HEALTH SYSTEMS STRENGTHENING ACCELERATOR

CHALLENGES TO EXPANDING TOGO'S IMMUNIZATION COVERAGE TO THE SECOND YEAR OF LIFE AND BEYOND

A Situational Analysis

Fifonsi Gbeasor-Komlanvi
Faculty of Health Sciences, University of Lomé; African Centre for Research in Epidemiology and Public Health, Lomé, Togo

USAID FROM THE AMERICAN PEOPLE
RESULTS FOR DEVELOPMENT
HEALTH STRATEGY AND DELIVERY FOUNDATION
ICF
BILL & MELINDA GATES foundation

HEALTH SYSTEMS STRENGTHENING ACCELERATOR

This report was commissioned by the Health Systems Strengthening Accelerator (the Accelerator) to better understand the systemic challenges to improving routine immunization coverage and equity in Togo during the second year of life (2YL) and beyond. This includes extending free immunization services to the 2YL and beyond as an expansion of essential services that are part of Togo's universal health coverage (UHC) agenda. The Accelerator is a five-year global initiative (2018–2023) funded by the U.S. Agency for International Development (USAID) and the Bill & Melinda Gates Foundation. It provides technical support to address a range of health systems strengthening challenges to ensure the development of sustainable, country-led institutions for continuous strengthening of health systems. The ultimate goal is to help countries and development partners develop new strategies, partnership models, and approaches to support countries on their journey to self-reliance.

Submitted to

USAID

Prepared by

Results for Development
1111 19th Street, NW, Suite 700
Washington, DC 20036

CONTENTS

Click on each entry to jump to that section.

ABBREVIATIONS AND ACRONYMS

2YL	second year of life
AFD	Agence Française de Développement
BCG	bacille Calmette-Guérin tuberculosis vaccine
CCIA	Inter-Agency Coordinating Committee
cMYP	comprehensive multi-year plan (national)
DTaP	diphtheria, tetanus, and acellular pertussis vaccine
EPI	Expanded Program on Immunization
GTCV-Togo	Technical Advisory Group for Immunization - Togo (*Groupe Technique Consultatif pour la Vaccination - Togo*)
HepB	hepatitis B combination vaccine
Hib	Haemophilus influenzae type B vaccine
HPV	human papillomavirus
IA2030	Immunization Agenda 2030
IPV	inactivated polio vaccine
MCV	measles-containing vaccine
MSHPAUS	Ministry of Health, Public Hygiene and Universal Access to Care
NGO	nongovernmental organization
OPV	oral polio vaccine
PCV	pneumococcal conjugate vaccine
POSCVI	Platform of Civil Society Organizations for Immunization
PPAc	comprehensive multi-year plan (*plan pluriannuel complet*) (EPI)
RV	rotavirus vaccine
SDG	Sustainable Development Goal
Td	tetanus and diphtheria vaccine
UHC	universal health coverage
UNFPA	United Nations Population Fund
VAR	varicella vaccine
WHO	World Health Organization

EXECUTIVE SUMMARY

This study was conducted to better understand the systemic challenges to improving routine immunization coverage and equity in Togo during the second year of life (2YL) and beyond. This includes extending free immunization services to the 2YL and beyond as an expansion of essential services that are part of Togo's universal health coverage (UHC) agenda.

The Togolese health system has a well-structured immunization program that has generally achieved national immunization coverage rates above 80%. However, the country has high vaccination dropout rates, and data on "zero-dose" children—those who have not received any vaccine through the vaccination program—are highly variable and depend on the definition of the indicators used, resulting in misreporting.

In response to the World Health Organization's Immunization Agenda 2030 and the 5.0 strategy of Gavi, the Vaccine Alliance, Togo's Ministry of Health, Public Hygiene and Universal Access to Care is receiving technical support from the Health Systems Strengthening Accelerator to extend free immunization services as described above. Togo has also expressed interest in seeking support from Gavi's Equity Acceleration Fund for interventions to reach zero-dose children and missed communities, by developing innovative strategies and partnerships under Gavi 5.0.

This report draws on interviews with 12 key informants (government officials and key stakeholders at the national and subnational levels), an analysis of immunization coverage data, and a desk review of key documents.

The main findings are as follows:

- Expansion of immunization services in Togo has been hindered by poor resource mobilization by both the public and private health sectors, lack of coordination across activities of the country's Expanded Program on Immunization (EPI), insufficient human resources, and lack of equipment and supplies.
- The main barriers to improving immunization coverage to the 2YL and beyond are 1) high dropout rates during the 2YL and 2) poor access to and use of immunization services, especially in hard-to-reach districts, resulting in higher proportions of zero-dose children.

Despite significant efforts by Togo's EPI to maintain high immunization coverage, the country urgently needs a national study of zero-dose children and an action plan to reduce the vaccination dropout rate in the 2YL.

INTRODUCTION

Immunization is the most cost-effective public health intervention for preventing morbidity and mortality from infectious diseases in children. Thanks to vaccination against diseases such as diphtheria, tetanus, pertussis, influenza, and measles, 2 to 3 million deaths are prevented each year worldwide.[1]

Immunization is a key element of primary health care (PHC) and an indisputable human right.[1] But every year, nearly 20 million infants lack access to vaccines.[1] Of these children, more than 13 million are "zero-dose"—having received no doses of any routine vaccination, which is commonly calculated based on the number of children who have received no doses of diphtheria, tetanus, and acellular pertussis (DTaP) vaccine.[2]

In 2020, the 73rd World Health Assembly adopted a new comprehensive strategy for vaccines and immunization through the Immunization Agenda 2030 (IA2030), which includes the following objectives:

- Reducing mortality and morbidity from vaccine-preventable diseases
- Strengthening equitable access to and use of new and existing vaccines
- Strengthening immunization in PHC and contributing to universal health coverage (UHC) and sustainable development

The 5.0 strategy of Gavi, the Vaccine Alliance—to "leave no one behind through immunization" by 2030—is inspired by the Sustainable Development Goals (SDGs) and aligns with IA2030. It also integrates routine immunization programs, particularly in low- and middle-income countries, as platforms to strengthen access to and delivery of PHC and make progress toward UHC.

In 2014, thanks to implementation of the "Reach Every District" approach to strengthening the country's Expanded Immunization Program (EPI)* with the support of partners, Togo was able to reach more than 70% coverage of the three doses of pentavalent vaccine and measles vaccine. The results have included a 50% reduction in suspected cases of measles;[3] in fact, no measles-related deaths were reported between 2017 and 2020.

Between March 2020 and October 15, 2021, Togo recorded 25,850 positive cases of COVID-19, with a recovery rate of 96.5% and 238 deaths. Before the pandemic, the country was already facing a resurgence of poliomyelitis derived from vaccine strain type 2 starting in the second half of 2019. The advent of the COVID-19 pandemic may have affected the country's immunization performance, with a downward trend in coverage compared to previous years.[4]

In response to IA2030 and Gavi 5.0, Togo's Ministry of Health, Public Hygiene and Universal Access to Care (*Ministère de la Santé, de l'Hygiène Publique et de l'Accès Universel aux Soins,* or MSHPAUS) has received technical support from the Health Systems Strengthening Accelerator (the Accelerator) to extend free immunization services to the second year of life (2YL) and beyond as part of an expansion of essential services under Togo's UHC agenda.

* The World Health Organization launched EPI in 1974 to ensure that all children, in all countries, could benefit from life-saving vaccines. Every country in the world now has a national immunization program, and vaccines are widely viewed as one of the safest, most cost-effective, and most successful public health interventions to prevent deaths and improve lives.

Togo has also expressed interest in seeking support from Gavi's Equity Acceleration Fund for interventions to reach zero-dose children and missed communities. To help improve immunization coverage in line with the country's needs, the Accelerator must consider the availability of vaccination services, vaccination performance, and obstacles and opportunities in the context of the COVID-19 pandemic.

This report was commissioned by the Accelerator to better understand the systemic challenges to improving routine immunization coverage and equity in Togo in the 2YL and beyond. The Accelerator is a five-year global initiative (2018–2023) funded by the United States Agency for International Development (USAID) and the Bill & Melinda Gates Foundation. The Accelerator provides technical support to countries on a range of health systems strengthening challenges. It aims to ensure the development of sustainable, country-led institutions that can strengthen health systems and develop new strategies, partnership models, and approaches to advance countries' self-reliance.

OBJECTIVES

In response to routine immunization challenges and in support of Togo's UHC goals, the Accelerator conducted a situational analysis to identify known challenges to implementing free vaccination services in the 2YL and beyond as an expansion of essential services under the country's UHC agenda. The objectives of the analysis were:

- To identify trends in coverage and equity for immunization in the 2YL and zero-dose children, including identifying low-performing districts
- To identify existing policies, strategies, actors, roles, and activities that can help improve coverage in the 2YL and reduce the number of zero-dose children

- To analyze, at a health system level, the challenges related to improving immunization activities and immunization coverage, particularly with regard to the 2YL, new vaccine introductions, and zero-dose children and including challenges related to the COVID-19 pandemic

METHODS

The situational analysis was conducted from January to April 2022 and included:

- A rapid desk review of available literature on immunization in Togo
- Individual interviews conducted with officials from the MSHPAUS Immunization Division, regional health directors, key individuals involved in immunization activities, and development partners on the challenges to improving vaccine performance at the national level

Research themes focused on EPI vaccines and challenges related to equity in immunization.

Literature Review

The literature review included available documents on vaccination and equity in Togo, including grey literature (internal or unpublished documents) as well as official literature available on the internet.

- **Grey literature.** This included official documents and reports not available on the internet. Research was carried out in the archives and internal libraries of institutions involved in vaccination and vaccination research, including the MSHPAUS Immunization Division, UNICEF, Gavi, the World Health Organization (WHO), and the University of Lomé Department of Public Health.
- **Official literature.** This included official documents published and available on the internet or in libraries and scientific or institutional databases. An internet search on vaccination in Togo was conducted in French and in English using the search engines Google, Google Scholar, and PubMed. The keywords used were: Togo, immunization, immunization coverage, expanded programme on immunization, strategic plan, programme, bottlenecks, barriers, and equity.

Interviews

Four interview guides were developed on issues related to vaccination and equity, based on the types of interviewees: leaders of the MSHPAUS Immunization Division, regional directors, key individuals involved in immunization activities, and development partners.

Face-to-face or remote interviews with 13 key informants were conducted between February 3 and March 25, 2022, by a medical epidemiologist (Table 1 and the Annex). Authorization was granted by MSHPAUS for all requested data that were made available.

TABLE 1 Distribution of Key Informants

	Number (Total: 13)
Institution	
MSHPAUS, central level	5
MSHPAUS, regional level	3
Civil society organization	1
Development partners	4
Sex	
Male	12
Female	1

COUNTRY OVERVIEW

Togo is a country in West Africa bounded to the north by Burkina Faso, to the south by the Atlantic Ocean, and to the east and west by Benin and Ghana, respectively.

In 2020, Togo had an estimated population of 8.28 million, 50.2% of it female,[5,6] and an annual population growth rate of 2.4%. In 2020, the total fertility rate was 4.3 children per woman and life expectancy at birth was 61 years.[5] The demographic context is characterized by: 1) a preponderance of young people (60% under age 25 and 42% under age 15), 2) a predominantly rural population (62.3%), and 3) rapid and poorly controlled urbanization, with high population density in coastal regions (261 inhabitants per square kilometer in the Maritime Region[7,8]).

Togo is a republic, with Lomé as its capital. It has five economic regions (Savanes, Kara, Central, Plateaux, and Maritime), 39 prefectures, 117 municipalities, and 393 cantons.[9]

A review of Togo's macroeconomic performance between 2008 and 2017 shows that various development policies contributed to economic progress through steady growth in real GDP, with average annual growth of 5.0% between 2013 and 2017.[7] In 2021, Togo's GDP was $8.41 billion USD, with a 5.73% share of GDP spent on health.[5]

Macroeconomic stability improved after a phase of indebtedness due to infrastructure investments and improvements. The debt ratio, which was 79.4% of GDP in 2016, fell to 70% in 2017.[7]

The incidence of poverty decreased between 2011 and 2015, from 58.7% to 55.1%. Unemployment fell from 6.5% to 3.4% during the same period. However, the underemployment rate is high and rose from 22.8% to 25.8% during that period. Labor is heavily concentrated in the informal economy, which has generally low productivity.[7]

The COVID-19 pandemic slowed growth to 1.8% in 2020, compared with 5.5% in 2019, with declines in investment and consumption.[10]

Pandemic travel restrictions hurt the tourism and service sectors, while the agricultural sector remained resilient. Inflation increased due to rising food and oil prices, from 0.8% in 2019 to 1.8% in 2020.[10] Due to significant increases in the budget deficit—from 0.9% in 2019 to 6.9% in 2020—and the economic slowdown, the country's debt ratio increased from 52.4% in 2019 to 60.3% in 2020.[10]

Epidemiological Profile

Togo's health situation is characterized by high levels of morbidity and mortality, strongly marked by infectious diseases including malaria, acute respiratory tract infections, and digestive parasitosis.[11] At the same time, incidence of noncommunicable diseases such as high blood pressure, diabetes, and cancer is growing. Infant and child mortality was 49 and 42 deaths per 1,000 live births, respectively, in 2009 and 2013, and maternal mortality was 399 deaths per 100,000 live births as of 2020.[12]

HEALTH SYSTEM OVERVIEW

Togo's health system is organized into six regions: Savanes, Kara, Central, Plateaux, Maritime, and Lomé-Commune. Administrative management has a pyramidal organization with three levels:

- **Peripheral or health district level.** The country has 39 health districts, each administered by a health district directorate. Health interventions are implemented at this level, informed by policy and guidelines from the central level.
- **Intermediate or regional level.** This level, which corresponds with the six health regions, is responsible for supporting and monitoring the peripheral level to ensure that health interventions are properly implemented and aligned with health policies and national guidelines.[13]
- **Central or national level.** This level is represented by the Minister's Office, the General Secretariat, three directorates-general, and 10 central directorates (with their divisions and sections). Divisions are responsible for defining and monitoring implementation of the country's health policy.[13]

Togo's immunization program has a similar structure, with the MSHPAUS Immunization Division coordinating EPI activities at the central level, EPI focal points coordinating at the regional level, and district-level EPI management. Health facilities are responsible for administering immunization services; at the community level, this is typically carried out by community health workers (CHWs).

Funding for these immunization services and activities follows the same pattern, with allocations to the central, regional, district, and community levels. In some instances, funds are sent by the central level directly to the district and/or community levels to pay health workers such as CHWs and training facilitators.

Levels of Care

Health care delivery in Togo follows the same four-level structure:

- **Primary level.** First-contact care is provided by district hospitals, peripheral care units, and CHWs (who provide care by delegation).
- **Secondary level.** This level consists of regional hospital centers.
- **Tertiary level.** This level consists of three university hospitals and specialized health centers (National Institute of Hygiene, National Center for Orthopedic Equipment, and National Center of Blood Transfusion and Health Training Schools).[8]

Togo provides a minimum package of services, including immunization services, at all levels of the health system.

MSHPAUS is supported in its activities by development partners including WHO; UNICEF; the United Nations Population Fund (UNFPA); the World Bank; the Global Fund to Fight AIDS, Tuberculosis and Malaria; FHI 360; Agence Française de Développement (AFD); Plan International; Gavi; USAID; the Platform of Civil Society Organizations for HIV/AIDS; l'Union des ONG du Togo; and the Platform of Civil Society Organizations for Immunization (POSCVI).

Provider Types

Public Health Facilities

According to Togo's 2019 yearbook of health statistics, the country had 1,297 public health facilities, including three university hospitals (two in Lomé and one in Kara), six regional hospital centers, 104 other public hospitals (73 of type 1, 27 of type 2, and four specialized), 1,065 peripheral care units (749 of type 1 and 316 of type 2), 48 infirmaries, and 71 other health facilities.[11] Immunization services are provided at all levels of public health facilities.

Private Health Facilities

The private health sector is concentrated in Lomé and is made up of private nonprofit (denominational and community) providers and private for-profit providers. According to MSHPAUS data, in the first half of 2022 Togo had 175 approved private health facilities, including 133 in Greater Lomé.[14] But some private health facilities do not yet provide free EPI immunization services. The traditional medicine sector is quite influential in Togo, especially in rural areas, but little is known about the services offered.

Community Health Providers

Community health is an integral part of the health system in Togo and is a government response to the need to improve health coverage.[15] Togo's national policy for community-based interventions outlines activities led by CHWs for promotive, preventive, and curative care. CHWs are also mobilized in immunization campaigns and in the search for and outreach to children lost to immunization follow-up. In recent years, community health has been strengthened to expand access to promotive, preventive, and curative services for the sustainable reduction of morbidity and mortality. An evaluation of the strategic plan for community-based interventions (2016–2020) noted that active involvement of community actors would result in improved care-seeking behaviors in communities.[15]

Efforts have been made at the community level to increase, for example, the proportion of villages far from a health center that have a CHW trained in integrated care or integrated management of newborn and child diseases. This led to an increase in the proportion of villages far from a health center that had a CHW trained in integrated care (diarrhea, pneumonia, and malaria) or integrated management of newborn and child diseases from 10% in 2012 to 48% in 2019.[13,16]

Social Protection

Only 7.6% of Togo's population is covered by a social protection system.[16] According to a 2015 report on the health financing system, households bear most of the burden of health expenditure through direct payment, which remains high at 51%. However, in March 2011 a compulsory health insurance scheme for public and similar employees was established, under the management of the National Institute of Health Insurance.[17] In October 2021, government officials adopted a bill establishing universal health insurance that guarantees access to quality health care for all segments of the population. Immunization services not covered by EPI are covered by the National Institute of Health Insurance.

IMMUNIZATION IN TOGO

EPI was established in Togo in 1980, and its implementation began in the Savanes region. A nationwide scale-up was initiated in 1984 to combat vaccine-preventable diseases, including tuberculosis, diphtheria, tetanus, pertussis, poliomyelitis, and measles.

Since 1988, other vaccines have been introduced into Togo's EPI:

- Yellow fever (1988)
- Hepatitis B (HepB) and Haemophilus influenzae type B (Hib) (2008)
- Pneumococcal conjugate vaccine (13-valent) (PCV13) and rotavirus (RV) (2014)
- Inactivated polio vaccine (IPV) (October 2018)
- Measles-containing vaccine second dose (MCV2) (January 2019)

In Togo, the target populations for routine immunization are pregnant women and children from birth to 23 months. The current vaccination schedule in Togo is shown in Table 2.

The gradual introduction of new vaccines into routine vaccination in Togo is called for in the country's EPI comprehensive multi-year plan (*plan pluriannuel complet*, or PPAc) for 2016 to 2022. These include:

- MenAfriVac for meningitis A
- Human papillomavirus (HPV) vaccine to prevent cervical cancer
- HepB vaccine at birth
- IPV second dose (IPV2)

It is important to note the impact of the COVID-19 pandemic on routine immunization in Togo.

TABLE 2 Routine EPI Calendar in Togo (2022)

Contact Number	Schedule	Vaccine*
Children: Birth to 9 months		
1	Birth	BCG, OPV0
2	6 weeks	DTaP-HepB-Hib1, OPV1
		PCV13-1, RV1
3	10 weeks	DTaP-HepB-Hib2, OPV2
		PCV13-2, RV2
4	14 weeks	DTaP-HepB-Hib3, OPV3
		PCV13-3, IPV
5	9 months	MCV1, YF, Vit A
Children: 15 to 23 months		
6	15 to 23 months	MCV2
Pregnant women		
1	First contact	Td1
2	4 weeks after Td1	Td2
3	6 months after Td2	Td3
4	1 year after Td3	Td4
5	1 year after Td4	Td5

* The vaccine abbreviations are explained below. The number following the abbreviation indicates the dose number.
BCG = bacille Calmette-Guérin tuberculosis vaccine
DTaP = diphtheria, tetanus, and acellular pertussis vaccine
HepB = hepatitis B combination vaccine (Vaxelis®)
Hib = Haemophilus influenzae type B
IPV = inactivated polio vaccine
MCV = measles-containing vaccine
OPV = oral polio vaccine
PCV13 = pneumococcal conjugate vaccine (13-valent)
RV = rotavirus vaccine
Td = tetanus and diphtheria vaccine (adult/adolescent formulation)
Vit A = vitamin A supplement
YF = yellow fever

COVID-19 vaccines have followed a separate, systematized rollout that has not been integrated into routine immunization services in Togo.

The pandemic years of 2019 and 2020 saw a drop in routine immunization coverage resulting from factors including a drop in attendance at health facilities due to COVID-19 precautions and the impact of rumors and false information surrounding the COVID-19 vaccine, which affected uptake of other vaccines. In Togo, the pandemic resulted in either a complete cessation or significant slowdown of several health-related activities in addition to redirection of funds toward pandemic response, which led directly to the underfunding of EPI activities.

Immunization Coverage

National Level

According to WHO/UNICEF estimates, immunization coverage in Togo decreased slightly from 2017 to 2018, followed by a rise in 2019, a decrease in 2020 (Figure 1), and a slight increase in 2021 (Figure 2).

Overall, immunization coverage is above 80% except for bacille Calmette-Guérin (BCG) in 2016 and 2017, oral polio vaccine (OPV) in 2018, and the second or later dose of the tetanus and diphtheria vaccine, adult/adolescent formulation (Td2+) since 2017.

- For BCG, the sawtooth trend is due to inconsistent supplies.
- For OPV, the decline in coverage in 2017 and 2018 was due to stockouts.[18]

These data contrast with WHO/UNICEF data, which report immunization coverage of less than 80% for MCV1 and Hib (Figure 1).

FIGURE 1 **WHO/UNICEF Estimates of Routine Immunization Coverage in Togo (2016 to 2020)[18]**

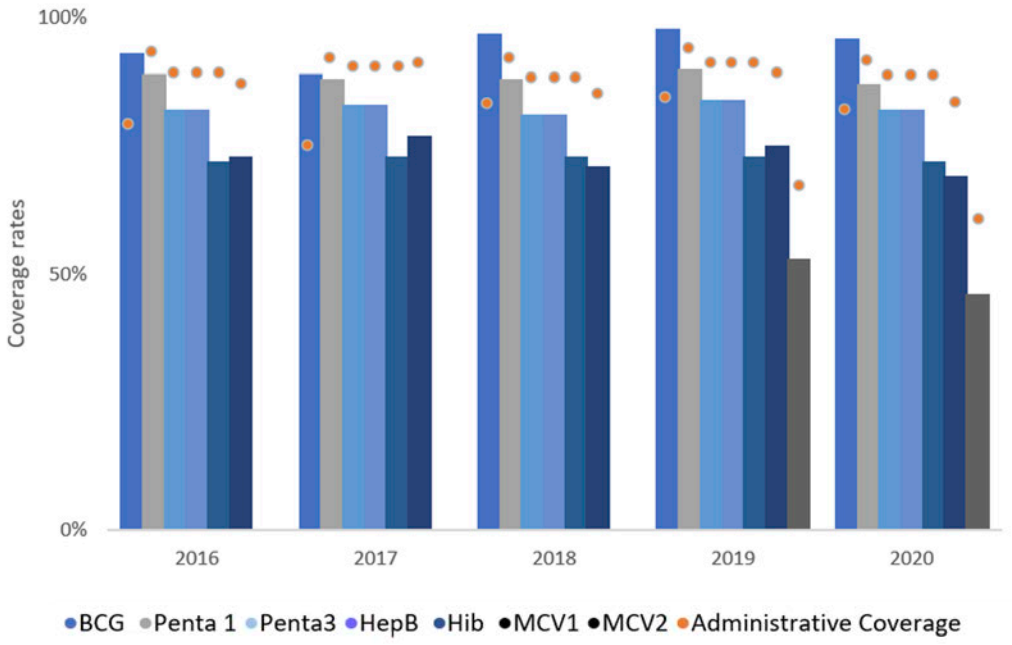
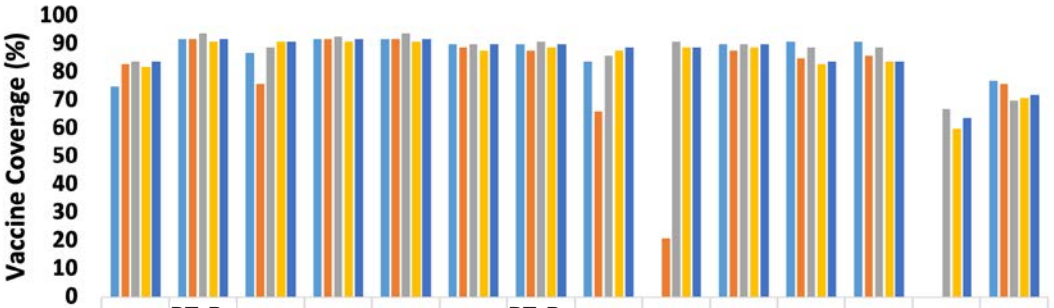


FIGURE 2 WHO/UNICEF Estimates of National Immunization Coverage in Togo (2017 to 2021)

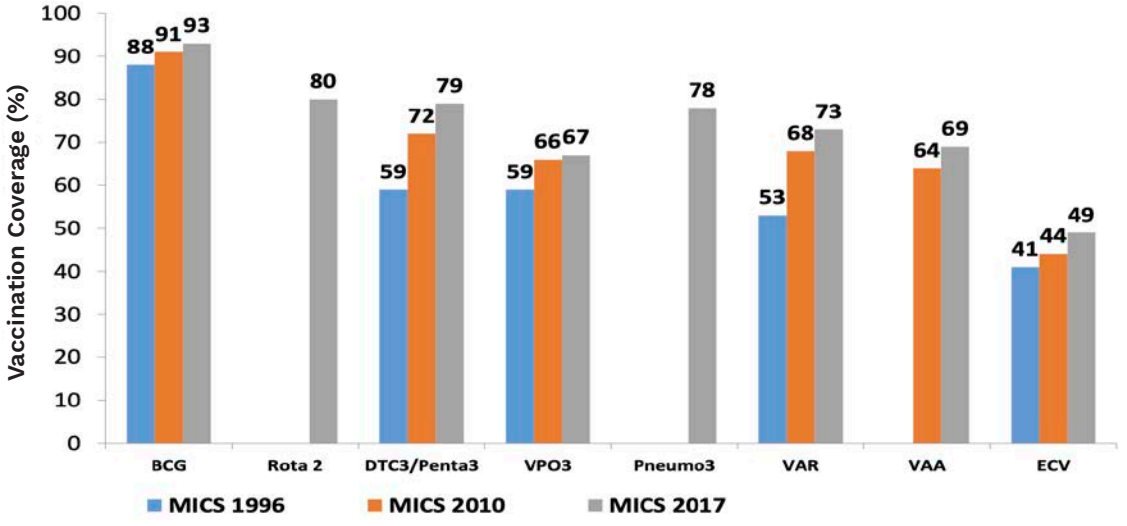


	BCG	DTaP-HepB-Hib1	VPO1	Rota 1	Pneumo 1	Rota 2	DTaP-HepB-Hib3	VPO3	VPI	Pneumo 3	VAR/RR1	VAA	RR2	VAT/Td2+
2017	75	92	87	92	92	90	90	84		90	91	91		77
2018	83	92	76	92	92	89	88	66	21	88	85	86		76
2019	84	94	89	93	94	90	91	86	91	90	89	89	67	70
2020	82	91	91	91	91	88	89	88	89	89	83	84	60	71
2021	84	92	91	92	92	90	90	89	89	90	84	84	64	72

DTaP-HepB-Hib1 = pentavalent vaccine
Pneumo = pneumococcal vaccine
Rota = rotavirus vaccine
RR = measles-containing vaccine
VPI = inactivated polio vaccine
VAA = yellow fever vaccine

Multiple Indicator Cluster Survey (MICS) data from 1996 and 2017 show a gradual increase in routine immunization coverage (Figure 3). However, BCG was the only vaccine with coverage greater than 80%, and the overall proportion of fully vaccinated children was less than 50%.

FIGURE 3 MICS Estimates of Routine Immunization Coverage in Togo (1996, 2010, 2017)[13]



ECV = children fully vaccinated

Regional and District Levels

Regional disparities are seen in immunization coverage in Togo. As of 2020:

- Immunization coverage was higher in the Kara and Savanes regions, whose populations are largely rural. Despite few financial resources, they adhere to vaccination activities due to strong community involvement and well-organized CHW activities, including home visits, finding those lost to follow-up, community outreach, and immunization campaigns.
- Immunization coverage was lower in the Lomé-Commune region, at less than 80% for all antigens (Table 3). These low rates may be related to weak data reporting from private facilities. Indeed, private facilities seldom use EPI vaccines and do not actively report vaccine data.

At the district level, analysis of immunization coverage data between 2016 and 2019 showed that:

- For DTaP-HepB-Hib3, 23 districts (57% of the total) had immunization coverage above 90% in 2016; 31 districts (70% of the total) exceeded that threshold in 2019. From 2016 to 2019, District 2 of the Lomé-Commune region had immunization coverage of less than 80% for this antigen.
- For varicella (VAR) and MCV1, 17 districts (42% of the total) had immunization coverage above 90% in 2016; 21 districts (48% of the total) exceeded that threshold in 2019. District 2 of the Lomé-Commune region and Ogou in the Plateaux region had vaccination coverage of less than 80% between 2016 and 2019 (Figure 4).

In 2020, 41 districts (93%) had immunization coverage above 80% for DTaP-HepB-Hib3; the Kpélé district in the Plateaux region had coverage below 80% (Figure 5). For VAR/MCV1, 31 districts (70% of the total) had coverage above 80%. Districts with less than 80% of VAR/MCV1 immunization coverage were:

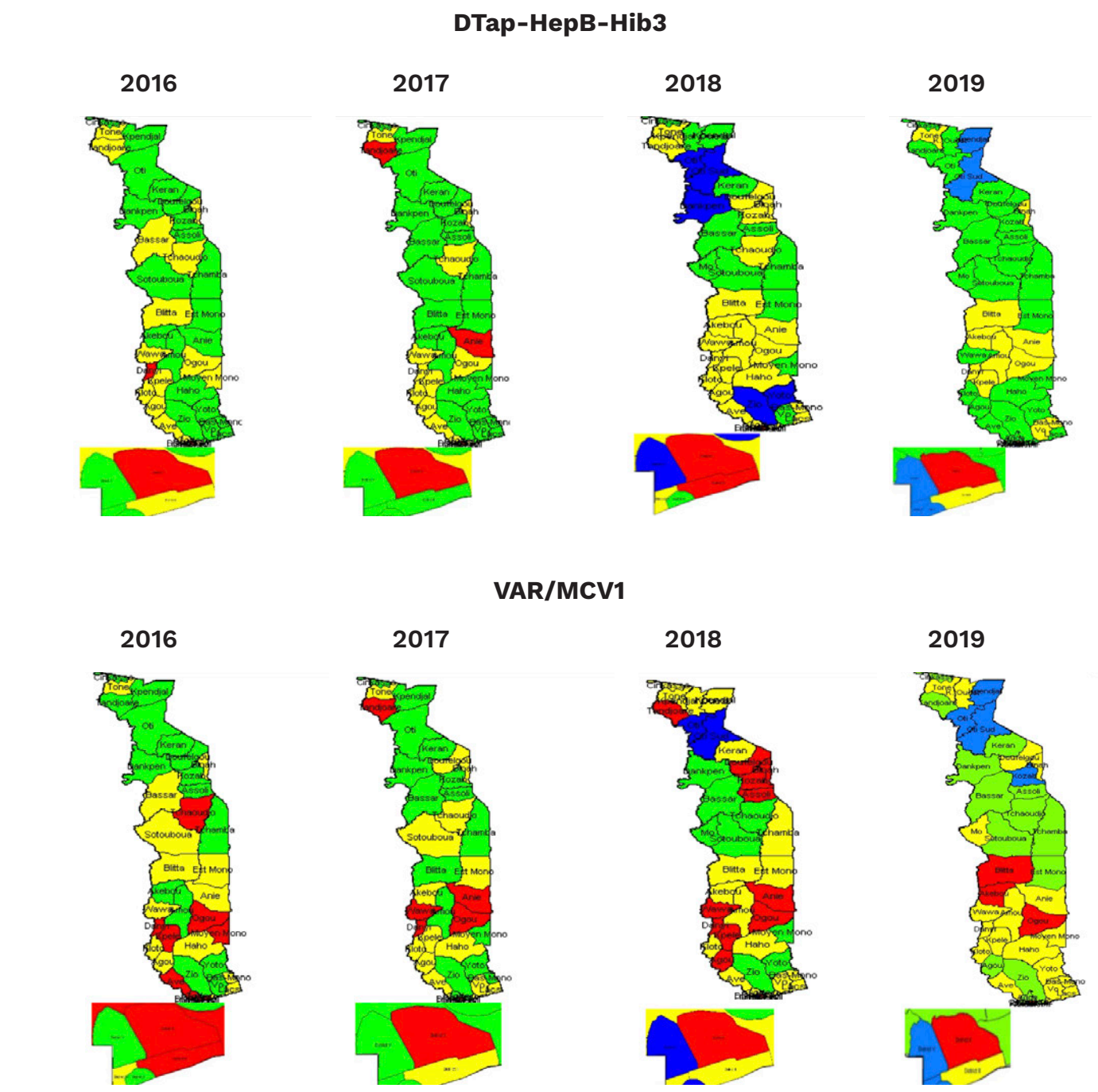
- Kara Region: Binah
- Central Region: Tchaoudjo
- Plateaux Region: Kpélé, Ogou, Wawa
- Maritime Region: Zio, Yoto, Vo, Lakes, Bas-Mono
- Lomé-Commune Region: Gulf

For MCV2, four districts (Agoè, Agou, Cinkassé, and Tandjoaré) recorded coverage of more than 80%.

TABLE 3 **Immunization Coverage (%) of Children and Pregnant Women by Region (2020)[19]**

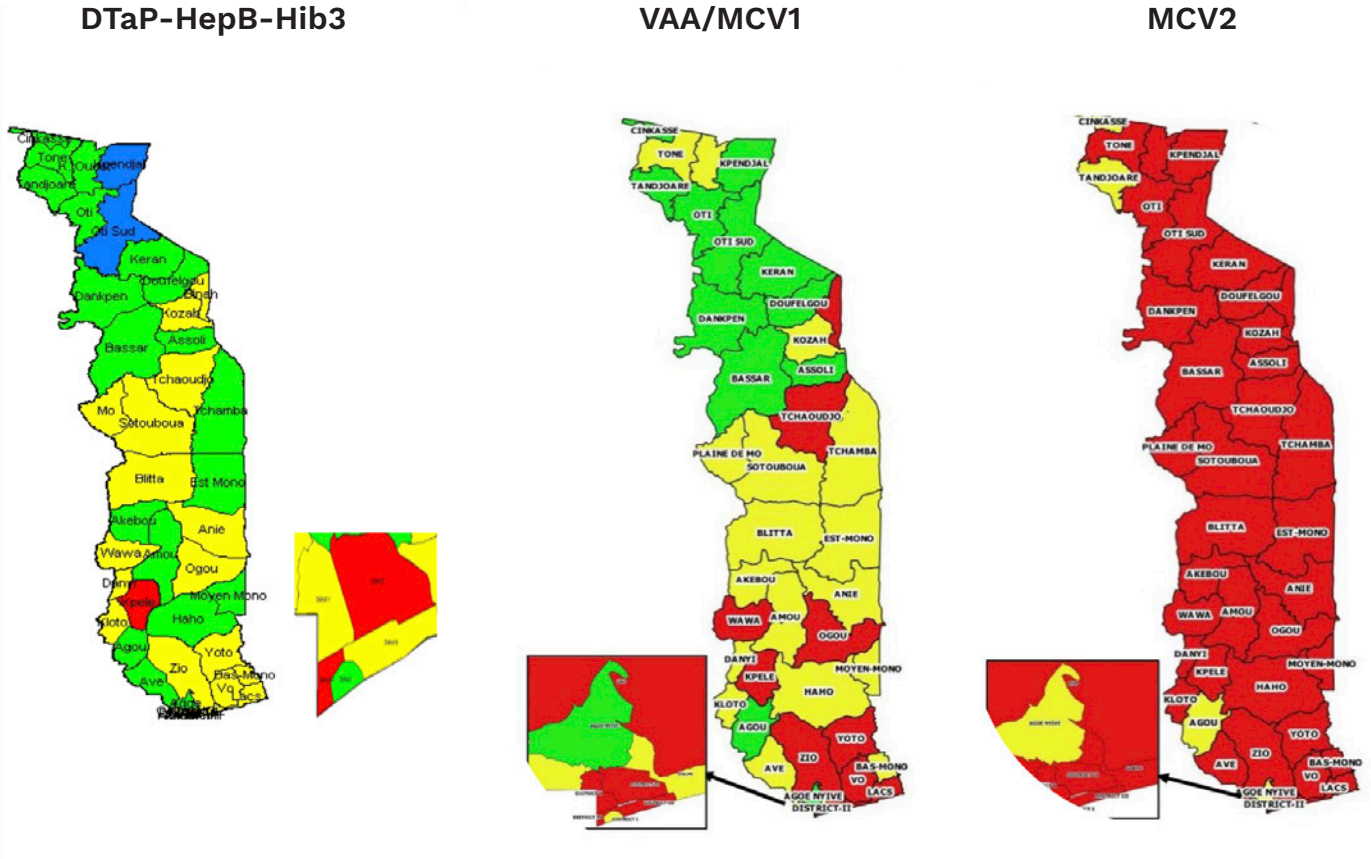
Region	BCG	OP V0	OP V1	DTaP-HepB-Hib	PCV1 3 -1	RV1	RV2	OP V3	DTaP-HepB-Hib	IP V	PCV1 3 -3	MC V1	YF	MC V2	Td2+
Lomé Commune	72	72	79	79	79	79	77	79	79	79	79	71	73	47	71
Maritime	81	81	92	92	92	91	88	88	88	88	88	83	84	61	66
Plateaux	82	81	90	92	92	90	87	87	88	88	88	84	85	81	74
Centrale	83	82	92	92	92	92	89	89	88	88	88	82	82	60	74
Kara	87	86	98	88	98	98	94	94	93	93	93	90	90	66	78
Savanes	87	86	97	98	98	97	96	96	97	97	97	91	92	66	70
National coverage	82	81	91	91	91	91	88	88	89	89	89	83	84	60	71

FIGURE 4 **DTaP-HepB-Hib3 and VAR/MCV1 Coverage by District in Children Ages 6 to 11 months (2016–2019)[18]**



CV = children vaccinated

FIGURE 5 **Coverage of DTaP-HepB-Hib3 and VAR/MCV1 in Children Ages 0 to 11 months and MCV2 in Children Ages 15 to 23 Months, by District (2020)[18]**



Vaccine Equity

According to Togo's 2017 MICS, immunization coverage was higher among females at birth than males for BCG (93.6% female, 92% male); the trend was slightly reversed for DTaP-HepB-Hib3 (79% male, 78.4% female). In 2021, a national survey commissioned by UNICEF reported higher overall immunization coverage among female children than male children (Figure 6).

Vaccine completeness increases with the mother's level of education and is higher among children in urban areas and those whose parents are in the highest quintile of economic well-being.

EPI and COVID-19

Immunization coverage was lower from January to February 2020 than during the same period in 2019 for all antigens except OPV (out of stock in 2019) and Td2+ (Figure 7).

FIGURE 6 **Vaccine Completeness by Sex[20]**

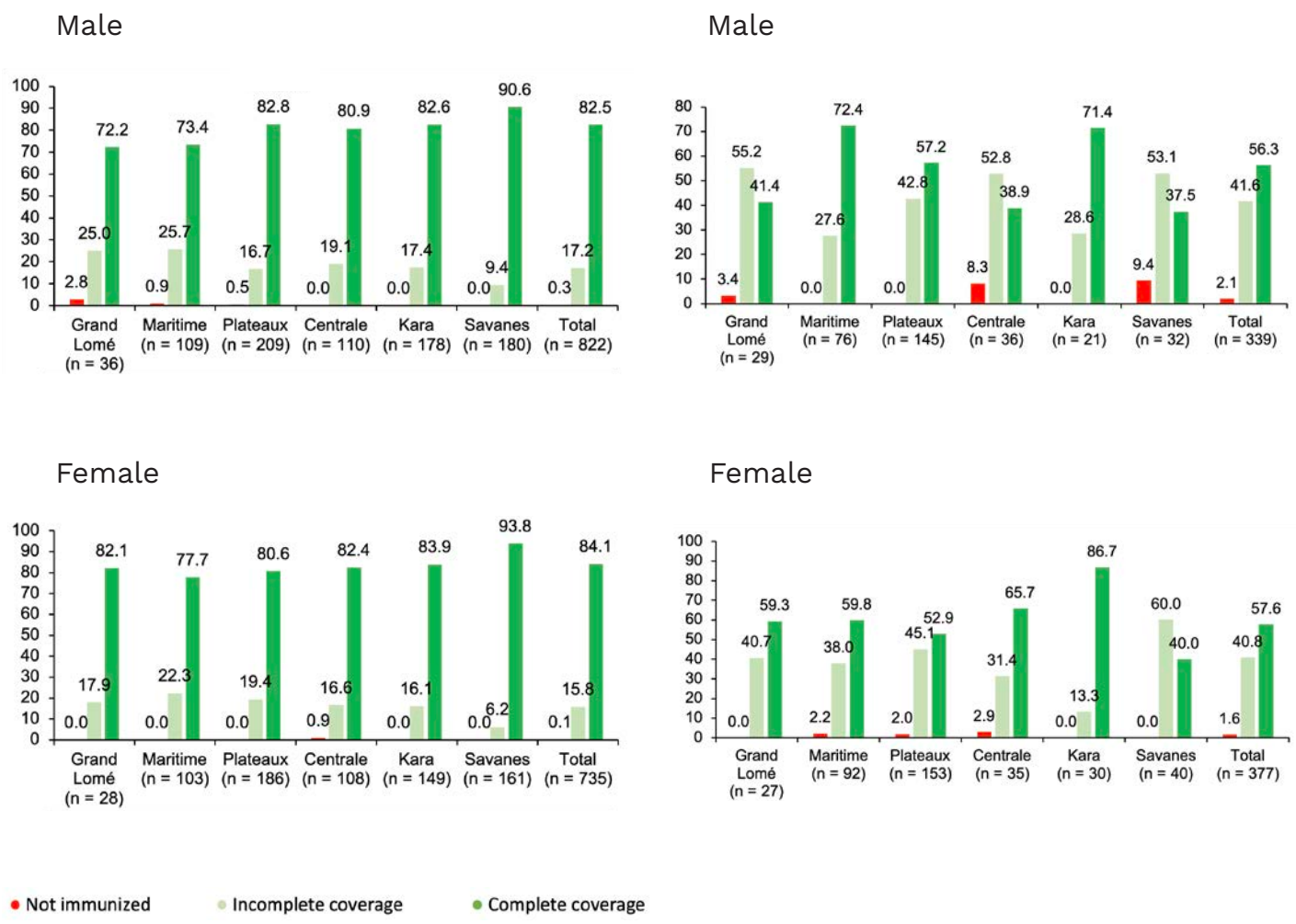
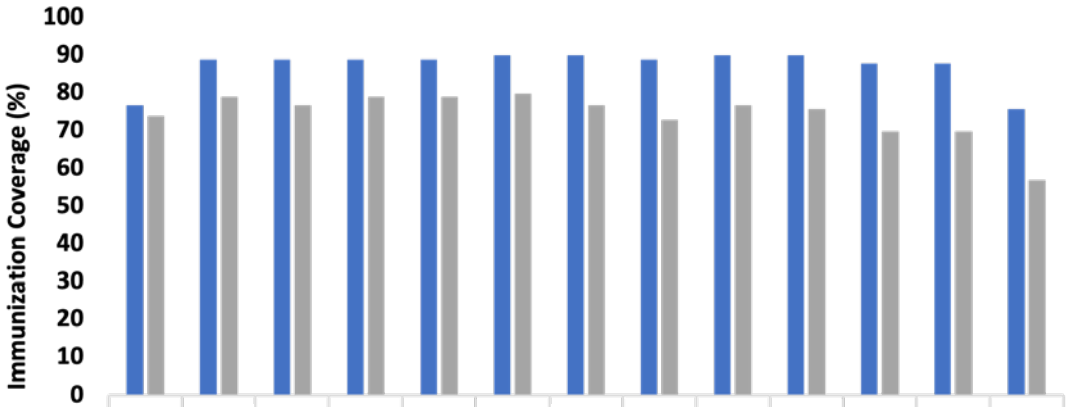


FIGURE 7 Immunization Coverage in January/February 2019 and January/February 2020[18]

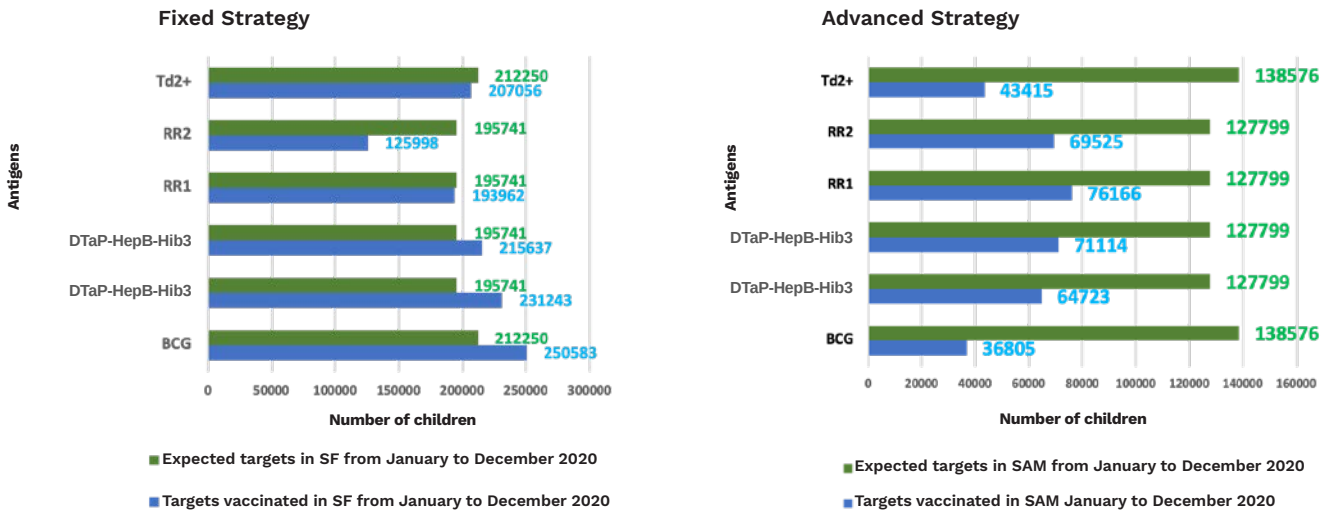


	BCG	DTaP-HepB-Hib1	VPO1	Pneumo1	Rota 1	Rota 2	DTaP-HepB-Hib3	VPO3	Pneumo3	VPI	MCV 1	VAA	Td2+
CV Jan-Feb 2020	77	89	89	89	89	90	90	89	90	90	88	88	76
CV Jan-Feb 2019 w/o JSE	74	79	77	79	79	80	77	73	77	76	70	70	57

JSE = Child Health Days

Also, vaccination sessions in the advanced strategy (a strategy to deliver and administer vaccines and other services to underserved populations) were severely disrupted compared with those in the fixed strategy (a strategy where patients seek out services from health facilities). In March and April 2020, activities carried out under the advanced strategy decreased due to restrictions on population movement imposed during the health emergency. Despite some catching up during the December 2020 Child Health Days (*Journées Santé de l'Enfant*, or JSE), which provide a package of preventive and promotive services to the most vulnerable populations of children, gaps remained in terms of unvaccinated target children under the advanced strategy (Figure 8).[18]

FIGURE 8 Immunization Strategy Performance (2020)[18]



As shown in Figure 9, a continuous decline in immunization coverage was observed in March and April 2020, the period corresponding to the beginning of the COVID-19 pandemic. However, coverage rebounded in May, with a second increase in December 2020 during a JSE campaign.

Other effects of COVID-19 on vaccination activities included:

- Persistence of anti-vaccination rumors and misinformation
- Mobilization of health personnel in health facilities for COVID-19 surveillance to the detriment of other interventions, including vaccination
- Decreased use of health services due to fears of COVID-19
- Postponement of the vaccine campaign against vaccine-derived poliovirus type 2 in the Lomé and Maritime regions, the first round of which had been scheduled for March 2020 but was delayed until September 24–27, 2020[18]
- Strengthening of EPI cold chain equipment capacity to store COVID-19 vaccines

Vaccination Challenges

Vaccine Abandonment

At the national level, vaccine dropout rates are estimated at:

- DTaP-HepB-Hib1/MCV1 series: 9%
- DTaP-HepB-Hib1/DTaP-HepB-Hib3 series: 3%
- PCV13-1/PCV13-3: 3%
- RV1/RV2 series: 3% (Figure 10)

For the cohort of children ages 0 to 11 months, completion of the vaccine series was generally satisfactory at the national and regional levels, with a dropout rate of less than 10%. However, the dropout rate was high for the MCV1/MCV2 series, at 28%.

This trend toward a high dropout rate for the MCV1/MCV2 series could be explained by the lag time between the two doses (six months) and the fact that no health interventions bring children back into contact with health facilities between ages 1 and 2. This means parents forget to bring their children back for MCV2 or vaccination records are lost. Also, parents do not prioritize the second dose of MCV.

FIGURE 9 **Immunization Coverage Among Children Ages 0 to 11 Months and 0 to 23 Months and Pregnant Women (January to December 2020)[18]**

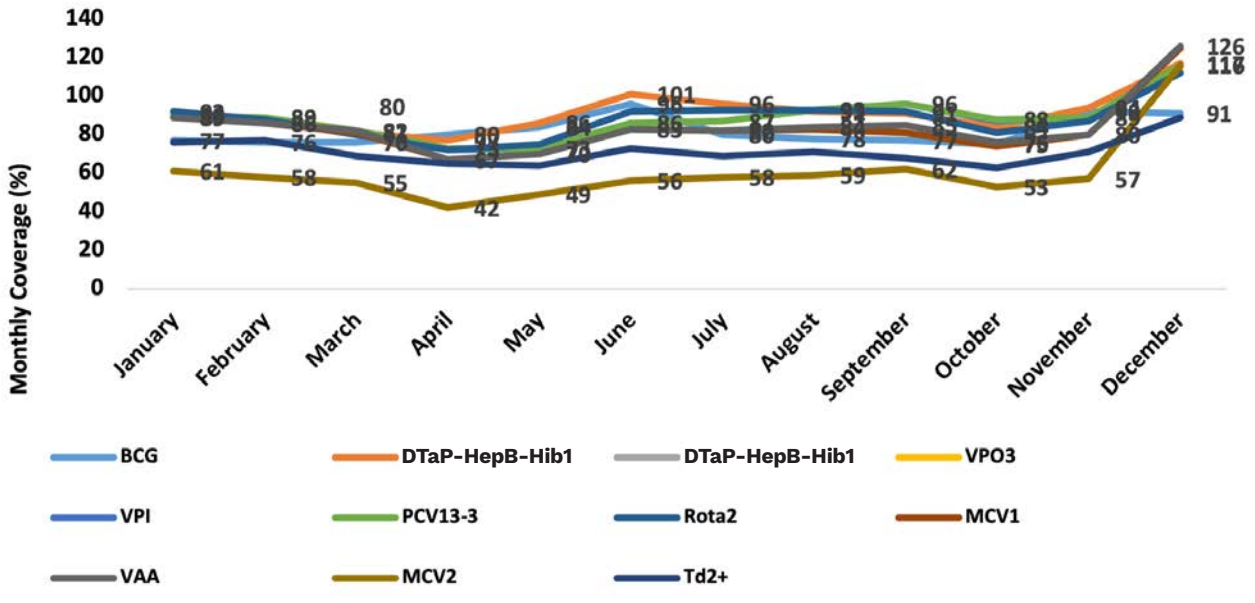
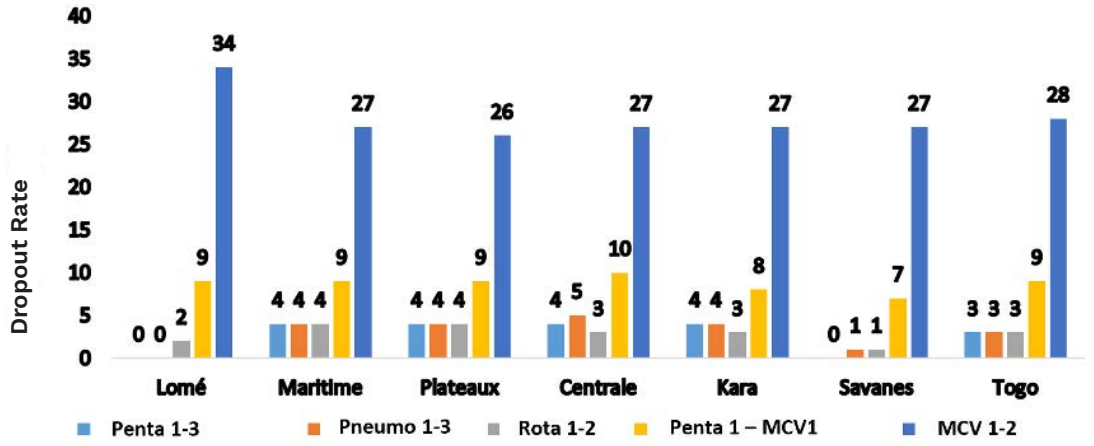


FIGURE 10 **Vaccine Dropout Rates by Health Region (2020)[18]**



In addition, the active search for children with incomplete vaccination status is difficult, and advanced strategies such as village-by-village monitoring and target-by-target census are lacking. However, coverage of MCV2 could be underestimated, given that this indicator uses the number of children ages 0 to 11 months as a denominator, which could be higher than the number of children ages 15 to 24 months, who are the target of this vaccine.

Low Access to and Use of Services

Table 4 categorizes districts by access to and use of immunization services in 2020. The categories are based on national immunization coverage targets, which include at least 90% coverage of the first dose of DTaP-HepB-Hib and a vaccine dropout rate of less than 10%:[18]

- Category 1 (good access to and good use of immunization services): 34% of districts (15 of 44)
- Category 2 (good access and poor use): 32% of districts (14 of 44)
- Category 3 (poor access and good use): 23% of districts (10 of 44)
- Category 4 (poor access and poor use): 11% of districts (5 of 44)

Zero-Dose Children

The problem of zero-dose children is a major public health issue in Togo. The proportion of zero-dose children was estimated at 7% and 2.2% in 2006 and 2012, respectively, according to EPI reviews. It was estimated at 3.8% and 4.5% in 2010 and 2017, respectively, based on MICS surveys (Table 5).

A 2021 UNICEF study estimated the proportion of zero-dose children at 2.1% nationally, with higher rates in the Greater Lomé (1.6%) and Central (1.7%) regions.[21]

However, the data vary according to the definition of the indicators, with some studies using the proportion of children who did not receive DTaP-HepB-Hib1 and others using the proportion of children who did not receive BCG.

TABLE 4 Access to and Use of Immunization Services by Region (2020)[18]

Category 1 (15 districts)	Category 2 (14 districts)	Category 3 (10 districts)	Category 4 (5 districts)
Good access and good use (Penta1 ≥ 90%, Penta1 to MCV1 dropout < 10%)	**Good access and poor use** (Penta1 ≥ 90%, Penta1 to MCV1 dropout > 10%)	**Poor access and good use** (Penta1 < 90%, Penta1 to MCV1 dropout < 10%)	**Poor access and poor use** (Penta1 < 90% and Penta1 to MCV1 dropout > 10%)
Agoè	District 1	District 3	District 2
Agou	Avé	District 4	Lacs
Amou	Zio	District 5	Vo
Danyi	Akébou	Bas-Mono	Kpélé
Est-Mono	Anié	Golfe	Ogou
Kloto	Haho	Yoto	
Moyen-Mono	Blitta	Wawa	
Assoli	Tchamba	Mo	
Doufelgou	Tchaoudjo	Sotouboua	
Kéran	Bassar	Binah	
Kozah	Dankpen		
Cinkassé	Kpendjal-ouest		
Kpendjal	Oti-sud		
Oti	Tône		
Tandjoaré			

TABLE 5 Immunization Coverage Estimates (%) Based on National Surveys and Reviews[13]

Antigen	EPI Review 2006	MICS IV 2010	EPI Review 2012	EDST III 2013	MICS 2017
BCG	92	90.7	96.9	95.3	93
OPV1	90	83.7	93.5	94.1	90
DTaP-HepB-Hib1	88	72	93.5	93.2	90
OPV3	76	65.4	83.8	74.1	67
DTaP-HepB-Hib3	76	59.1	84.1	82.9	79
Pneumo3					78
RV2					80
VAR	64	63.8	71.7	74.4	73
VAA	53	60.3	71.6	74.2	69
ECV	34	29.7	70	61.4	49
Zero dose	7	3.8	2.2	13.5	4.5
VAT2	80	ND	78.4	ND	50.9
Children protected at birth against tetanus	58	66.9	66	77	79

ECV = children fully vaccinated before age 1

ANALYSIS AND RECOMMENDATIONS

Unless otherwise noted, the recommendations in this section are the result of discussions with the key informants interviewed.

Leadership and Governance

In Togo, the MSHPAUS Immunization Division is in charge of EPI activities. Initially a service in the Epidemiology Division, it became one of the six divisions of the Directorate of Disease Control and Public Health Programs according to Order 0021/2013/MS/CAB/SG in 2013.

The EPI organizational chart also aligns with the three-tier health system (Figure 11).

EPI is managed at the regional and district levels by the regional health directors and the prefectural health directors. The day-to-day monitoring of EPI activities in regions and districts is the responsibility of the EPI focal points.[13]

For planning of EPI activities, the country has a PPAc initially developed for 2016 to 2020. It was revised in 2020 and extended until 2022 to align with the National Health Development Plan, which extends until 2022.

The revised PPAc already incorporates some of the new approaches in the IA2030 and Gavi 5.0 global immunization agendas, including those described on the next page.

FIGURE 11 **Togo EPI Organizational Chart**

LEVEL	ACTOR	FUNCTION
Central	MSHPAUS Immunization Division	• Coordination of activities at the national level • Conceptualization/elaboration/dissemination of EPI tools, guides, and directives • Technical support for the operational level
Intermediate	Regional health directorates (6)	• Coordination of activities at the national level • Technical support for vaccination activity implementation • Support for monitoring and evaluation
Peripheral	District health directorates (39)	• Implementation of EPI activities • Integrated surveillance of vaccine-preventable diseases

- **Immunization programs for PHC and UHC.** Immunization is an integral part of the PHC package in Togo and is offered free of charge to all EPI target populations, including pregnant women and children. Other maternal and child health programs, such as free cesarean sections and free prenatal consultations, are stepping stones toward the implementation of UHC.

- **Commitment and demand from the community.** To benefit from Togo's demographic dividend (greater economic growth due to the growing working-age population and therefore reduced spending on the dependent population), vaccination is a priority for the Togolese government. Despite some pockets of resistance, vaccination is seen as a high-impact intervention by the general population. Awareness-raising and community mobilization activities are at the center of immunization activities in communities.

- **Coverage and equity.** The revised PPAc calls for "a particular focus on equity analysis at each level of the health system to reach unvaccinated children and underserved populations" and an evolution from "Reach Every District" to "Reach Every Child." The latter strategy and the search for children lost to follow-up are essential to achieving the goals of reducing the dropout rate and the number of zero-dose children regardless of gender or social condition.

- **Life cycle and integration.** Vaccination beyond the first year of life is a priority of the PPAc, especially with the integration of new vaccines into EPI over the next seven years, including the measles-rubella vaccine, IPV1 and IPV2, MenAfriVac, HPV vaccine, HepB vaccine at birth, and diphtheria and tetanus vaccine as a replacement for tetanus vaccine. In addition, public health interventions to boost immunization coverage and other essential health services are also gradually being implemented.

Since 2016, immunization catch-up campaigns have been organized with UNICEF support to reach unvaccinated or incompletely vaccinated children and pregnant women. Vitamin A supplementation and albendazole deworming in children ages 6 to 59 months are coupled with the vaccination campaign. Thus, twice a year, the campaigns achieve more than 90% of the targets for vitamin A supplementation and albendazole deworming.[21] In 2021, due to the coordination of civil registration services with vaccination services, the proportion of children for whom a birth certificate could be presented was 58.1%, compared with 41% in 2017.[21] For malaria prevention and to increase demand for vaccination services, a two-year demonstration project called MULTIPLY was launched in May 2021 in the Haho district of the Plateaux region. Its aim is to administer four doses of sulfadoxine/pyrimethamine during children's visits, in line with EPI vaccine schedule recommendations.[22] The MSHPAUS Immunization Division reports that it is working with the nutrition program to increase immunization coverage in the 2YL, especially for MCV2.

- **Epidemics and emergency situations.** The Togolese government has made efforts to make the COVID-19 vaccine available free of charge to all eligible target populations, which has led to Togo having one of the highest COVID-19 immunization coverage rates in Africa.

- **Research and innovation.** Data quality is crucial for guiding decisions about vaccination programs. Following a review of the quality of vaccination data in 2020–2021, a data quality plan and a national data quality team led by the Directorate of the National Health Information System and Informatics were established. In terms of technological innovation, an electronic vaccination record pilot project is underway in three health facilities in three health districts (Agoè, Golfe, and Zio).

Strengths

- EPI is a priority program for the Togolese health system.
- Political will in support of PHC and UHC is strong.
- EPI implementation aligns with strategic axis 1 of the National Health Development Plan 2017–2022 ("Accelerating the reduction of maternal, neonatal, and infant mortality and strengthening family planning and adolescent health") and strategic axis 3 of the plan ("Improve and promote equitable and inclusive access to basic social services").
- The pool of technical and financial partners is diverse.
- The country has implemented strategies, vaccination campaigns, and other efforts to identify children lost to immunization.

Weaknesses

- The position of EPI in the MSHPAUS organizational chart does not allow it to function optimally. Indeed, the MSHPAUS Immunization Division, which coordinates immunization activities at the national level, does not have its own operating budget and cannot mobilize resources.
- The country does not have a national immunization policy with a regulatory framework for immunization services.

Recommendations

- Strengthen coordination between MSHPAUS and EPI. This was a strong recommendation from all key informants at the central level, development partners, and associations, but also following a 2019 Inter-Agency Coordinating Committee (CCIA) meeting.
- Conduct an organizational audit to identify where capacities and resources of the MSHPAUS Immunization Division need strengthening.
- Develop a national immunization policy.
- Strengthen integration of new IA2030 and Gavi 5.0 approaches into the new strategic immunization plan.

Coordination

At the national level, the MSHPAUS Immunization Division, which coordinates all EPI activities, is responsible for planning (vaccine supply, cold chain), supervising, and evaluating EPI activities for both routine and supplementary immunization.[13]

For coordination of activities, the division is supported by the CCIA and the Technical Advisory Group for Immunization - Togo (GTCV-Togo). The CCIA comprises representatives of MSHPAUS, the Ministry of Economy and Finance, the Ministry of Development Planning and Coordination, and EPI partners. The CCIA is responsible for coordinating the interventions of the various partners for strengthening the immunization program. Created by Order No. 2015/MS/CAB/SG/DGAS/DLMPSP/DI, GTCV-Togo is responsible for providing the minister of health and national authorities with guidance on implementing national vaccination policies and strategies. Since 2017, it has issued four opinions on different themes: use of the fractional dose of IPV, routine national introduction of HPV vaccines, MenAfriVac, and introduction of the birth dose of hepatitis B vaccine.[13]

To strengthen coordination and implementation of activities, other advisory bodies were created in 2019, including the National Logistics Group for Immunization, which provides EPI with expertise, technical assistance, and advice on strengthening the supply chain for immunization; and the National Data Quality Team, which is responsible for promoting and monitoring data quality improvement activities.[13] Both meet once a quarter.

EPI activities are implemented with the technical and financial support of partners (Gavi, WHO, and UNICEF). EPI also collaborates with civil society organizations within POSCVI.

The CCIA does not operate at the subnational level; the Health Sector Coordinating Committee is responsible for coordination and implementation of activities at the regional and district levels.

Strengths

- A formal framework guides collaboration between MSHPAUS and the private health sector to improve access to and quality of health services, including immunization.

Weaknesses

- The private sector has low involvement in immunization, especially in the Greater Lomé region.
- Private health facilities do not use EPI vaccines.
- EPI vaccines are offered free of charge, but health care staff need to be paid to administer them.
- According to MSHPAUS Immunization Division interviewees, even when public health facilities shift vaccination to private health facilities, users are suspicious about the quality of the vaccines.

Recommendations

- Establish a framework for functional collaboration with the private health sector.
- Three key informants called for reflection on financial compensation mechanisms for private providers to carry out EPI activities.

Financing

EPI mobilizes significant resources from partners and the Togolese government. Government commitment to EPI is reflected in 1) budget lines dedicated to the purchase of traditional vaccines and the co-financing of vaccines purchased by Gavi in the national budget since 2004 and 2) the grant to promote the Reach Every District approach to immunize all target populations in all districts, particularly those that have had low immunization coverage since 2016.[13]

As shown in Table 6, the 2018–2022 PPAc budget projects that funding needs will increase due to the planned integration of new vaccines (HPV, MenAfriVac, measles-rubella) into EPI. Overall, gaps still exist between needs and secure funding.

Nearly 80% of immunization funding comes from external resources. Depending on the partners, the available resources are distributed as follows:

- State funding is earmarked for the purchase of traditional vaccines (with other inputs) and for co-financing new and underused vaccines.
- Gavi financing goes toward the purchase of new vaccines, support for new vaccine introductions, support for implementation of the Reach Every District approach, and improvement of cold chain equipment.
- WHO supports surveillance of vaccine-preventable diseases.
- UNICEF supports EPI implementation in the Savanes and Maritime regions through annual work plans.
- A Gavi sub-sub-recipient grant for 2017–2023 supports 15 priority districts under the advanced strategy and central oversight. Since 2019, the Togolese government has also supported advanced strategies in non-priority districts through an annual grant of about 30 million CFA francs.

Strengths

- The government has a budget, which is gradually increasing, for purchasing traditional vaccines and consumables and co-financing EPI activities.
- Togo uses cost recovery (budget from the activities of health facilities) for the partial financing of immunization activities.[13]

TABLE 6 **Secure Financing for Immunization and Funding Gaps (Excluding Shared Costs), 2018–2022 (in U.S. dollars)[13]**

Financing Source	2018	2019	2020	2021	2022
Government	$1,861,880	$910,523	$1,726,693	$1,790,822	$1,860,632
Subnational government	$0	$0	$0	$0	$0
Government co-financing of Gavi-supported vaccines	$0	$0	$0	$0	$0
Gavi	$7,296,005	$7,387,737	$6,945,858	$10,061,498	$12,436,879
WHO	$78,608	$87,171	$288,726	$1,527,651	$1,509,521
UNICEF	$0	$857,655	$473,215	$1,452,610	$1,542,553
UNFPA	$0	$0	$0	$0	$0
West Africa Health Organization	$0	$0	$0	$0	$0
Plan Togo	$0	$0	$0	$0	$0
Health Management Committees	$0	$0	$0	$0	$0
European Union	$0	$0	$0	$0	$0
AFD	$0	$0	$0	$0	$0
Rotary International	$0	$0	$0	$0	$0
GIZ	$0	$0	$0	$0	$0
Red Cross	$0	$0	$0	$0	$0
Total secure financing	$9,236,492	$9,243,087	$9,434,492	$14,832,581	$17,349,585
Total resource requirements	$12,250,446	$14,482,007	$14,083,090	$16,845,113	$19,556,657
Funding gap	$3,013,954	$5,238,920	$4,648,599	$2,012,532	$2,207,072

Weaknesses

- EPI is highly dependent on partners for its activities and vaccine procurement.
- State budget allocations for EPI (purchase of vaccines, cold chain equipment, rolling stock, Reach Every Child strategy) are insufficient.
- The EPI funding process is not dynamic, and domestic financial resources do not vary to match the increase in financial needs.
- Budgets for purchasing vaccines and financing other EPI activities are low.
- Implementation of a compact signed in December 2019 between the government and development partners in the health sector to mobilize and manage funding has run into difficulties. Development partners have implemented the compact more quickly in the context of health emergencies than for financing activities included in annual work plans.*
- The COVID-19 pandemic has led to redirection of some resources. For example, a bonus of 70 million CFA francs allocated to EPI in 2019 was used to support COVID-19 response. However, the pandemic has also created opportunities to strengthen the cold chain.

*The signatories of the compact include the government, civil society, the private sector, bilateral and multilateral development partners, nonstate actors at the national level, and other stakeholders.

Recommendations

- Strengthen advocacy to encourage MSHPAUS and the National Assembly to increase the budget for EPI.
- Restructure the compact to more efficiently mobilize external funding for health.
- Encourage development partners to better finance sparsely funded EPI activities and identify a co-financing agreement with state participation.

Human Resources

At the central level, EPI is managed by EPI officers. Management of the various EPI components is carried out by focal points who are available at all levels of the health system under the regional and prefectural directors of health. At the regional level, EPI activities are carried out by health personnel working in health facilities. Health professionals in health facilities are paid according to category: Public service officials recruit health professionals, who are then paid by the government; health facilities recruit and pay health professionals on a contractual basis; and volunteer agents are recruited and paid through the National Volunteer Agency of Togo.

Strengths

- A framework exists for managing and supervising immunization activities at the subnational levels (regions and districts).
- A plan exists for overseeing immunization activities.
- Staff are motivated.
- EPI managers and providers are supervised as follows: semi-annual supervision from the national level to the regions and districts; quarterly supervision from the regional level to the districts; and monthly supervision from the district level to health facilities.

Weaknesses

- Qualified personnel are lacking, especially at the operational level dedicated to EPI activities. For example, the same qualified staff who carry out consultations and treatment are also responsible for vaccination in fixed and advanced strategies. Thus, on vaccination days, their workload is heavy. Also, COVID-19 increased the workload of EPI officers, who became involved in implementing and managing COVID-19 vaccination activities in health facilities in the region.
- Supervision of EPI activities at all levels is weak. According to a 2019 external review at the operational level, only 38% of respondents had been supervised for more than six months.[13] This would be due to a lack of resources for these activities and, in the past two years, disruptions due to COVID-19.
- Staff training is insufficient. According to the 2019 external review, respondents identified training gaps in the areas of cold chain management (71% of respondents), vaccine management (64%), vaccine adverse event management (62%), and data management (40%). Lack of funding would explain this lack of staff training.
- Personnel who are unqualified to provide vaccinations (such as birth attendants) are carrying out this task in several health facilities.
- Staff are distributed unequally by region. In 2019, Togo had 11,555 health workers in the public sector and 3,719 health workers in the private sector. In the public sector, more than a quarter (27.6%) worked in the Lomé-Commune region and at the central level, and 10.5% worked in the Savanes region.[11]

Recommendations

- Recruit sufficient qualified personnel for immunization.
- Regularly train all staff involved in immunization, including CHWs, on EPI management.
- Develop quality supervision through training and ensure supervision at the required frequency.
- Mobilize sustainable funding for implementing training activities.

Infrastructure and Logistics

Cold Chain

Central Level

According to the external review carried out in 2019, the central repository has sufficient vaccine storage capacity, both positive and negative.* However, there is a shortage of freezers with cold accumulators, which maintain quality freezing performance.[13] All of the cold rooms are equipped with continuous temperature monitors and an alarm system. The equipment is in working condition, and there is an updated contract for the maintenance of cold chain equipment.

All cold rooms at the central level are equipped with an automatic and continuous temperature recording system, but it has not been functional since 2016.

To compensate for the shortage of negative storage capacity for producing cold accumulators, the central repository in 2019 acquired nine FCW 300 freezers, including five for the central level, thanks to Gavi funds.[13] These cold rooms were also used to store COVID-19 vaccines.

Regional Level

The country has five operational regional repositories—in the Maritime, Plateaux, Centrale, Kara, and Savanes regions. None of these regions has sufficient positive cold storage capacity to store vaccines for the planned three-month supply (Table 7).

The districts in the Lomé region are supplied directly by the central repository, given the proximity (1 km) and the fact that the Greater Lomé regional repository is not operational.

To compensate for the lack of positive storage capacity, the country received Gavi support to purchase three cold rooms in 2017 with a capacity of 30,000 liters each in the repositories of the Maritime, Plateaux, and Kara regions. The Kara repository will be able to serve the Savanes and Central regions. Large-scale vehicles (such as SUVs and all-terrain vehicles) will be used to transport vaccines and consumables to districts and regions.[13]

TABLE 7 **Positive Storage Capacity vs. Projected Requirements for Each Repository**

Repository	Total population (2017)	Net available fridge storage capacity at +5°C (in liters)	Net available freezer storage capacity at -20°C (in liters)	Annual positive cold chain capacity requirements (in liters)					
				2017	2018	2019	2020	2021	2022
Maritime (without Golfe)	1,205,668	776	575	1,378	1,462	1,565	1,602	1,760	1,815
Plateaux	1,609,994	377	281	1,841	1,952	2,089	2,140	2,349	2,424
Centrale	725,394	601	973	830	880	942	965	1,059	1,092
Kara	903,368	553	271	1,033	1,096	1,173	1,201	1,319	1,361
Savanes	963,411	1,428	562	1,101	1,168	1,251	1,281	1,406	1,451

* Positive cold storage is at a temperature above 0°C; negative cold storage is at a temperature below 0°C.

District Level

The country has 44 district repositories. Currently, 16 districts have insufficient storage capacity, especially with the creation of new districts (Mô, Kpendjal, Ouest Oti Sud, and Agoè-nyivé). To date, 17 of the district repositories have insufficient storage capacity.

Peripheral Level (Health Facilities)

A 2019 inventory showed:

- At least one working refrigerator in 525 of 713 sanitary facilities (74%), running on oil, electricity, gas, and/or solar energy
- No functional refrigerator for vaccine storage in 78 vaccination centers (11%)
- No means of transport (motorcycle) at 299 vaccination centers (59%)

In general, the inventory revealed:

- Great disparities in equipment
- A high rate (11%) of broken equipment
- Plans to acquire 110 refrigerators for health centers, to replace refrigerators that were to be amortized during the period 2016 to 2022

Maintenance of Cold Chain Equipment

The cMYP 2016–2022 included plans to create a maintenance system involving private refrigeration technicians, with preventive and curative maintenance plans for the cold chain (cold rooms, refrigerators, and freezers), generators, and buildings at all levels, using maintenance notebooks or monitoring records. The total cost of setting up this maintenance system, including training, was estimated at $50,000 USD. However, due to lack of funding, the plan was not implemented.

Vaccine Supply and Injection Safety

The government and Gavi finance the purchase of vaccines and injection equipment. These are supplied through UNICEF as part of a purchase-assistance agreement with the Togolese government.

The regions are supplied bimonthly, but that can be revised by the central level when storage capacity in the regions is insufficient. Districts are supplied once a quarter or monthly, depending on regional storage capacity. Procurement happens after inventory is carried out at the operational level, as required.

Safe injections and the management of vaccine waste are improving with the supply of adequate quantities of self-locking syringes, dilution syringes, and safety boxes to regions and districts and the construction of incinerators.

In terms of vaccine regulation, EPI collaborates with the Directorate of Pharmacy, Medicines and Laboratories, which acts as the national regulatory agency. The directorate performs four of the eight core functions of pharmaceutical regulation, including licensing, inspection, pharmacovigilance, and import control. The functions it does not yet perform are approval of clinical trials, batch release, and quality control. However, all vaccines used by EPI in Togo are prequalified by WHO, and they are supplied through UNICEF.[13]

Strengths

- Regular equipment inventories for EPI are conducted, as called for in strategic documents such as the cMYP.
- At least one MONTFORT incinerator is available in each district, and a waste management plan exists.

Weaknesses

- Vaccine shortages are sometimes recorded at the operational level. These are linked to lack of storage capacity at the regional level.
- Cold chain equipment is insufficient: 11% of health facilities do not have functioning, approved refrigerators for storing vaccines.
- Domestic financing of EPI infrastructure and equipment is low.
- Rolling stock (cars and motorcycles) is insufficient for supplying vaccines at all levels, implementation of supervision activities, and advanced vaccination strategies. In 2019, 59% of health facilities did not have motorcycles.

- Despite the existence of at least one incinerator in each health district, incineration materials and equipment in the districts are still insufficient. Needs include maintenance of 16 incinerators and construction of 105 new incinerators in the districts.

Recommendations

- Encourage co-financing between development partners and the government for purchasing cold chain equipment and rolling stock.
- Improve equipment maintenance and increase available equipment across all health districts.
- Ensure more frequent and regular equipment inventories for EPI.

Community Engagement

At the central level, the Division of Community Health and the Elderly and POSCVI participate in decision-making processes (via the CCIA) and are involved at the technical level (supervision, planning, and financing). Civil society organizations are also involved with the MSHPAUS Sector Communication Service to develop key messages to combat rumors and misinformation.

At the operational level, the involvement of community leaders, community relays, and CHWs is essential for the smooth running of EPI activities. Indeed, EPI activities face challenges such as rumors, misrepresentations, and illiteracy. Community actors facilitate EPI activities on the ground, including social mobilization and the negotiation of timetables. During vaccination sessions, they support vaccinators by helping to organize sites, register children, present talks, and administer vitamin A. They also help search for children lost to follow-up.

Strengths

- Motivated community health actors are involved in EPI activities, including advanced strategies.

Weaknesses

- Funding for community activities, including permanent/ongoing community communication to combat rumors, is insufficent.
- Communications are sometimes not adapted to target audiences, especially when radio/television communications do not reach people that do not have the time or electricity to tune in to radio and TV programs.
- Civil society organizations are sometimes late in paying CHWs for their participation. Challenges include cumbersome administrative requirements, verification of CHW numbers for electronic payment, duplicative tasks, and the requirement to pay CHWs before a new activity begins. To overcome some of these difficulties, a pilot project to digitize the reporting of CHW activities is underway in four districts (Oti Sud, Bassar, Assoli, and Mandjouri).
- Funding for advanced strategy activities is insufficient. Funding for CHW activities covers the duration of immunization campaigns, while CHW funding for advanced strategies is provided by health management committees.
- Compensation for CHWs is too low. This poses a problem in peri-urban and urban areas because CHWs abandon EPI activities to engage in more lucrative work or even abandon their CHW status. This results in frequent turnover, with new CHWs being added who are not trained.
- Means of transportation (motorcycles, bicycles) are insufficient for carrying out home visits.

Opportunities

Togo has an opportunity to professionalize CHWs. Since 2016, CHWs have been selected by communities. They work on a voluntary basis and receive 15,000 FCFA per quarter (5,000 FCFA per month) for producing activity reports that are submitted to health facilities. The regular payments are financed by the government, with additional payments made to CHWs by development partners (during the implementation of campaign activities, for example).

The professionalization of CHWs called for in the government's 2020–2025 roadmap aims to improve CHW living and working conditions by redefining recruitment criteria (level of study, training) and working conditions (duration, possibility of advancement). The government is considering actions such as pooling among financial partners and adding resources to generate a substantial premium for CHWs.

Recommendations

- Prioritize community dialogue to identify barriers to increasing immunization coverage and strengthening community outreach, especially in hard-to-reach areas.
- Advocate for government remuneration strategies for CHWs and improved motivation tactics to reduce CHW attrition.
- Develop innovative strategies to facilitate rapid reporting of CHW activities, to empower CHWs and highlight their achievements and contributions toward strengthening community health.
- Adopt a unified definition of "zero-dose children" (typically defined as children who have not received a single vaccine dose and calculated by determining the percentage of children who have not received DPaT1).

Summary of Priority Issues

This analysis identified several areas for improvement in Togo's immunization program. Improvement efforts should include, but not be limited to, districts with low reported immunization coverage levels. They should address immunization misinformation, increase community leader involvement in developing immunization strategies, strengthen integration of immunization into community health, advocate for adequate remuneration and motivation tactics for CHW retention, and expand the framework for collaborating with the private sector in immunization activities.

CONCLUSION

This situational analysis found that significant efforts are being made by EPI in Togo to maintain immunization coverage at a high level. At the national level, immunization coverage is generally above 80% except for MCV1, regardless of the source of the data, with a very high MCV1 to MCV2 vaccination dropout rate—nearly three times the target of 10%. For zero-dose children, the data are highly variable, depending on the definition of the indicators used, and the proportion of zero-dose children is insufficiently documented. The COVID-19 pandemic has led to a decline in immunization coverage, but the COVID-19 response has also enabled EPI to strengthen its cold chain capacity. The country has no specific strategy to improve immunization coverage in the 2YL and reduce the proportion of children with zero doses. However, research on those lost to follow-up has been initiated at the operational level for all vaccine antigens.

Togo's health system faces many challenges in improving immunization coverage, including insufficient human and financial resources. These challenges are more pronounced for implementing advanced strategies. Other areas for improvement include the status of the MSHPAUS Immunization Division, CHW allowances, and community outreach on immunization. There is also an urgent need for a national study on zero-dose children and a micro action plan to reduce vaccine dropout rates in the 2YL.

ANNEX: KEY INFORMANTS

Name	Institution and Role
Government	
Dr. BOKO Kodjo	Ministry of Health, Public Hygiene and Universal Access to Care (MSHPAUS) Head of Immunization Division
Mr. LACLE Anani	MSHPAUS Monitoring and evaluation officer, Immunization Division
Dr. NABA Mouchedou	MSHPAUS Head of the Division of Community Health and the Elderly
Dr. ZIGAN Mawunyon	MSHPAUS Director of Studies, Planning, and Programming
Mr. ISSA Aboubabacar	MSHPAUS Head of the Planning and Health Card Division
Dr. LAMBOKALE Aboudramane	MSHPAUS Regional director of health, Maritime Region
Dr. APETSIANYI Djatugbé	MSHPAUS Regional director of health, Greater Lomé Region
Dr. AGORO Sibabe	MSHPAUS Regional director of health, Kara Region
Development partners	
Dr. LANDOH Dadja	WHO, Togo Head of the Immunization and Polio Programme
Dr. TOKE Yaovi Temfan	UNICEF Immunization Plus administrator
Mr. DIACK Demba	Gavi Senior country manager, AFRO Region
Mr. RYCHEN Mickaël	Gavi Project manager, AFRO Region
Civil society organization	
Mr. KOLA Manzama Esso	Technical Secretariat of the Platform of Civil Society Organizations for Immunization (POSCVI) Coordinator

REFERENCES

1. World Health Organization (WHO). Vaccines and vaccination [Online]. 2022 [Accessed 2022 Jul 13]. Available from: https://www.who.int/health-topics/vaccines-and-immunization#tab=tab_1

2. Immunization Agenda 2030 (IA 2030). A global strategy to leave no one behind [Online]. 2020 [Accessed 2022 Jul 13]. Available from: https://tinyurl.com/d82zrhzy

3. Ministère de la Santé, de l'Hygiène Publique et de l'Accès Universel aux Soins. Rapport annuel de performance année 2021. Lomé, Togo: Togolese Republic; 2021.

4. Coronavirus in Togo: Official government information site. Welcome [Online]. 2020 [Accessed 2022 Jul 13]. Available from: https://covid19.gouv.tg

5. World Bank DataBank. World Development Indicators: Toga [Online]. 2020 [Accessed 2022 Jul 13]. Available from: https://tinyurl.com/264v338m

6. World Bank. Population, women (% of total) - Togo | Data [Online]. 2022 [Accessed 2022 Jul 13]. Available from: https://tinyurl.com/42jv545s

7. Directorate-General for Statistics and National Accounts. Final results of the general census of population and housing (RGPH4) [Online]. Lomé, Togo; 2010 [Accessed 2022 Jan 21]. Available from: https://inseed.tg/statistiques-demographiques/

8. Ministry of Health and Social Protection of Togo. National Health Development Program 2017-2022 [Online]. Lomé, Togo; 2017 [Accessed 2022 Feb 22]. Available from: https://covidlawlab.org/item/national-health-development-plan-2017-2022/

9. Ministry of Territorial Administration, Decentralization and Local Authorities. Administrative division of Togo [Online]. 2018 [Accessed 2022 Jan 22]. Available from: https://territoire.gouv.tg/

10. World Bank. Togo - Overview [Online]. 2022 [Accessed 2022 Jul 13]. Available from: https://www.banquemondiale.org/fr/country/togo/overview#1

11. Ministry of Health and Public Hygiene of Togo. Togo Health Statistics Yearbook 2017. Lomé, Togo: Togolese Republic; 2018.

12. UNICEF: Data warehouse [Online]. 2021 [Accessed 2021 Mar 29]. Available from: https://data.unicef.org/resources/data_explorer/unicef_f/?ag=UNICEF&df=GLOBAL_DATAFLOW&ver=1.0&dq=TGO.MNCH_MMR.&startPeriod=1970&endPeriod=2022

13. Ministry of Health and Public Hygiene. Comprehensive Multi-Year Plan 2016-2022 extended to 2022 of the Expanded Programme on Immunization. Lomé, Togo: Togolese Republic; 2020.

14. Ministry of Health, Public Hygiene and Universal Access to Care. List of approved private health facilities in Togo in the 1st half of 2022 [Online]. 2022 [Accessed 2022 Jul 13]. Available from: https://tinyurl.com/mr2ahkf3

15. Ministry of Health and Social Welfare. Manual of procedures and implementation of community-based interventions in Togo. Lomé, Togo: Togolese Republic; 2016.

16. Ministère du Développement à la Base, de la Jeunesse et de l'emploi des jeunes. Rapport annuel de performance année 2021. Lomé, Togo: Togolese Republic; 2022. Available from: https://devbase.gouv.tg/wp-content/uploads/2022/02/rapport-annuel-de-performance-2021-VF.pdf

17. Togolese Republic. Law No. 2011-034/PR of 9 March 2011, on the statutes of the National Institute of Health Insurance (INAM). Official Journal of the Togolese Republic, Special No. of 22 April 2011.

18. Ministry of Health, Public Hygiene and Universal Access to Care. Expanded Programme on Immunization (EPI) activity reports 2020. Lomé, Togo: Togolese Republic; 2021.

19. Ministry of Health, Public Hygiene and Universal Access to Care. Expanded Programme on Immunization (EPI) activity reports 2021. Lomé, Togo: Togolese Republic; 2022.

20. African Center for Research in Epidemiology and Public Health (CARESP). Action research on vaccination and birth registration in Togo: quantitative survey on vaccination, use of antenatal consultation services. Lomé, Togo: CARESP; 2021.

21. Ministry of Health and Public Hygiene. Child Health Days (JSE) report. Lomé, Togo: Togolese Republic; 2019.

22. Barcelona Institute for Global Heatlh (ISGLOBAL). MULTIPLY, MULTIple doses of IPTi Proposal: a Lifesaving high Yield intervention [Online]. 2018 [Accessed 2022 Jul 13]. Available from: https://www.isglobal.org/en/-/multiply

Contact Information

USAID

USAID missions and country representatives interested in joining the Accelerator project should contact Jodi Charles, USAID Agreement Officer's Representative, at jcharles@usaid.gov.

Accelerator

Other interested parties should contact Nathan Blanchet, Accelerator project director, at nblanchet@r4d.org.

This report was made possible by the support of the American people through the United States Agency for International Development (USAID). The contents are the sole responsibility of the author and do not necessarily reflect the views of USAID or the United States government.

@AccelerateHSS

https://www.facebook.com/accelerateHSS

accelerateHSS@r4d.org

HEALTH SYSTEMS STRENGTHENING ACCELERATOR

AccelerateHSS.org

USAID FROM THE AMERICAN PEOPLE

RESULTS FOR DEVELOPMENT

HEALTH STRATEGY AND DELIVERY FOUNDATION

ICF

BILL & MELINDA GATES foundation