**MINISTRY OF HEALTH REPUBLIC OF TOGO**

**GENERAL SECRETARIAT Work – Liberty - Country**

**GENERAL DIRECTORATE OF HEALTH ACTION**

**DIRECTORATE TO FIGHT DISEASE**

**DIVISION OF EPIDEMIOLOGY**

**IMMUNIZATION SERVICE**

**PLAN FOR INTRODUCTION OF THE INJECTABLE POLIOMYELITIS VACCINE (IPV)**

**IN THE ROUTINE EPI OF TOGO**

**LOME, SEPT. 2014**

 **IPV introduction plan – Togo**

Summary.

The World Health Organization (WHO) since 1988 has had the goal of eradicating poliomyelitis. Initially targeted for 2000, this goal was successively postponed to 2005, 2010 then 2012 and currently to 2015, due to the export of cases from endemic countries. At the initiative of the other countries of the epidemiological block of West Africa, Togo joined the initiative to eradicate poliomyelitis. In this context, it developed strategies, such as the implementation of the RED approach, the monitoring of AFP cases based on the situation and the organization of national polio immunization days since 1996.

In October 2007, the country submitted a report on the process of eradicating poliomyelitis to the African Region Certification Committee (ARCC) which declared the country to be free of wild polio virus But during the period of 2008, 2009 and 2010, many countries where wild polio virus has been endemic since 2005, including Togo, have seen a reimportation of the virus. Through 2011, most of the countries of West Africa have experienced a reimport of the virus.

Urgent actions, in particular response campaigns, were undertaken and results were spectacular in certain countries. In Togo, since March 2009 no case of WPV has been detected, however threats of the import of WPV linger over the country due to the fragility of the health system and the existence of risk factors.

Much progress has been achieved recently in the West African sub-region in this fight against poliomyelitis. However this progress is fragile due to the significant movement on the part of the population, the population density in certain zones, poor routine immunization performance (poliomyelitis vaccine) and monitoring of acute flaccid paralysis (AFP) cases in certain districts and zones of the West African region.

In order to fight the circulating polio virus derived from vaccine strains (cVDPV), new immunization options using the injectable poliomyelitis vaccine (IPV) have been developed. The Strategic Advisory Group of Experts (SAGE) in 2012 recommended withdrawing as soon as possible the Type 2 component of the OPV from systematic immunization, throughout the world, an operation that would be facilitated by the introduction of at least one dose of the IPV.

The introduction of one dose of IPV into the vaccination calendar followed by the gradual withdrawal of the Type 2 component of the OPV from routine immunization will allow the country:

* to avoid the reemergence of cases of cVDPV2, as well as those reported in 2013,
* to facilitate disruption of the transmission in the event of an outbreak of the Type 2 virus, ensuring a quicker and more effective immune response,
* to strengthen immunity against Types 1 & 3 in children who were already vaccinated with the OPV,
* to accelerate the eradication of polio.

Based on this situation and given the regional context related to poliomyelitis, Togo has responded to this recommendation by introducing one dose of the IPV into the vaccination schedule for children 0-11 months at 14 weeks of life, as of 1 April 2015.

After long experience with the introduction of new [vaccines] such as the VAA, Penta vaccine, PCV 13 and the Rotavirus vaccine, Togo will introduce the IPV in all districts of the country. In order to do this, the process has already been underway since January 2014, through the updating of management materials for the EPI, to include the IPV. The preparatory activities for this introduction will be carried out upon the approval of this request by GAVI, as of January 2014 in this case, the briefing of participants, the adaptation of communication materials, the implementation of a training plan, supervision, monitoring and treatment of AEPI, the preparation of financial reports and progress reports.

The IPV will be introduced simultaneously in all districts at the national level starting in April 2015. . Upon GAVI’s approval of the financing request by Togo, the various committees must get to work and the preparatory activities will be launched. The review of tools for collecting data was carried out in April 2014 in favor of the preparations for introduction of the PCV13 and the Rotavirus vaccine. The vaccination records and management materials for the EPI were revised, taking into consideration the fact that one dose of the IPV will be administered with the 3rd dose of the OPV. The activities remaining to be carried out are as follows:

Togo has extensive experience with the introduction of new vaccines since 2005. Togo introduced vaccines into the EPI to protect against yellow fever in January 2005, then the vaccines against haemophilus influenzae Type B and viral Hepatitis B in July 2008. Most recently in June 2014, Togo carried out a double introduction of vaccines against the Rotavirus (RotarixTM) and pneumococcus (PCV13).

In advance of these introductions, the implementation of the cold chain rehabilitation plan allowed an improvement in the rate of coverage of equipment requirements in accordance with WHO/UNICEF standards. Additionally, the introduction of the PCV13 and Rotavirus vaccines was an opportunity to acquire new cold chain equipment. GAVI Alliance proposes providing additional support to the country in order to supplement the storage capacity at the central level and to replace certain equipment that is outdated yet still operational, in the context of the reprogramming of RSS funds in 2016.

 The health care personnel will receive training in the new vaccine before its introduction. The supply of vaccines at the central cold room level is carried out every three (3) months, like at the level of the 5 interior regions of the country. The health districts are supplied each month, and health care facilities are also supplied each month. The country has a 10-ton truck that supplies the health regions with vaccines each quarter.

The introduction of the PVC13 and Rotavirus vaccines presented an opportunity to refresh immunization tools by including the IPV (Records, vaccination card and supervision checklist) and the refresher training of providers relative to the use of these tools.

The Ministry of Health and its partners appreciated the assistance from GAVI supporting the decision to introduce the IPV in the country. For this reason, the implementation of the preparatory activities was ordered with a schedule shared with all the technical ICC partners, civil society organizations (CSOs), teachers. This multidisciplinary group, upon approval by GAVI of the submission request for the IPV, will continue to carry out all the preparatory activities planned in the attached schedule.

The primary activities included in the IPV introduction process are:

* advocacy among officials to gain political commitment supporting the introduction,
* updating the cold chain inventory and management materials for the EPI,
* preparation of the various documents to be submitted to GAVI as well as their validation by ICC members,
* registration of the vaccine by the national pharmaceutical regulation agency,
* production of communications support and training modules,
* trickle-down training of providers and communication focal points,
* social mobilization, and
* availability of the vaccine in health care facilities before the launch.

The major challenges which the program will have to confront relate to several areas, in particular the low storage capacity for vaccines and the insufficient logistical and financial resources that are available.

This document covers the following domains:

1. Justification of the introduction of the IPV and the national decision-making process,

2. General presentation of the IPV,

3. Considerations related to the introduction and implementation,

4. Situational analysis of the immunization program,

5. Monitoring - evaluation

6. Social mobilization, communication and advocacy.

**1. Justification of the introduction of the IPV and the national decision-making process,**

Following the receipt in December 2013 of the letter signed jointly by the GAVI Alliance, WHO and UNICEF, the Minister of Health approved the introduction of the IPV and requested that the submission be prepared. In order to contribute to acceleration of the eradication of poliomyelitis, the country subscribed to the introduction of the injectable inactivated polio vaccine as was recommended by SAGE. This will allow strengthening of not only the immune status of children immunized with the OPV but also the acceleration of the eradication of this disease by reducing the risk of reemergence of the wild polio virus Type 2, which has been absent since 2009, by facilitating the disruption of polio virus outbreaks derived from a Type 2 vaccine strain (cVDPV).

 This introduction will allow global vulnerability to the Type 1 and Type 3 wild polio virus to be reduced. A multidisciplinary group comprising an ICC technical subcommittee, technical partners, civil society organizations (CSOs), is working on issues related to immunization. This is the group that validates and gives its technical opinion regarding any documentation to be submitted to the ICC. This multidisciplinary group, upon approval by GAVI of the submission request for the IPV, will be entrusted with all the preparatory activities planned in the attached schedule.

In the context of the introduction of the IPV, this multidisciplinary group with the national polio experts committee (CNEP) and the National Certification Committee (CNC) was established in order to prepare this plan. The Ministry of Finance and the Economy, the Ministry of Education and the Ministry of Planning, the Ministry of Social Action, the Ministry of Agriculture and Livestock Husbandry and the Ministry of Communication are part of the ICC and participate in the planning meetings and the preparation of various activities of the EPI.

The preparation of this plan was envisioned by a multidisciplinary technical team described above. The technical and financial immunization partners are stakeholders (WHO, UNICEF, AMP). The document prepares was submitted to the ICC for validation, covering all the member ministries, the multi- and bi-lateral partners and Civil society organizations (CSOs).

Togo has extensive experience with the introduction of new vaccines, i.e.: the Yellow Fever vaccines in 2005; Viral Hepatitis B and Haemophilus Influenzae Type B in the Pentavalent form (Type b (DTC-HepB + Hib) in July 2008, PCV-13 and the Rotavirus diarrhea vaccine (Rotarix) in June 2014. Lessons learned will be used to improve this introduction, i.e.:

* to establish a detailed schedule of introductory activities at the regional and district levels.
* to use the opportunity of pre-introduction trainings to refresh vendors as to the management of the cold chain and vaccines in all the districts;
* to closely follow the service providers after training through training supervision, in order to continue to strengthen the skills of personnel with regard to the new vaccine;
* the need to join mass communication with increased continuous nearby communication and also advocacy at all levels;
* to ensure that all health districts introduce the new vaccine at the same time;
* to strengthen the implementation of advanced strategy immunization in the health areas;
* to strengthen the AEPI management system and the waste management system.

Furthermore, recent experience with the introduction of the IPV in several developing countries shows the importance of emphasizing:

- collaboration by the various ministries involved and all the stakeholders in all stages of project planning and implementation;

- implementation of a rumor management system;

- promotion of awareness among community and religious leaders, local government officials and civil society organizations (NGOs, Associations).

Togo already successfully introduced the yellow fever vaccine in 2004 and the Pentavalent vaccine (DTC-HepB-Hib) in 2008 as part of the routine EPI. Additionally, the country had to organize several mass injection campaigns, in particular for yellow fever in 2006-2007, and for the AH1N1 flu pandemic in 2010.

Specifically for the introduction of the DTC-HepB-Hib vaccine, a post-introduction evaluation was conducted in 2009 and the results were overall positive. However certain areas for improvement were highlighted. These points, as well as the proposed solutions, are summarized in the following table:

|  |  |
| --- | --- |
| **Lessons learned** | **Measures taken** |
| **1 - Storage capacity, cold chain and logistics• The positive storage capacity at the central warehouse and in certain regional stores is acceptable. However necessary improvements are in progress.• Cold chain equipment that is not in compliance with WHO standards (household refrigerators) at certain peripheral health care facilities• Diversity of types of refrigerators and energy sources for cold chain equipment, particularly at the peripheral level (gas, oil, solar, etc.)• Insufficiency of the cold chain equipment maintenance system• Insufficient and outdated transport equipment (vehicles, motorbikes and bicycles)** | **- Review of the pace of supply at the various levels,****- Strengthening of cold chain capacity with the acquisition in 2013 of refrigerators with the support of development partners (Rotary, UNICEF)****- Implementation of the plan for gradual strengthening of cold chain equipment.** **- Removal of unapproved refrigerators and replacement with those that comply with standards****- A thorough inventory of cold chain equipment undertaken on 12 August 2013 will allow, among other items, the identification of CFC refrigerators to be removed from service and their replacement.** **- The plan for replacement of logistics defined in Togo the standards for equipment by level for cold chain equipment.****- Training plan for 2013 for agents at all levels in preventive maintenance. This training should lead to the implementation of a cold chain maintenance system.** **- Training of 40 agents in cold chain equipment maintenance.****- Purchase of 10 4x4 vehicles, 50 motorbikes with the support of RSS-GAVI.****- Purchase of 176 bicycles from the State budget for Community Health Agents.** |
| **2. Protection against accidental freezing** | **- Purchase of fridge tags since May 2013 and plan to purchase multilogs with the support of UNICEF for cold chambers.****- Institution of the use of cold tanks prepared for the transport and storage of vaccines.** |
| **3 - Training of personnel** **- Training in EPI and vaccines management was only able to be carried out for a single agent per Peripheral Health Care Unit (USP); the others were summarily briefed at the USP level;****- Absence of simple technical material (e.g. brochures) intended for all USP personnel****- No demonstrations during training (formulation and presentation of the vaccine, administration technique, etc.) due to the new vaccine not yet being delivered in the field.** | **- Briefing regarding aspects of EPI and vaccine management during monthly district coordination meetings.****- Training of 23 members of civil society organizations (CSOs) at three sessions regarding planning, quality control, EPI, vaccine management and social mobilization.** **- Training in computerized vaccine management and Data Quality Self-assessment (DQS).****- Project for the preparation of a guide and technical materials (brochures, etc.) for the use of the new vaccines, directed at service providers.****- Planning of demonstration sessions with samples of the new vaccines during the trainings at all levels during the next introductions.** |
| **4 – Social mobilization****- Absence of a global mobilization and communication plan for the new vaccine****- Absence of media for mobilization / communication adapted for peripheral personnel and their respective communities (brochures, posters, etc.)** **- Insufficient training of personnel with media for the new vaccine** | **- Existence of a 2011-2015 strategic communications plan adapted for the introduction of new vaccines****- Preparation and distribution of posters, signs, image boxes and brochures****- Project to train journalists in the new vaccines in the plan for introduction, advocacy among community and religious leaders and local government authorities and civil society organizations (NGOs, Associations).** |
| **5. Coverage and dropout rate, wastage rate****- Analysis and use of data at the level of Peripheral Health Care Facilities is minimal and does not trigger corrective actions**  | **Allowance for training care providers in the monitoring of data and strengthening of training supervision activities.** |

**All these lessons learned have allowed the process of introducing the PCV13 and Rotavirus vaccines to be improved and will allow the IPV to be introduced more easily.**

**2. General presentation of the IPV,**

**2.1 Vaccine preferences**

***Table 1. Preferred presentation of the IPV and estimated introduction date***

|  |  |  |  |
| --- | --- | --- | --- |
| **Preferred presentation of the IPV**  | **Month and year of first vaccination** | **Second preferred presentation**  | **Third preferred presentation** |
| **Liquid IPV in 10-dose vials**  | **April 2015** | **Liquid IPV in 1-dose vials**  | **Liquid IPV in 5-dose vials**  |

 Presentation in single dose vials (wastage factor = 1.05), considering the fact that its wastage factor (1.05) is very low with regard to the 5-dose presentation (wastage factor = 1.43) and the 10-dose presentation (wastage factor = 2) should be the first choice, but in the current context of insufficient storage capacity for the introduction of other new vaccines, this benefit is relegate to the 2nd tier. In addition, the 5-dose presentation will not be available in a sufficient quantity for all countries until January 2016, however the IPV will be introduced in the second quarter of 2015.

Considering all these arguments, the 10-dose presentation was chosen to be the first choice. In late 2014 and 2015 the EPI will acquire new contributions of cold chain materials, which will resolve the storage issues, and we can return to the single dose presentation as a first choice. In the interim, efforts will be made to reduce the wastage rates and dropout rates with the 1—dose presentation.

The IPV that will be given in the fourteenth week with the third dose of the pentavalent and OPV3 vaccines. [sic]

So the IPV will be administered intramuscularly – the left deltoid. The IPV will be introduced in April 2015 in Togo, at all health care facilities in all districts of the country. This introduction will be preceded in late 2014 by a mass immunization campaign against meningitis A with MenAfriVac, and a demonstration project with the uterine cancer vaccine (HPV) in two districts.

The introduction of the IPV will not have any effect on the EPI vaccine calendar.

**2.2 National Approval**

The country has a National Regulatory Authority (ANR) that is functional and that fulfills three functions out of the six that were recommended, i.e. approval of the products and granting of authorizations to sell the product, the release of lots and post-commercialization monitoring, including the monitoring of Adverse Effects Following Immunization (AEFI).

Regulations in Togo with regard to medications require that any pharmaceutical product entering the country be registered and subjected to release of lots prior to circulation. National approval is therefore necessary for the IPV, in addition to prequalification of the product by the WHO. However the country accepts the registration procedure requested for vaccines prequalified by the WHO. This procedure will take three months. The approval process is carried out in several phases:

* Receipt of documentation: the required documents are verified. Complete documentation files are retained. Those that are incomplete are rejected. In each case, the corresponding laboratory is informed;
* Expert Evaluation: Technicians responsible for approval are charged with preparing the documentation.
* Decision: opinions of the technicians are presented for approval by the Minister of Health.

The inactivated IPV was not approved in Togo.

The customs processing and transport activities for the vaccine from the airport to the central warehouse are carried out by the government or by the UNICEF country office, depending on the nature of the activity (routine activity or immunization campaign). UNICEF has a long-term local agreement (in Togo) with a transporter that picks up vaccines and vaccination supplies upon their arrival at the airport or the port for its own account. The vaccines follow the direct pick-up process immediately upon arrival. Once they have been picked up, the products are delivered to the central EPI, which starts the procedure for releasing the lots.

In the context of processing through customs for the vaccines and injection equipment for routine immunization, every year the EIP requests and obtains an exemption from custom fees from the Ministry of Finance. However, the payment of the data processing tax, approved customs forwarding agent and the transport shall be for the account of the EPI. The latter will pick up and transport vaccines and injection equipment from the point of entry (airport and port) to the Central EPI Depot.

**2.3 Target population and vaccine availability**

The target populations by year according to the data of the general population and residence survey are set forth in the following table:

Table: 2015-2018 target populations (Source: RGPH 2010)

|  |  |  |
| --- | --- | --- |
| Year | Total Population | Target population (4.15%) |
| 2015 | 6,979,225 | 217,229\* |
| 2016 | 7,153,706 | 296,879 |
| 2017 | 7,332,548 | 304,301 |
| 2018 | 7,515,862 | 311,908 |

\*Considering the fact that the IPV will be introduced as of 1 April 2015

The country will receive the vaccines through UNICEF.

**3. Considerations related to the introduction and implementation,**

**3.1 Preparation of policies**

The review of tools for collecting data was carried out in April 2014 in favor of the preparations for introduction of the PCV13 and the Rotavirus vaccine. The vaccination records and management materials for the EPI were revised, taking into consideration the dose of the IPV to be administered with the 3rd dose of the OPV. A national immunization policy document that considers the GIVS and GVAP will be prepared at the end of 2014 to update the current vaccination guide document that is used. The guidelines for introduction of the IPV will be integrated into each new policy.

The IPV will be integrated into current strategies: stationary, advanced and mobile, as well as intensified immunization activities. This vaccine will be administered intramuscularly as of the 14th week, at the same time as the OPV3, PCV13-3 and DTC-HepB-Hib3, in the left arm deltoid region. ,. Children who are late with respect to the ideal vaccine calendar should receive one dose of IPV at their first vaccination after the age of 14 weeks, as well as all those aged less than one year who come for measles immunization.

**3.2. National coordination mechanism to facilitate the introduction of the vaccine**

The briefing of the primary participants, advocacy among political executives are part of the activities to be carried out during the month of January 2015. The national immunization policy document that will be prepared in late 2014, emphasizing the new immunization schedule, and immunization practices related to the IPV vaccine. In this regard, teaching material as well as the management tools will be updated for training health care providers. The communication plan and IEC supports will be developed in order to promote Community awareness. This activity will be carried out during the 1st quarter of 2015. The media awareness (broadcast of audiovisual spots) will begin at least fifteen days prior to the date specified for the introduction, i.e. approximately March 15, 2015

During the first few months of the introduction (April, May, June 2015), integrated supervisions will be carried out at all levels (central towards the regions and from the regions to the health areas). A supervision will also be carried out before introduction of the IPV to show any gaps that must be remedied.

The ICC is the highest coordinating agency that will direct and supervise this introduction. At each level, a steering committee will be put into place for local coordination. During the entire IPV introduction process, the Minister of Health, through the Immunization Service, will coordinate with its partners (WHO, UNICEF, the Togo Plan) all activities to be carried out through the monitoring.

Central supervisors from the Central services and departments of the Ministry of Health, such as the Department of the Laboratory Pharmacy and technical equipment, the Epidemiology and EPI Division, the Department of Family Health (DSF); the National Information and Communication Service. These central supervisors also come from other ministries that are involved and from technical and financial partners of the EPI.

 The regional and district supervisors come from regional supervisor teams; the district executive teams and all stakeholders including the development partners at the local level are involved in supervision of the implementation of the IPV introduction plan.

**3.3 Economic accessibility and financial sustainability of the vaccine**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | Expense category | Total(in CFA francs) | Total in USD | Gov't. | GAVI | WHO | UNICEF |
| **1** | **Program coordination and management** | **4761350** | **10131** |  | **10131** |  |  |
| 2 | Planning and preparations | 8350991 | 17768 |   | 17768 |   |   |
| 3 | Trainings and meetings | 42878040 | 91230 |   | 91230 |   |   |
| 4 | Social mobilization, information/education/communication (IEC), advocacy: | 17700000 | 37660 |   | 0 | 0 | 37660 |
| 5 | Reproduction of materials | 1600000 | 3404 |   |   | 0 | 3404 |
| 6 | Daily indemnification granted to employees and volunteers  | 7387435 | 15718 | 15718 | 0 | 0 | 0 |
| 7 | Cold Chain Equipment & Maintenance | 14080000 | 29957 |   | 29957 |   |   |
| 8 | Vehicles and Transportation | 21000000 | 44681 |   | 44681 |   |   |
| 9 | Supplies for immunization sessions;  | 14300000 | 30426 | 30426 |   |   |   |
| 10 | Waste management | 8207400 | 17463 | 17463 | 0 |   |   |
|   |   | 7500000 | 15957 | 15957 |   |   |   |
| 11 | AEFI monitoring, case by case monitoring and follow-up  | 11055000 | 23521 | 17113 | 6409 |   |   |
| 12 | Evaluation: | 5000000 | 10638 |   |   | 10638 |   |
| 13 | Technical assistance: | 0 | 0 |   |   | 0 | 0 |
|  | **TOTAL** | **156320216** | **332596** | **80719** | **200175** | **10638** | **41064** |

The total budget for introduction of the IPV is approximately 332,596 US Dollars, i.e. 200,175 US Dollars from GAVI and 80,719 US Dollars from the Togo Government and 51,702 USD from the other Government partners.

The amount allocated by GAVI for the introduction of the IPV in the Togo EPI is two hundred three thousand US Dollars (203,000 USD) based on an exchange rate of 1 USD to 470 CFA francs. This amount will sufficiently cover the activities necessary for introduction of the IPV in particular training of caregivers and social mobilization. The other activities that are not covered will be covered by the State and the other partners (WHO and UNICEF). This amount does not include the cost of purchasing the vaccine.

The cost of the vaccines is supported in the first year by GAVI. In the subsequent years, the Togo government will co-finance the IPV from the national budget, and this financing will fall in the context of budget allocations for the co-financing of new vaccines.

**3.4 Overview of cold chain capacity at the districts level and at the regional and national levels**

**In preparation for the introductions of the new vaccines mentioned above, the implementation of the 2012 to 2015 cold chain improvement plan has allowed an improvement in meeting equipment needs, in accordance with WHO/UNICEF standards.**

**From the post-introduction assessments, it has been shown that the introduction of these vaccines has contributed to an overall improvement in the various areas of the program, such as vaccine storage capacity. It has also highlighted weaknesses, such as the outdated and poor operating condition of the cold chain equipment, the absence of a cold chain maintenance plan at all levels, and low storage capacity at ambient temperature.**

**With regard to the regions, given the quarterly resupply frequency, the refrigerated storage capacity is sufficient to accommodate all vaccines through 2015, however the cold chambers of the regional warehouses are outdated (> 20 years), but they are still functional.**

* **The gradual replacement of electrical equipment with solar equipment is planned, starting in the 2nd half of 2014.**

**The following table presents the status of cold chain equipment needs by level.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Needs** | **Level**  | **Positive cold chambers** | **Negative cold chambers** | **Solar refrigerators**  | **Electrical refrigerators**  | **Freezer** |
| **Central**  | **03** | **1** | **0** | **0** | **2** |
| **Regional**  | **4** | **0** | **0** | **10** | **3** |
| **District** | **0** | **0** | **0** | **30** |  |
| **Health Centers**  | **0** | **0** | **20** | **21** | **0** |
| **Total** | **6** | **1** | **20** | **61** | **5** |
| **Programs in 2014**  | **Gov’t** | **0** | **0** | **0** | **0** | **0** |
| **UNICEF** | **0** | **0** | **0** | **0** | **0** |
| **WHO** | **0** | **0** | **0** | **0** | **0** |
| **GAVI RSS** | **2** | **0** | **0** | **10** | **0** |
| **Rotary** | **0** | **0** | **0** | **0** | **0** |
| **Total** | **2** | **0** | **0** | **10** | **0** |
| **Gap** |  | **4** | **1** | **20** | **51** | **5** |

**The current status of Cold Chain equipment and its ability to accommodate the introduction of new vaccines over the next two years is as follows:**

***At the central level***

* **Three positive cold chambers at Lomé, two with gross volume of 40 m3 installed in 2007 and one with a gross volume of 12 m3 (decreased), for a total net storage capacity of 24,860 liters;**
* **one negative cold chamber with a gross volume of 20 m3 installed in 2007, for a net storage capacity of 5,714 liters;**
* **6 FC W 300-type freezers, all in good operating conditions;**

**Maintenance of cold chain equipment is provided by a technician assigned to the Epidemiology Division since 2009. Aside from these chambers, the Program can use the cold chamber of CAMEG (Procurement Center for Essential and Generic Medications). The current capacity of the central vaccine warehouse will be sufficient for the introduction of the IPV through the end of 2015.**

**In contrast, for the various campaigns planned in 2014 (JNVP, human papilloma virus vaccination and meningococcal A vaccination), the positive storage capacity is insufficient, with a shortfall of 14,742 liters in order to cover positive storage capacity requirements in 2014 (see table below).**

**This shortfall may be offset either by the installation in 2014 of a new cold chamber with a total gross capacity of 40 m3 approved by the ICC. [sic] The cost related to the purchase and installation of this cold chamber was financed by the PCV13 and Rotavirus vaccine introduction funds, and procurement is underway.**

**Taking into consideration the arguments mentioned above, the existing positive capacities are sufficient to cover the current and future needs of the central level, through 2015.**

***The District Level***

**All vaccines are stored at positive temperature (+2 to +8 °C) in the district warehouses and at health care facilities. Freezers are used to prepare ice packs. The updating of data after the inventory-evaluation of cold chain storage capacity needs for the district storage facilities shows a net improvement with the conversion to the Pentavalent vaccine in 10-dose vials.**

**No district has a positive storage capacity shortfall in 2014, in spite of the introduction this year of the pneumococcal vaccine and the rotavirus vaccine, both of which are single-dose vaccines.**

**A maintenance system involving private refrigeration technicians was put in place through the implementation of cold chain maintenance plans (preventive and corrective), electrical generators and buildings at all levels. Maintenance logs or records will be used in this regard for the purpose of monitoring at the operational level.**

**Expenses for electricity and running water for all public health care facilities are the responsibility of the State and are paid directly out of the operating budget;**

**Cold chain equipment maintenance is provided by the State.**

**3.5 Waste management and injection safety**

* **Describe activities related to injection safety and vaccine waste management, and indicate whether any changes are necessary to ensure that the introduction of this new vaccine will comply with national policies; determine how and when these changes will take place, as applicable.**

**At the program level, the injection safety policy has been prepared and distributed since 2002. This policy provides guidelines in the following domains:**

* **The systematic use of auto-destruct syringes for each injection;**
* **The collection of used syringes and needles in safety boxes;**
* **The destruction of full safety boxes by incineration and by burying the burnt remains in a two-stage pit at health care facilities that do not have an incinerator.**

 **Regions and districts have been supplied with vaccines and injection supplies through bundling since 2004, and all of the vaccination centers systematically use auto-destruct syringes and safety boxes for all vaccination injections in order to provide safe vaccination services.**

**At present, each district has at least one (1) functional De Monfort incinerator for the safe destruction of waste from immunization and a waste management plan since 2002. Full sharps boxes are transported to the (x) functional incineration site(s) in each district.**

**Safe injection practice and management of waste from immunizations have clearly improved in the country.**

**Currently, 12 incinerators require rehabilitation and 105 new incinerators are required.**

**Togo is supplied with vaccines and injection supplies through UNICEF alone. Thus, all the equipment supplied is prequalified by WHO.**

**3.6 Training and supervision of health care personnel**

The central, regional and district EPI teams periodically receive training in vaccine management, cold chain management and supervision. The introduction of the rotavirus and PCV13 vaccines last 19 June allowed skills to be improved for care providers in management, preservation and the resupply pace for vaccines at each level.

The introduction of the IPV will present an additional opportunity for the EPI to brief/train the district teams, care providers at the health care facility level, and clinicians regarding the new vaccine before it is introduced.

In the context of the introduction of the IPV, additional trickle-down training will be given to all participants in vaccination. The Central level will train the supervisory teams for the regions and districts, which in turn will train the operational care providers. Training modules covering all aspects of the IPV, both technical as well as social mobilization, will be prepared for supervisors/trainers, care providers and mobilization agents.

All these documents and the EPI materials (vaccine order forms, vaccine inventory management sheets, vaccination log, checklist, vaccination card, monthly activity report, etc.) were revised to this end and were validated for the introduction of the PCV13 and Rotavirus vaccines.

The aspects that will be covered during these trainings are communication, inventory management, vaccine storage, reconstitution and administration of vaccines, waste management and AEFI management. Interactive methods will be used during trainings, in particular through brainstorming, presentations followed by discussions, demonstrations and role playing. The opportunity will be taken to cover certain general aspects of the EPI.

Additional needs not included in the submission and that may affect the introduction of the IPV are overall covered by the State and the other partners working on the EPI.

The existing training manuals will be adapted, reviewed and distributed at the various trainings, after being reproduced. Audiovisual materials will be used.

During the training, there will be a pre-test and a post-test to determine the level of knowledge of the participants, but also to measure the impact of the training on participants' knowledge.

The training will be carried out on a cascading basis. The training of trainers will take place at the central level, and in turn they will go to the various regions to train the regional and district teams, under the supervision of the central team. Then the regional and district levels will go to train the teams from the various health care facilities. The methodology will be adult learning based on a participative method, supported by group work and presentations to the full assembly.

The vaccine providers will be briefed regarding injection safety, with a practical demonstration. The awareness team will be trained in general regarding communications and regarding AEFIs in particular. Integrated, formative supervision will be carried out before, during and after the introduction of the IPV. Supervision before introduction must verify the level of mastery of the introduction of previous new vaccines, storage capacity and social mobilization. Supervision during introduction will demonstrate the level of progress of IPV introduction activities, mastery of vaccine management, injections, waste management and social mobilization.

Supervision after introduction of the IPV will target activities supervised during the introduction, vaccine management in general and the routine immunization operations. Data analysis will allow any inconsistencies to be detected and the provision of feedback.

**3.7 Risks and challenges**

The challenges encountered in the implementation of the immunization program are:

* Insufficient funding of the RED, particularly from the national level (State and other national funds), with the consequence of decreasing coverage in certain districts due to the reduction of advanced strategies: community financing has allowed these obstacles to be overcome to a certain extent however the districts have found major funding problems with the RED approach, with at times the consequence of certain personnel becoming discouraged;
* Insufficient qualified human resources, particularly at the operational level (USP): immunization campaigns for polio were opportunities to improve the capacity of existing human resources; An improvement in collaboration with private structures must be noted. However a plan for improving capacities is planned [for] the insufficient CDF equipment and logistics, ongoing advocacy for which among institutions (JICA, Rotary, UNICEF, Etc.) is carried out continually, to implement the cold chain improvement plan and logistics for 2012-2015.
* The fear of personnel to carry out several injections in the fourteenth week on the same date in the same thigh of the child may present a risk/challenge for this introduction.
* insufficient computer equipment for processing data at the central and regional levels.
* The appearance of AEFIs may constitute a risk for the acceptance of the program, the training of care-givers regarding treatment and monitoring of AEFI may minimize this risk.
* the spread of false rumors is a risk affecting acceptance that must be combatted by promoting awareness among the population;

In order to overcome all these challenges, the ICC will be informed to conduct advocacy activities with the government and the technical and financial partners, and in order to mobilize the necessary resources.

|  |  |  |
| --- | --- | --- |
| Risk/Challenge | Comments | Measures taken |
| Insufficient financial resources | In spite of funding support from GAVI, certain needs related to common activities of the program will lack funding | Improving advocacy with the government and technical and financial partners, and mobilizing the necessary resources. |
| Insufficient human resources | The shortage of human resources in health is a real challenge in Togo and has harmful repercussions on the EPI, and it may impact the introduction of the IPV | Conducting advocacy to assign human resources to the EPI |
| Insufficient storage capacity for vaccines and for transport means | The positive storage capacity is insufficient at the district and health center levels  | While awaiting the implementation of the plan to improve storage capacities for the GAVI/RSS Plan, purchase equipment for highly affected centers and districts.  |
| Insufficient computer equipment:  | Immunization data managers suffer from a lack of equipment for entering and processing data. | Procure computers for central level data managers |
| Appearance of AEFIs | The occurrence of AEFI cases may affect acceptance by the population  | Promote awareness of the population regarding any AEFI cases. |
| Personnel’s and parents’ fear about multiple injections | High number of injections to be given may create fear of the vaccination. | Reassure personnel during training and make parents aware of the harmlessness of vaccine injections. |

**4. Situational analysis of the immunization program,**

**4.1 Overall context of the country**

1. **Geographic and demographic situation**

**Located in West Africa, between 6º and 11º North latitude and 0º and 2º East longitude from the Grenwich meridian, Togo has a surface area of 56,600 Km2. It is bordered by Benin to the East, Ghana to the West, Burkina Faso to the North and the Atlantic Ocean to the South.**

**The country has a tropical climate, subdivided into two major zones: one zone in the South that is Sudanian with vast productive stretches of land, and one Sahelian zone covering the northern half, characterized by a dearth of fertile land. The vegetation is characterized by a grassy savanna in the north, a forested savanna in the center and south and forests in the mountainous regions. The hot and humid climate of Togo is favorable to the proliferation of illness vectors and in part it is responsible for the national epidemiological profile dominated by infectious and parasitic diseases. The principal waterways are the Oti and Mono.**

**The population of Togo is estimated (2010 survey) to be 51% women and 49% men. The proportion of the total population under 15 years old is estimated at 42%, those under five years old at 14.6 % and those under one-year-old at 3.08%.**

**On an administrative level, Law No. 81-8 dated June 23, 1981 regarding territorial organization broke the country down into 5 economic regions: the Savanes Region, the Kara Region, the Central Region, the Plateaux Region and the Maritime Region. Each economic region is subdivided into prefectures. There are 35 prefectures, subdivided into cantons.**

**On a political level, Togo has been independent since 27 April 1960. At the beginning of the 1990s it underwent a social-political crisis which had serious social-economic consequences for the population. According to Togo's GDP committee, the proportion of the State's general budget assigned to Healthcare was 6.9% in 2008.**

**Life expectancy at birth is 49 years according to the WorldBank report of 1999. According to the EDST II survey in 1998, the maternal mortality rate is 478 per 100,000 live births; the infant mortality rate is 80 per 1000 live births (78 per 1000 per the MICS 2010) and the infant-youth mortality rate is 146 per thousand (123 per 1000 per the MICS 2010). The birth rate is estimated to be 3.25%. The fertility rate is 5.4% in rural environments and 3.3% in urban environments. The annual natural growth is of order 2.46% with an average density of 105 inhabitants per square kilometer, unequally distributed. This population is mostly rural (63%) in spite of fast urbanisation in progress (5.2% per year).**

**Demographic data for Togo**

|  |  |
| --- | --- |
| **Health regions** | **6** |
| **Health districts** | **40** |
| **Population in 2014** | **6,809,000** |
| **Annual growth rate** | **2.46%** |
| **Birth rate** | **3.25%** |
| **Infant-youth mortality rate** | **76/1000** |
| **Adolescent girls (9-13 years)**  | **6.94%** |
| **Maternal mortality rate** | **478 per 100,000** |
| **Women of child-bearing age**  | **22.5%** |

**Source: Statistics Division, RGPH 4 2010**

## The Health System

***Organization of the Health System***

* 1. *Health Pyramid*

From a medical point of view, Togo has 6 health regions. The most common diseases are malaria, acute respiratory infections and diarrhea. The health system is a pyramid with three levels: local, regional and central levels as shown in the diagram below:



The health care system in Togo is based on the implementation of a Primary Health Care (PHC) policy through the establishment of health districts. The Bamako Initiative (IB) was adopted by the country in order to boost PHC.

The health care system comprises a double organizational pyramid, administrative and technical. It is directed by the Ministry of Health. It comprises five central departments including primary health care to which the Epidemiology Division is attached; this division assures the national coordination of vaccination activities.

Away from the center, Togo has six healthcare regions: Lomé-commune, Maritime, Plateaux, Central, Kara and Savanes. These regions are sub-divided into 40 health districts. In the health districts and regions. The primary technical health care structures include 700 local care units, 34 district hospitals, including 8 private hospitals, six (6) Regional Hospital Centers (CHR) and three (3) University Hospital Centers (CHU) and one specialized hospital.

**The operation of health care facilities is based on the recovery of costs and the system of illness risk insurance does not at present cover the entire population. This reduces access by the population to care, however immunization is free.**

These are: the Community Health Units (CHUs), virtual structures that are managed by the Community Health Workers, serving as the first contact between a sick person and the health facilities. Each community health agent covers more or less 50 families, for which he is responsible for their care (16 essential family practices), defined in advance in the grassroots interventions document. The government is in the process of studying the possibility of paying the community agents by intervention.

The private health care facilities are undergoing expansion, but in particular they are concentrated in the large cities. The denominational private health sector has always been a partner of choice.

The traditional sector remains attractive both because of its geographical accessibility and affordability and because of its cultural acceptability. Those practicing in this sector are becoming increasingly numerous and organized. The National Assembly approved a law organizing traditional medicine in 2001. Immunization is part of the minimum package of activities of the various health services.

##  Routine EPI

The Expanded Program for Immunization (EPI) started in Togo in 1980, and its implementation started in the Savannah region, the Northern region of the country. The EIP was gradually extended to other regions to cover all national territory in 1984.

The Epidemiology Division (DEPI) provides national coordination of the Expanded Program for Immunization. The Epidemiology Division (DEPI) is one of the divisions of the Directorate of Primary Health Care Facilities (DSSP). It was created by Decree No. 11/91/MSP dated March 27, 1991, to replace the major epidemics unit. Its primary mission is to prevent and respond to epidemics that threaten the health of populations in Togo. It has 3 technical departments:

* + - * The immunisation department;
			* The communicable diseases department;
			* The non-communicable diseases department.

The regional health directors and prefectoral health directors are the supervisors of the EIP, respectively, at the regional and prefectoral levels. The monitoring of activities of the EIP in the regions and districts is provided by the focal points. At the peripheral level, more specifically in health facilities, the minimum package of primary health care activities includes vaccination activities.  **The EPI is implemented through:**

* systematic immunization of children from 0 to 11 months against nine (9) deadly childhood diseases (tuberculosis, tetanus, diphtheria, whooping cough, poliomyelitis, measles, yellow fever, and since July 2008 against Hepatitis B and Haemophilus influenzae b);
* systematic immunisation of pregnant women against maternal and neonatal tetanus;
* the monitoring of diseases avoidable by immunization;
* and supplemental immunization activities, covering VAR, OPV, MenA and HPV.

The minimum ages and periods recommended for the various vaccinations are presented in the following table:

Table I: Vaccine schedule of the routine Expanded Immunisation Program in Togo

|  |  |  |
| --- | --- | --- |
| Contacts | Ages/periods | Antigens |
| Immunisation of children 0-11 months old |
| 1 | Birth | BCG, polio 0 |
| 2 | 6 weeks | DTC-HepB-Hib1, polio 1, pneumo1, Rota1 |
| 3 | 10 weeks | DTC-HepB-Hib2, polio 2, Pneumo2, Rota2 |
| 4 | 14 weeks | DTC-HepB-Hib3, polio 3, Pneumo3,  |
| 5 | 9 month | VAR, VAA, Combined meningitis vaccine  |
| Tetanus immunisation of pregnant women |
| 1 | On first contact | TTV1 |
| 2 | 4 weeks after VAT1 | TTV2 |
| 3 | 6 months after TTV2 | TTV3 |
| 4 | 1 year after TTV3 | VAT4 |
| 5 | 1 year after VAT4 | TTV5 |

The implementation of the EIP mobilizes significant resources provided by partners and the Government. The Interagency Coordination Committee (ICC) is the entity responsible for coordinating intervention by the various partners in order to strengthen the program. It comprises representatives of the Ministry of Health, the Ministry of the Economy, the Ministry of Development and the partners in the EPI.

### Program Objectives

The purpose of the EPI is immunization of children 0 to 11 months of age against tuberculosis, diphtheria, tetanus, whooping cough, poliomyelitis, measles, yellow fever, hepatitis B and Haemophilus influenzae b and pregnant women and women of child bearing age (12-45) years against tetanus in order to reduce the incidence and mortality of these diseases. More specifically:

* To eradicate poliomyelitis,
* Eliminate maternal and neonatal tetanus,
* Control measles and vitamin A deficiency,
* Control other immunization avoidable diseases (tuberculosis, diphtheria, pertussis, yellow fever, hepatitis B, haemophilus influenzae B).

The target populations for routine vaccination and supplemental activities are derived from the following demographic indicators:

*Table 2: Proportion of various EPI target groups*

|  |  |  |
| --- | --- | --- |
| Group | **Proportion of the Population** | **Vaccination Strategy** |
| Children aged 0-11 months | 4.15% | Routine EPI |
| Children aged 0-59 months | 14.59% | National Immunization Day  |
| Children aged 9-59 months | 13% | Measles control  |
| Children 6 months – 14 years of age | 42% | Control of yellow fever |
| Children aged 6-59 months  | 14% | Prevention of vitamin A deficiency |
| Pregnant women | 3.26% | Elimination of MNT |
| Women of Child-Bearing Age | 23.40% | Elimination of MNT |

**Source: DISER 2014**

### Data on vaccine coverage and incidence of EPI targeted diseases

### Progress of EPI Indicators

Since 2002, Togo has chosen the “Reach Every District” approach to strengthen the routine EPI in Togo with the support of GAVI. This fourfold approach (advanced strategy, monitoring, supervision and communication) started in 2002, with 23 pilot districts chosen based on their DTC3 coverage of less than 50% and their target population of the routine EPI in excess of 5000 children. Flush with the encouraging results obtained, the approach was extended to all of the 35 health districts starting in 2003. With funding from GAVI and the support of other partners (WHO, UNICEF, Rotary International, Plan-Togo), this allowed the immunization services to increase vaccine coverage since 2001, as is shown in Table 4 below.

**Table IV: Evolution of vaccine coverage between 2001-2013 (in percent)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Years | BCG | DTC3[[1]](#footnote-1) | OPV3 | Measles Vaccine | YFV | TTV2 and + |
| 2001 | 59 | 43 | 44 | 33 | - | 40 |
| 2002 | 81 | 59 | 59 | 48 | - | 38 |
| 2003 | 89 | 75 | 75 | 71 | - | 56 |
| 2004 | 91 | 71 | 71 | 70 | - | 61 |
| 2005 | 92 | 82 | 82 | 70 | 70 | 70 |
| 2006 | 96 | 87 | 87 | 83 | 83 | 80 |
| 2007 | 91 | 88 | 78 | 80 | 80 | 85 |
| 2008 | 92 | 89 | 88 | 77 | 77 | 85 |
| 2009 | 91 | 89 | 89 | 84 | 84 | 82 |
| 2010 | 94 | 92 | 92 | 84 | 84 | 85 |
| 2011 | 90 | 92 | 92 | 85 | 85 | 86 |
| 2012 | 90 | 90 | 90 | 85 | 85 | 82 |
| 2013 | 84 | 87 | 76 | 82 | 83 | 79 |

 **Progress of target diseases of the EPI from 2001 through 2013.**

Togo has developed a system for monitoring diseases targeted by the EPI through the local monitoring networks. The early warning system regularly provides epidemiological information on AFP, measles, yellow fever and maternal and neonatal tetanus.

The following table shows the progress of cases of EPI target diseases from 2001 through 2013, according to data provided by the target disease monitoring system.

**Table 5: Evolution of EPI target diseases with the number of cases from 2001 through 2012**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Years | AFP | Whooping Cough | Measles | Neonatal tetanus | Yellow fever |
| 2001 | 89 | 628 | 1833 | 29 | 0 |
| 2002 | 114 | 177 | 363 (23 confirmed) | 42 | 0 |
| 2003 | 91 (1 case confirmed) | 71 | 295 (16 confirmed) | 28 | 391 reported(0 confirmed) |
| 2004 | 64 | 88 | 375 (61 confirmed) | 29 | 386 cases (0 confirmed) |
| 2005 | 54 | 90 | 173 (28 confirmed) | 19  | 281 cases(0 confirmed) |
| 2006 | 73 | 71 | 165 (25 confirmed)  | 26 | 288 cases(3 confirmed) |
| 2007 | 62 | 20 | 171 (8 confirmed)  | 17 | 454 cases(3 confirmed) |
| 2008 | 77 (3 cases confirmed) | 83 | 189 (51 confirmed) | 3 | 341 cases(2 confirmed) |
| 2009 | 100 (6 cases confirmed) | 72 | 820 (162 confirmed) | 17 | 374 cases(3 questionable per the National Reference Laboratory) |
| 2010  | 60 | 53 | 692 (120 confirmed) | 28 | 425 cases(0 confirmed) |
| 2011 | 73 | 34 | 415 (182 confirmed) |  28 | 356 |
| 2012 | 70 | 32 | 451(238 confirmed) |  20 | 458 (03 confirmed) |
| 2013 | 151 | 30 | 564 (286 cases confirmed) | 26 | 476 |

The mass campaign against yellow fever took place in 2007 and covered the entire country. Since 2008, confirmed cases of yellow fever are vaccine-derived cases. Togo was one of the countries having eliminated neonatal tetanus, according to a survey conducted by LQAS in September 2005.

 Training of Personnel

Trainings for the health care personnel involved in the EPI were organized with the financial support of partners in the area of EPI management in order to improve skills. This training involved:

* In 2004, 41 supervisors and regional and prefectoral representatives of the EPI as well as 305 vaccinator agents of the USPs
* In 2006, 170 vaccinators and district EPI representatives
* *In 2009, 29 agents (12 new chief district physicians, 2 physicians in charge of health facilities, 12 new district EPI focal points, 1 regional vaccine management representative and 2 agents responsible for vaccine management in the DEPI cold chamber).*

EPI management training involves the cold chain, management of vaccines and supplies, vaccination safety, supervision, monitoring and communication.

Training of representatives in EPI management was also organized locally in the regions in 2010 (central region) and 2011 (Plateaux Region) and in certain districts.

A vaccination guide and also data sheets containing directives on routine vaccinations are available in all the vaccination centers where they are used as reference tools for the supervisors and vaccinators.

*In the context of strengthening the EPI monitoring system, 18 district EPI representatives, 6 regional EPI representatives and 5 vaccine and data managers from the DEPI were trained in computerized management of vaccines, cold chain and immunization data in 2009.*

### Data Management System

In 2004, Togo underwent a successful vaccination data quality audit (correction factor: 0.893). In order to strengthen the immunization services notification system, new data collection media for vaccine management (checklist) and for consumables management (stock sheet, inventory sheet, purchase orders and delivery tickets) were prepared and distributed in 2005 and 2008, for the introduction of the yellow fever vaccine in December 2004 and the Pentavalent vaccine in 2008 in the routine EPI.

In order to standardize the data collection system at the operational level, the document "User guide for EPI management materials – Togo” was prepared and distributed in 2005 and updated in 2008. This document contains guidelines regarding filling out data collection sheets for routine immunization and management of vaccines and supplies (checklist, monthly report sheet, log, stock sheets, inventory sheets, purchase orders and delivery tickets, temperature sheet) and it was the subject of a briefing given to all regional and prefectoral representatives of the EPI.

The monitoring is done monthly in the PCU and districts. Vaccination and vaccine and consumable management data for the PCU are consolidated at the district level and sent to the region and the central level each month

**Vaccine management.**

In July 20004, a computerized tool for managing vaccines and supplies in the EPI was installed in the Epidemiology Division, thanks to support from the FED/ARIVA Project. Its use has provided for a better tracking of stocks centrally and regionally Since 2006, the central level has been using the DVD-MTV and the SMT for the management of vaccination data and vaccine stock. Following the training of the focal points since 2009, these tools have also been used by Regional and District Management.

For several years now, the monthly report sheet has been used in the field for collecting and tracking vaccine and consumable management data. In support of the introduction of the PVC13 and Rotavirus vaccines in the routine EPI in June 2014, the forms for collection of immunization and surveillance data were revised, taking into consideration the IPV and they were put in place at all levels of the health system to strengthen the management of vaccines and consumables: stock sheets, inventory sheets, purchase orders and delivery tickets.

The open vial policy was implemented. The loss rate for each antigen is calculated monthly by PCU, district and region and is part of the essential indicators which are systematically analyzed during monthly meetings of station chief nurses in each district. Since 2004, the vaccine wastage rates are below the maximum tolerated by international standards accepted by the WHO and this is the case for all antigens.

As a reminder, the international standards indicate a maximum loss rate of 50% for BCG, 5% for DTP-HepB-HIV at 25% for the other antigens (measles, yellow fever and tetanus).

**4.2 Geographic, economic, political, cultural, gender-specific and social obstacles to immunization**

Certain villages housing populations living in the marshy soils are not accessible during the rainy period due to floods. These villages were surveyed throughout the country, and actions in favor of these populations were taken to mitigate risks during these floods.

### Economic and social situation

La situation économique nationale est marquée par une croissance économique de plus en plus forte (+3,1% en moyenne entre 2006 et 2010 contre 1,1% entre 1991 et 2005)fn, résultats des efforts que réalise le gouvernement en matière des réformes économiques et sociales depuis 2008.Ainsi, les réformes entreprises ont permis d’atteindre en novembre 2008 le point de décision de l’Initiative en faveur des Pays Pauvres Très Endettés (PPTE) et en décembre 2010 le point d’achèvement de l’Initiative PPTE et de voir l’annulation de 82% de la dette publique extérieure du Togo. The national economic situation was marked by increasingly strong economic growth (+3.1% on average from 2006 through 2010, compared to 1.1% from 1991 through 2005)[[2]](#footnote-2), as the result of efforts by the government for economic and social reforms since 2008. Thus, the reforms undertaken allowed decision point to be reached in 2008 for the Highly Indebted Poor Countries (HIPC) initiative and in December 2010 the end point of the HIPC Initiative and the cancellation of 82% of the foreign public debt of Togo. In terms of macroeconomic indicators, the growth of the GDP reached 3.1% in 2009 and 3.7% in 2010, in spite of a difficult international environment. The economic growth rate of 4.0% achieved in 2010[[3]](#footnote-3) (higher than the demographic growth rate of 2.58% the same year[[4]](#footnote-4)) was an encouraging sign of the economic recovery. However this growth, in spite of its significant increase, was still not sufficient to significantly reduce poverty[[5]](#footnote-5) and overcome the challenge of the MDOs, in particular the rights to health, education and food.

The trends observed between 1980 and 2006 had shown an increase in poverty among the Togo population (poverty rate increasing from 32% to 61.7% during the period[[6]](#footnote-6)); primarily rural poverty, more marked in the central, Kara and Savannah regions, which was the poorest region of Togo.En outre, l’analyse des niveaux de la mortalité entre les différents groupes économiques du Togo montre que la mortalité des enfants des 20 % des ménages les plus riches est presque de moitié moindre que celle des 20 % des ménages les plus pauvres.

**Table: Trends in national coverage during the past two years**

|  |  |  |  |
| --- | --- | --- | --- |
| **Vaccines**  | **Vaccines used**  | **Target Population** | **Coverage determined (attached formula)** |
| **2013** | **2012** | **Most recent year: 2013** | **Previous year: 2012** |
| **BCG** | **BCG** | **297638** |  | **84** | **91** |
| **OPV3** | **OPVt** | **274489** |  | **76** | **91** |
| **DTC1 / Penta1** | **Pentavalent** | **274489** |  | **95** | **95** |
| **DTC3 / Penta3** | **Pentavalent** | **274489** |  | **87** | **92** |
| **HPV1** | **N/A** |  |  | **N/A** | **N/A** |
| **HPV3** | **N/A** |  |  | **N/A** | **N/A** |
| **Measles 1** | **Rouvax** | **274489** |  | **82** | **85** |
| **Measles 2** | **N/A** |  |  | **N/A** | **N/A** |
| **PCV1** | **PCV-13** | **N/A** |  | **N/A** | **N/A** |
| **PCV3** | **PCV-13** | **N/A** |  | **N/A** | **N/A** |
| **Rota 1** | **N/A** | **N/A** |  | **N/A** | **N/A** |
| **Rota 2**  | **N/A** | **N/A** |  | **N/A** | **N/A** |

|  |  |
| --- | --- |
| Type of obstacles | description |
| Geographic: | Difficult access zones (islands, mountains, etc.) surveyed in all regions without weighting. |
| Economic | High burden of direct health care expenses of households (51% of health expenses through direct payment identified as a significant factor in low financial accessibility to care of the population and therefore the under-utilization of services); Insufficient Government budget allocated to the Ministry of Health (the **Government health budget ratio is** approximately 6%, which represents 31.6% of the budgeted expenses of the Ministry of Health |
| Socio-cultural | Existence of certain small religious groups that are opposed to immunization. |

**4.3. Conclusions of recent program evaluations**

The monitoring of recommendations for the evaluation post Pentavalent introduction (DTC-HepB-Hib) conducted in October 2009 allowed preparations for the introduction of other new vaccines to be improved by:

* sharing the introduction plan at the regional and district levels;
* making the training documents available at all levels;
* respecting the time allocated for training and various demonstrations;
* conducting close follow-up of trained personnel.

The implementation of the EVMA conducted has allowed improvement of the vaccine supply chain management.

* The country benefitted from the Effective Vaccine Management Assessment (EVMA) in April 2011 and from a review of the EPI in 2002, with strong points and points for improvement.
* The recommendations resulting from these assessments were integrated into the Annual Work Plan of the EPI.
* The implementation of the planned activities will contribute to improvement of the EPI.

The implementation of the recommendations drawn from recent assessments was faced with constraints in terms of resources:

* the 2013 EPI activity report notes a low mobilization of resources by the State in favor of routine immunization
* insufficient financing of immunization activities, in particular with regard to C4D components and active monitoring.

Reprogrammed funds for strengthening of the health system will be contributed to finance certain areas of the program such as logistics, services provided and EPI communication.

In Togo, the experience with the introduction of new vaccines shows the importance of emphasizing the following points:

* to establish a detailed schedule of introductory activities at the regional and district levels.
* to use the opportunity of pre-introduction trainings to refresh vendors as to the management of the cold chain and vaccines in all the districts;
* making samples of the new vaccine available to health care providers during training;
* to closely follow the service providers after training through training supervision, in order to continue to strengthen the skills of personnel with regard to the new vaccine;
* the need to join mass communication with increased continuous nearby communication and also advocacy at all levels;
* to ensure that all health districts introduce the new vaccine at the same time;
* Strengthening the implementation of advanced strategy immunization in the health areas;
* to strengthen the AEPI management system and the waste management system.

Furthermore, recent experience with the introduction of the IPV in several developing countries shows the importance of emphasizing:

* collaboration at all stages of planning and implementation of the project by the various ministries involved,
* implementation of a rumor management system,
* promotion of awareness among community and religious leaders, local government officials and civil society organizations (NGOs, Associations).

**4.4 Management of inventories**

The management of inventories is carried out at the central and regional levels thanks to the computerized inventory management tool developed by the WHO and manual records. The district level uses the District Vaccine Data Management Tool (DVDMT).

Monitoring the use of vaccines introduced at all levels since 2004 allowed the wastage rates per vaccine to be calculated; the corresponding data are indicated in the table below.

Vaccines and injection equipment are transported to the regions over land and by two routes. The Lomé – Tsévié- Atakpamé route for the Maritime and Plateaux regions and the Lomé Sokodé-Kara and Dapaong route for the Central, Kara and Savannah regions. The EPI since 2007 has had a long frame truck to make deliveries to the five health regions.

The pace of resupply for the regions is quarterly. The districts are resupplied monthly at the regional level while health areas are resupplied at the district level with the same frequency. A reserve inventory equivalent to 3 months’ consumption is set for each routine vaccine at the central level.

The vaccine delivery operations are supported by State funds. The introduction of the IPV will not modify the delivery schedule and will not incur additional costs.

**5. Monitoring - evaluation**

**5.1 Updating monitoring instruments**

Management tools (Checklists/Records, Immunization records, immunization card, Monthly Activity Report, inventory sheets, inventory record) as well as the EPI standards document will be revised in order to include all aspects related to the new vaccine. Training modules will also be prepared for trainings/refresher training of health care providers and communicators then distributed to all levels before the launch of the vaccine.

Monitoring/evaluation focused on increasing vaccine coverage, a decrease in the specific dropout rate, maintaining an acceptable vaccine wastage rate, ending interruptions in vaccine and supply availability, identifying the number of children missed will be carried out through coordination meetings and self-evaluations that will be organized once per week at the central level. Monthly data review meetings, quarterly monitoring meetings with the regions to evaluate performance levels and the quality of data will also be organized. A post-introduction assessment will be carried out 6 months after introduction.

The Togo constitution in its preamble states that human beings, without distinction as to race, religion, sex or belief has inalienable, sacred rights.

Based on this legal provision, the services do not differentiate between men and women in terms of health care. The immunization services are accessible to all children without distinction as to sex.

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The results of the EDS-MICS 2011 show that there is practically no discrepancy between girls and boys (54% vs. 52%) in regards to complete vaccine coverage. In spite of these results, and out of a concern to comply with international recommendations regarding equity, the country proposes revising its data collection tools to include distribution of immunization results by sex in the near future.

**5.2 Monitoring of Adverse Effects Following Immunization (AEFI)**

The EPI, in its norms and standards document, has guidelines for the management of AEFI at all levels of the health pyramid, starting with the community and health facilities that provide vaccinations. Thus every case of an AEFI must be included in the monthly activities report. Major AEFI must be investigated and follow the process to the AEFI National Expert Committee. Personnel were trained in 2010 in pharmacovigilance and a briefing was organized at all levels before the mass immunization campaigns and before the introduction of a new vaccine.

The country has an AEFI National Experts Committee appointed by the Ministry of Health, which makes decisions regarding the attribution of AEFI cases.

The AEFI Experts Committee is comprised of: neurologists, epidemiologists, anatomo-pathologists, biologists, pediatrician and paramedical personnel.

Suspected cases of serious AEFI are investigated and managed by the regional contacts trained for this purpose, assisted by members of the AEFI experts committee. The latter are responsible for further investigations, classifying cases with or without a causal link and preparing a report.

In the context of post-introduction monitoring, tools and definitions of cases of AEFI related to the administration of the IPV will be prepared, integrated into the pharmacovigilance guide and distributed.

The AEFI monitoring system in force in the country will be used for IPV.

**6. Social mobilization, communication and advocacy.**

In order to make political managers and opinion leaders at the national/regional level and in the districts aware regarding the introduction of the IPV, advocacy and partnership will be the primary strategies that will be used. This will involve advocacy at all levels regarding administrative, political, religious and traditional authorities, opinion leaders, NGOs/Associations and Civil Society.

The strategic communication plan for 2012-2015 aligned with the cMYP, which describes the various strategic axes is the fruit of the analysis of the results of the CAP survey on immunization conducted in 2011 by the Ministry of Health with the support of its partners, WHO/UNICEF. The following strategies will be used to make the public aware (population and communities) during the introduction of the vaccine:

* Social mobilization:
* Communication for behavioral change;
* Advocacy:
* Strengthening of skills.

In order to do this, it will be necessary to form, educate and promote awareness to health care personnel and mothers of children regarding the benefits of this new vaccine for the health of the population in general and children in particular regarding the eradication of poliomyelitis, like with smallpox and the plague. In the context of the introduction of the IVP vaccine, the mobilization committee will prepare a specific communication strategy in order to lead the health care personnel and mothers of children to accept the new vaccine.

Materials for information, education and communication (media plan) will be prepared by a technical team comprised of representatives of the IEC (SNIEC, EPI, UNICEF, WHO, the Communication Cell of the Ministry of Health and the Ministry of Communication). These media will be validated during a workshop. They must be pretested in a community to ensure that the materials and messages they contain do not cause any problem with understanding and adoption by the population.

The results of CAP surveys and independent evaluations of supplemental immunization activities will be carried out in order to improve the quality of the messages to be disseminated.

Advocacy will be carried out to obtain an official launch by the Minister of Public Health and the other launches at the regional and district level will be presided over by the other administrative authorities that are involved.

A press conference held by the Minister of Health in the presence of other partners (other ministers - other UN agencies - participants from the private sector - Civil Society Organizations) and covered by the public and private media, will precede the launch which will occur in the interior of the country.

1. As of July 2008, the Penta vaccine is comprised of DTC + Hep B and Hib. [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. Enquête QUIBB de 2006. [↑](#footnote-ref-6)