensure that money goes towards evidence based treatments and that facilities have less room for overusing medicines. Some parts of current expenditures could also be included in the capitation fee, although this requires additional measures to lower and stabilize medicine prices

- Introduce centralized, transparent procurement for medicines and health technologies that reduces the current high costs, with facilities ordering under pre-agreed framework contracts
- Separate prescribing and dispensing and contract with chain pharmacies that have good management systems in place for the delivery and control of the pharmaceutical benefit in areas that are well covered by pharmacy chains
- Review the NHIS reimbursement and price setting methodology. The review would include options for the introduction of dispensing fees, as opposed to a reliance on mark ups.
- Education, awareness raising, advocacy for support to contain cost of medicines to providers and beneficiaries as well as the need of prescribers to adhere to standard treatment guidelines

Capacity Building Activities

• Strengthening of Drugs and Therapeutics Committees

Drugs and Therapeutics Committees (DTCs) are multi-disciplinary committees with commitment to the overall governance of the medicines management system in their health service organization to ensure the judicious, appropriate, safe, effective and cost-effective use of medicines. Drug Management functions are clearly the core essence of what DTCs are responsible for and the functions they should

perform. It is a justifiable expectation that functional DTCs should be able to play an important role in promoting rational use of medicines in health facilities based on their stipulated functions. Ghana's health system embraces the DTC concept as a management intervention to ensure correct, efficient, and cost-effective management and use of drugs.

A baseline of DTCs was conducted and revealed that a lot of them were not functional though they existed and for those that were functional the activities they were carrying out were below the minimum to be carried out by functional DTCs.

Out of 10 regions targeted, consistent data was obtained from 6 regions as indicated in the figure below.

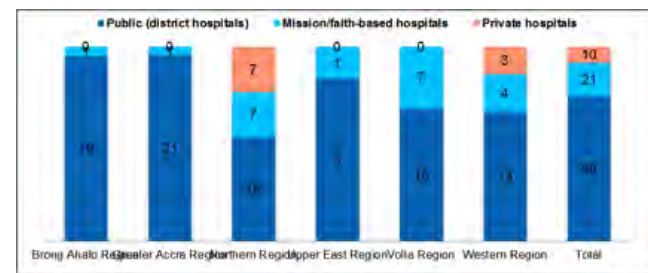


Fig. 8: Regional census on functional and non-functional DTCs

The aim was therefore to train and institutionalize the DTC concept in health facilities to improve indicators on Rational Use of Medicines and introduce the WHO Methodology for monitoring antimicrobial consumption and use in the community.

- Training of the FDA's Technical Advisory Committee for Adverse Events following Immunization (AEFI) on the advanced causality assessment module of the WHO and field investigations

WHO collaborates with the Food and Drugs Authority and Ghana Health Service to train Expert Committee members for effective causality assessment and confirmation of AEFI. At the request from the FDA, a five-day training programme was organized for the Technical Advisory Committee to strengthen AEFI monitoring and causality assessment in the country. Participants had one-day field training at the Dodowa district hospital where they practised a simulation on a parent whose child had been on admission purported to have been AEFI from vaccination. Participants learnt how to present AEFI investigation report to the national expert committee. They learnt and practiced how to brief the media on health events especially on AEFI. Participants finally developed action plans to improve AEFI monitoring and causality assessment in the country.



Participants in the bus for a field trip

Review of the guidance document for appropriate medical devices needed for the implementation of cancer care delivery programmes

Medical devices contribute to the attainment of the highest standards of health of individuals. A workshop



Participants in the AEFI Training Workshop



was organised for persons involved in clinical assessment, laboratory and pathology, radiology and diagnostic imaging, radiotherapy and nuclear medicine, systemic therapy and palliative care to review the guidance document for appropriate devices needed for implementation of cancer care delivery programs. The main challenges identified included low awareness of cancer, limited screening, late presentation and mis-information in the public domain with regards to complementary and alternative medicine, lack of appropriate education low capacity for diagnosis and out of pocket payment system for screening and treatment of most cancers. Some issues identified included the need for comprehensive training and the availability of the correct accessories for the equipment for radiology.

5.4 HEALTH SYSTEM INFORMATION AND EVIDENCE

WHO supported three key activities in the year 2016 under health system information and evidence to enhance data generation, analyse disseminate sound information for decision-making. These include (i) workshop on the cause-of-death statistics; (ii) Outreach training and supportive supervision; (iii) compilation of analytical country health profile for the health observatory.

• Workshop on the Cause-of-Death Statistics in Ghana

WHO HQ funded and supported cause-of-death statistics workshop in Ghana from 21-22 April 2016 at Mensvic Hotel, Accra. The workshop was attended by

94 participants including facilitators and international partners. Participants were from 20 Ghana hospitals: 10 provincial hospitals, 4 teaching hospitals and 6 CHAG (Christian Health Association Ghana) hospitals: an average of 2 medical doctors and 2 health information officers/coders from each of them. In addition there were 2 participants from Liberia and representatives from Bloomberg D4H, CDC and World Bank. The overall objective of the workshop is to empower low-resource countries of Africa in starting and improving their collection of cause of death information by:

- Familiarizing participants to the various components of the module
- Training certifiers in completing the medical certificate of the cause of death according to international standards
- Training health management information officers and coders on the selection of the underlying cause of death according to a set of rules
- Supporting Ghana and other countries in their implementation, integration and roll-out plan



Country Representative, Dr Owen Kaluwa granting interview to the press after opening ceremony

• Analytical Country Health Profile for the National Health Observatory

WHO is supporting the Ministry of Health and the Ghana health service to develop a national health observatory for the health sector. This is a regional programme that is being supported by WHO AFRO through funding from DFID for countries to establish national health observatories in the region.

The observatory is to monitoring health events and trends using objective and verifiable methods. Their purposes vary but the major objectives are:

I. Monitoring health situations and trends, including assessing progress toward agreed-upon health-related targets;

II. Producing and sharing evidence;

III. Supporting the use of such evidence for policy and decision making

As a repository of extensive information and evidence on national health systems, the National Health Observatory will strives to play a key role in the policy dialogue, monitoring the implementation and evaluation of national strategies and plans and it has three key components which include.

1. Data-Statistics - Access to the best available health-related data and statistics on the African Region
2. Country Health Profiles - Compiling comprehensive and analytical country health profiles to inform policy

and decision making on wide range of indicators and key determinants of health.

3. Networking & Communities- Networking and communities of practice by offering IT-based networking facilities, members of communities learn and work together and strive to use the best available evidence for policy and decision making as well as members work together in building National Health Observatories.

In fulfilment of component two and as part of the process to develop the Ghana national health observatory, WHO and the Ministry of Health contracted a Research Fellow from a Consulting Firm – IN-DEPTH Network to compile a comprehensive country health profile on behalf of the Sector. A draft document was produced and is currently undergoing review.



Fig 10: Screenshot of analytical country health profile on Africa Health Observatory website

- **Outreach Training and Supportive Supervision (OTSS)**

With the implementation of WHO/AFRO five-year project (2014–2018) on Strengthening the use of data for malaria decision-making and action in the African Region with financial support from DFID, WCO Ghana supported Northern, Brong-Ahafo, Ashanti and Central Regions to conduct data management assessment using OTSS tools in 9 districts in 4 regions covering 16 health facilities to ascertain the impact of the experience on data accuracy in the selected health facilities where two malaria indicators; suspected and tested in both consulting room registers and entered dhism2 were reviewed and audited.

Figure 11: OTSS data management assessment findings



Key Challenges and how to address them

As the country move to establish its National Health Observatory, concerns have been raised about the existence of other data and health information warehouse (database) within and outside. A typical example is West Africa Health Observatory (WAHO) and district health information management system (dhims2) which is currently in operational and data populated on weekly and monthly basis. The following misconceptions about Health Observatory features prominently in any stakeholder’s engagement;

- *A replacement of National Health Information Systems.*
- *An extra burden*
- *One more “short-lived” donor initiative which meant not be ascertain once the donor pull out*

The National Health Observatory in its current form as is been implementing in other countries seeks for better, synergy and harmonization of health information. A lot of stakeholders engagements are needed since the observatory can be done around the existing national health information platform without necessarily developing entirely new platform. It will also address the issue of data sharing and collaboration among agencies outside the health sector.

CHAPTER 6

SURVEILLANCE PREPAREDNESS AND RESPONSE

6.1 ALERT AND RESPONSE CAPACITIES IHR, IDSR

Against the backdrop of the Ebola Virus Disease (EVD) outbreak in West African countries, increasing attention is being paid to building a resilient health system that would help prevent and rapidly respond to emergencies and outbreaks to minimize catastrophic consequences.

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. 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. Technical support and advocacy for building core capacity for the 2005 International Health Regulations is also a priority.

WHO with resources from different partners including EU, DFID, CDC, JICA and Norway as well as internal funds supported the country in a myriad of emergency response preparedness, health systems strengthening activities in coordination, surveillance and laboratory, case management and risk communication.



Debriefing on POE simulation exercise at Tatala. Immigration staff involved in POE simulations documenting procedures at Hamile



Laboratory Supplies and equipment handed over the head of Public health reference lab; Ghana Health Services September 2016.

Table 11. WHO Support for IHR, IDSR, public health emergency and preparedness and response and health system strengthening

Area of Support	Objective	Achieved	Output
Coordination and Health Systems Strengthening	Provide technical expertise to support coordination of preparedness and response activities and health systems strengthening	An International staff; Medical officer-Health Systems (MO-HS) at post to support health system strengthening (HSS).	Review of the emergency response activities, the monitoring of the risk mapping and capacity assessment exercise, resource mobilization efforts, human resource for health projection exercise supported
		A technical logistics officer at post to support logistics operations supply and inventory systems of the Ministry of Health and related agencies.	Development of Supply Chain Master Plan, logistics operations of the response meningitis and cholera outbreaks response and capacity building in supply chain management supported
		International health security officer at post to support emergency preparedness and response activities	Coordination of assessments, simulation exercises and IHR core capacity development supported
		Short term WCO Strategic partnership portal (SPP) focal person recruited	Upgraded version of the generic Strategic Partnership Portal (SPP) tool capturing countries' needs, partner support and gaps in IHR core capacity developed
		Technical support staff at post to support health system strengthening activities	Technical sport provided to MoH, GHS, UN agencies, development partners and NGOs
		Capacity built in regional coordination of emergency response.	Eastern, Upper East, Upper West Brong Ahafo, Greater Accra Western regional public health emergency management committees supported to undertake cholera outbreak simulation exercise
		Capacity to conduct simulation exercises developed	29 experts were trained in design and implementation of simulations and rapid response to public health emergencies. Chemical hazard simulation supported
Surveillance	Build capacity in surveillance, case investigation, contact tracing, data management	Reviews and development of strategic documents supported	Risk mapping and capacity assessment, Review of Public Health Emergency Response and Preparedness in Ghana, Integration of Health Systems and Health Security, Work force development projection study undertaken
		An international epidemiologist at post to strengthen public health surveillance, outbreak investigation and response	Preparedness, outbreak investigation, response activities and evaluation of cholera and meningitis outbreaks and training of health staff training, revision of public health documents supported
		Health facility staff capacity to identify key disease under surveillance supported	Over 40 clinicians trained IDSR to enhance disease detection. In health facilities 5,100 poster with case definition of epidemic prone and priority diseases printed for distribution to health facilities.
		Port Health and Point of Entry staff capacity built for effective surveillance	28 point of entry staff trained and certified to conduct ship inspection and sanitation Simulation exercises conducted at Tatala-Nanchamba, Northern Region, Hamile, Upper West Region and Oseikojokrom PoE, Western Region to strengthen capacities to prevent, detect, respond to outbreaks at ground crossings
		Cross -border collaboration strengthened	Cross border coordination meeting for 30 Ghanaian and Togolese staff conducted in Tatala to facilitate collaboration and information sharing
Laboratory	Procure laboratory diagnosis	Capacity built in surveillance, outbreak investigation and field epidemiology	200 multi-disciplinary frontline health staff from Northern, Brong Ahafo, Western, Central, Eastern and Volta regions trained in Field Epidemiology and Laboratory Program in line with efforts to strengthen IDSR in-country
		Diagnostic capacity of Noguchi, Public Health Reference Laboratory and regional and district	More than 33 kinds of laboratory diagnostic kits, equipment, consumables, reagents and supplies to support sample collection and safe shipment, diagnosis of outbreaks and public health threats

• JEE self- assessment

WHO supported MOH/GHS to conduct self-evaluation of its current capacity to prevent, detect, and rapidly respond to public health risks, based on the IHR Joint External Evaluation (JEE) tool. The self-assessment identified the most critical gaps within the health systems and priority actions to address the gaps. The self-evaluation exercise will be followed by an external evaluation mission in the first quarter of 2017 to validate the findings. Findings from these exercises will inform appropriate prioritization of public health interventions and serve as major inputs to develop a comprehensive strategic plan for emergency preparedness and response.

• Training of WHO staff in emergency preparedness

The WCO Ghana held a 4-day capacity building training for its staff on health emergency management. The training, attended by 33 WCO staff, aimed to enhance the knowledge, skills and competences of participants on key principles and tools for emergency management, including the WHO emergency response framework (ERF), standard operating procedures (SOPs), incident command systems (ICS), etc. The workshop, facilitated by experts from WHO/AFRO and IST, prepared the WCO staff for re-purposing and deployment in the event of a public health emergency.

WHO Country Office Staff following the training

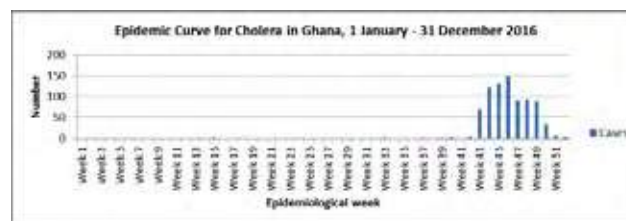


6.2 EPIDEMIC- AND PANDEMIC-PRONE DISEASES

Cholera

Following the trend in recent years, cholera outbreaks were reported in 2016. Accra the usual hotbed of cholera and Kumasi reported only one case each in weeks 15 and 33 respectively but the outbreaks were quickly contained. Central Region however became the epicenter of cholera in 2016 with the onset of an outbreak in week 37. WHO supported the rapid containment of the outbreak of cholera in Cape Coast which was the epicentre by deploying an epidemiologist, a risk communication expert, a WASH specialist and a logistician as part of the national rapid response team that provided technical support and guidance to the regional and district response. The rapidly evolving cholera outbreak was effectively controlled within weeks of onset following intensive implementation of high-impact interventions.

Fig 12: Epidemic Curve for Cholera 1 Jan. – 31 Dec. 2016)



Cumulatively 720 cholera cases were reported in 2016 but for the first time in several years no deaths were reported. Cape Coast recorded the highest number of cases, 675 in all.

• Meningitis

The country experienced a major outbreak of bacterial meningitis between January and March 2016, caused by a mix pathogen of *Streptococcus pneumoniae* sero-type 1 and *Neisseria meningitidis* W. As of 31 March 2016, a cumulative of 2,316 suspected, probable and confirmed cases including 221 deaths (CFR of 9.5%) had been reported from 9 out of 10 regions of Ghana. Brong Ahafo was most affected followed by Upper West Region



Dr Owen Kaluwa, WHO Representative and Dr Sally-Ann Ohene in Sunyani for a support visit during the meningitis outbreak

(UWR) with 954 and 612 cases respectively. WHO provided technical, logistical and financial support to the Ministry of Health/ Ghana Health Service in response to the meningitis outbreak including outbreak investigation and risk assessments, findings from which informed formulation of control strategies and interventions convened and hosted the initial outbreak coordination meetings; and supported reactivation and functioning of the National Technical Coordination Committee (NTCC).



On the bench training in Sunyani Regional Hospital

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. WHO also facilitated a mission from the Medical Research Council (MRC) Gambia to build in-country laboratory diagnostic capacity in bacteriology and latex sero-typing and provision of additional essential reagents and equipment.



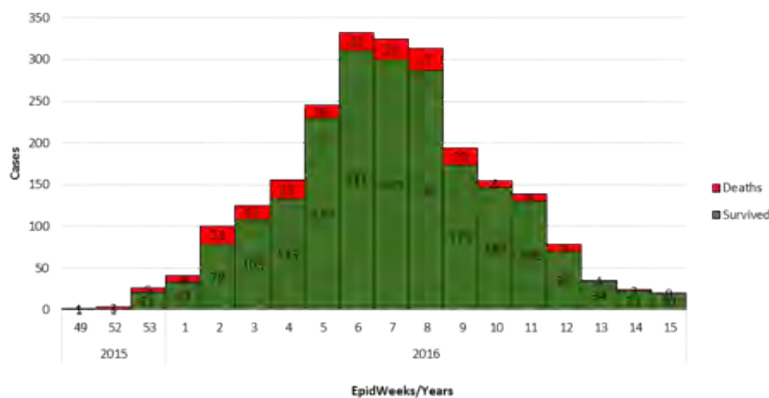
Vaccination of school children in Nadowli

WHO supported the Ministry of Health/ Ghana Health Service to secure 161,111 doses of ACW meningitis vaccines. Reactive meningitis vaccination campaign was successfully conducted in three districts Nadowli, Nandom and Jirapa in the UWR, rapidly bringing the meningitis outbreak in the region under control. A total of 136,002 (representing 98.6% of the target population) aged 2-29 years was vaccinated.



WHO secured 4,000 vials of ceftriaxone for treatment of meningitis patients. WCO supported and participated in conducting rapid assessment to establish community's knowledge, practices & behaviour in order to inform decision on further risk communication and behavioral interventions for meningitis. WHO also provided financial support to orient health care workers on guidelines for meningitis outbreak response including active surveillance, case management and public information /social mobilization. The meningitis outbreak was effectively contained.

Fig.13: Distribution of meningitis cases and deaths in Ghana by week, December 2015 to April 2016



• 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. The year 2016 saw an unprecedented outbreak of yellow fever in Angola which spilt over to other countries. Following confirmed cases of yellow fever (YF) reported from 2 regions in Ghana, WHO provided technical support in the interpretation of the results with the conclusion that Ghana was in a high alert for YF but not in an outbreak situation. Guidance was given to strengthen confirmation of YF results, surveillance and risk communication.

- **Influenza**

The recurrent outbreaks of avian influenza reported in 2015 in Ghana persisted in 2016 with Greater Accra, Eastern, Western, Ashanti and Central regions reporting cases. There was no avian influenza transmission to humans. WHO maintained support for the country plan of action for Pandemic Influenza preparedness (PIP), with the objective of strengthening the laboratory capacity and surveillance for influenza among humans. The objectives are to strengthen influenza laboratory and surveillance and enhance national capacity data sharing.

In line with the one health agenda, NMIMR was supported to convene a meeting to enhance channels for data transmission and information sharing on influenza infections in humans and animals for stakeholders from the Ghana Health Service, Veterinary Services Department, NADMO, FAO, CDC, KCCR, WHO, School of Public Health among others.

Support for influenza sentinel sites included funds to facilitate shipment of samples to the National Influenza Centre in NMIMR for testing, refresher training of staff in influenza surveillance protocols and a study tour of the model Kumasi South sentinel site to observe best practices and learn lessons to improve performance in the other sites.



Study tour participants in a group picture with Kumasi South Hospital staff during the study tour

The capacity building activities have served to improve specimen collection and transport to NIC with better adherence to the sentinel surveillance protocols.

CHAPTER 7

CORPORATE SERVICES AND ENABLING FUNCTIONS

7.1 LEADERSHIP AND GOVERNANCE

7.2 STRATEGIC PLANNING, RESOURCE COORDINATION AND REPORTING

7.3 STRATEGIC COMMUNICATION

During the year under review, the facebook page: www.facebook.com/WHOGhana and the WCO/Ghana website which were regularly updated. WCO/Ghana produced quarterly newsletters in addition to press releases on African Vaccination and Child Health Promotion Weeks. Official Health Days were also planned and celebrated and activities documented and disseminated to Technical Staff, Development partners, WRs & HPRs in AFRO

7.4 TRANSPARENCY, ACCOUNTABILITY AND RISK MANAGEMENT

As part of the Transformational Agenda, the Regional Office has set up the Accountability and Internal Control Strengthening Project to assist Country Office Staff in improving controls and accountabilities. There are now best practices, guidance on rules and regulations, SOPs, checklists and templates in place to increase work

efficiencies. The use of KPIs is also in place for Country Offices to have a complete self-check on its performances against well-defined indicators. The WCO had a Desk Review Audit from 2015 to date by IOS/HQ in November and will be completed in March 2017.

7.5 MANAGEMENT AND ADMINISTRATION

The general management and administration of the Office was to ensure full compliance and implementing control framework, ensuring a very efficient and effective information, communication and technology system with up-to-date infrastructure, provision of operational and logistic support and compliance of MOSS requirements.

• **Compliance and Control Framework**

The necessary internal controls for efficient running of the office has been in line with organizational policy. The WCO followed clear delegation of authority, clear lines for reporting and strict adherence to laid down policies and procedures. The Representative has proposed some members of staff for the Local Compliance and Risk Management Committee which will be operational in 2017.

• **Managing Expenditure Tracking and Reporting**

For efficient management of the Work plans and monitor implementation rates for the WCO, monthly updates on workplan expenditure is done and shared during the Monthly General Staff Meeting held on the first Monday of the month. Workplan summary as at 31 December 2016 are below:

Table 13: Workplan Summary as at 31 December 2016

Project Number	Planned Cost	Award Budget	Encumbrances	Expenditures	Utilization	Utilization as % of Planned costs	Utilization as % of Award budget
AFGHA1610766	3,638,241	3,163,839	3,685	1,866,288	1,869,973	51%	59%
AFGHA1610984	4,598,000	2,829,916	211,246	1,442,992	1,654,238	36%	58%
AFGHA1610985	1,172,000	771,542	15,093	553,091	568,184	48%	74%
AFGHA1610989	645,000	645,000	15,554	303,890	319,444	50%	50%
AFGHA1610991	841,000	390,486	15,051	295,094	310,144	37%	79%
AFGHA1610997	948,820	780,999	58,500	698,131	756,631	80%	97%
AFGHA1612796	214,000	214,000	54,434	150,007	204,441	96%	96%
	12,057,061	8,795,782	373,564	5,309,492	5,683,056	47%	65%

Table 14: Summary of Purchase orders processed

Type of PO	Number Issued
eImprest POs	63
DI POs	8
GES	209
Goods	12
APWs/SSA/TSA/LOA	19
DFCs	99

Summary of DFCs Issued

WCO issued ninety-nine (99) DFC agreements with the Ministry of Health and its agencies and a breakdown is below:

No of DFC	Received Reports	Overdue reports	Currently Due	Not Yet Due
99	34	20	36	9

The WCO is currently following up with its government counterparts to have overdue and currently due reports submitted in due course for full closure of the POs.

elmprest Operations

The elmprest system has been managed very well in the year and monthly closures are done promptly and reports submitted before the 10th of every month. It is the only GMC KPI that has green ratings from January to November consecutively for the WCO in 2016.

• Information and Communication Technology

WCO Ghana enjoyed another year of robust computing infrastructure and systems during the period with the redesigning of our IT equipment room

• CISCO Telephony System

WCO Ghana successfully migrated to the Cisco Unified Communication Manager (CUCM) solution. This project modernized the infrastructure and Services, and improved efficiency of work processes and procedures. It also reduced cost and eliminated duplication of services.

• **MS OFFICE 365**

WCO Ghana successfully migrated all users email boxes to MS Office 365 (O365). This gave users larger email storage size of 50GB per user and allowed improved handling of email. This was a twenty-five-fold increase from the previous set-up. It also gave more intuitive interface, using Outlook on the Web.

All users using Android phones, Microsoft phones, tablets, iPads and iPhones were also successfully migrated to the new O365 platform

• **Service Requests**

Information and Technology Management (ITM) unit including WCO Ghana started using a new Service Request platform called ServiceNow. This is an Incident Management System that manages all WHO IT activities including IT incidents and requests. It also gives an overview of all reported incidents which is used for IT KPIs

• **NETWORK Optimization**

During the year, a frame of network optimization and WAN best practices was aligned. An Application Performance Management (APM) was implemented. The operation ensured that all low-priority traffic, typically the email was dynamically redirected to the second Internet Service Provider (ISP) to enable the release of some bandwidth from the main VSAT links

• **Business Continuity Plan (BCP)**

In order for the office to be able to continue critical processes during and after a disaster or crisis such as major power outages, natural disasters, terrorist attacks, and a

possible pandemic influenza, WHO Ghana together with the Regional Office for Africa designed and implemented a corporate Business Continuity Management Strategy Plan. The plan ensures the provision for staff safety and security as well as the continuity of critical business processes during and after an incident to enable the organization deliver its mandate.

• **ICT Infrastructure Assessment**

During the year in review, a regional ICT assessment and standard check list of tests of key office IT indicators was used to review the WAN and LAN performance. This assessment checked to ensure a robust ICT environment for staff to work and access ICT services adequately. Overall rating was good. However, there was the need for other key elements of the ICT environment to be upgraded to meet regional ICT standards which if implemented will also improve the user experience.

- ◆ During the assessment it was recommended that the following should be upgraded.
- ◆ Changing the entire Local Area Network (LAN) cabling type from CAT 5E to CAT 6
- ◆ Installing a central UPS to ensure that all key ICT systems are protected.
- ◆ Upgrading the WIFI to standard CISCO equipment for a single WIFI network.
- ◆ Retire two old servers and reinstall the network Active Directory.
- ◆ Install a Video surveillance and access control as per the UNDSS guidelines.



- **Staff ICT Training Needs**

Training and presentations were provided for staff throughout the year on the proper use of all new ICT initiated projects.

Operational and Logistics Support

- **Office Accommodation**

The WCO Ghana office has been at its present location since August 1997. The Landlord has indicated a 33% increment in the rent from \$9000 to \$12,000 which will throw the office running budget out of proportion. Upon negotiations with the landlord, it has been reduced to \$11,500 which is still on the high side. The WCO aims to embark on a search for a less costly but modern office that will fit into the next biennium's budget allocations.

Fleet Management

The WCO had nine (9) vehicles which are all operational, of which two were procured in 2016. Only one of them is overaged (2008) and it disposed of three (3) vehicles as donation to government agencies.

- **Procurement of Goods and Services**

There is a Local Procurement Committee in place at the WCO set up in 2014. Its main mandate is to provide objective and independent advice on procurement of goods and services for the WCO. One main challenge in the local procurement of goods and services is the fluctuations of the exchange rate whereby goods especially processed with pro-forma invoices have price changes after issuance of POs and this has delayed payment to the supplier. There were also unnecessarily delays in issuance of Goods PO for signing by the supplier for delivery and payment. This led to abrogation of a contract by the supplier reason being attributed to the delay of receipt of the PO.

- **Minimum Operating Security Standards (MOSS)**

The WCO did its Mandatory Assessment in December and this is a key KPI under Security for all Country Offices. There are still some MOSS compliant recommendations from 2011 that have not been implemented due to budget constraints. They will be factored in 2017 office running budget and implemented when funds are available.