



FEDERAL  
MINISTRY  
OF HEALTH

**DEPARTMENT OF PUBLIC HEALTH**

**NATIONAL TUBERCULOSIS  
& LEPROSY CONTROL PROGRAMME**

**Nigeria**

**2014 NTBLCP Annual Report**

## Acknowledgements

National Tuberculosis, Leprosy and Buruli Ulcer Control Programme (NTBLCP) in this 2014 annual report has compiled the activities carried out by the programme from January to December 2014. In line with our procedure, both the achievements and challenges encountered during the year in view were outlined.

Our heartfelt gratitude goes to the Federal Ministry of Health through the Head of Department of Public Health, Dr. Bridget Okoeguale for the good managerial coordination and passionate drive to achieve our set targets.

All of these achievements have been made possible through the inspiration of the Honourable Minister of Health, Dr. Alhassan Khaliru, whose desire is to actualize the transformation agenda of the President and commander-in -chief of the Federal Republic of Nigeria, His Excellency Dr. Goodluck Ebele Jonathan.

We also want to thank the staff of TBL & BU control programme at both Federal, State, and local Government levels, the World Health organization National Professional Officers (WHO NPOs), ILEP partners, the PRs for GFATM and all national/international Consultants to GFATM for joining in implementing the strategic plan for the interventions and control of Tuberculosis, Leprosy and Buruli ulcer in the year 2014. Our achievements would not have been possible without their commitment.

Our Special appreciation is to the Global Fund, the USAID (KNCV, MSH, FHI360 and Abt. Associates), the CDC, WHO, other technical and financial partners who have contributed tremendously to the progress achieved by the NTBLCP in the year under review.

Moreover we appreciate the cooperation of all persons, families and communities affected by Tuberculosis, Leprosy and Buruli ulcer in Nigeria whose willingness to comply with treatment, health education as well as instruction on TB infection control has helped us to achieve sustainable control of these diseases in Nigeria.

Finally, our gratitude goes to the Almighty God for the fortitude to take these giant strides.



Dr. Gabriel Akang  
National Coordinator, NTBLCP

## Abbreviations

ACSM	Advocacy, Communication and Social Mobilisation
ADR	Adverse Drug Reaction
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
BU	Buruli Ulcer
CDC	Centres for Disease Control and Prevention
CIDA	Canadian International Development Agency
CPT	Co-trimoxazole Preventive Therapy
CTBC	Community TB Care
DFB	Damien Foundation Belgium
DOTS	Directly Observed Treatment Short-course
DST	Drug Susceptibility Test
EPTB	Extra Pulmonary TB
EQA	External Quality Assessment
FCT	Federal Capital Territory
FDC	Fixed Dose Combination
FMOH	Federal Ministry of Health
GDF	Global Drug Facility
GFATM	Global Fund to Fight Aids, Tuberculosis & Malaria
GHAIN	Global HIV/AIDS Initiative in Nigeria
GHW	General Health Worker
GHCW	General Health Care Worker
GLC	Green Light Committee
GLP	Good Laboratory Practice
GLRA	German Leprosy and Tuberculosis Relief Association
HCT	HIV Counselling Testing
HDL	Hospital Development and Linkage
HIV	Human Immunodeficiency Virus
IHVN	Institute of Human Virology Nigeria
ILEP	International Federation of Anti-Leprosy Associations
IPT	Isoniazid Preventive Therapy
ISTC	International Standards for TB Care
IULTD	International Union against TB and Lung Diseases
LGA	Local Government Area
MB	Multi-bacillary
MDR	Multi-Drug Resistance
MDT	Multi-Drug Therapy
NLR	Netherlands Leprosy Relief
NPO	National Professional Officer
NSP	National strategic Plan
NTBLCP	National TB and Leprosy Control Programme
NTBLTC	National TB and Leprosy Training Centre
PAL	Persons Affected by Leprosy
PB	Pauci-bacillary
PLHIV	People Living With HIV/AIDS
POD	Prevention of Disability
PPM	Private Public Mix
QA	Quality Assurance
QAP	Quality Assurance Policy
R&R	Recording & Reporting
RFT	Released From Treatment

M&E	Monitoring & Evaluation
STBLCO	State TBL Control Officer
TB/HIV	Tuberculosis/Human Immuno-deficiency Virus
TBL	Tuberculosis and Leprosy
TBLS	TBL Supervisor
TLMN	The Leprosy Mission Nigeria
USAID	United States Agency for International Development
WHO	World Health Organisation

## Table of Contents

Acknowledgements.....	1
Abbreviations.....	2
Table of Contents.....	4
1. Introduction .....	5
1.1 Context and Structure of the NTBLCP .....	5
1.2 Goal and objectives of the Programme.....	5
2. Tuberculosis Control Activities.....	6
2.1 DOTS Expansion and Enhancement activities.....	6
2.2 Progress towards achievement of Global TB Targets .....	7
2.3 Laboratory and Quality assurance services .....	9
2.4 TB/HIV collaborative activities .....	10
2.5 Advocacy, Communication and Social Mobilization.....	12
2.6 Programmatic Management of Drug Resistant Tuberculosis.....	12
2.7 Childhood TB .....	14
3. Leprosy Control Services .....	15
3.1 Introduction .....	15
3.2 Achievements .....	15
4. Buruli Ulcer.....	16
4.1 Introduction .....	16
4.2 Achievements .....	16
5. Monitoring, evaluation and Programme Management.....	18
5.1 Supervision, Monitoring and evaluation .....	18
5.2 Programme Management .....	18
5.3 Major Achievements in 2014 .....	18
6. Human Resource Development.....	19
6.1 The central unit.....	19
6.2 National Tuberculosis and leprosy Training Centre (TBLTC) .....	19
7. Key challenges and recommendations to TBL and BU Control in 2014.....	21
7.1 Challenges .....	21
7.2 Recommendation.....	21
8. Annexes .....	23
8.1 Tuberculosis .....	23
8.2 Drug resistant Tuberculosis.....	34
8.3 Leprosy.....	37
8.4 Buruli Ulcer.....	40

## 1. Introduction

Year in year out, the Tuberculosis, Leprosy and Buruli ulcer Control Programme (NTBLCP) has continue to achieve significant landmarks and 2014 is not an exception. As at the beginning of 2014, the programme still operates the National Strategic Plan for Tuberculosis Control 2010 – 2015 but adopted the new National Strategic Plan for Tuberculosis Control 2015 – 2020 with the aim to reduce the prevalence of TB and the other two diseases to levels where they no longer constitute public health problems in the country.

In 2014, the NTBLCP received both financial and technical support from various organizations such as the United States Agency for International Development (USAID), Centres for Disease Control and Prevention (CDC), the Global Fund for ATM (to Fight AIDS, Tuberculosis and Malaria), KNCV Consortium (TB CARE 1, MSH and FHI 360) WHO, ILEP Organisations, Agbami partners and APIN.

The Director of public health through the NTBLCP, expresses appreciation to all donor agencies, technical and implementing partners, field workers, local and international consultants and most importantly to all those affected directly or indirectly by the three diseases who in 2014 have contributed to all the achievements attained towards a Nigeria free of TB, Leprosy and Buruli ulcer.

### 1.1 Context and Structure of the NTBLCP

#### 1.1.1 The context of the NTBLCP

Nigeria is a Federation of 36 States and a Federal Capital Territory. For operational purpose, these States are grouped into 6 geo-political Zones, and for administrative and grass-root governance, they are divided into 774 Local Government Areas. With a projected population of about 175 million in 2014, the NTBLCP with supports from other stakeholders continued to intensifies its efforts in ensuring universal access to TBL & BU services across the country.

#### 1.1.2 Structure of the NTBLCP

NTBLCP is structured along the three tiers of government i.e. Federal, State and LGAs.

- The National TBL programmes a unit of the Department of Public Health of The Federal Ministry of Health, is responsible for policy development, tertiary care, mobilization and development of human and material resource and provision of technical support to state programmes.
- The State TBL programmes a unit of the Department of the State Ministry of Health, coordinate TB activities, provide secondary care and provide technical management to programme implementation at the LGA level and facility level.
- The LGA is the operational level and the Basic Management Unit (BMU) of the NTBLCP.

### 1.2 Goal and objectives of the Programme

#### 1.2.1 Long-term goal

To reduce significantly the burden, socio-economic impact and transmission of Tuberculosis, Leprosy and Buruli Ulcer in Nigeria.

### 1.2.2 The general objectives

1. To reduce the prevalence of tuberculosis, Leprosy and Buruli Ulcer to the level at which they no longer constitute public health problems in the country
2. To prevent and reduce the impairments associated with leprosy and Buruli Ulcer
3. To provide appropriate rehabilitation for persons affected by leprosy and Buruli Ulcer

### 1.2.3 Strategies and specific objectives

#### Strategies and specific objectives for TB, Leprosy and Buruli ulcer

The basic strategies for the treatment and control of TB, Leprosy and BU diseases in Nigeria remain the provision of DOTS, MDT and BU drugs free of charge to all persons with active disease. However, the supportive strategies that would enable a successful and efficient implementation of the MDT and DOTS strategies as outlined in the NTBLCP Strategic Plan for the 3 diseases are as follows:

- Early case finding and proper case management
- Comprehensive management of the long term physical and socio-economic effects
- Integration of TBL and Buruli ulcer services into the general health services
- Promoting Public-Public-Private partnerships
- Behavioural Change Communication
- Collaboration with bilateral and multilateral partners
- Ensuring functional commodities management system
- Human Resource Development

## 2. Tuberculosis Control Activities

### 2.1 DOTS Expansion and Enhancement activities

#### 2.1.1 Coverage

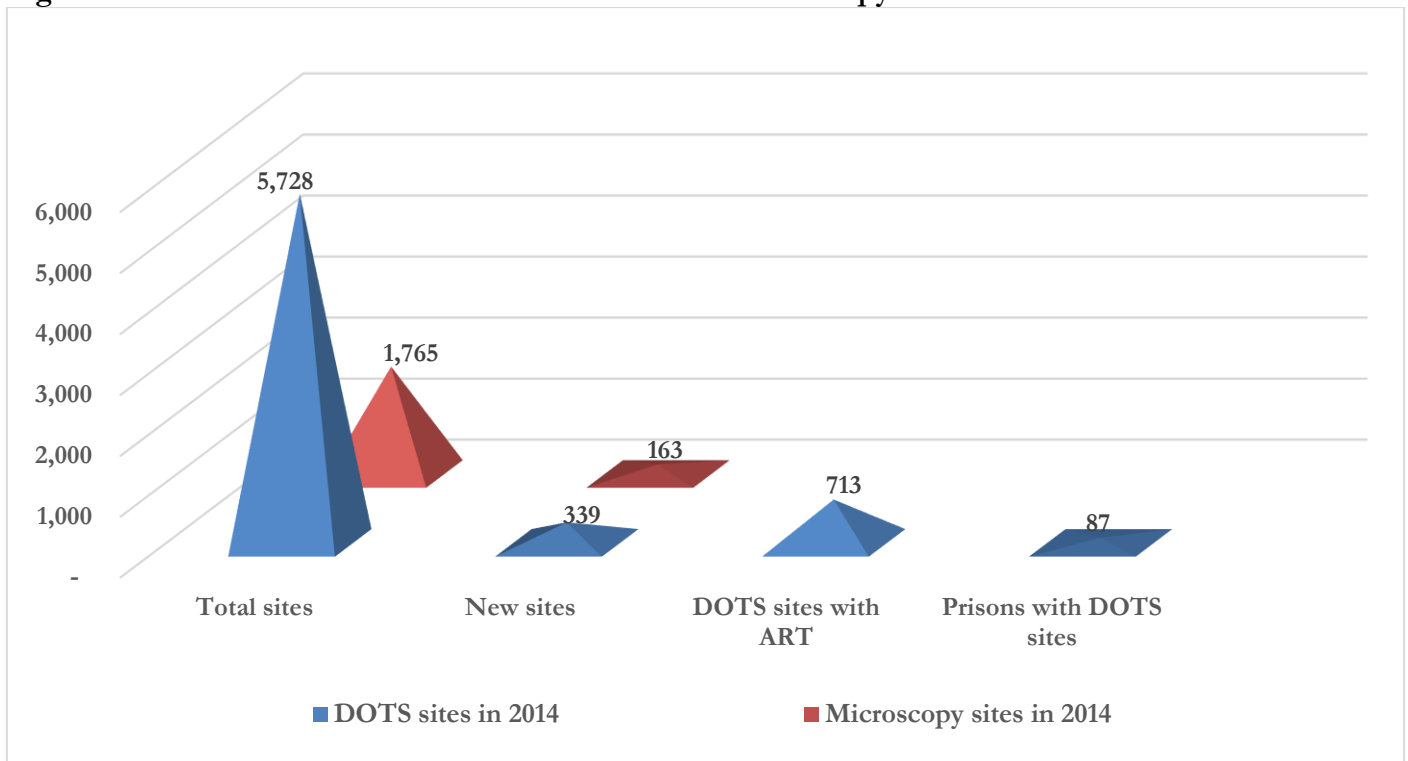
DOTS expansion and enhancement remain one of the important strategies of the NTBLCP to ensure progress towards the achievement of a universal access to TB services in Nigeria. The strategic DOTS expansion plan which was developed in 2013 to guide the expansion and enhancement of DOTS services in Nigeria was implemented and with support from the Federal Government of Nigeria, GFATM and WHO (through USAID funding), a total of 339 new DOTS centres and 163 new Microscopy centres were established in 2014 putting the total DOTS and microscopic coverage as at December 2014 at 5,728 DOTS and 1,765 microscopy sites respectively.

As part of the ingredients needed for the DOTS and Microscopy expansion in 2014 and in order to ensure that quality TB services are provided at all times to patients, the NTBLCP in 2014 built the capacity of 219 Medical Doctors and 1,283 GHCWs through various types and levels of standardized training with the technical efforts of the NTBLCP, WHO and ILEP partners. Financial support was from the government and hugely from the Global fund, USAID through WHO and other partners. While the majority of these health workers were from new DOTS facilities (not previously providing DOTS services), health workers from previously established DOTS facilities were also trained to ensure continued service provision at these sites.

Apart from the numerous DOTS facility established in the private health facilities through GF supports in 2014, the NTBLCP through the support of USAID/WHO was able to establish DOTS services in 120 Private health facilities in 10 states of the federation namely, Lagos, Imo, Anambra, Benue, Nasarawa, Katsina, Rivers, Adamawa,

Bauchi and Kaduna. In each of these states, one Medical Doctor and one nurse were trained on quality DOTS implementation. A total of 240 personnel were trained.

**Figure 2.1: Total number of Old and New DOTS and Microscopy sites as at end of 2014**



## 2.2 Progress towards achievement of Global TB Targets

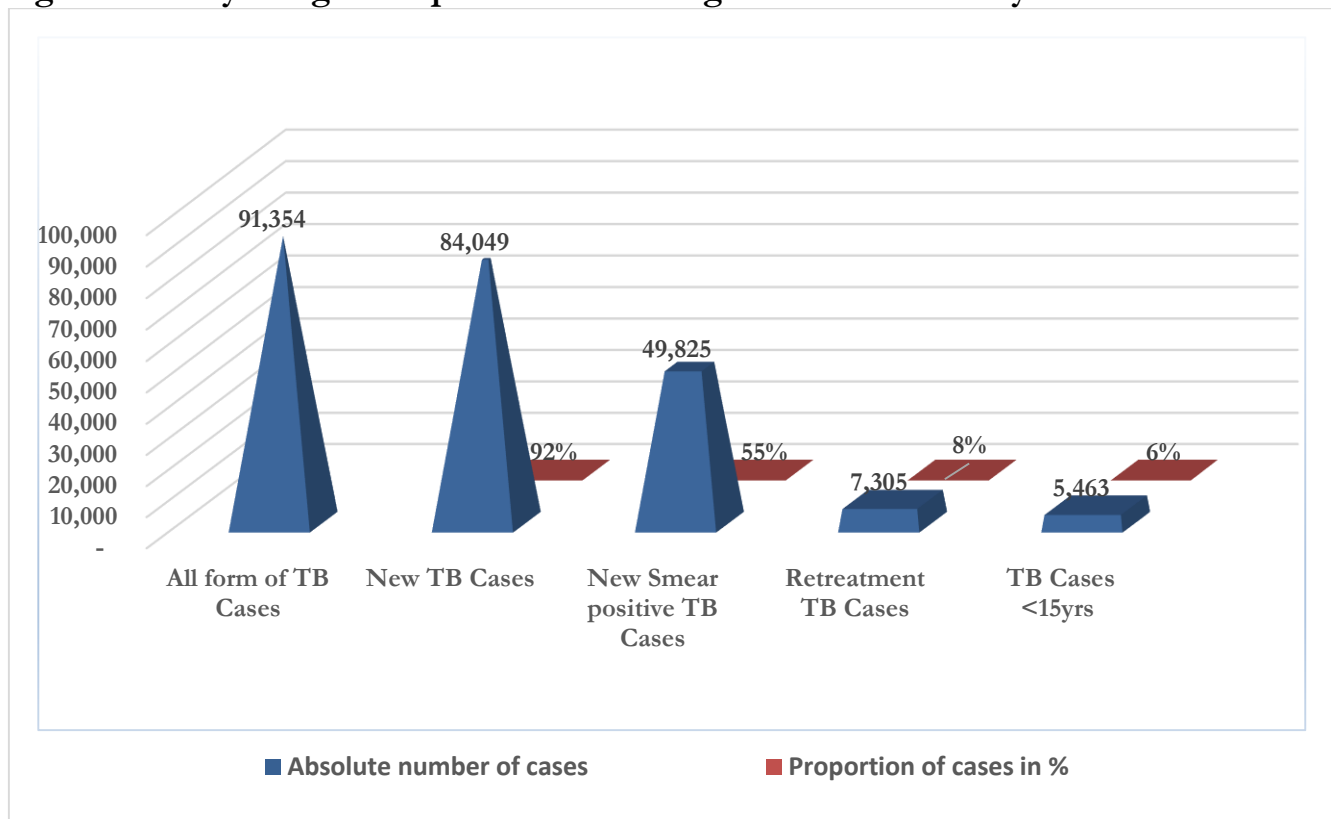
### 2.2.1 Case Detection

A total of 91,354 of all forms of TB cases were registered in 2014. Of these number, 84,049 (92%) were new TB cases while the remaining 7,305 (8%) were retreatment TB cases. Access to HCT services among TB patients has continued to improve above 90%. Similarly, a total of 399,062 presumptive TB cases were identified and examined for diagnosis in 2014. 23% (91,090) of the total presumptive TB cases identified in 2014 were referred by the community volunteer while 65% (59,065) of the total TB cases registered and started on treatment in 2014 received adherence support from treatment supporter throughout their treatment period.

Furthermore, out of the 84,161 (96%) of the TB patients offered HCT in 2014, 16,066 (19%) were HIV infected (co-infection rate of 19% among all forms of TB cases tested for HIV), of these patients, 14,569 (91%) and 11,997 (75%) were placed on Co-trimoxazole and Anti-retroviral therapy respectively. Despite the effort put at ensuring that IPT uptake among children screened for TB is increased, the proportion of under six children placed on IPT among those screened for TB who came in contact with smear positive TB cases was 3,811 (46%). Refer to figure 9.11 in the annex.



Figure 2.2: Key Drug Susceptible case finding indicators for the year 2014

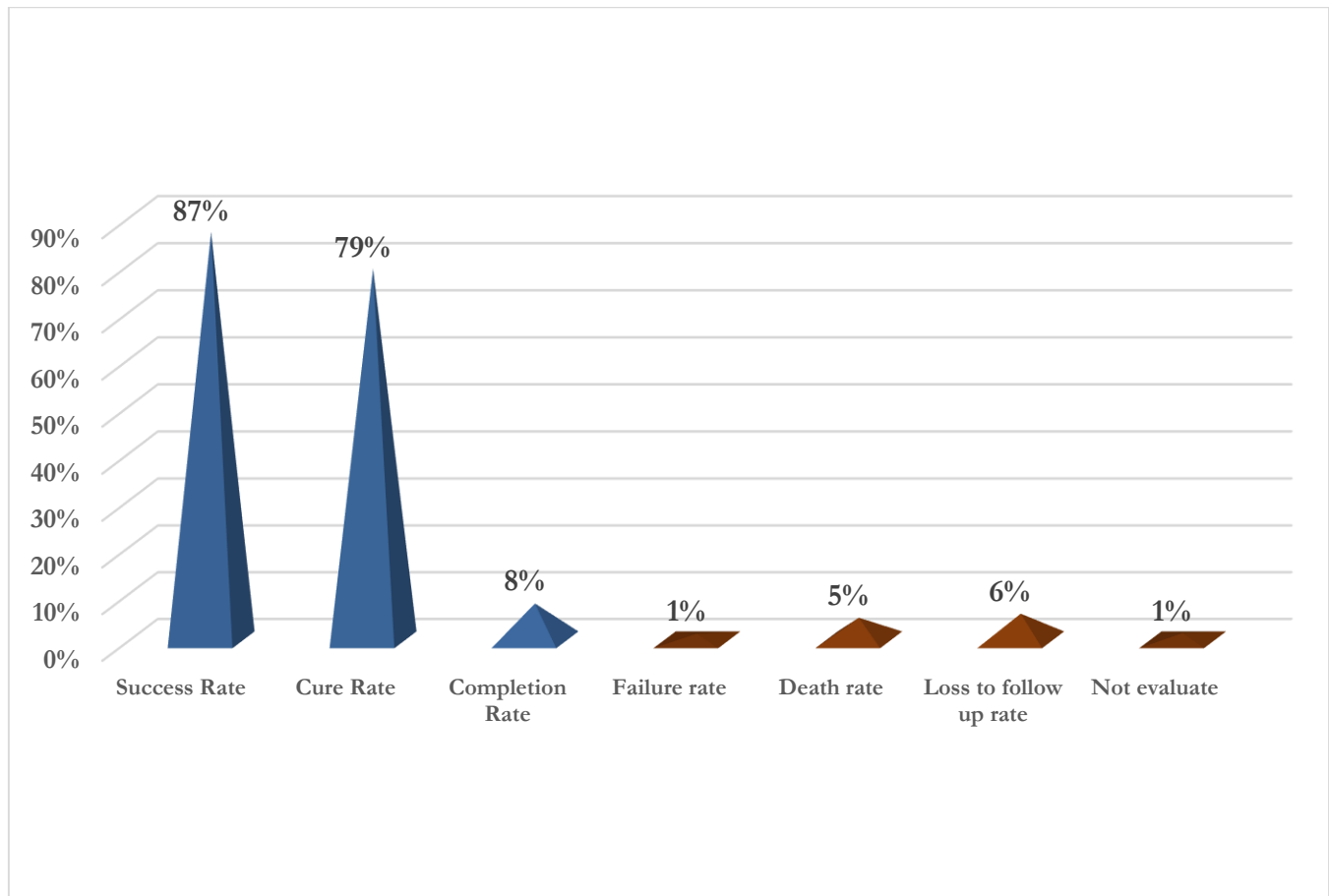


In 2014, the distribution of all forms of tuberculosis cases shows that approximately 60% were males mostly within the ages of 25-44 years while about 6% were Children (both boys and girls) aged less than 15yrs among all forms of TB cases notified. Though the number of TB cases notified in the country is highest within the SW and NC zones, the case notification rates per 100,000 population also revealed that the highest CNR was in Benue, FCT, Nasarawa, Sokoto and Oyo. All 5 states recorded CNR > 100/100,000pop.

### 2.2.2 Treatment/Treatment Monitoring

Ensuring DOTS at all-time still remains a key strategic option for the implementation of TB services in Nigeria. The treatment success rate for smear positive TB cases registered in 2013 was 87% and 83% for new smear positive (NSP) and Retreatment smear positive TB cases respectively. 23 (62%) out of the 36 States plus FCT achieved the minimum of 85% treatment success rate in 2014. Rate of loss to follow-up and death rate among these cases was put at 6% and 5% for the new smear positive TB cases and 6% and 2% for retreatment smear positive cases respectively. However, the failure rates among new smear positive and retreatment TB cases started on treatment in 2013 remained 1% and 7% respectively when compared with the failure rate among those started on treatment in 2012 (see annex for details). It is worth noting that the programme has continued to witness some measure of success in the reduction in proportion of the unfavourable outcomes especially among the NSP TB cases; Rate of loss to follow up and death rate has been halved from 12% and 11% in 2006 to 6% and 5% in 2014.

**Figure 2.3: Treatment outcome of all form of TB cases registered and commenced on anti-TB treatment in 2013**



### 2.3 Laboratory and Quality assurance services

TB diagnosis and management is largely dependent on laboratory diagnosis. While AFB microscopy remained the basic laboratory examination for a presumptive PTB case in Nigeria, diagnosis of PTB cases has received massive boost with the introduction of rapid molecular testing which scale up has been adopted by all TB stakeholders in Nigeria. This new diagnostic policy has improved the quality of TB diagnosis in Nigeria and has increased the detection of RIF resistant cases among TB cases notified.

The laboratory is structured in a pyramidal form with the two National Reference Laboratories (NLRs), located at the National TB and Leprosy Training Centre (NTBLTC), Zaria and the Nigerian Institute of Medical Research (NIMR) in Lagos, in the northern and southern parts of the country, respectively. While the Zaria NRL is structurally located within the NTBLCP, NIMR in the other hand is a parastatal within the Federal Ministry of Health. The NRLs are affiliated with the supranational reference laboratory (SRL) in Milan, Italy from which they get laboratory related programmatic and technical support.

The Zonal Reference Laboratories (ZRLs) are strategically located in the six geo-political zones of Nigeria and are sited within university teaching hospitals. The programme also enjoy the services of the only state reference laboratory which is located at the Dr. Lawrence Henshaw Memorial Hospital, Calabar and has the capacity to perform culture, DST for first-line TB drugs and molecular assays (LPA and GeneXpert). Zankli Medical Centre which is integrated into the laboratory network through a memorandum of understanding with the NTBLCP still remains the only private hospital in Nigeria which apart from contributing to the

diagnosis of tuberculosis through microscopy, culture, DST, GeneXpert services also support various research projects as it relates to TB diagnosis in Nigeria.

TB laboratory network exists to support the TB Control Programme by providing quality diagnostic services for early detection and management of tuberculosis at all levels in Nigeria through continuous improvement in close collaboration with partners and stakeholders. As part of efforts in strengthening the laboratory services, a number of activities/achievements were recorded through support from GFATM, USAID/TB CARE 1 project, CDC/ASM and the Agbami partners.

There is an established EQA system in place. Panel testing and proficiency testing are conducted regularly through the support of the 2 NRLs and Zankli Medical Centre. In 2014, Quality Assurance meetings were held within the six geopolitical zones of the federation.

**Table 2.1: EQA coverage for 2014**

Period	Q1 2014	Q2 2014	Q 3 2014	Q 3 2014
<b>Number of Reporting States (FCT inclusive)</b>	37	37	37	37
<b>Number of functional labs</b>	1,474	1,553	1,617	1,687
<b>Number covered by Blinded Rechecking EQA</b>	1,282	1,342	1,369	1,390
<b>Blinded Rechecking EQA Coverage (%)</b>	89	88	86	82
<b>% concordance</b>	97	97	97	97

A concordance rate of **97%** across participating laboratories was achieved as at the end of Q4 2014.

As at the end of 2014, 96 GeneXpert MTB-Rif machines were in use, supported by numerous partners and placed in all 36 states plus the FCT (refer to figure 9.2 below). Out of the 96 GeneXpert machines installed, 47 machines have been successfully connected to the Gx Alert system. While the majority of these machines have been used to date for the diagnosis of DR-TB; an increasing number of tests are expected for the diagnoses of TB among PLHIVs, children, health care workers and presumptive PTB cases with smear negative AFB results who remained symptomatic after a course of broad spectrum antibiotics. Additional strategic scale-up of GeneXpert machine is already in place as part of 2015 implementation plan to support universal access to high-quality diagnosis.

## 2.4 TB/HIV collaborative activities

The NTBLCP in collaboration with HIV AIDS Division (HAD), National Agency for the Control of AIDS (NACA), Civil society Organizations (CSOs) and partners currently provide policy guidance and support for the implementation of TB/HIV collaborative activities in the country through an established National TB/HIV Technical working group (TB/HIV-TWG). Through this coordinating body, significant progress has been made in the area of implementation of key TB/HIV collaborative activities.

This TWG function at different levels namely the National, state and facilities. Through this coordinating bodies significant progress has been made in the areas of key TBHIV collaborative activities which includes resource mobilization through the Global Fund interim funding and PEPFAR funding, improved

coordination in the expansion of HIV and TB services, and the development of guidelines and Operational manual to strengthen the operational structure and improve TB and HIV service delivery at all levels.

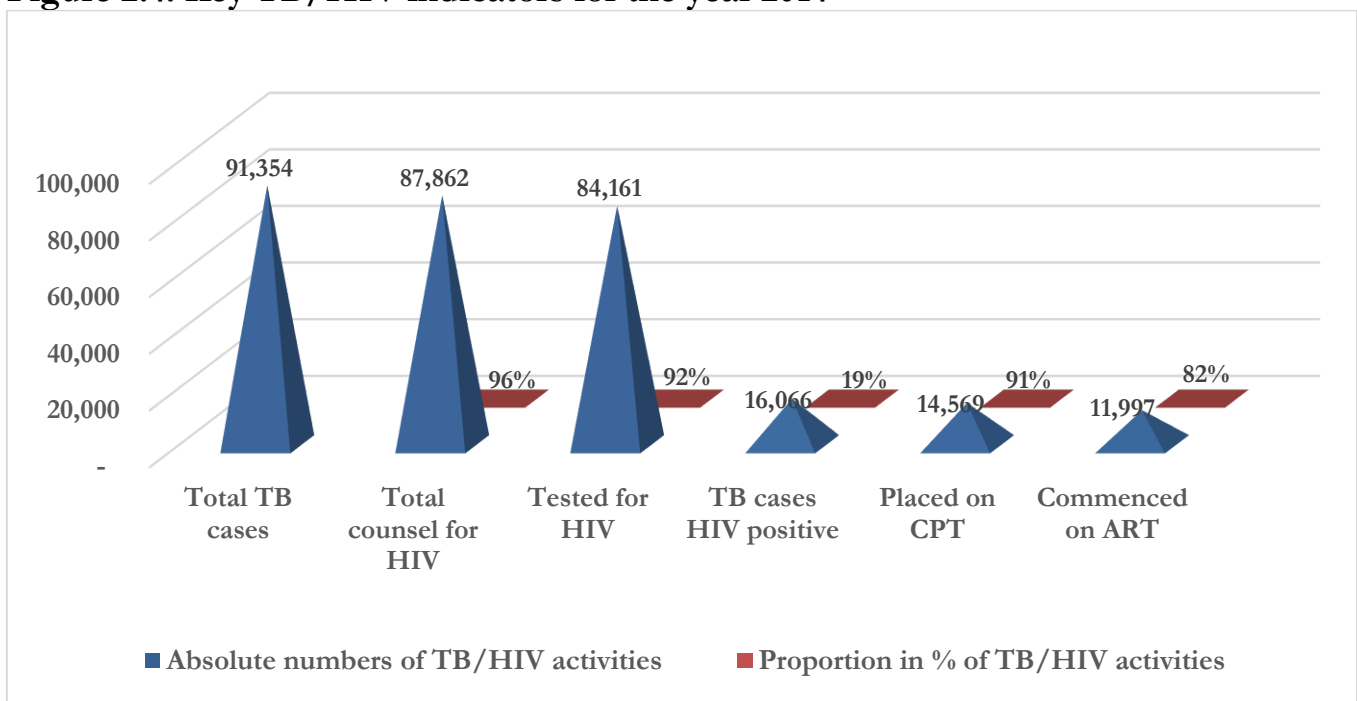
In order to ensure access to treatment for all patients, the NTBLCP through its funding partners procured Rifabutin for 200 PLHIVs. Currently, 48 PLHIVs on second line ARVs who developed TB were offered Rifabutin based anti-TB regimen. The NTBLCP, HAD and NACA has continue to intensify its efforts in ensuring increased access to TB prevention among PLHIVs through increasing the uptake of IPT among PLHIV.

However, there are still challenges in the implementation of TB/HIV collaborative activities in the country. These challenges include:

- Non implementation of TWG at the local government level
- Suboptimal TB/HIV coordination and linkages especially at the sub-national level.
- Intermittent stock out of HIV test kits in the country
- Although the uptake of services are still on the increase, the uptake of ART and CPT among TB/HIV co-infected patients and the HCT are still suboptimal.
- IPT uptake among the PLHIVs is still low despite the success recorded in 2014

Despite the above challenges, there has been a steady improvement in the quality of care provided to Tuberculosis patients and people leaving with HIV/AIDS as evidenced by regular increased in the National TBHIV indicators. In 2014, HCT uptake increased from 88% in 2013 to 92% in 2014 with only 6 out of the 36 states and FCT still testing less than 85% of their TB patients for HIV. This also reflected in the care offered the TB/HIV co-infected patients offered CPT, the uptake of CPT has increased from 87% in 2013 to 91% in 2014 while access to ART also increased from 67% in 2013 to 75% in 2014 among the PLHIVs (see figure on trend in % of TB/HIV co-infected patients on CPT and ART from 2008 - 2014).

**Figure 2.4: Key TB/HIV indicators for the year 2014**



## 2.5 Advocacy, Communication and Social Mobilization

The NTBLCP continue to conduct quarterly advocacy visits to the state governments, head of health institutions and other key stakeholders in the prevention and control of TBL & BU in the country canvassing for support to the TBL & BU control programmes at all levels. Through active and targeted advocacy, a number of state programmes received financial support from their respective state governments during the year.

All efforts have been renewed by the NTBLCP and its stakeholders to intensify community based TB case finding using all the various lessons learnt from the current active case finding activities conducted by WHO and other partners. There are also renewed efforts by the NTBLCP to ensure that the Nigeria TB Partnership network becomes functional and more vibrant.

Currently, community based case finding and management has improved significantly as observed in the number of presumptive TB cases referred from and managed in the community. Also, the willingness of managing DR-TB cases in the community has increased among the State programmes.

As at the end of 2014, the proportion of presumptive TB cases referred by the Community Volunteer increased from 11% in 2013 to 23% while the proportion of TB cases on treatment who were supported by a treatment supporter throughout their TB treatment increased from 56% in 2013 to 65% in 2014. In 2014, the programme has continued to engage the CSOs/NGOs for social mobilisation with the aim of creating awareness on DOTS, engagement of treatment supporters to administer DOTS at home to patients and the review of activities carried out by Community Volunteers, Patent Medicine Vendors (PMVs) and community pharmacists (CPs).

## 2.6 Programmatic Management of Drug Resistant Tuberculosis

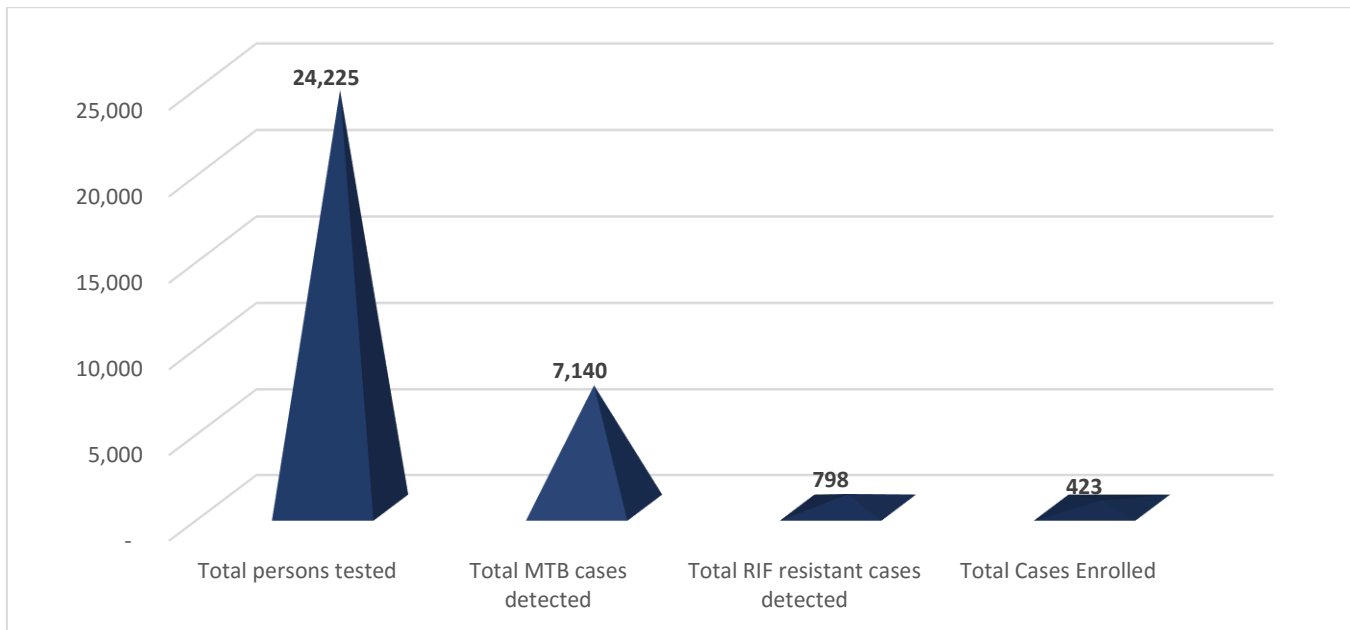
### 2.6.1 Case finding

The adoption of the Gene Xpert as a point of entry in the diagnosis of drug resistant Tuberculosis in Nigeria has propelled the increase in the detection of RIF resistance TB cases. The NTBLCP algorithm has been expanded to include other priority groups aside DR-TB presumptive TB cases and PLHIVs. This has resulted in a commensurate increase in the number of presumptive TB cases screened and TB cases diagnosed in 2014. A total of 24,313 persons were tested using the Xpert machine in 2014 out of which 783 isolates were resistant to the anti-TB drug Rifampicin.

The clinical and programmatic Management of Drug Resistant Tuberculosis has assumed another dimension since the unrelenting efforts of all stakeholders to ensure that the community management of Drug Resistant Tuberculosis is commenced in Nigeria. This model of care was introduced in order to scale up enrollment of diagnosed DR-TB cases and to provide access to care and support for patients while on treatment across the country. In 2014, 10 states of the federation commenced community PMDT through the support of TBCARE 1 project. These states are Kano, Kaduna, Gombe, Benue, Abia, Lagos, Ogun, Akwa Ibom, Oyo and Osun..

While intensifying efforts to increase the number of treatment centres in the country with a target of ensuring that each state has a treatment center, the introduction of community PMDT has also ensured that patients can have access to DOTs on ambulation during intensive phase of their treatment and prevent or reduce the socio-economic impact experienced by patients who have to be admitted in treatment centres for 8 months of their intensive phase treatment. A total of 423 DR-TB cases were enrolled on treatment both at the community and in the treatment centres across the country.

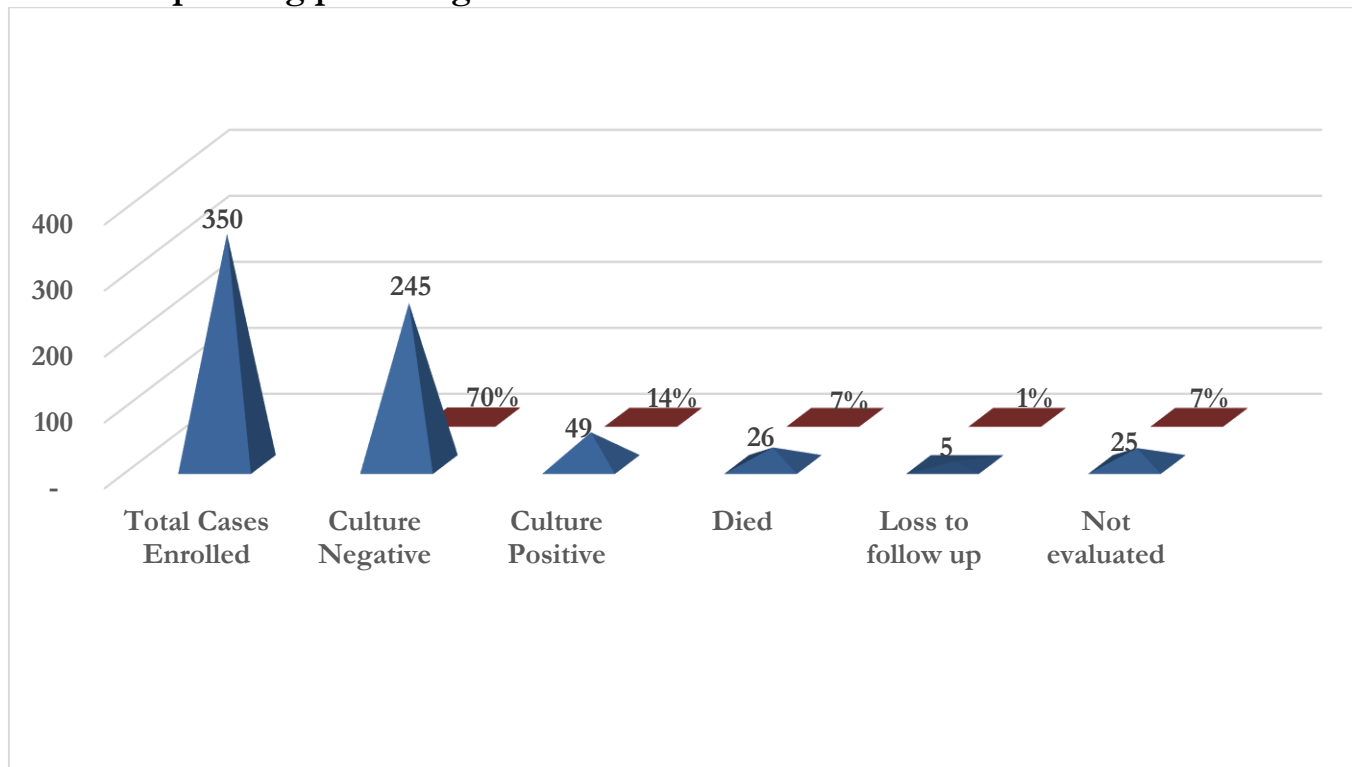
**Figure 2.5: GeneXpert test results and corresponding DR-TB cases enrolled on treatment in 2014**



### 2.6.2 Case Holding

Although much has been achieved in the areas of case finding for DR-TB cases with the scale up of GeneXpert and culture services, not much improvement has been achieved in the area of case holding (both the interim outcome and preliminary outcome results for PMDT). The percentage of DR-TB cases who converted to culture negative at 8 month of their treatment (interim assessment outcome) reduced from 73.9% among cases enrolled on treatment in 2010 to 70.0% among cases enrolled on treatment in 2013. Similarly, the cure rate and treatment success rate among DR-TB cases enrolled in 2010 has reduced from 43.0% to 29.9% and increased from 57.0% to 62.3% respectively in 2012. Continuous efforts are being made to ensure improvement in these key indicators through ensuring improved patient management and proper record keeping both for patient managed at the treatment centres and in the community.

**Figure 2.6: 8 month interim outcome for cases enrolled in 2013 by absolute number and corresponding percentages**



## 2.7 Childhood TB

The NTBLCP with specific support from the WHO ensured the consolidation of its 2013 support towards the control of TB in children in Nigeria. In 2014, WHO supported the review of the training manual for training all cadre of health providers and provided both the technical and financial support for the training of 156 health providers ranging from Paediatricians to CHEWS in secondary institutions across the six geopolitical zones in Nigeria. Also, the Global Fund through its funding ensured the un-interrupted supply of paediatric anti-TB drugs for both the treatment (paediatric kits) and prevention (Isoniazid) of TB in children for the year under review. Despite this effort, the total childhood TB cases notified in 2014 accounted for only 6% of the total all forms of TB cases notified in Nigeria which is the same for 2013 and has been attributed to the incessant industrial action embarked by health care workers across the country among other factors.

Adequate skill and knowledge in the diagnosis of TB in children still remained a major challenge to the control of TB in children. The road map for controlling TB in children which was developed in 2013 was followed through in 2014 but not much progress has been made so far based on the proportion of TB cases notified when compared to the previous years.

Aside the un-impressive statistics stated above, the NTBLCP has made some land mark progress; in 2014, the principle of task shifting in the management of childhood TB was adopted and incorporated into the 6<sup>th</sup> edition of the NTBLCP implementation guideline for TB. This policy change will enable the GHCW to be able to detect and treat childhood TB cases and thereby increases the proportion of TB cases of children notified. Also, the collaboration with Paediatricians in various tertiary health facilities across the country and



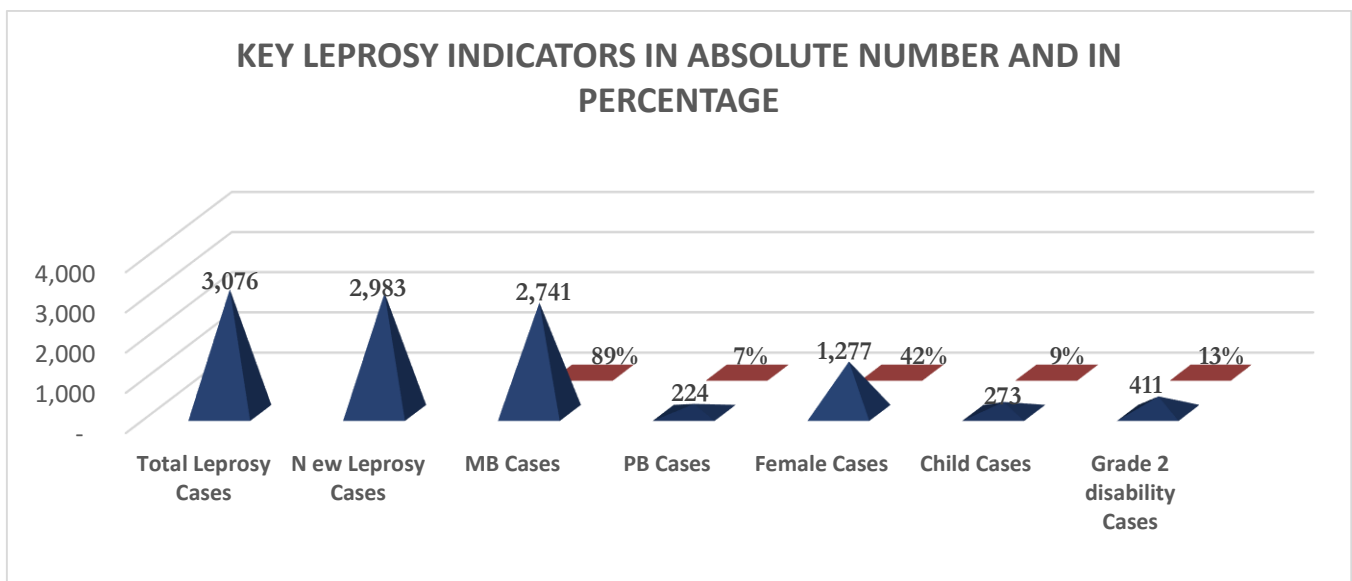
Paediatric associations have tremendously improved as evidenced by continuous involvement of either the individual Paediatricians or their association in key NTBLCP activities such as document development and training of health care workers at various levels.

### 3. Leprosy Control Services

#### 3.1 Introduction

Nigeria adopted the Enhanced Global strategy for Further reducing Leprosy 2011-2015 following the attainment of the global Leprosy elimination goal of less than 1 case per 10,000 population in December 1998. In 2014, a total of 3,087 leprosy cases was notified out of which a total of 2,983 (97%) new leprosy cases was recorded. Of these total, 1,277 (41%) and 273 (9%) cases turned out to be females and children respectively. Similarly, the proportion of MB cases among all new leprosy cases notified is put at ninety-two (92%) with a Grade II Disability rate of 13% for the same period.

Figure 3.1: Key leprosy indicators in absolute number and in percentage



#### 3.2 Achievements

Although much was not achieved of leprosy due to continue dwindling of fund to implement leprosy activities, support from the ILEP members towards sustaining the elimination of leprosy in Nigeria continues. In 2014, Leprosy R&R tools were updated and printed through the support of the Federal Government of Nigeria and the ILEP members and was distributed to the field. Aside the technical support the NTBLCP enjoyed from the WHO in 2014, the supply of Leprosy drugs also received a boost from the support from WHO.

The National Technical Working group for Leprosy held its meeting and has come up with the strategy to do a country wide assessment of the leprosy situation in Nigeria to enable it come up with a new strategy to sustain the progress made so far in the elimination of the disease in Nigeria.



Just like the previous year, the control of leprosy has continue to receive very low attention from all stakeholders at all levels even among the ILEP members. Poor funding, reducing leprosy skills among health workers and loss of experienced personnel to other programmes or retirement from service remained the major challenges which mitigated against the control of Leprosy in 2014

## **4. Buruli Ulcer**

### **4.1 Introduction**

Most activities concerning BU were carried out through the effort of the GLRA in collaboration with the NTBLCP.

### **4.2 Achievements**

#### **4.2.1 GLRA contribution to Nigeria Buruli Ulcer (BU) control in 2014**

Following the successful implementation of the pilot project by GLRA in Ogoja, Cross River State, in 2013, GLRA commenced a phased scale-up of BU activities in three states of Anambra, Cross River and Ogun in southern Nigeria with the main objective of improving access to BU services in those states. The project specifically aims at detecting at least 90 BU cases within one year commencing July 1st 2014 and managing them according to the national guidelines. It also plans to provide appropriate services for the physical rehabilitation of all those with disabilities due to BU among the detected cases as well as ensure educational support for school age children among the detected cases while on hospitalisation. Operational researches will be conducted to inform programme expansion and improved quality of care.

#### **4.2.2 During the reporting period, the following planned activities were carried out:**

##### **Pre-implementation stakeholders' meeting:**

- Preparatory to the actual implementation of planned project activities, various stakeholders were invited to a one day meeting in Enugu on the 24th April 2014. The objective of the meeting was to take a holistic look at the project to enable partners to understand their respective roles. A total of 29 persons participated in the meeting. They were drawn from the 3 project states of Anambra, Cross River and Ogun; the 3 projects hospitals (one for each state), Federal Ministry of Health, National Orthopaedic Hospital Enugu and GLRA.

##### **Training and capacity building:**

- Two batches of training workshop for selected programme staff and health workers were conducted.
  - One batch, held at Awka in Anambra State was for participants from Anambra and Cross River States as well as some strategic staff from the National Orthopaedic Hospital Enugu (NOHE).
  - The second batch held at Abeokuta, Ogun State for similar participants from Ogun State.
- During the workshop, the participants received training on sample-taking, preparation and packaging for transportation. Also covered were clinical and programmatic management of confirmed BU cases.
- A total of 51 health workers including doctors and general health workers were trained at various levels.

### 4.2.3 Case-finding:

**Table 4.1: Case-finding and case management in GLRA-assisted states in 2014**

2014	Achieved	2014 Global Target
Total New Cases	63	
PCR confirmed	41 (65%)	At least 70%
Antibiotic completion	63 (100%)	
≤ 15 yrs	18 (29%)	
Female	41 (65%)	
Joint limitation @ diagnosis	9 (14%)	Not more than 15%
Ulcerative cases	38 (60%)	Not more than 60%
% Cat I	2 (3%)	
% Cat II	4 (7%)	
% Cat III	57 (90%)	Below 25%

### 4.2.4 Clinical care and management:

- Confirmed cases were managed according to the Nigerian national guidelines and in keeping with the World Health Organisation's (WHO) recommendations. Each patient received an 8 week drug treatment using the standard regimen of Rifampicin and Streptomycin.
- Wound-care for ulcerated cases was also provided while those that required surgery got it. Ten cases required and got surgeries with 7 having successful skin grafting and 3 had extensive wound debridement during the year.
- Physiotherapy also remains an important component of management as BU disease is known to be associated with disabling complications such as contractures and joint affectations. Therefore, those needing it got it.
- Social support in form of transport subsidy to and from project hospitals as well as feeding support for all hospitalised patients and one attendant each was implemented. Children of school age who were hospitalised equally received educational support.

### 4.2.5 Supervision and monitoring:

To ensure continuous quality improvement and tracking of planned activities, GLRA technical staff, usually medical and laboratory advisers carried out supervisory and monitoring visits to the Project States.

Nigeria reported 55 cases of BU in 2014 (only 35% of these cases were confirmed by PCR) and has adopted a new recording and reporting format to improve surveillance of Buruli ulcer in Nigeria. Ogun and Cross river States share borders with Benin republic and Cameroon respectively suggesting a possibility of trans-border infection.

The country still relies on external reference laboratories in Antwerp, Belgium for case confirmation.

## 5. Monitoring, evaluation and Programme Management

### 5.1 Supervision, Monitoring and evaluation

Supervisory, mentoring and monitoring activities were sustained throughout the year 2014. The NTBLCP with supports from all stakeholders provided regular technical supports to all levels of programme implementation throughout the 2014. Compared to the previous years, supervisory monitoring visits were strategically coordinated to ensure full participation of all stakeholders and to ensure that each visit to the field was used as a capacity building exercise aside achieving the expected outcome for these visits.

Also, coordinated supervisory and mentoring visits from the zones through the six WHO NPOs and the ILEP members are conducted to the states TBLCP, the LGTBLCP and facilities in order to compliment the effort of the central unit. This is achieved through quarterly visits to challenged States and LGAs in order to improve programme and staff performance.

### 5.2 Programme Management

Although the year 2014 was a busy year for all TBL & BU stakeholders especially the M&E and programme management unit of the Central unit due to its continuous efforts to achieve the following activities:

- Finalization of the NTBLCP National strategic plan 2015 – 2020 for TB
- Initiation of the process for the new funding model for Global fund
- The finalization of the NTBLCP management and control guideline for implementing TB, Leprosy and BU in Nigeria
- The development and finalization of a new recording and reporting tools for TB and leprosy to align with the new guideline
- Initiated the process of migrating from a paper based data management to an electronic based data management system

Throughout the reporting period, the central unit through its various thematic areas ensured close collaboration and continuous engagement of all stakeholders including the STBLCPs and the LGTBLCP.

### 5.3 Major Achievements in 2014

- Adoption of the new WHO definition for TB
- Development of the 6<sup>th</sup> Edition of the National TBL and Buruli ulcer management and control guidelines
- Finalization of TB NSP (2015 – 2020)
- Launching of the NSP and the 2012 TB prevalence survey report by the Supervising Minister of health
- The 2014 annual programme review meeting was held in FCT, Abuja in November, 2014. All state Program Managers and Implementing Partners were engaged in this event.
- Routine on-site data verification exercises was conducted to most challenged states with the specific objective to ensuring accurate data management
- The NTBLCP finally adopted the migration from paper based reporting and data management to an electronic reporting and data management system which captures patient level data

## 6. Human Resource Development

### 6.1 The central unit

A new national coordinator and a Director in the department of Public health of the Federal Ministry of Health in the person of Dr. Gabriel Akang was deployed to oversee the division since June 2014. Also, several officers (technical and support staff) were posted to the central unit in 2014. One medical officer was supported to Zaria to participate in the Medical officer's course and various capacity building opportunity was provided to most of the remaining central unit staff.

### 6.2 National Tuberculosis and leprosy Training Centre (TBLTC)

The National Tuberculosis and leprosy Training Centre (TBLTC) was established in January, 1991 as a human resource development (HRD) centre for the National TBL Control Programme (NTBLCP).

The centre has the following responsibilities:

- Training manpower for the National TBL Control Programme (NTBLCP)
- Referral hospital for TB & leprosy cases
- Provision of integrated TB/HIV diagnosis, treatment, care and support
- Development of training materials and guidelines
- Operational research relating to TBL

Major collaborative partners are the Netherlands Leprosy Relief (NLR), Institute of Human Virology (IHVN) – ACTION Project, Centre for Disease Control and Prevention (CDC), Tuberculosis Control Assisted Programme (TB CAP I), Abt. Associates' Health Systems 20/20 project (Health Finance and Governance - HFG).

The centre has also been providing integrated TB/HIV care in the last five years.

The National TBL Training Centre comprises the training department as well as 140 bed capacity hospital wing as a practical area for the trainees. In addition to this, the centre currently offer comprehensive DR-TB services.

At varying levels of implementation, capacity of programme officers both at state and National levels were also built through participation at both local and international capacity building meetings, workshops and conferences.

#### 6.1.1 Major Achievements:

- Sustained activities of the centre with the support of the Federal Government of Nigeria;
- Developed a new strategic plan (2014 – 2018)
- Supported field training of health workers and community volunteers in TB management and control
- Carried out training for various cadres of health workers in Tuberculosis, Buruli ulcer and Leprosy Control Programme according to the 2013 training calendar
- The Centre has been accredited by MDCN to provide Continuous Medical Education (CME); conducted 3 CMEs in the year 2014
- Upgraded laboratory facilities to provide culture and drug susceptibility and resistance testing services including second line anti tuberculosis drugs.
- Fully operational MDR-TB diagnosis (Using the Gene Xpert machine and tuberculosis culture).

- Discharged to the community the second and recruited the third batch of multi drug resistance tuberculosis patients after having a successful eight months intensive phase of the anti-tuberculosis drugs.
- Renovation of training halls, facilitators' office and the old female leprosy ward
- As a referral hospital we serve the core Northern states (Kaduna, Kano, Katsina, Niger, Nasarawa, Borno, and Plateau to mention a few) including the FCT.
- Partnering with Ahmadu Bello University in Operational research: staff capacity building and conduction of researches
- Recruitment of many casual staff especially of the junior cadre
- Training of 2 health care workers from the Gambia on HIV/AIDS
- Awareness creation/education on Ebola and other hemorrhagic fevers with provision of hand sanitizers and other PPEs

#### 6.1.2 Challenges:

- Human resource crisis; 11 medical officers, 17 nurses, 2 M&E staff and only 3 medical lab scientist for the entire range of services. Some of the doctors are currently on study leaves and secondment assignments.
- Inadequate coordination and planning of training activities on the field
- The NMA and JOHESU strikes which slowed activities in the centre
- The Ebola outbreak in the country which created fears amongst staff
- Excessive dependence on international donors especially in sponsoring candidates for the institution's trainings
- Daunting task of maintaining the laboratory facility (BSL 2, BSL 3, PCR, Gene Xpert for TB and HIV diagnosis) which is very dependent on international donors
- Daunting task of bringing/keeping alive the mandate of Operational Research.
- Lack of Ambulance
- Declining government funding
- Old student buses

#### 6.1.3 Recommendations

- The FMOH to recruit senior staff according to established posts, especially medical officers, laboratory scientists and nurses – presently there is ongoing regularization of staff who were once supported by IHVN
- The institution to continue to work closely with the National Tuberculosis, Buruli Ulcer and Leprosy Control Programme
- The institution to implement its five year strategic plan as laid out
- The institution to continuously advocate to relevant government organs in order to improve upon its funding
- The institution to continue to partner with other tertiary institutions in order to roll out more Operational Researches

- Improve on Capacity Building of staff and their motivation

## 7. Key challenges and recommendations to TBL and BU Control in 2014

### 7.1 Challenges

- Low case notification rate (52/100,000pop)
- Low childhood TB notification (6% of total cases notified)
- Intermittent stock outs of key TB/HIV commodities esp. HIV Rapid Test kits
- Huge number of diagnosed DR-TB patients still awaiting enrolment for treatment
- Highly donor driven programme
- Low commitment to leprosy control at all levels
- Poor funding to leprosy control programme
- Continuous decline in skills and knowledge amongst health care providers and programme officers
- Poor rehabilitation programme in place for leprosy control in Nigeria
- Poor awareness of Buruli ulcer control among states control programmes
- Lack of awareness, poor knowledge and skills among health care providers
- Worsening insecurity
- Prolonged industrial action by both the Doctors and other health care providers
- Poor funding to BU at all levels
- There was no any other source of funding for BU activity aside the effort of GLRA
- The project witnessed initial challenge of late take-off due to late arrival of BU drugs from Ghana. It was to initially commence May 1, 2014 but had a 2 month delay before it finally took off July 1, 2014.
- There was obvious capacity gap in one of the project states (Anambra); all 23 suspect samples from the state sent for PCR confirmation turned out negative and preliminary findings pointed to knowledge gap on the part of the programme staff.
- Terrains in some endemic parts of Cross River State posed serious challenges; some of these communities where BU disease has been established are very hard to reach and require enormous resources to reach.
- Lack of case confirming PCR apparatus in the country was and remains a serious challenge, leading to diagnostic delays in most cases.

### 7.2 Recommendation

#### 7.2.1 Tuberculosis

- Increased number of treatment and microscopy centres through continuous Strategic DOTS expand
- Increased engagement of private health care providers in the delivery of TB services, which may address challenges faced during incessant strike actions
- Implementation of PPM DOTS in larger cities with high private practice patronage
- Advocacy visits to provide/ increase funding of the TB programs at all levels
- Increased Government commitment through Annual budgeting for TB program activities and the provision of funds to cover existing funding gaps
- Increase frequency of supportive supervision by the Central/zonal Units to the States, with focus on challenged states showing low achievements of key performance indicators
- Establish a robust DR-TB diagnosis, treatment and care services

### 7.2.2 Leprosy

- There should be a deliberate plan by all stakeholders to increase skills and knowledge for Leprosy management among HCWs and programme officers at all levels through refresher trainings
- Incorporate and integrate leprosy activities into General Outpatient Department (GOPD), Skin/dermatology clinics through integration of leprosy into secondary and tertiary health facilities
- Involve CVs and ex-leprosy patients in appropriate leprosy activities in the community in high priority states and LGAs
- Engage private practitioners and traditional healers in leprosy control services
- Increased funding for Leprosy/Re-channelling of more funds to leprosy control by Partners
- Improve on contact examination among all new cases of leprosy
- Improve on the Rehabilitation and re-integration patients in society- provision of POD materials
- Increase awareness campaigns to address late reporting of patients at facilities and to reduce stigma and disabilities

### 7.2.3 Buruli Ulcer Program Recommendations

- There should be more commitment on the part of government to compliment current efforts of stakeholders especially that of GLRA
- GLRA to liaise with the Anambra State Programme to address the identified knowledge gap in BU diagnosis.
- Capacity should be built at all levels especially the peripheral level which remains a major challenge to BU control.
- More health facilities ought to be explored and engaged to expand the scope of service delivery.
- Appropriate local health staff need to be identified within the hard-to-reach communities in Cross River State and their capacity built to facilitate cost-effective case finding and management.
- Create awareness on Buruli ulcer in the country for all stakeholders
- Implement the strategic plan for BU control
- Mobilize the three tiers of Government and Donors to provide funds for Buruli Ulcer control in the country.
- Develop training curriculum, modules for training of health workers.
- Train trainers and conduct training of frontline health workers.
- Establish a monitoring and evaluation system for BU Control in Nigeria by incorporating BU into the routine NTBLCP surveillance system



## 8. Annexes

### 8.1 Tuberculosis

#### 8.1.1 Drug susceptible Tuberculosis

Table 8.1: DOTS and Microscopy expansion against yearly targets

TREND OF DOTS AND MICROSCOPY SITE EXPANSION FROM 2005 TO 2014							
Year	Population	Targets	Actual	DOTS Coverage against target	Targets	Actual	AFB Microscopy Coverage against target
2005	130,995,280	5,240	2,015	38%	1,637	592	36%
2006	140,003,542	5,600	2,219	40%	1,750	694	40%
2007	143,965,642	5,759	2,321	40%	1,800	794	44%
2008	148,039,870	5,922	2,742	46%	1,850	900	49%
2009	152,229,380	6,089	3,459	57%	1,903	1,200	63%
2010	156,537,490	6,261	3,931	63%	1,957	1,148	59%
2011	160,967,501	6,439	4,387	68%	2,012	1,229	61%
2012	165,426,314	6,617	5,073	77%	2,068	1,453	70%
2013	170,207,179	6,808	5,389	79%	2,128	1,602	75%
2014	175,024,042	7,001	5,728	82%	2,188	1,765	81%

Figure 8.1: Trend of DOTS & Microscopy expansion against yearly targets from 2005 to 2014

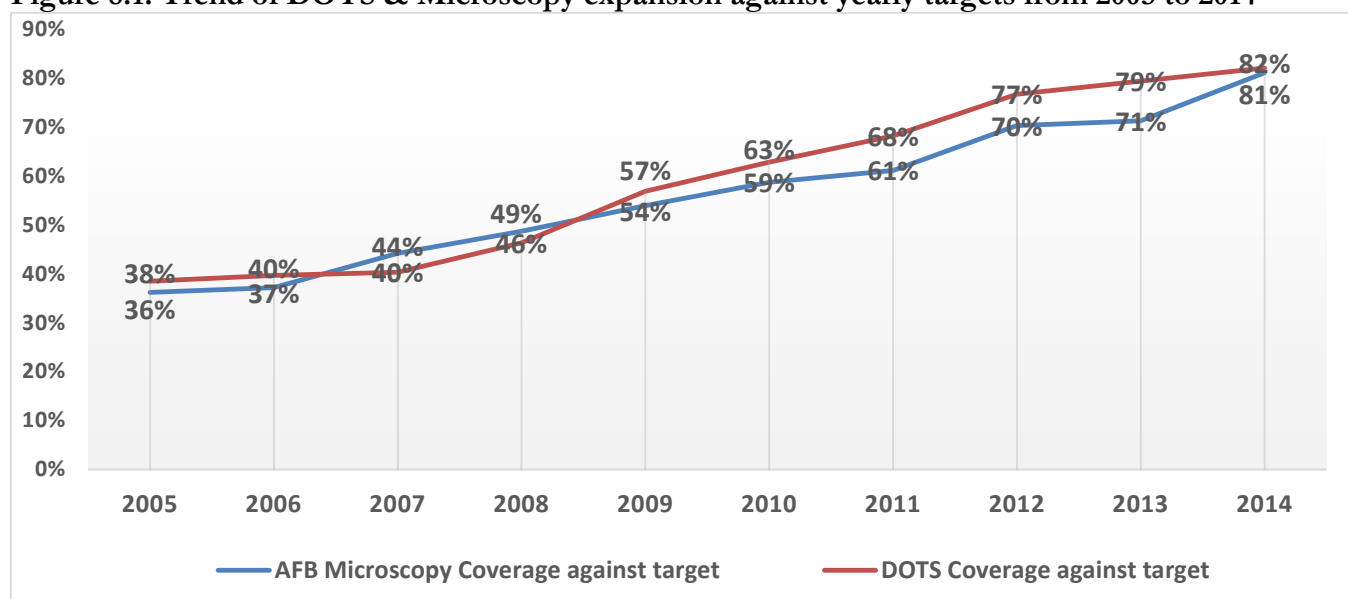




Figure 8.2: Concordance rates (the proportions of AFB microscopy results in agreement with the result of the first and second controllers) 2008 – 2014

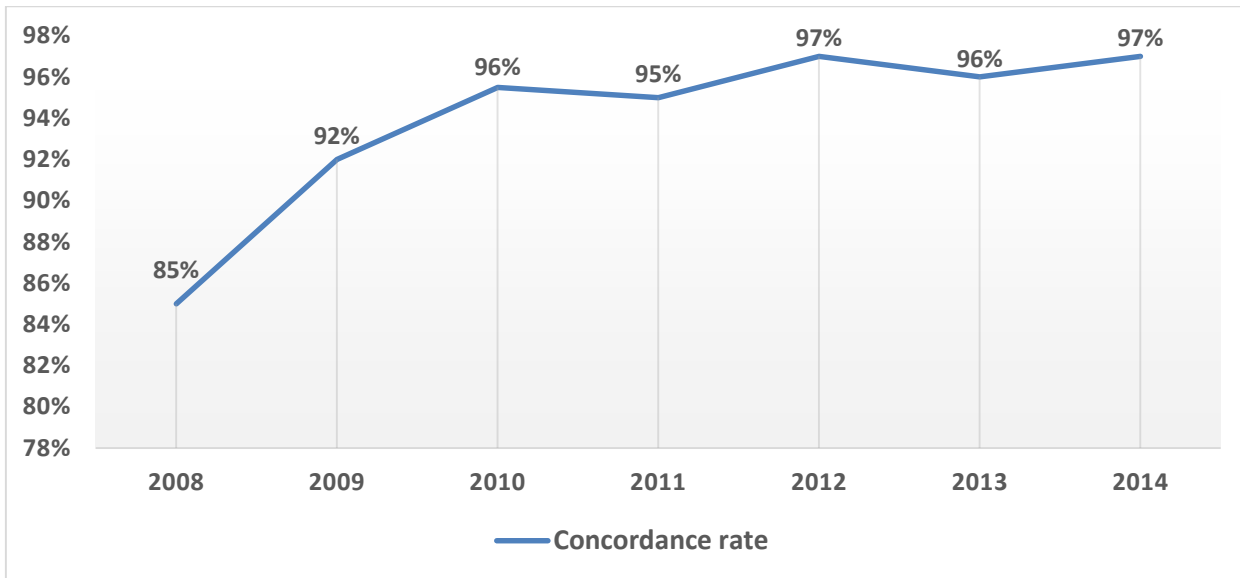


Figure 8.3: Trend of TB case finding in Nigeria from 2005 to 2014

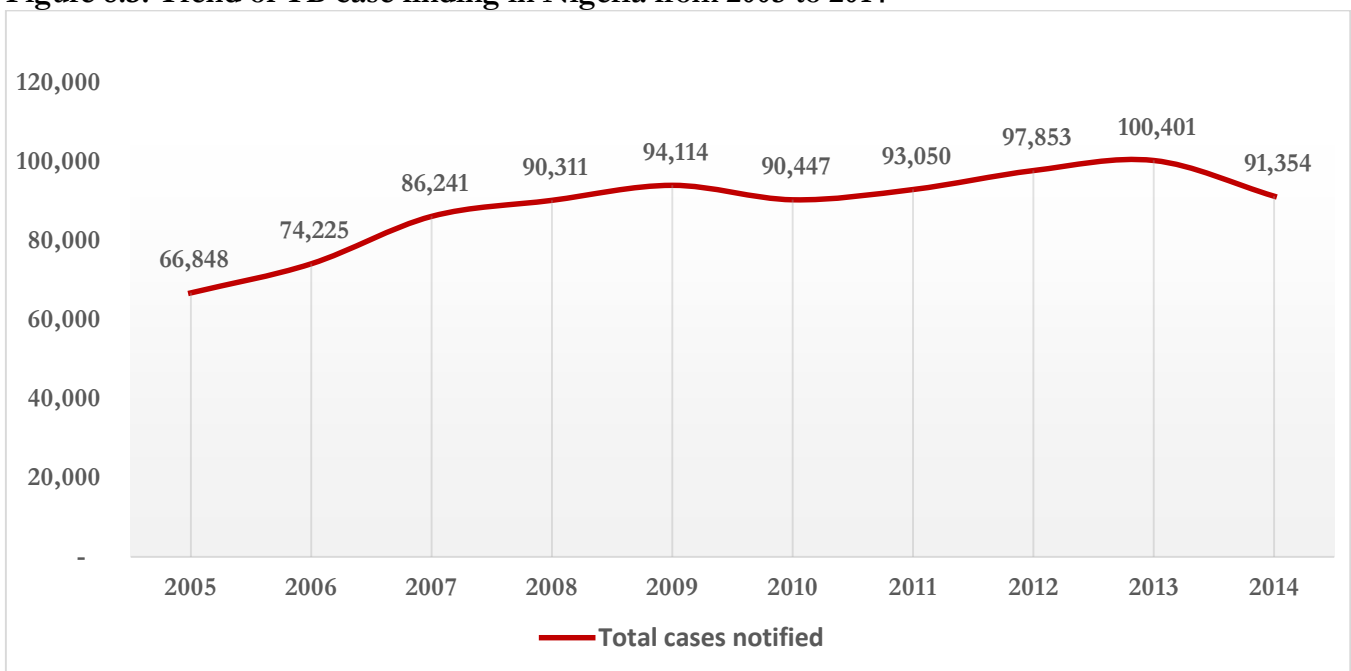


Figure 8.4: Trend of TB Treatment outcome in Nigeria from 2005 to 2014

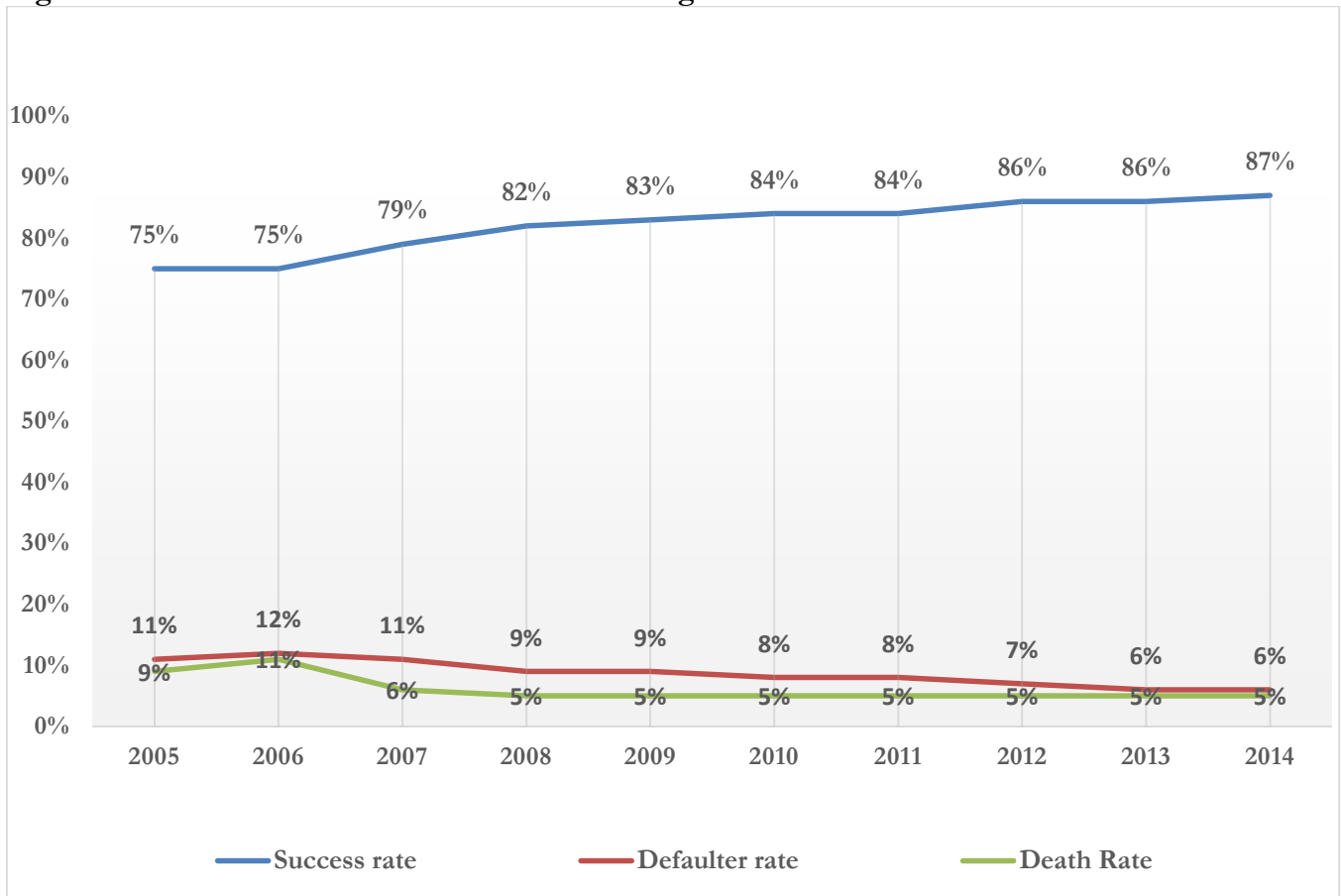


Figure 8.5: Trend of TB/HIV key indicators (2009 – 2014)

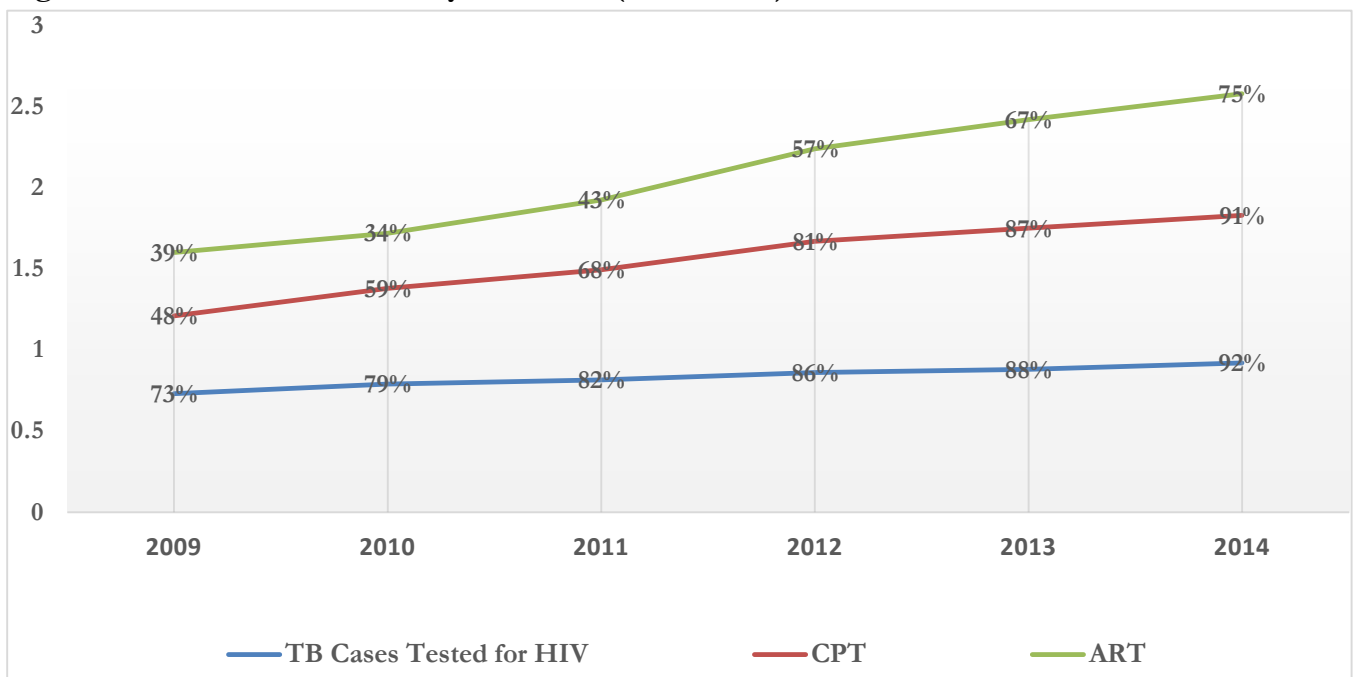


Figure 8.6: 2014 Case notifications disaggregated by State

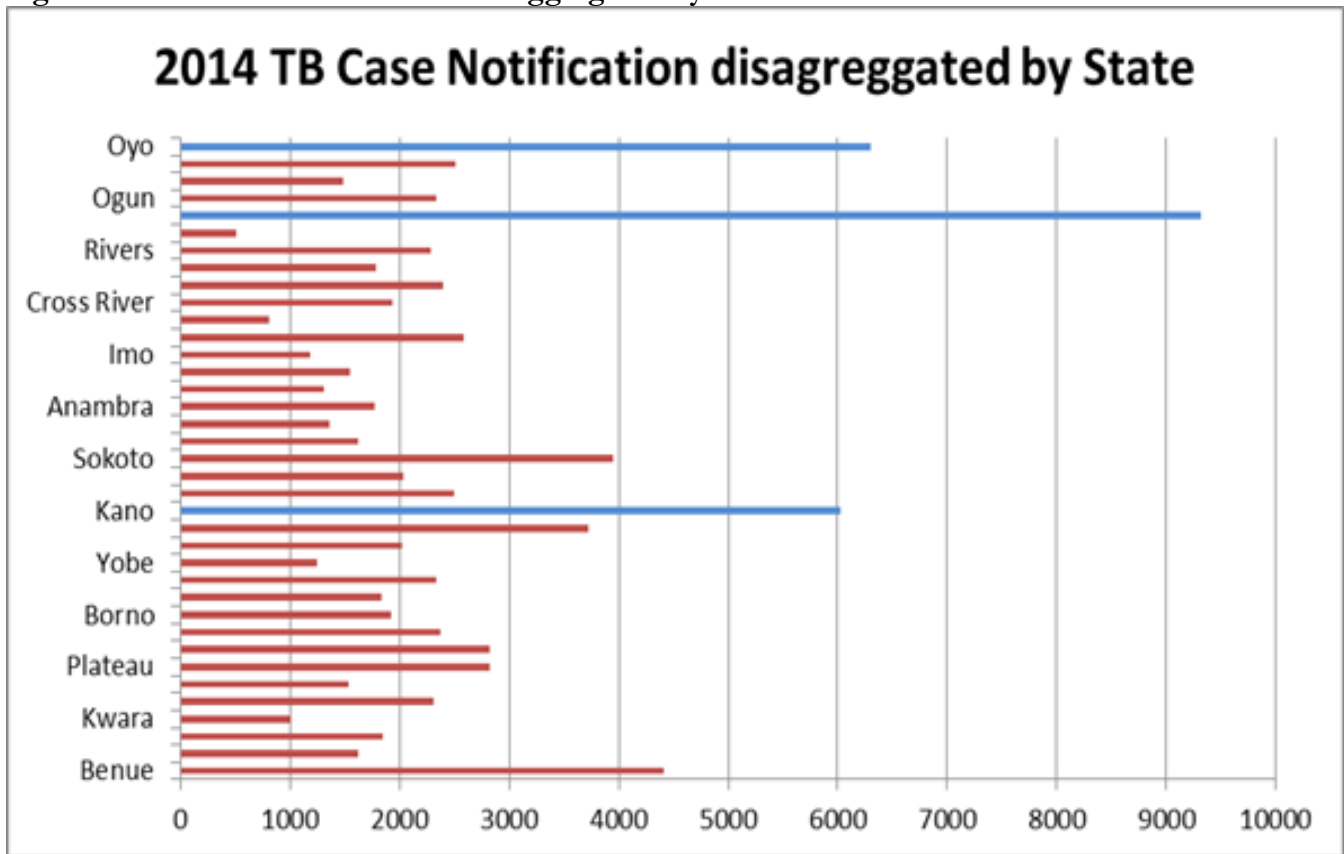


Figure 8.7: 2014 Case notifications disaggregated by Zone

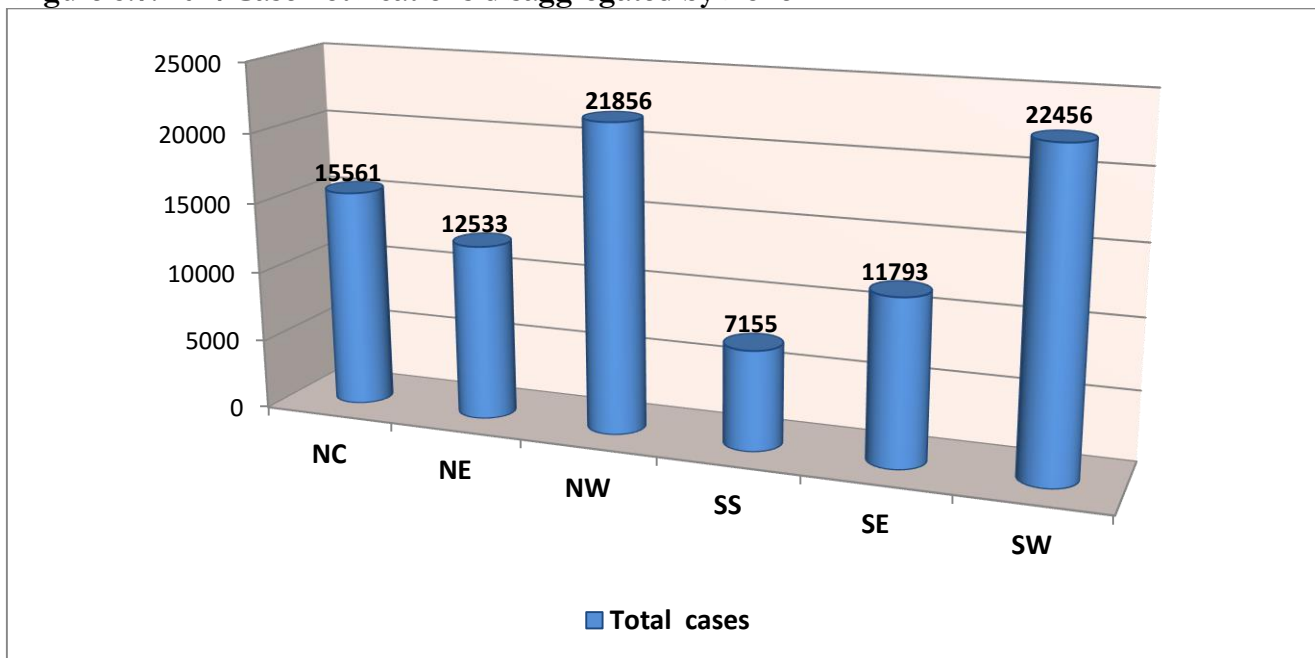


Figure 8.8: 2014 Case notification rate (CRN) disaggregated by Zone

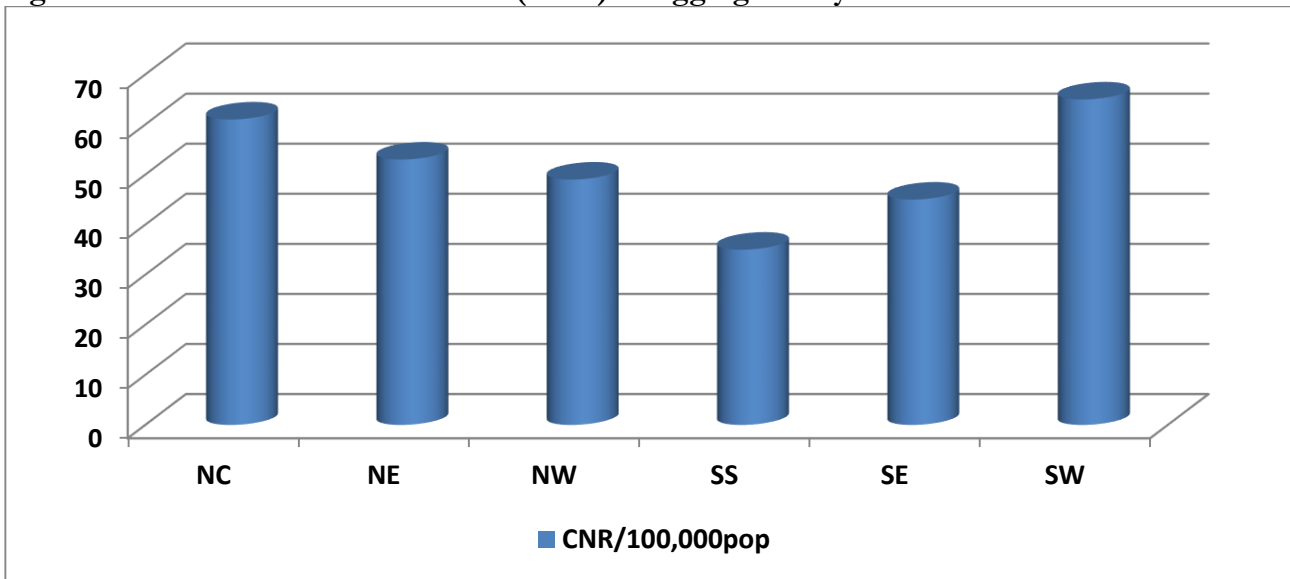


Figure 8.9: All forms of TB cases registered in 2014 disaggregated by Age

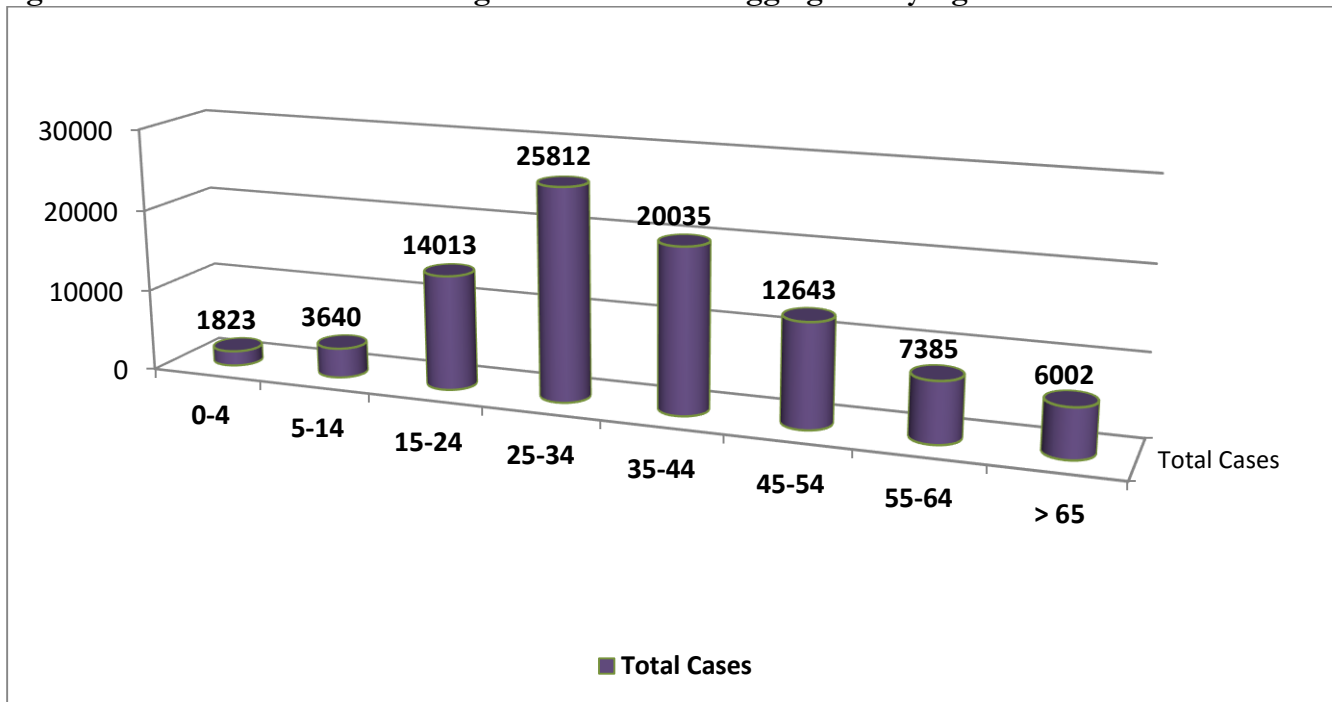


Figure 8.10: All forms of TB cases registered in 2014 disaggregated by Sex

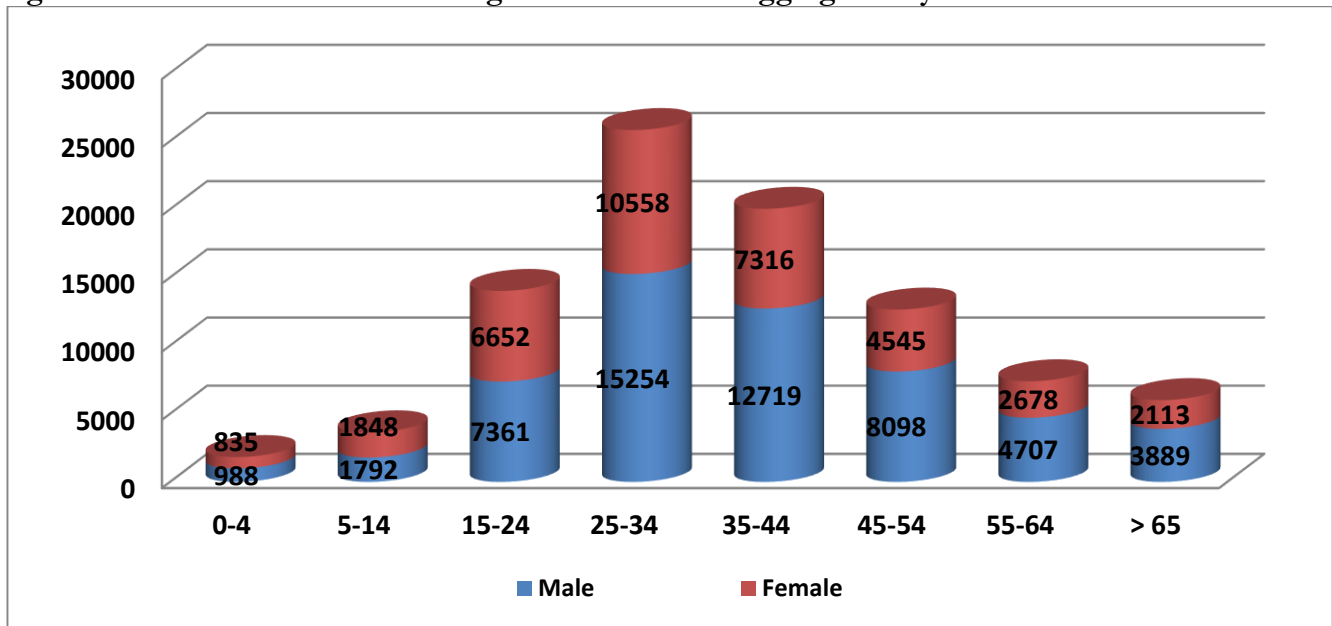


Figure 8.11: Number of under 6 children placed on IPT among those screened for TB in 2014

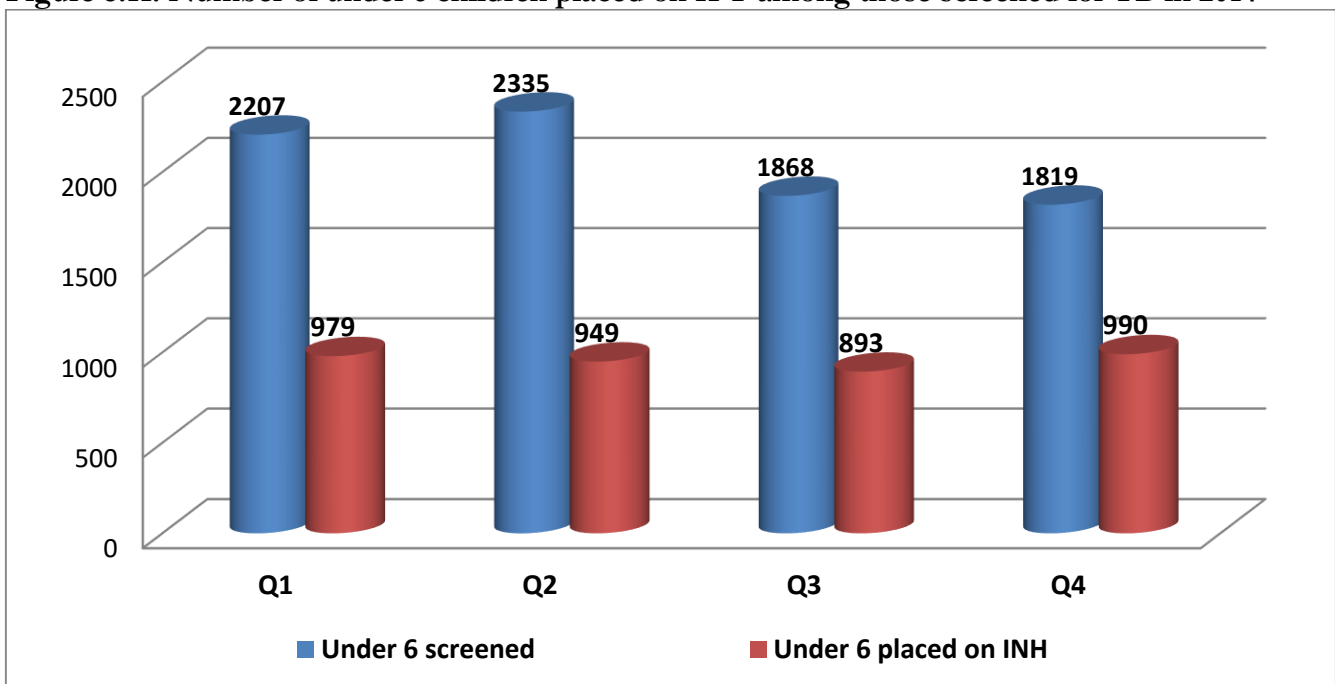


Figure 8.12: Case notification rate for all forms of TB in 2014 disaggregated by State

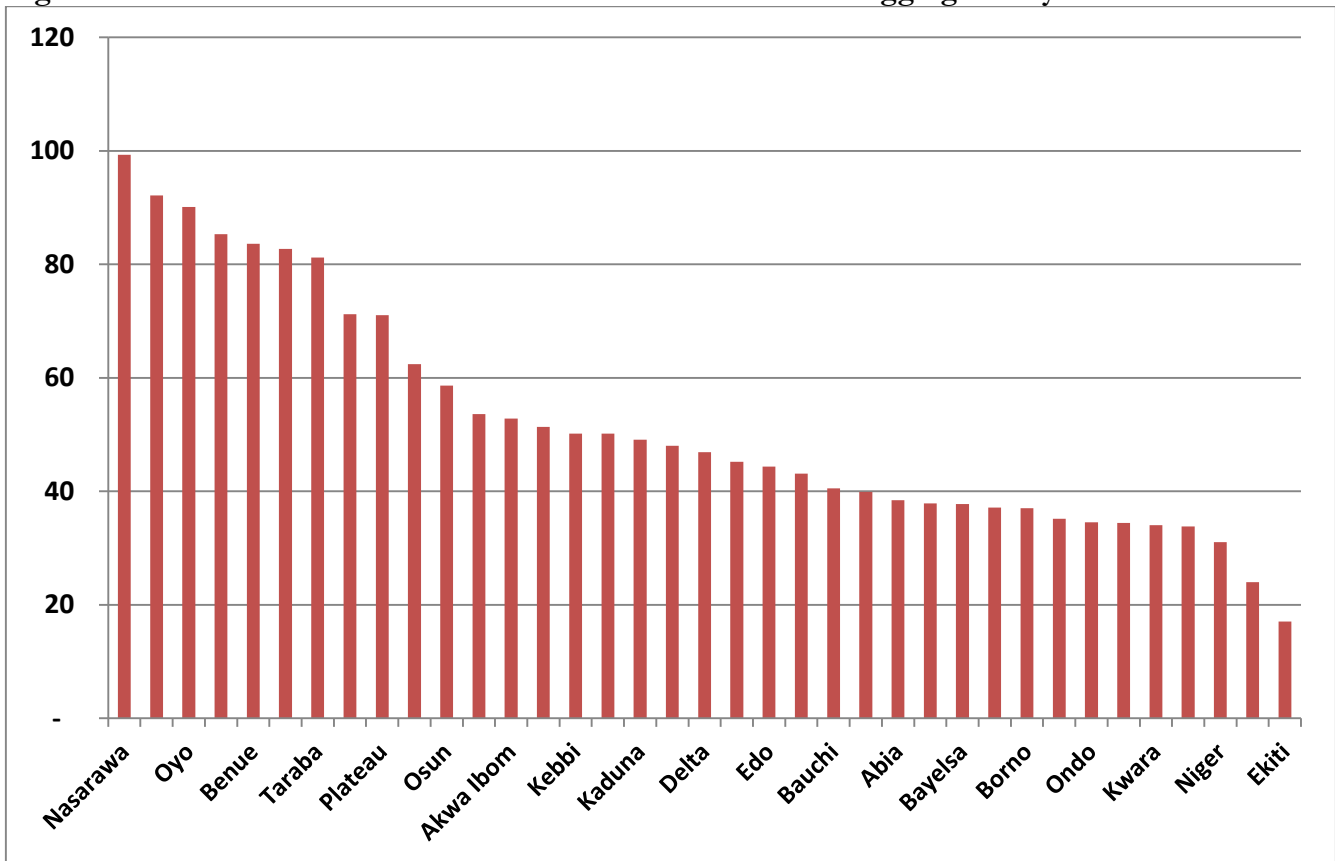


Figure 8.13: Trend of Case notification rate (all forms) per 100,000 (2005-2014)

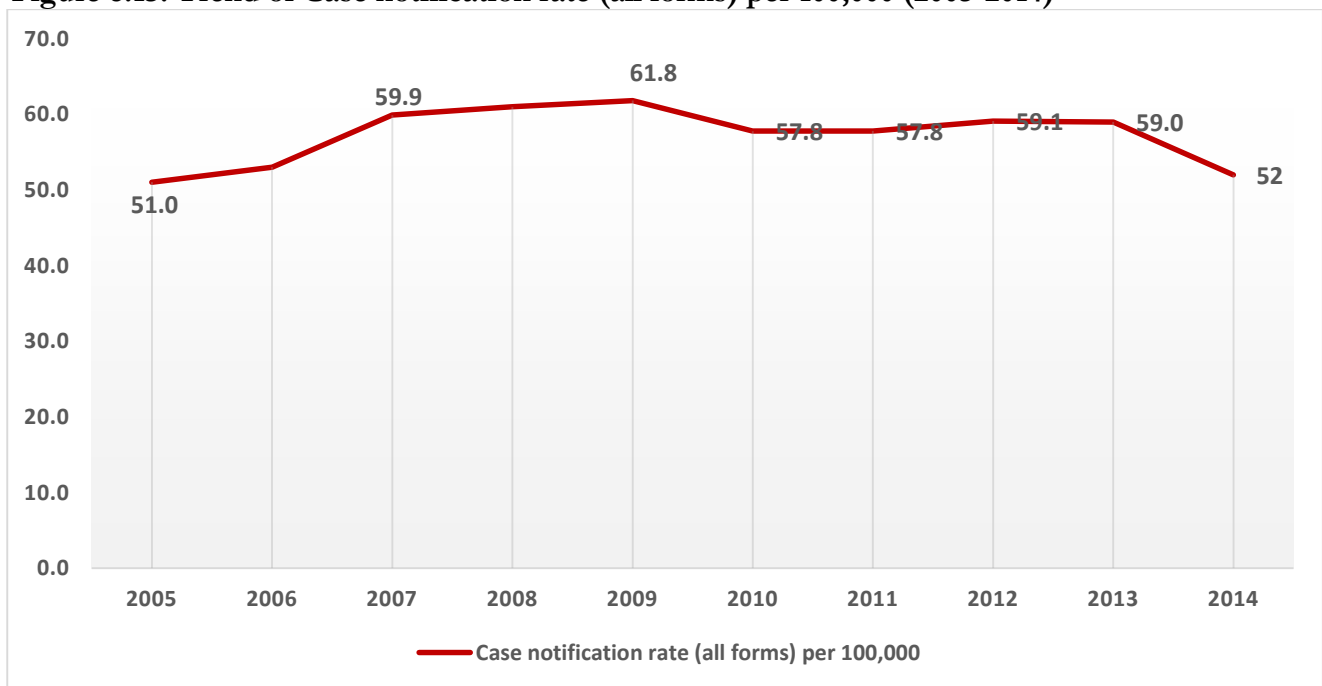
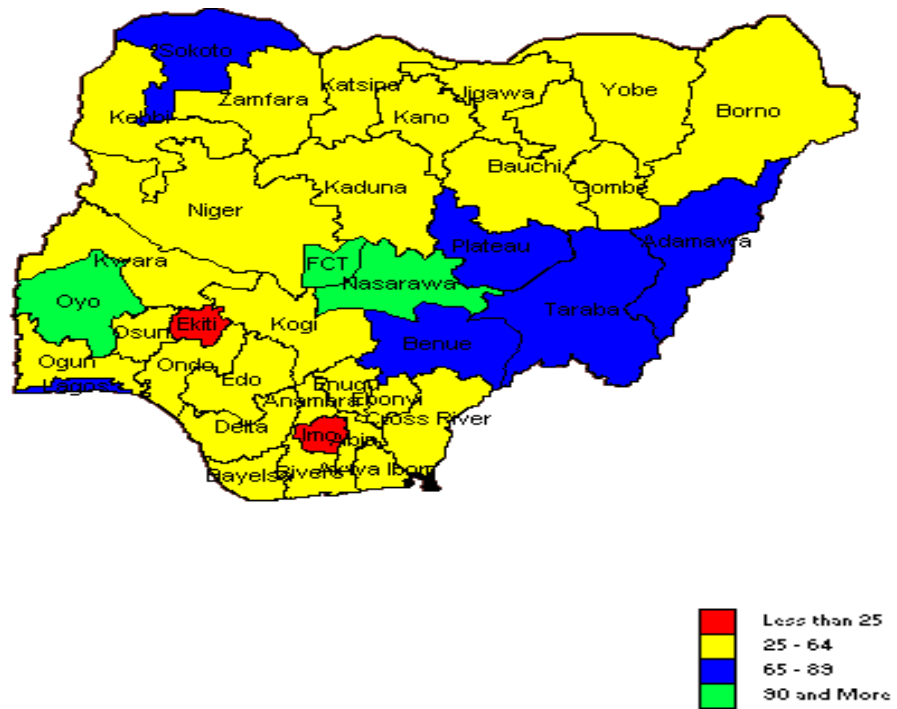


Figure 8.14: Map showing Case Notification Rate for all forms of Tuberculosis (per 100,000) by state in Nigeria in 2014



2014 Annual summary of TB case finding in Nigeria																			
Zone	StateName	Popn	New PTB Smear pos	Relapse	Failure	RAD	Total Smear Positive	Others Sm pos	Others Sm neg	Total Others	Total Retreatment	PTB neg <15	PTB neg ≥15	Total New PTB Smear neg	EPTB <15	EPTB ≥15	Total New EPTB	Total cases	Total new cases
North Central	Benue	5,274,646	2241	69	33	48	2391	11	193	204	354	68	1663	1731	11	75	86	4412	4058
	FCT	1,756,698	973	0	0	0	973	0	0	0	0	65	472	537	13	96	109	1619	1619
	Kogi	4,098,568	1101	69	14	39	1223	5	18	23	145	27	509	536	10	60	70	1852	1707
	Kwara	2,964,193	574	20	13	20	627	16	52	68	121	32	246	278	8	28	36	1009	888
	Nasarawa	2,329,355	1142	93	23	45	1303	3	91	94	255	104	707	811	8	97	105	2313	2058
	Niger	4,938,365	1044	29	4	13	1090	1	4	5	51	53	228	281	30	126	156	1532	1481
	Plateau	3,973,835	1039	67	16	25	1147	11	110	121	229	87	1170	1257	16	283	299	2824	2595
<b>NC Total</b>	<b>25,335,661</b>	<b>8114</b>	<b>347</b>	<b>103</b>	<b>190</b>	<b>8754</b>	<b>47</b>	<b>468</b>	<b>515</b>	<b>1155</b>	<b>436</b>	<b>4995</b>	<b>5431</b>	<b>96</b>	<b>765</b>	<b>861</b>	<b>15561</b>	<b>14406</b>	
North East	Adamawa	3,960,570	1458	100	15	17	1590	4	54	58	190	122	807	929	27	217	244	2821	2631
	Bauchi	5,846,236	1334	64	13	13	1424	5	36	41	131	96	696	792	9	103	112	2369	2238
	Borno	5,189,573	929	59	7	28	1023	0	55	55	149	110	629	739	23	80	103	1920	1771
	Gombe	2,942,679	772	47	10	3	832	2	49	51	111	121	650	771	17	165	182	1836	1725
	Taraba	2,876,242	1443	72	8	11	1534	2	34	36	127	61	598	659	12	94	106	2335	2208
	Yobe	2,902,314	552	49	8	10	619	1	50	51	118	65	460	525	10	47	57	1252	1134
	<b>NE Total</b>	<b>23,717,614</b>	<b>6488</b>	<b>391</b>	<b>61</b>	<b>82</b>	<b>7022</b>	<b>14</b>	<b>278</b>	<b>292</b>	<b>826</b>	<b>575</b>	<b>3840</b>	<b>4415</b>	<b>98</b>	<b>706</b>	<b>804</b>	<b>12533</b>	<b>11707</b>
North West	Jigawa	5,436,421	1063	46	37	34	1180	3	39	42	159	69	620	689	17	91	108	2019	1860
	Kaduna	7,584,052	1879	122	21	35	2057	13	94	107	285	181	1180	1361	34	162	196	3721	3436
	Kano	11,730,917	3013	228	67	35	3343	3	100	103	433	301	1909	2210	41	326	367	6023	5590
	Katsina	7,241,534	1359	106	18	36	1519	12	29	41	201	188	620	808	35	90	125	2493	2292
	Kebbi	4,048,739	1046	49	12	30	1137	5	89	94	185	42	671	713	22	66	88	2032	1847
	Sokoto	4,621,767	2372	26	39	69	2506	9	41	50	184	72	1084	1156	7	224	231	3943	3759
	Zamfara	4,075,264	1040	33	7	18	1098	1	25	26	84	42	297	339	18	144	162	1625	1541
<b>NW Total</b>	<b>44,738,694</b>	<b>11772</b>	<b>610</b>	<b>201</b>	<b>257</b>	<b>12840</b>	<b>46</b>	<b>417</b>	<b>463</b>	<b>1531</b>	<b>895</b>	<b>6381</b>	<b>7276</b>	<b>174</b>	<b>1103</b>	<b>1277</b>	<b>21856</b>	<b>20325</b>	
South East	Abia	3,542,896	844	40	15	43	942	4	73	77	175	26	276	302	5	36	41	1362	1187
	Anambra	5,228,126	1020	35	19	46	1120	10	54	64	164	86	381	467	21	94	115	1766	1602
	Ebonyi	2,717,181	716	16	6	14	752	11	76	87	123	37	358	395	12	59	71	1305	1182
	Enugu	4,072,079	958	49	13	29	1049	1	47	48	139	27	328	355	8	82	90	1542	1403
	Imo	4,919,175	795	19	20	27	861	7	36	43	109	24	204	228	7	41	48	1180	1071
<b>SE Total</b>	<b>20,479,456</b>	<b>4333</b>	<b>159</b>	<b>73</b>	<b>159</b>	<b>4724</b>	<b>33</b>	<b>286</b>	<b>319</b>	<b>710</b>	<b>200</b>	<b>1547</b>	<b>1747</b>	<b>53</b>	<b>312</b>	<b>365</b>	<b>7155</b>	<b>6445</b>	
South South	Akwa Ibom	4,900,809	1628	51	16	26	1721	2	65	67	160	72	564	636	43	120	163	2587	2427
	Bayelsa	2,129,436	427	12	8	34	481	0	57	57	111	68	171	239	6	21	27	804	693
	Cross River	3,611,612	824	36	4	27	891	0	94	94	161	69	687	756	24	170	194	1935	1774
	Delta	5,123,563	1347	28	8	27	1410	4	101	105	168	45	797	842	11	35	46	2403	2235
	Edo	4,023,366	1160	47	18	36	1261	2	76	78	179	38	377	415	5	26	31	1785	1606
	Rivers	6,482,476	1388	49	6	27	1470	3	40	43	125	113	559	672	48	46	94	2279	2154
<b>SS Total</b>	<b>26,271,263</b>	<b>6774</b>	<b>223</b>	<b>60</b>	<b>177</b>	<b>7234</b>	<b>11</b>	<b>433</b>	<b>444</b>	<b>904</b>	<b>405</b>	<b>3155</b>	<b>3560</b>	<b>137</b>	<b>418</b>	<b>555</b>	<b>11793</b>	<b>10889</b>	
South West	Ekiti	2,980,599	259	10	2	4	202	4	19	23	39	7	179	186	1	23	24	508	469
	Lagos	11,268,180	4708	273	73	100	5154	18	437	455	901	528	2903	3431	67	211	278	9318	8417
	Ogun	4,660,645	1636	76	14	33	1759	5	49	54	177	104	373	477	20	27	47	2337	2160
	Ondo	4,301,762	932	48	9	22	1011	4	49	53	132	36	334	370	11	40	51	1485	1353
	Osun	4,279,898	1575	80	49	21	1725	61	132	193	343	55	485	540	8	45	53	2508	2165
	Oyo	6,990,270	3234	198	31	35	3498	25	298	323	587	329	1698	2027	80	372	452	6300	5713
<b>SW Total</b>	<b>34,481,354</b>	<b>12344</b>	<b>685</b>	<b>178</b>	<b>215</b>	<b>13349</b>	<b>117</b>	<b>984</b>	<b>1101</b>	<b>2179</b>	<b>1059</b>	<b>5972</b>	<b>7031</b>	<b>184</b>	<b>718</b>	<b>902</b>	<b>22456</b>	<b>20277</b>	
<b>Nigeria Grand Total</b>	<b>175,024,042</b>	<b>49825</b>	<b>2415</b>	<b>676</b>	<b>1080</b>	<b>53923</b>	<b>268</b>	<b>2866</b>	<b>3134</b>	<b>7305</b>	<b>3570</b>	<b>25890</b>	<b>29460</b>	<b>742</b>	<b>4022</b>	<b>4764</b>	<b>91354</b>	<b>84049</b>	





2014 Annual treatment outcome of New smear positive TB cases registered in 2013																		
Zone	State	# Reg.	# Cured	Rx Comp	# Died	# Failure	# Default	# Trans O	# Eval.	Discrepan	Succestrate	Cure rate	Compl. Rate	Success rate	Failure rate	Death rate	Defaulter rate	Trans out. Rate
North Central	Benue	2823	1830	569	135	29	251	9	2823	0	2399	65%	20%	85%	1%	5%	9%	0%
	FCT	1170	717	223	44	21	106	59	1170	0	940	61%	19%	80%	2%	4%	9%	5%
	Kogi	1340	1112	100	48	14	60	6	1340	0	1212	83%	7%	90%	1%	4%	4%	0%
	Kwara	570	420	63	33	10	32	12	570	0	483	74%	11%	85%	2%	6%	6%	2%
	Nasarawa	1198	841	143	66	14	94	40	1198	0	984	70%	12%	82%	1%	6%	8%	3%
	Niger	943	789	44	60	13	20	17	943	0	833	84%	5%	88%	1%	6%	2%	2%
	Plateau	1107	900	69	63	18	43	14	1107	0	969	81%	6%	88%	2%	6%	4%	1%
	<b>NC Total</b>	<b>9151</b>	<b>6609</b>	<b>1211</b>	<b>449</b>	<b>119</b>	<b>606</b>	<b>157</b>	<b>9151</b>	<b>0</b>	<b>7820</b>	<b>72%</b>	<b>13%</b>	<b>85%</b>	<b>1%</b>	<b>5%</b>	<b>7%</b>	<b>2%</b>
North East	Adamawa	1647	1519	8	73	5	21	21	1647	0	1527	92%	0%	93%	0%	4%	1%	1%
	Bauchi	1351	1060	116	82	13	45	35	1351	0	1176	78%	9%	87%	1%	6%	3%	3%
	Borno	955	690	116	64	6	65	14	955	0	806	72%	12%	84%	1%	7%	7%	1%
	Gombe	775	740	7	26	0	2	0	775	0	747	95%	1%	96%	0%	3%	0%	0%
	Taraba	1561	1257	93	117	9	70	15	1561	0	1350	81%	6%	86%	1%	7%	4%	1%
	Yobe	620	514	42	37	7	17	3	620	0	556	83%	7%	90%	1%	6%	3%	0%
	<b>NE Total</b>	<b>6909</b>	<b>5780</b>	<b>382</b>	<b>399</b>	<b>40</b>	<b>220</b>	<b>88</b>	<b>6909</b>	<b>0</b>	<b>6162</b>	<b>84%</b>	<b>6%</b>	<b>89%</b>	<b>1%</b>	<b>6%</b>	<b>3%</b>	<b>1%</b>
	North West	Jigawa	903	674	73	62	22	50	22	903	0	747	75%	8%	83%	2%	7%	6%
Kaduna		2044	1734	97	114	21	62	16	2044	0	1831	85%	5%	90%	1%	6%	3%	1%
Kano		3359	2686	397	111	46	102	17	3359	0	3083	80%	12%	92%	1%	3%	3%	1%
Katsina		1192	881	97	81	12	80	41	1192	0	978	74%	8%	82%	1%	7%	7%	3%
Kebbi		1212	1103	38	27	1	29	14	1212	0	1141	91%	3%	94%	0%	2%	2%	1%
Sokoto		2071	1763	199	27	35	47	0	2071	0	1962	85%	10%	95%	2%	1%	2%	0%
Zamfara		988	842	52	20	0	19	55	988	0	894	85%	5%	90%	0%	2%	2%	6%
<b>NW Total</b>		<b>11769</b>	<b>9683</b>	<b>953</b>	<b>442</b>	<b>137</b>	<b>389</b>	<b>165</b>	<b>11769</b>	<b>0</b>	<b>10636</b>	<b>82%</b>	<b>8%</b>	<b>90%</b>	<b>1%</b>	<b>4%</b>	<b>3%</b>	<b>1%</b>
South East	Abia	962	784	6	87	30	55	0	962	0	790	81%	1%	82%	3%	9%	6%	0%
	Anambra	1055	715	117	66	16	112	38	1064	-9	832	67%	11%	78%	2%	6%	11%	4%
	Ebonyi	826	643	32	51	22	63	15	826	0	675	78%	4%	82%	3%	6%	8%	2%
	Enugu	1117	754	162	57	12	116	16	1117	0	916	68%	15%	82%	1%	5%	10%	1%
	Imo	776	571	54	71	17	49	14	776	0	625	74%	7%	81%	2%	9%	6%	2%
	<b>SE Total</b>	<b>4736</b>	<b>3467</b>	<b>371</b>	<b>332</b>	<b>97</b>	<b>395</b>	<b>83</b>	<b>4745</b>	<b>-9</b>	<b>3838</b>	<b>73%</b>	<b>8%</b>	<b>81%</b>	<b>2%</b>	<b>7%</b>	<b>8%</b>	<b>2%</b>
South South	Akwa Ibom	1666	1432	72	105	12	41	4	1666	0	1504	86%	4%	90%	1%	6%	2%	0%
	Bayelsa	550	427	58	9	7	41	6	548	2	485	78%	11%	89%	1%	2%	7%	1%
	Cross River	842	670	75	37	1	51	8	842	0	745	80%	9%	88%	0%	4%	6%	1%
	Delta	1535	1201	147	70	15	78	24	1535	0	1348	78%	10%	88%	1%	5%	5%	2%
	Edo	1250	1001	40	89	23	67	30	1250	0	1041	80%	3%	83%	2%	7%	5%	2%
	Rivers	1504	1096	152	90	18	137	11	1504	0	1248	73%	10%	83%	1%	6%	9%	1%
	<b>SS Total</b>	<b>7347</b>	<b>5827</b>	<b>544</b>	<b>400</b>	<b>76</b>	<b>415</b>	<b>83</b>	<b>7345</b>	<b>2</b>	<b>6371</b>	<b>79%</b>	<b>7%</b>	<b>87%</b>	<b>1%</b>	<b>5%</b>	<b>6%</b>	<b>1%</b>
South West	Ekiti	249	215	5	19	3	5	2	249	0	220	86%	2%	88%	1%	8%	2%	1%
	Lagos	4902	3625	365	163	112	552	85	4902	0	3990	74%	7%	81%	2%	3%	11%	2%
	Ogun	1697	1255	153	89	48	145	7	1697	0	1408	74%	9%	83%	3%	5%	9%	0%
	Ondo	942	804	16	44	8	58	12	942	0	820	85%	2%	87%	1%	5%	6%	1%
	Osun	1526	1261	65	66	44	56	34	1526	0	1326	83%	4%	87%	3%	4%	4%	2%
	Oyo	3617	3276	47	83	43	104	41	3594	23	3323	91%	1%	92%	1%	2%	3%	1%
	<b>SW Total</b>	<b>12933</b>	<b>10436</b>	<b>651</b>	<b>464</b>	<b>258</b>	<b>920</b>	<b>181</b>	<b>12910</b>	<b>23</b>	<b>11087</b>	<b>81%</b>	<b>5%</b>	<b>86%</b>	<b>2%</b>	<b>4%</b>	<b>7%</b>	<b>1%</b>
<b>NIGERIA TOTAL</b>	<b>52845</b>	<b>41802</b>	<b>4112</b>	<b>2486</b>	<b>727</b>	<b>2945</b>	<b>757</b>	<b>52829</b>	<b>16</b>	<b>45914</b>	<b>79%</b>	<b>8%</b>	<b>87%</b>	<b>1%</b>	<b>5%</b>	<b>6%</b>	<b>1%</b>	

## 8.2 Drug resistant Tuberculosis

Table 8.2: Total number of GeneXpert sites in Nigeria as at the end of 2014

NTBLCP has 96 Xpert machines across the country (36 states & FCT) as at December 31, 2014			
No.	States	GeneXpert sites	Support through
1	Akwa Ibom	University of Uyo Teaching Hospital	Tbcare1
2	Akwa Ibom	Immanuel General Hospital Eket	GF
3	Adamawa	SH Yola	TB Reach
4	Anambra	Anambra state University Teaching Hospital, Amaku Awka	Agbami
5	Anambra	NAUTH, Anambra state	FHI
6	Abia	FMC Umuahia	Tbcare1
7	Abia	Abia Specialist Hosp. & Diagnostic Center, Amachara Umuahia	Agbami Partners
8	Benue	45 Nigeria Air force Hospital Makurdi	EPIC/DOD
9	Benue	FMC Makurdi	APIN/IHVN
10	Benue	GH Otukpo	CIHP
11	Benue	Benue State UTH Makurdi	Agbami Partners
12	Benue	GH Vandekeiya	CIHP
13	Bauchi	Tafawa Belewa Unv teaching Hosp	Tbcare 1
14	Bauchi	FMC Azare	GF
15	Bayelsa	Leprosy and TB Hosp, Igbogene	Agbami Partners
16	Borno	Univ. of Maiduguri Teaching Hospital	FHI360
17	Cross River	St Benedict Catholic Hospital, Ogoja	FHI
18	Cross River	UCTH Calabar	GF
19	Cross River	DLHMH Calabar	FHI360
20	Delta	C H AGBOR	IHVN
21	Delta	FMC Asaba	Tbcare1
22	Delta	TBL Referral center Eku	Agbami Partners
23	Ebonyi	St Patrick Hospital Abakaliki (Mile 4)	Tbcare1
24	Ebonyi	FETHA 1	CCCRN
25	Ebonyi	Mater Misericordiae Hospital, Afikpo	WHO
26	Edo	Central Hospital Benin	Tbcare1
27	Edo	G H Auchu	Agbami Partners
28	Enugu	Annunciation Specialist Hospital Enugu	CCCRN
29	Enugu	District Hosp. E/Ezike	CCCRN
30	Enugu	UNTH Enugu	CCCRN
31	Enugu	Bishop Shahanan Hospital Nsukka	NACA
32	Enugu	Ntasiobi Specialist Hospital, Enugu East	NACA
33	Ekiti	State Specialist Hospital	TB Care 1
34	Ekiti	Oba Adejuyigbe General Hospital Agric Road Ado-Ekiti	Agbami Partners
35	FCT	Zankli Medical centre	Tbcare1
36	FCT	Kwali Gen hosp	Agbami Partners
37	FCT	DHQ	DOD
38	FCT	Bwari GH	TB Reach
39	FCT	Gwagwalada Teaching Hospital	TB Reach

40	FCT	Abaji GH	TB Reach
41	FCT	Kuje GH	TB Reach
42	FCT	Kwali GH	TB Reach
43	Gombe	Specialist Hospital Gombe	Tbcare1
44	Gombe	G H (IDH), Zambuk	Agbami Partners
45	Imo	IMSUTH	CCCRN
46	Imo	FMC Owerri	Agbami Partners
47	Imo	St. Damians Hospital, Orlu	NACA
48	Jigawa	GH Hadeja	Tbcare1
49	Kaduna	NTBLTC Zaria	Tbcare1
50	Kaduna	GH Kafanchan	Agbami Partners
51	Kaduna	44 NARH	DOD
52	Kaduna	Gwamna Awan Hospital	CIHP
53	Kano	IDH Kano	Tbcare1
54	Kano	AKTH	Tbcare1
55	Kano	GH Bichi	IHVN
56	Katsina	GH FUNTUA	IHVN
57	Katsina	FMC Katsina	Tbcare1
58	Kebbi	FMC B/Kebbi	Tbcare1
59	Kwara	Sobi Specialist Hospital Ilorin	Agbami Partners
60	Kwara	University of Ilorin Teaching Hospital, Ilorin	WHO
61	Kogi	Kogi state Specialist hosp Lokoja	Agbami Partners
62	Kogi	KSUTH Ayingba	GF
63	Lagos	NIMR Lagos	Tbcare1
64	Lagos	Mainland Hospital Yaba Lagos	Tbcare1
65	Lagos	68 NARH Yaba	EPIC/DOD
66	Lagos	LASUTH	Tbcare1
67	Lagos	Alimosho G H	Agbami Partners
68	Lagos	Police Hospital Falomo	WHO
69	Lagos	Nigerian Navy Reference Hospital Ojo	GF
70	Lagos	Military Hospital Ikoyi	DOD
71	Lagos	Nigerian Airforce Hospital (NAFH) Ikeja	DOD
72	Nasarawa	Dalhatu Araf Specialist Hosp. Lafia	Tbcare1
73	Nasarawa	FMC Keffi	IHVN
74	Nasarawa	ERCC Akwanga	Agbami
75	Niger	G H Minna	WHO
76	Niger	FMC Bida	MSH
77	Niger	Umaru Musa Yar'adua Mem. Hosp. Sabon Wuse	Agbami
78	Niger	General Hospital Suleja	WHO
79	Oyo	Government Chest Hospital Jericho Ibadan	Tbcare1
80	Oyo	University College Hospital (UCH) Ibadan	APIN
81	Ondo	State Hospital Akure	Tbcare1
82	Ondo	State Specialist Hosp Okitikupa	Agbami Partners
83	Ogun	Hansen Disease Centre, Iberekodo, Abeokuta	Agbami Partners
84	Ogun	OOUTH SAGAMU	IHVN
85	Osun	OAUTH, IFE	IHVN
86	Osun	SH Asubiaro	Tbcare1
87	Osun	G H Iwo	Agbami Partners

88	Plateau	JUTH Jos	APIN
89	Plateau	COCIN Hospital Mangu	GF
90	Rivers	BMS Hosp	FHI
91	Rivers	UPTH Port Harcourt	GF
92	Sokoto	MM Specialist Hospital, Sokoto	Agbami Partners
93	Taraba	State Specialist Hospital Jalingo	WHO
94	Taraba	Hon. Haruna Tsokwa Memorial General Hospital Takum	WHO
95	Yobe	FMC Nguru	FHI360
96	Zamfara	FMC Gusau	Tbcare1

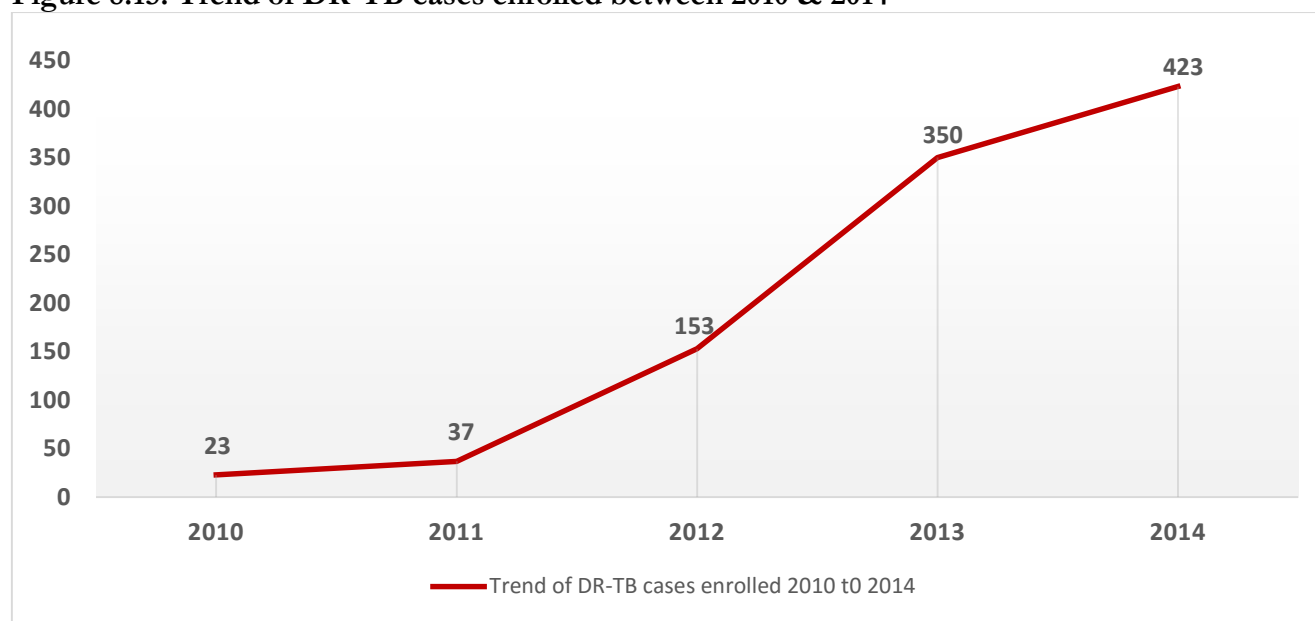
Table 8.3: DR-TB cases enrolled on second line TB treatment by treatment health unit in 2014

S/N	Notification health unit	Number of cases	Percentage
1	ABUBAKAR TAFABALEWA UNIVERSITY TEACHING HOSPITAL	11	2.6%
2	FEDERAL MEDICAL CENTER, OWERRI	19	4.5%
3	GOVERNMENT CHEST HOSPITAL, JERICHO, IBADAN	21	5.0%
4	INFECTIOUS DISEASE HOSPITAL, KANO	18	4.3%
5	JOS UNIVERSITY TEACHING HOSPITAL	20	4.7%
6	LAWRENCE HENSHAW MEMORIAL HOSPITAL DR-TB TREATMENT CENTRE	19	4.5%
7	MAINLAND HOSPITAL	24	5.7%
8	NATIONAL TB AND LEPROSY TRAINING CENTRE, ZARIA	18	4.3%
9	SACRED HEART HOSPITAL	99	23.4%
10	STBLCP LAGOS	34	8.0%
11	STBLCP ABIA	6	1.4%
12	STBLCP AKWA IBOM	6	1.4%
13	STBLCP BAUCHI	2	0.5%
14	STBLCP BENUE	5	1.2%
15	STBLCP CROSS RIVER	1	0.2%
16	STBLCP GOMBE	4	0.9%
17	STBLCP JIGAWA	1	0.2%
18	STBLCP KADUNA	22	5.2%
19	STBLCP KANO	19	4.5%
20	STBLCP OGUN	3	0.7%
21	STBLCP OSUN	4	0.9%
22	STBLCP OYO	13	3.1%
23	STBLCP PLATEAU	6	1.4%
24	UNIVERSITY COLLEGE HOSPITAL, IBADAN, DR-TB TREATMENT CENTRE	19	4.5%
25	UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL	26	6.1%

26	UNIVERSITY OF UYO TEACHING HOSPITAL, UYO	3	0.7%
	<b>Total</b>	<b>423</b>	<b>100%</b>

\*STBLCP refers to DR-TB cases enrolled on treatment in the community

Figure 8.15: Trend of DR-TB cases enrolled between 2010 & 2014



### 8.3 Leprosy

Table 9.3: Leprosy yearly and annual statistics for 2014

Indicators	2009	2010	2011	2012	2013	2014
New cases	4,219	3,913	3,623	3,805	3,385	3,076
MB Proportion	88.5%	91%	92%	92%	93%	89%
% Female	42.5%	42.5%	44%	42%	41%	42%
GD2 Proportion	11.7%	14%	14%	14%	13%	13%
Child Proportion	9.7%	10%	9%	9%	9%	9%

Figure 8.16: Trend of annual cases of new leprosy cases from 2009 to 2014

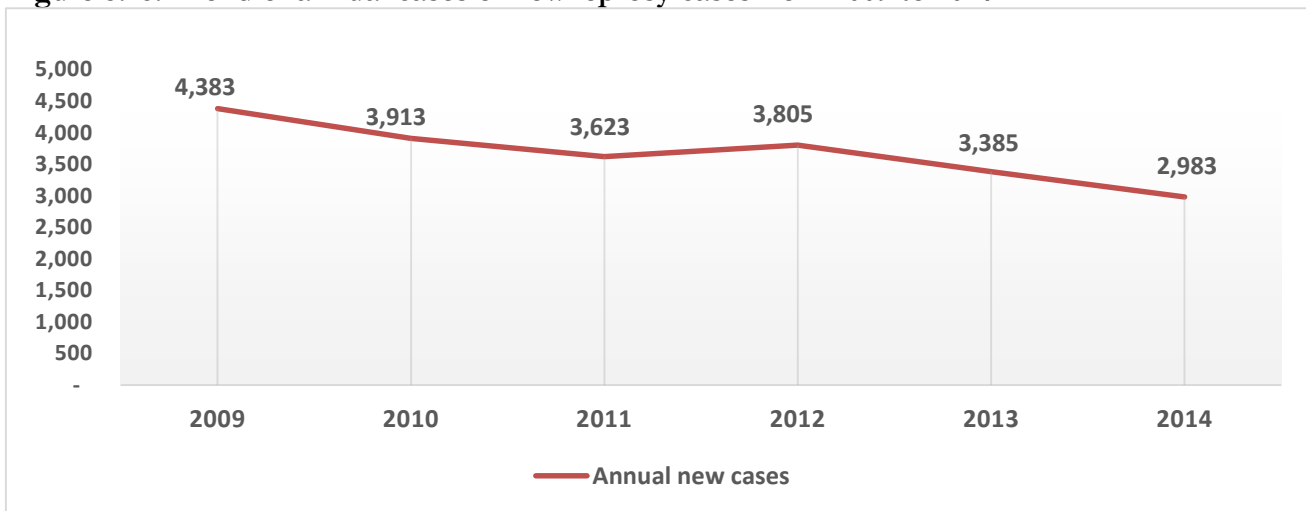
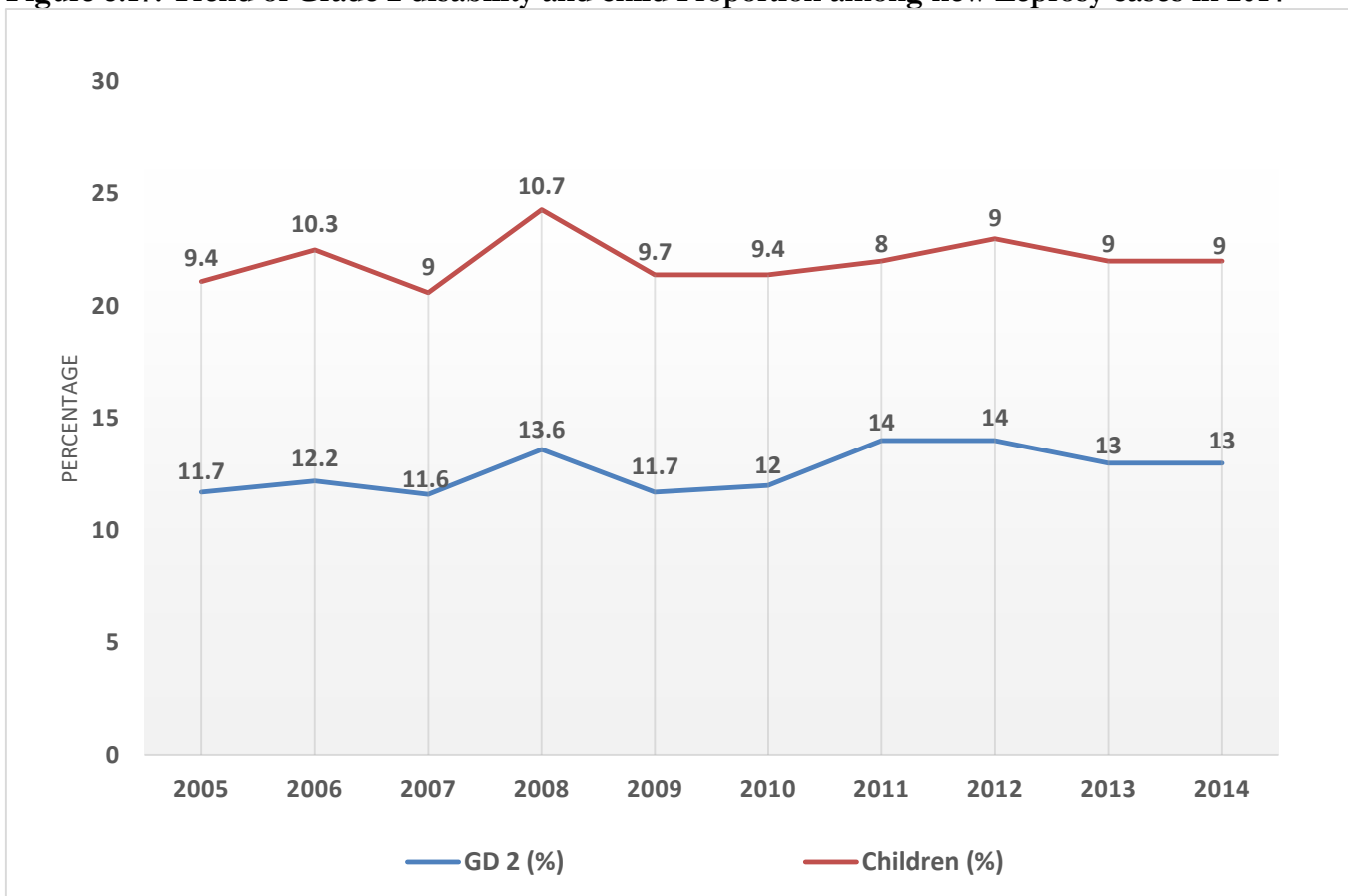


Figure 8.17: Trend of Grade 2 disability and child Proportion among new Leprosy cases in 2014



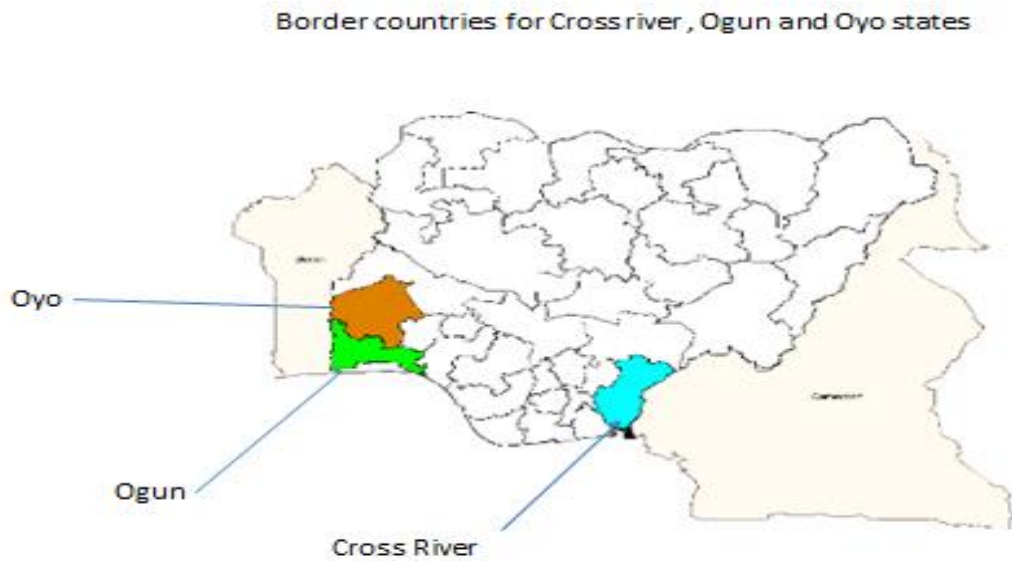
In line with the newly introduced indicators as contained in the Enhanced Global strategy for Further reducing Leprosy 2011-2015, the Grade 2 disability rate (per 100,000) recorded nationally for 2014 was 7%.





### 8.4 Buruli Ulcer

Figures 8.18a and 8.18b: Buruli ulcer mapping based on detection by states in 2014



Data source: NTBLCP- Nigeria

States with Confirmed cases of Buruli ulcers in 2014



Data source: NTBLCP- Nigeria

