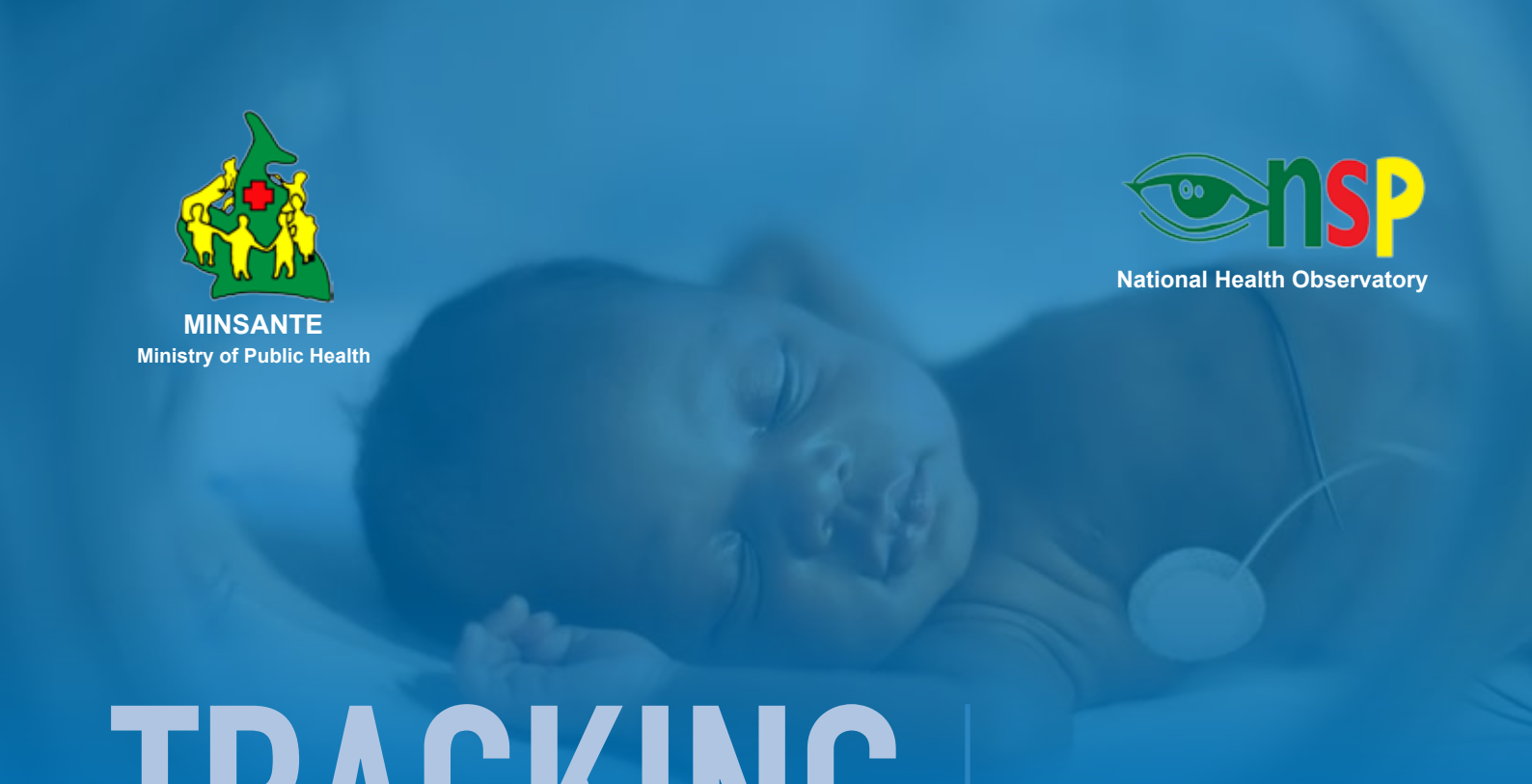

MINSANTE
Ministry of Public Health

National Health Observatory

TRACKING 100 CORE HEALTH INDICATORS IN CAMEROON 2019 & SDG FOCUS

World Health Organization
Cameroon

MINSANTE
Ministry of Public Health

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TRACKING 100 CORE HEALTH INDICATORS IN CAMEROON 2019 & SDG FOCUS

World Health Organization
Cameroon

I intend to work relentlessly, with all the sons and daughters of our country, towards meeting the challenges we are facing in order to improve the welfare of our population, especially in terms of infrastructure, water and electricity supply, healthcare delivery and youth employment.

The Head of State's Message to Nation – 10 Sept 2019

His Excellency Paul BIYA
President of the Republic of Cameroon

Joseph Dion NGUTE
Prime Minister Chief of Government

TRACKING 100 CORE HEALTH INDICATORS IN CAMEROON 2019 & SDG FOCUS

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AIDS: Acquired Immune Deficiency Syndrome

ANRP: National Agency for Radioprotection

ART: Anti retroviral Treatment

ARV: Anti retro viral

SIA: Suplementary Immunisation Activities

BCG: Bacillus Calmette–Guérin

CDBPH: Centre for the Development of Best Practices in Health

CENAME: National Center for the Supply of Drugs and Consummables

CHS: Cameroonian Household Survey

CIS: Health Informations Unit

CNLCa: National Cancer Control Committee

CNLD: National Drug Control Committee

COCPR: Central Office for Census and Population Research

CPA: Complementary Package of Activities

DFDEP: Directorate for the fight against Diseases, Epidemics and Pandemics

DFH: Directorate of Family Health

DFRH: Directorate of Financial Resources and Heritage

DHP: Department of Health Promotion

DHR: Directorate of Human Resources

DHS: Demographic Health Survey

Dla: Douala

DOHCT: Directorate for the Organisation of Health Care and Technology

DOHR: Division of Operational Health Research

DPML: Directorate of Pharmacy, Medicines and Laboratories

DQR: Data Quality Review

EONC: Emmergency Obstetrical and Neonatal Care

EPI: Expanded Program on Immunisation

FHBS: Faculty of Health and Biomedical Sciences

GDP: Gross Domestic Product

GESP: Growth and Employment Strategy Paper

GHED: Global Health Expenditure Database

HFS: Health Financing Strategy

HIV: Human Immunodeficiency Virus

HIV+ PGW: HIV Positive Pregnant Women

HKI: Hellen Keller International

HRD: Human Resource Department

HU: Health Unit

IDSR: Intergrated Disease Surveillance and Response

IFORD: Training Insitutute for Demographic Research

INH: Isoniazide

ITN: Insecticide Treated Net

LLIN: Long Lasting Insecticide Treated Net

MICS: Multiple Indicators Cluster Survey

MINADER: Ministry of Agriculture and Rural Development

MINAS: Ministry of Social Affairs

MINATD: Ministry of Territorial Administration and Decentralisation

MINESUP: Ministry of Higher Education

MINFI: Ministry of Finance

MoH: Ministry of Health

MPA/CPA: Minimum Package of activities/ Complementary Package of Activities

MRT: Multi-Resistant Tuberculosis

NACC: National AIDS Control Committee

NCCP: National Cancer Control Program

NCD: Non Communicable Diseases

NCRO: National Civil Registry Office

NHA: National Health Accoints

NHO: National Health Observatory

NIS: National Institute of Statistics

NMCP: National Malaria Control Program

NPDP: National Participatory Development Program

NTCP: National Tuberculosis Control Program

NTD: Neglected Tropical Diseases

ORS: Oral Rehydration Salt
Penta Pentavalent Vaccine (DPT-HEP B-HIb)

PLWHIV: Persons Living with HIV/AIDS

PMTCT: HIV mother-to-child Transmission

PN2LP: National Program for the fight against Leprosy and Yaws

PNDS: National Health Development Plan

RHHS: Report on Health and Health System in Cameroon

RT: Rifampicin test

SDG: Sustainable Development Goals

SDMHC: Sub-divisional Medicalised Health Centers

SDI/HFA: Service Delivery Indicators / Health Facilities Assessment

SDMHC: Sub-Divisional Medicalised Health Center

ST/SSS: Technical Secretariat / Health Sectoral Strategy

SYNPEMS: Syndicate of Health Professionals

TB: Tuberculosis

THE: Total Health Expenditure

UHC: Universal Health Coverage

UN: United Nations

UNICEF: United Nations International Children's Emergency Fund

VPD: Vaccine Preventable Diseases

VPD: Vaccination preventable disease

WASH: Water Sanitation and Hygiene

WB: World Bank

WHO: World Health Organization

WHS: World Health Statistics

Yde: Yaounde

Foreword by the Minister of Public Health

The Ministry of Public Health has developed and published the Health Sector Strategy (HSS) 2016-2027 and the National Health Development Plan (NHDP) 2016-2020. The HSS takes into account the indicators and recommendations of the Growth and Employment Strategy Paper (GESP) and on the other part guidance of the Sustainable Development Goals (SDGs). It sets out the country's health sector priorities and objectives to be achieved by 2027.

The achievement of these goals depends on an effective monitoring process, through the production of accurate and up-to-date health data at the national and sub-national levels. To meet this requirement, the National Health Observatory (NHO) published in 2017, the first report "Tracking the 100 core health indicators in Cameroon", using the reference list of indicators proposed by the World Health Organization (WHO).

"*Tracking 100 core health indicators in Cameroon in 2019 & SDG Focus*" Report that I am pleased to publicize, presents the country's health situation through four major themes. This report provides recent information and trends of the 100 core indicators for both health problems and determinants. Relevant analysis highlight the main priorities, thus providing an objective basis on which each stakeholder should rely for individual and collective actions aimed at the sustainable improvement of the health of the population of Cameroon.

The Minister of Public Health

Dr Malachie Manaouda

The high-level political engagement to improve access to care require us the measurement of progress in order to plan strategies and actions that take into consideration the realities on the ground, and the actual needs of population. In its role as Secretariat, WHO supports Members State in monitoring national, sub regional and international health trends. Moreover, the international context concomitantly marked by the adoption by the General Assembly of the United Nations of the High Level Declaration on Universal Health Coverage (UHC) and the development of an integrated plan (Global Action Plan) for achieving the Sustainable Development Goal (SDG) 3 on health, recommend that the country put in place efficient and resilient data production systems.

Improving health information systems and increasing the production and use of reliable and accurate data is one of the accelerators in achieving the 2030 SDG Agenda. To this end, the publication of the report "*Tracking 100 core health indicators in Cameroon in 2019 & SDG Focus"* is a tool for monitoring the country's health situation, and measuring its present position, with respect to the SDG targets (including key indicators for monitoring progress towards UHC as defined by WHO and the World Bank) on health and related issues. So this is a photograph which allows us to better project ourselves, as the country works to define its development strategy for the next decade.

This report is the result of a harmonious work between WHO, the Ministry of Public Health and several other administrations. Most Directorates and Programs of the Ministry of Public Health, and specialized Directorates of other administrations have contributed and actively collaborated for the realization of this document. I would like to thank all those who contributed, and hope that everyone will find it a useful source of health reference for Cameroon.

WHO Representative

Dr Phanuel Habimana

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The present document "*Tracking 100 Core Health Indicators in Cameroon in 2019 & SDG Focus*" was developed by the Ministry of Public Health through the National Health Observatory (NHO) with technical support from the World Health Organization (WHO). Therefore, our thanks go to:

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"Tracking 100 Core Health Indicators in Cameroon in 2019 & SDG Focus" is based mainly on national data sources, namely national surveys, official reports and documents from the health and related sectors. It was developed in collaboration, with the country's technical and financial partners.

The particularity of this document is that it coincides with the completion of the 2018 DHS and the new list of core indicators proposed by WHO in 2018. These two elements have made it possible to propose a 2019 nomenclature that takes into account the indicators integrating health targets and health-related targets of the SDGs, but also indicators related to universal health coverage that are summarized in the SDGs target 3.8. This Target 3.8, which is fast tracking the implementation of the Health SDGs, focuses on the two pillars of the UHC: supply (coverage by quality essential services) and demand (financial protection).

The main objective of this report is to provide a framework for analysing the country's health situation, by making reliable information available to decision makers under four sets of indicators.

1. Health status indicators

For more than a decade, Cameroon has made significant progress in reducing the burden of disease among its population : (i) Life expectancy has increased from 53 years in 2009 to 58 years in 2016 ; under-five mortality has decreased from 151 in 1998 to 79 in 2018 per 1 000 live births. TB mortality rate went from 52 deaths per 100 000 people in 2005 to 25 deaths in 2017. HIV/AIDS move from 210 deaths in 2007 to 112 deaths per 100 000 population in 2015. Malaria mortality rate, according to NMCP data, went from 20 deaths per 100 000 in 2014 to 13 deaths in 2018. The total fertility rate decreased from 5.1 (2011) to 4.8 (2018) children. In addition, the mortality ratio that peaked at 782 deaths (MINSANTE, 2011) per 100,000 live births is estimated in 2018 to 467 deaths (following old method of calculation) for 100,000 live births a drop 40%. Applying WHO definition, which restricts the calculation to the deaths of women during pregnancy or childbirth or during the 42 days following delivery or the end of pregnancy, the mortality ratio maternal, is estimated at 406 deaths for 100,000 live births.

Moreover, (i) the suicide rate per 100 000 people doubled as much between 2012 (4.9) and 2016 (12.2), according to WHO estimates. (ii) Overall, we notice significant decrease in accidents recorded by the gendarmerie and the police as of 2012. The number of road traffic accidents (all types) decreased by 12% and 29% respectively, according to National Gendarmerie and GDNS (police) during this period. In addition, this overall decline in accidents leads to a decline of 11.5% and 15.3% in fatalities, as well as 10.8% and 27.0% in injuries respectively.

At the same time, (i) the rate of TB notification went from 126 cases in 2011 to 95 cases per 100 000 inhabitants in 2018; (ii) the HIV/AIDS prevalence dropped from 4.3% in 2011 to 2.7% in 2018; (iii) malaria prevalence moved from 30% in 2011 to 24% in 2018 among children aged 6-59 months; (iv) the prevalence of surface antigen of hepatitis B infection is 8.3% among the population aged 15-64 years.

2. Risk factor indicators

Overall, breastfeeding rate decreased from 97.4% in 2011 to 92.5% in 2018. At the same time, exclusive breastfeeding rose by nearly 10 points, from 31.4% in 2011 to 39.7% in 2018.

Moreover, the evolution of malnutrition indicators contrasted between 2011 and 2018.

For example, stunting rose from 28% in 2011 to 28.9% in 2018; at the same time, moderate or severe wasting decreased from 5.6% in 2011 to 4% in 2018, while the percentage of children under five with overweight increased from 6.2% in 2011 to 11% in 2018.

The prevalence of obesity rose from 8.2% in 2004 to 10.7% in 2011 and the rate of overweight increased 20.6% (2004) to 21.5% (2011) regarding overweight in women.

Indicators of environmental risk factors (improved water source, improved non-shared toilets, solid and modern fuels) have all witnessed some progress. According to statements of women and men recorded during national surveys, emotional violence is by far the most common (43.65%) form of violence, followed by physical violence (31.0%), and sexual violence (11%) in 2014.

3. Service coverage indicators

Health service coverage indicators have recorded a contrasted trend in recent years, notably:

(i) Reproductive health where satisfied FP needs went from 23.7% in 2011 to 15.4% in 2018 ;

(ii) Maternal health, where ANC4 increased from 62.2% in 2011 to 65% in 2018, and assisted delivery by skilled personnel increased from 61.2% in 2011 to 69% in 2018;

(iii) Child health status, where vitamin A supplementation increased from 38% 2004 to 55.3% in 2011; and the demand for pneumonia care dropped from 40.7% in 2004 to 30% in 2011. Considering the tracer antigen which is DTP3, immunization coverage went from 82% in 2014 to 72% in 2018 ;

(iv) For HIV/AIDS control, ART coverage increased from 27.4% in 2014 to 54% in 2018. Detection of TB cases increased from 49% in 2014 to 51% in 2018, and the prevalence of malaria went from 30% in 2011 to 24% in 2018.

Drug addiction is wreaking havoc on society, especially among young people. According to an official report, in 2017, approximately 2,100 drug-using patients requested for treatment in health facilities during the period January 2016 to December 2017.

4. Health system indicators

In general, the evolution over time of indicators of this group is contrasted.

Moreover, some indicators on (i) quality and safety of care (perioperative mortality, admission owing to abortion) are poorly reported or underreported; (ii) Health workforce, according to a WHO regional survey, the number of health personnel in Cameroon is estimated at 27,978 for a calculated health personnel density of 11.53 per 10,000 inhabitants, and 1.5 physicians per 10,000 inhabitants. With regards to health financing, the country spent 1.2% of its GDP on health in 2015; household out-of-pocket payment accounts for 70% of health-care expenditure; and household expenditure on health as a share of total household consumption or income is high, and estimated at least at 40% of household income. Health financing is an important component for the UHC.

In terms of health security, the International Health Regulation (IHR, 2005) core capacity index is estimated at 40% of the 13 core capacities required.

In terms of health governance, the country has a sectoral strategic plan 2016-2027, and a national health development plan for the period 2016-2020.

The document 'Tracking 100 Core Health Indicators in Cameroon in 2019 & SDG Focus' was developed by Cameroon's Ministry of Public Health, through the National Health Observatory (NHO), with the technical support of World Health Organization (WHO) and other partners.

This report provides information on the progress of indicators in the '*Core Health Indicator Reference List in Cameroon*', taking into consideration the reference list of the 100 core indicators revised by WHO (changes and addition)[1] in 2018. The revision of the indicator list consists of a new proposal and redistribution of core health indicators in 4 areas, 27 dimensions, and 114 core indicators.

In addition, the document specifically focuses on the progress made towards the realisation of the SDGs, as this is a major issue on the agenda recalled by the UN General Assembly in 2016. In fact, SDG 3 is considered the gearbox for the development of quality human capital, thereby facilitating and/or contributing to the achievement of the other SDGs.

The nomenclature of the 100 core health indicators selected, in the 2019 version, is distributed into four (04) areas that include the following dimensions:

I. **Health status indicators**: (i) mortality by age and sex, (ii) mortality by cause, (iii) fertility, and (iv) morbidity.

II. **Risk factor indicators**: (i) nutrition, (ii) infections, (iii) environmental risk factors, (iv) non communicable diseases, and (v) injuries / harmful traditional practices.

Revised 2018 List of Core Indicators: changes include:

1) **The removal of indicators that are no longer recommended as relevant and the consolidation of certain indicators**: (i) two indicators (AIDS coverage, and TB prevalence) removed, (ii) sources of health expenditures (public and private) are combined, (iii) total health expenditures and health capital expenditures have been combined.

2) **New indicators that take into account health-related SDGs and new commitments** :
(i) Mortality of adolescents, (ii) Mortality from household and ambient air pollution (SDG 3.9.1.), (iii) Mortality from unsafe water, unsafe sanitation and lack of hygiene/Access to inadequate WASH services (SDG 3.9.2.), (iv) Mortality attributed to: unintentional poisoning(SDG 3.9.3.), (v) Number of deaths, missing persons, and persons affected by disaster per 100 000 people (SDG 1.5.1., 11.5.1., 13.1.1.), (vi) Mortality rate due to homicide (SDG 16.1.1.), (vii) Hepatitis B incidence (SDG 3.3.4.), (viii) Congenital syphilis rate, (ix) Non-partner sexual violence prevalence (SDG 5.2.2.), (x) Prevalence of female genital mutilation/cutting (SDG 5.3.2.), (xi) Sexual violence against children (SDG 16.2.3.), (xii) Early marriage (SDG 5.3.1.), (xiii) Frequency rate of occupational injuries (SDG 8.8.1), (xiv) Post-partum care coverage, (xv) Number of people requiring intervention against neglected tropical diseases (SDG 3.3.5.), (xvi) Treatment coverage for alcohol and drug dependence (SDG 3.5.1.), (xvii) Total net official development assistance to medical research and basic health sectors (SDG 3.b.2.), (xviii) Existence of national health sector policy/strategy/plan.

3) **Updated indicators of indicator names / Data** : Indicators not taken into account above (points 1 and 2).

III. **Service coverage indicators** : (i) reproductive, maternal, new born, child and adolescent, (ii) immunization, (iii) HIV / TB, (v) tuberculosis, (vi) malaria, (vii) neglected tropical diseases, (viii) screening and preventive care, (ix) mental health, (x) substance abuse, (xi) essential health services.

IV. **Health system indicators** : (i) quality and safety of care, (ii) utilization and access, (iii) health workforce, (iv) health information, (v) health financing, (vi) health security and (vi) governance.

Although the agreed reference year is 2016, the aim is to present the information available for each indicator in 2019, by displaying data for atleast 3 consecutively periods.

In addition, where possible, the information is disaggregated by region, by gender (male, female) and by residence (urban, rural). This is illustrated using tables and graphs and a description to assess the evolution of each indicator over a period.

Finally, the indicators in this report “Tracking 100 Core Health Indicator 2019 & SDG Focus” are not reported from incompatible data sources. However, studies and/or survey data and estimates may be reported separately if necessary. This report is an opportunity not only to monitor the progress of core health indicators in the country but also to assess the progress towards the achievement of the SDGs and the gradual progress towards the UHC.

The following methods were used:

1. Working sessions with (i) WHO Cameroon country office key stakeholders (ii) NHO Coordinator and his team, and officers of the Ministry of Public Health ;

2. Update of the list of core health indicators/2019 in Cameroon, based on the revised 2018 WHO list, English translation, routine checks and production of the 2018 core indicators nomenclature. The structure of the document is aligned with the 2018 reference list with a specific focus on the SDG and UHC monitoring indicators ;

3. Identification of the reference library : the research process and data extraction to report on the core health indicators has been facilitated by the 2018 revised WHO core indicators document, and by the production team of the 2019 version ;

4. Critical of data sources: two main sources were used: (i) domestic sources and (ii) international sources.

- The domestic sources include annual reports and publications from the Programs and Directorates of the MoH, supplemented by results of major national surveys conducted mainly by the NIS (ECAM, DHS, and DHS-MICS), BUCREP and local research institutes. Moreover, for some indicators, we relied on routine data from the DHIS2 (District Health Information Software) despite its progressive implementation. In addition, domestic databases, built on data from published surveys and/or field studies were preferred as they are considered closer to reality;

- International sources include global and specialized data and/or data from the United Nations system, including WHO, UNICEF, UNFPA, World Bank, etc. Moreover, articles/journals published in reference journals were also used as a basis for work;

5. The development of data collection matrices, extraction of data under © Excel spread sheet and production of graphs using the software © Power BI ;

6. Research and/or cross-reference of additional information from the Ministry of Health, program managers, WHO, NIS and technical and financial partners ;

7. Production of a preliminary report ;

8. Review and finalization of the document during a participatory workshop organized by the NHO with the support from WHO and other technical and financial partners

9. Validation by the NHO Scientific Council ;

10. Adoption by the NHO Steering Committee ;

11. Production of the final document ;

12. Dissemination of the document ‘Tracking 100 core health indicators in Cameroon in 2019 & SDG Focus’ by the NHO.

Focus on Universal Health Coverage (UHC):

The UN General Assembly resolution on the SDGs 'transforming our world: The Sustainable Development Agenda 2030' points out that universal health coverage (UHC) is one of the keys to SDG 3. Indeed, failure to achieve SDG 3 by 2030 will reflect countries inability to deliver quality essential services without being exposed to financial risk. The progress is reflected quite clearly in the monitoring to target 3.8.

To be comprehensive, this monitoring must take into account the two dimensions of UHC:

***(i) Coverage of essential services (provision of services)**, through the indicator 3.8.1. This indicator, approved by the United Nations Statistical Commission and the Economic and Social Council in 2016, is defined as the average coverage of essential services as determined by reference interventions. These interventions include reproductive, maternal, newborn and child health, communicable diseases, non-communicable diseases, capacity to accommodate and access to services for the general population and the most disadvantaged in particular.*

***(ii) Financial coverage (demand)** through indicator 3.8.2 defined by WHO and World Bank as large household expenditures on health, impoverishing health expenditures, protection against large and impoverishing expenditures, stakeholder contributions, in order to reduce household out-of-pocket payments.*

These two indicators 3.8.1 and 3.8.2 provide a regulatory control over progress towards target 3.8. However, it remains crucial that civil society organizations have full access to these two indicators in order to demand more accountability from the government on the right of communities to health.

In 2017 in Cameroon, the Ministry of Public Health (MoH) produced a set of health care and services for UHC, comprising 185 public health diseases and interventions (LDC/PCA : 156 ; PAC : 29) included in the basic package and 101 interventions. The financial aspect was also taken into account. In this light, Cameroon is in the process of developing strategies[2] and interventions to mobilize resources for health.

This ambitious program by the Ministry of Public Health (MoH) will be addressed in this report, focusing on priority essential services and financial protection aspects. By covering these two points, the report will not cover the multisectoral issue. Nevertheless, this will provide a holistic view of the journey towards UHC, including the challenges the health system is facing.

[2] MINSANTE, Stratégies de financement de la Santé (2018-2027), Novembre 2018


CAMEROUN
Capitale d'État (plus de 700 000 hab.)
Plus de 1 000 000 hab.
Plus de 100 000 hab.
Plus de 50 000 hab.
Plus de 20 000 hab.
Autre localité
Route principale
Route secondaire
Autre route et piste
Voie ferrée
Aéroport, aérodrome
Limite de région
Limite de département
Bertoua Capitale de région
Chef-lieu de département
Barrage, chute
Marais, terrain inondable
Parc national ou réserve
EXTRÊME-NORD
NORD
ADAMAOUA
CENTRE
EST
SUD
LITTORAL
OUEST
SUD-OUEST
NORD-OUEST
YAOUNDÉ
Douala
Garoua
Maroua
Ngaoundéré
Bertoua
Bafoussam
Bamenda
Ebolowa
Buea
NIGERIA
TCHAD
RÉPUBLIQUE CENTRAFRICAINE
CONGO
GABON
GUINÉE ÉQUATORIALE
OCÉAN ATLANTIQUE
NDJAMENA
MALABO
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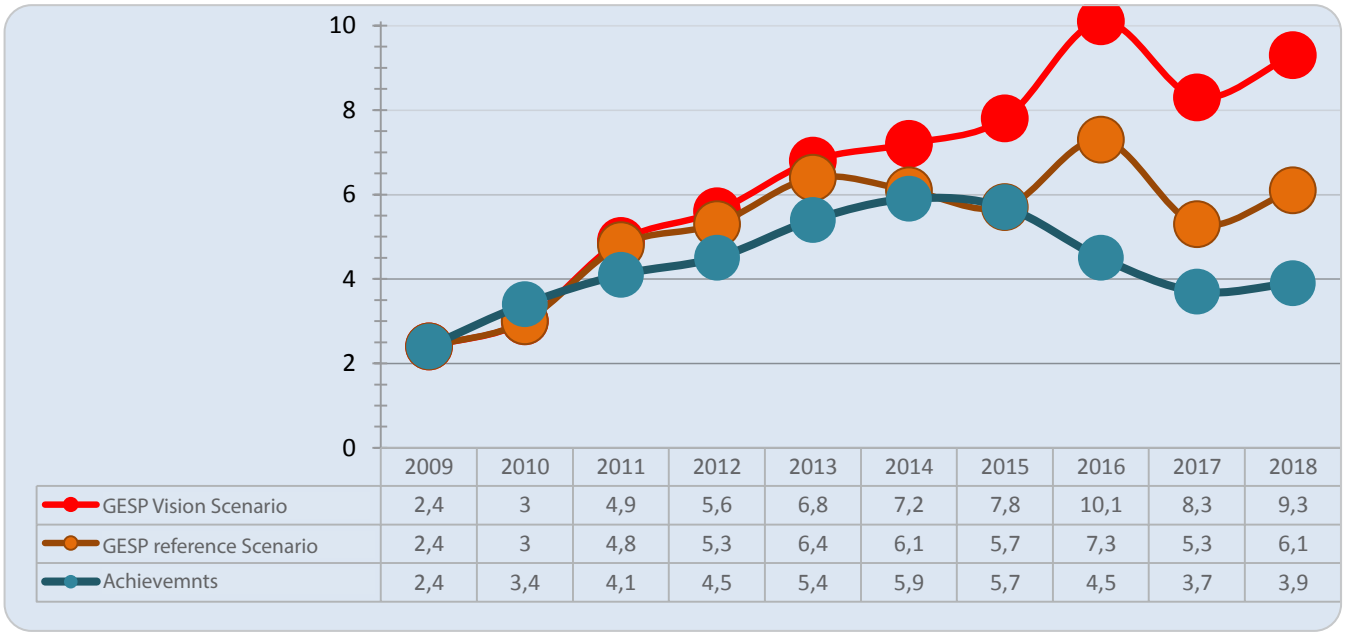
Commonly referred to as 'Africa in miniature' Cameroon is a Central Africa state, situated between the 2nd and 13th degrees north latitude and 9th and 16th degrees east longitude. It covers a surface area of 475 650 Km², of which 466 050 Km² is continental and 9600 Km² is maritime. Cameroon is limited to the North by Lake Chad, to the North-East by the Republic of Chad, to the East by the Central African Republic, to the South by the Republic of Congo, the republic of Gabon, and the Republic of Equatorial Guinea, and to the West by the Federal Republic of Nigeria.

The relief of Cameroon is very diverse. It is unevenly distributed between highlands, plateaus, and plains. The highland has three main groups: the Mandara Mountains, the Adamawa plateau and the western highlands. These highlands are bordered to the north and south by the Donga valley and the Bakossi gap, to the west by the cross-river basin, and to the east by the Mbam plain. The highlands are also home to numerous summits and volcanic massifs. The most important are: Mount Cameroon (4070m), Mount Manengouba (2396m), Mounts Bamboutos (2740m), and Mount Oku (3008m). The country has two types of plains: the coastal plains and the northern plains. The coastal plains stretch between the Atlantic Ocean and the southern Cameroon plateau. The northern plains include the Logone plain, the Diamare plain around Maroua and the Benoue basin.

With respect to plateaus, the Adamawa plateau is a real "water tower" for the country since the main rivers take their source from there. These rivers flow into four basins, which are: the Sanaga (the longest river in the country with 560 miles), Nyong, Ntem, Moungo and Wouri flows into the Atlantic basin. The Benoue flows into the Niger basin and Logone River vanishes into the Lake Chad basin. Finally, the Congo basin receives the Sangha formed by its Cameroonian tributaries, Kadei and Ngoko. Moreover, the country is marked by two major hydrographical areas on both sides of the Adamawa plateau: the Niger and Chad basins in the north and the Atlantic and Congo basins in the south.

Cameroon is divided into 10 regions, 360 municipalities, with an estimated global population of about 24 million in 2018. 50.6% of the population are women, while 54% are young people under the age of 20.

Figure 1 : **GDP Evolution over the period 2010-2018**



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GESP Vision Scenario	2,4	3	4,9	5,6	6,8	7,2	7,8	10,1	8,3	9,3
GESP reference Scenario	2,4	3	4,8	5,3	6,4	6,1	5,7	7,3	5,3	6,1
Achievemnts	2,4	3,4	4,1	4,5	5,4	5,9	5,7	4,5	3,7	3,9

Source : MINEPAT/DAPE, 2019

Young people under 15 account for 42.5% of the total population, while those over 65 account for 3.6%.

Decentralization is gradually taking place with more and more responsibilities transferred to local and regional authorities.

Analysis of the evolution of main poverty indicators in the ECAM4 survey revealed according to the monetary approach (or objective approach), that between 2001 and 2014 the incidence of poverty decreased by 2.7 points, from 40.2% to 37.5%. In fact, according to the NIS, it increased from 3.3% in 2010 and reached 5.9% in 2015, before decreasing to 4.8% in 2016. This relapse can be explained, inter alia, by both security and humanitarian crisis that the country has experienced since 2014 in the east and far north due to the crisis in Central African Republic and the attacks of the Boko Haram sect, and the crisis in the north-west and south-west regions. In addition to these crises, it is appropriate to mention that other factors have contributed to economic slowdown such as the fall in oil prices in 2015. In terms of health, Cameroon has 10 regional health delegations, 190 health districts, 1802 health areas and about 5800 health facilities (51% public and 49% private).

Chapter 1

HEALTH STATUS INDICATORS

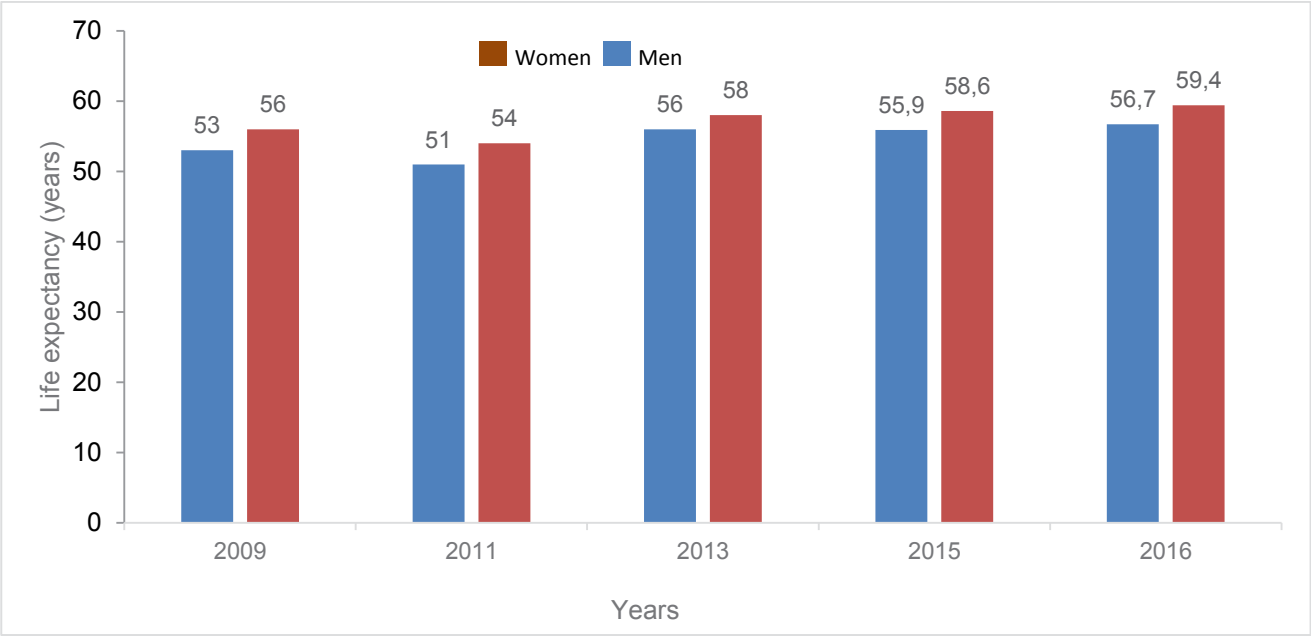
A - MORTALITY BY AGE AND SEX

1. Life expectancy at birth

The average number of years that a newborn could expect to live if he or she were to pass through life exposed to the sex-and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory or geographical area.

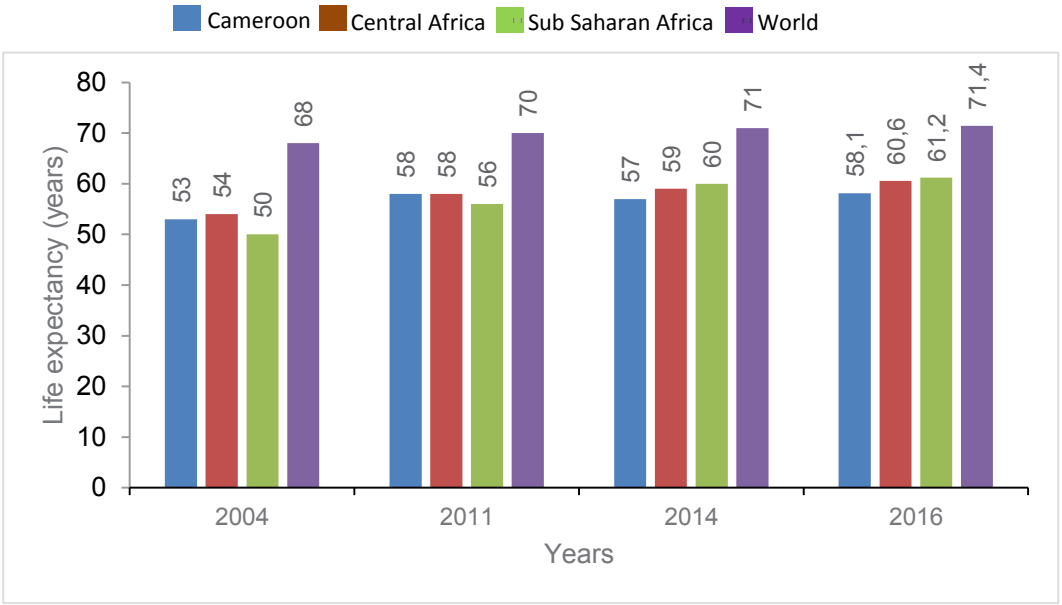
Life expectancy in Cameroon rose from 53 years in 2009 to 58 years in 2016. However, in 2016 life expectancy in Cameroon remains lower compared to Central Africa countries (60.6 years) and Sub-Saharan Africa (61.2 years). Overall, the life expectancy of the population has increased over the past decade.

Figure 1: Life expectancy at birth by sex, 2009-2016 in Cameroon



Source : WHO, Global Health Statistics, 2017

Figure 2: Life expectancy at birth from 2004 to 2016 Cameroon compared to other areas



Source : WHO, Global Health Statistics, 2017

2. Adolescent mortality rate

Number of deaths among adolescents (10-19 years old) per 100,000 population.

The country has no information on the 10-19 age group, but since 1991, the DHS has provided information on the 15-19 age group. In fact, the mortality of adolescents aged 15 to 19 increased in Cameroon between the periods 1991-1997 and 2004-2011, from 2.4 to 2.98 per 1,000 for women and from 2.18 to 3.2 per 1,000 for men.

Table 1: **Direct estimate of the mortality rate of 15- to 19-year-olds, male and female, for the 06-year period preceding the survey, per 1,000 people, expressed as a percentage between 1991 and 2011**

Period		1991-1997	1998-2004	2004-2011
Adolescents 15 to 19 years old	Women	2.4	2.99	2.98
	Men	2.18	3.01	3.2
Source		DHS III 2004	DHS III 2004	DHS-MICS 2011

3. Adult mortality rate between 15 and 60 years of age

Probability that a 15-year-old person will die before reaching his or her 60th birthday. The probability of dying between the ages of 15 and 60 years (per 1,000 population) per year among hypothetical cohort of 100,000 people who would experience the age-specific mortality rate of the reporting year.

The country has no information on the 15-60 age group, but since 1991, the DHS has been reporting on the 20-60 age group. Similarly with adolescents, the mortality of adults over 20 years of age has increased over 15 years (over the 1991-1997 and 2004-2011 periods) among women and men, although there were variations across the age groups. Mortality among women more or less doubled for the 25-29, 30-34, 35-39 age groups. In the same period, mortality doubled between the 1991-1997 and 2004-2011 periods in the 30-34 and 40-44 age groups.

Table 2: Direct estimate of the mortality rate of 20- to 50-year-old females by age group, for the 06-year period preceding the survey, per 1,000 people, in Cameroon from 1991 to 2011

Age Group		1991 - 1997	1997-2004	2004-2011
Women	20 - 24 yrs	3.19	5.25	4.87
	25 - 29 yrs	3.62	7.85	6.45
	30 - 34 yrs	4.64	8.12	8.18
	35 - 39 yrs	4.23	7.45	8.98
	40 - 44 yrs	6.91	8.49	10.44
	45 - 49 yrs	7.36	10.12	9.88
Source		DHS III 2004	DHS III 2004	DHS-MICS 2011

Table 3: Direct estimate of the mortality rate of adults aged 20 to 50 years, males by age group, for the 06-year period preceding the survey, per 1,000 people, in Cameroon from 1991 to 2011

Age Groupe		1991 - 1997	1997-2004	2004-2011
Men	20 - 24 yrs	3.06	4.09	3.22
	25 - 29 yrs	4.27	6.19	5.42
	30 - 34 yrs	4.22	7.87	8.16
	35 - 39 yrs	7.39	10.73	8.24
	40 - 44 yrs	5.47	13.11	12.14
	45 - 49 yrs	12	13.29	12.43
Source		DHS II 2004	DHS III 2004	DHS-MICS, 2011

4. Under-five mortality rate – SDG 3.2.1

The probability for a child born in a specific year of period dying before the age of 5 years, if subject to age-specific mortality rates of that period, expressed per 1,000 live births.

Under-five mortality decreased from 122 deaths to 79 deaths per 1,000 live births between 2011 and 2018. This is equivalent to an estimated 40% drop in the under-five mortality rate in 08 years. It should be recalled that the target of the SDGs is to reach 25 per 1,000 live births by 2030.

Table 4: Mortality of children under 5 per 1,000 live births, 1991 to 2018 in Cameroon

Years	1991	1998	2004	2011	2014	2018
< 5years	125	151	144	122	103	79
Source	DHS 1991	DHS, 1998	DHS 2004	DHS-MICS 2011	MICS, 2014	DHS 2018, Key Results

5. Infant mortality rate

The probability that a child born in a specific year or period will die before reaching the age of 1 year, if subject to age-specific mortality rates of that period, expressed as a rate per 1,000 live births.

Infant mortality decreased from 62 deaths in 2011 to 48 deaths per 1,000 live births in 2018. This is equivalent to about 25% drop in the infant mortality rate of nearly in 08 years. It should be noted that the objective of the GESP is to reduce infant mortality by two-thirds by 2035.

Table 5: Evolution of infant mortality per 1000 live births, 1991 to 2018 in Cameroon

Year	1991	1998	2004	2011	2014	2018
Infant	64	77	74	62	60	48
Source	DHS 1991	DHS, 1998	DHS 2004	DHS-MICS 2011	MICS, 2014	DHS 2018, Key results

6. Neonatal mortality rate – SDG 3.2.2

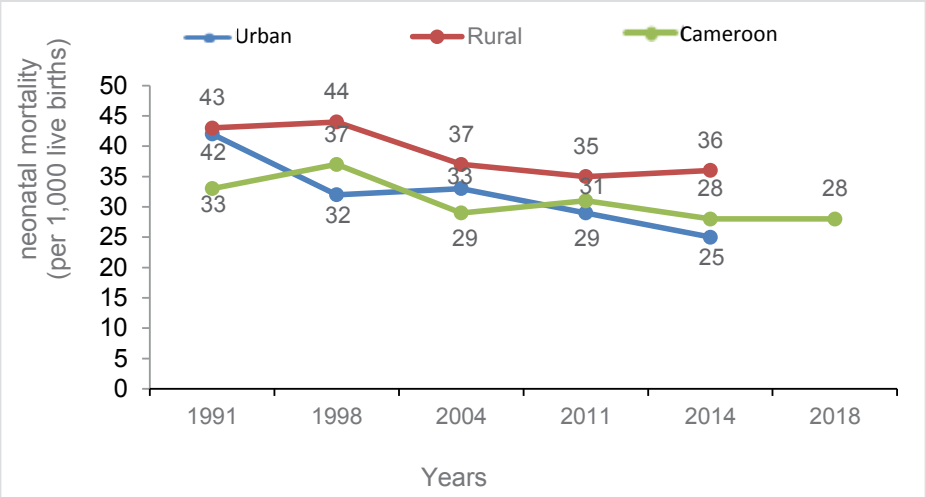
Probability that a child born in a specific year or period will die in the first 28 days of life (0-27 days) if subject to age-specific mortality rates of that period, expressed per 1,000 live births.

Neonatal mortality decreased from 31 to 28 deaths per 1,000 live births between 2011 and 2018. This indicator has been stagnant since 2014 at 28 deaths per 1,000 live births. The SDG's target is to reach 12 per 1,000 live births by 2030.

Table 6: Evolution of neonatal mortality per 1000 live births, 1991 to 2018 in Cameroon

	1991	1998	2004	2011	2014	2018
Neonatal	33	37	29	31	28	28
Source	DHS 1991	DHS, 1998	DHS 2004	DHS-MICS 2011	MICS, 2014	DHS 2018, Key results

Figure 3: **Evolution of neonatal mortality per 1,000 live births by residence in Cameroon from 1991 to 2018**



Source: **MoH, DHS 1991, 1998, 2004, 2011; MICS 2014; Key Results DHS 2018**

7. Stillbirth rate

Number of stillbirths per 1,000 total births. Stillbirths can occur antepartum or intrapartum.

Stillbirths are events that occur during the antepartum and intrapartum phases. Fetal deaths occur during the third trimester of pregnancy or at birth. They generally reflect a failure in the coverage and management of the prenatal or intrapartum phase. WHO estimated the stillbirth rate at 26 per 1,000 live births in 2009 (World Health Statistics 2011).

B - MORTALITY BY CAUSE

8. Maternal mortality ratio SDG 3.1.1

The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100,000 live births, for a specified time period.

Maternal mortality ratio increased from 669 to 782 deaths per 100,000 live births between 2004 and 2011. In 2018, it is estimated at 467 deaths (according to the old method of calculation) per 100,000 live births, a decrease of 40%. By applying WHO definition, which restrict calculation to women's deaths during pregnancy or childbirth, or during the 42 days following the birth or the end of pregnancy, the maternal mortality ratio is then estimated at 406 deaths per 100,000 live births. At the same time, the SDG's target is to decrease the global maternal mortality ratio to 70 per 100,000 live births.

Table 7: **Evolution of the maternal mortality ratio per 100 000 live births in Cameroon between 1998 and 2018**

Period	1991 - 1998	1997 - 2004	2004 - 2011	2011 - 2018
Ratio	511	669	782	467*; 406**
Source	DHS 1998	DHS 2004	DHS-MICS 2011	DHS 2018

*** Old calculation method corresponding to the results of previous DHS surveys in Cameroon**
**** New calculation method corresponding to WHO definition**

9. TB mortality rate

Estimated number of deaths caused by TB in a given year, expressed as a rate per 100,000 population.

TB mortality rate decreased from 52 per 100,000 in 2005 to 25 per 100,000 in 2017 (TB World Report, 2018). Moreover, the average proportion of deaths (administrative data) among cases treated since 2011 is about 6%.

Table 8: **Proportion of deaths in cases treated in Cameroon between 2006 and 2014**

Years	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Deaths (%)	6	7	6	6	6	6	7	6	6	6	6	6

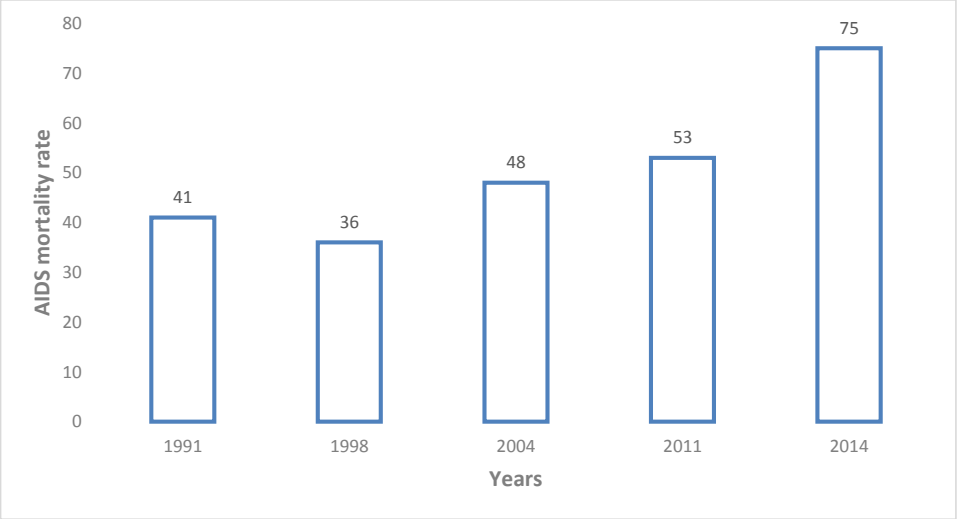
Source : NTCP, Activity Reports 2006-2017

10. AIDS-related mortality rate

Estimated number of adults and children who have died due to AIDS-related causes in a specific year, expressed as a rate per 100,000 population.

According to WHO, there has been a reduction in the HIV/AIDS mortality rate in recent years. It decreased from 188 in 2009 to 112 per 100,000 inhabitants in 2015.

Figure 4: **AIDS-related mortality in Cameroon, 2001-2015**



Source: WHO, Global Health Statistics, 2016

11. Malaria mortality rate

Number of adults and children who have died due to malaria in a specific year, expressed as a rate per 100,000 population.

The number of malaria-related deaths reported in hospitals (all ages) went from 4,398 in 2014 to 3,263 in 2018, a drop of 26%. This reduction in malaria-related deaths has resulted in a decrease in malaria-related mortality per 100,000 population from 20/100,000 in 2014 to 13/100,000 in 2018. The Center and Littoral regions have the lowest malaria mortality rates.

Table 9: **Number of malaria related deaths per 100,000 population between 2014 and 2018**

Regions	**2014**	**2015**	**2016**	**2017**	**2018**
Adamawa	37	40	21	25	19
Center	6	4	8	6	5
East	41	27	27	28	20
Far North	43	31	15	18	25
Littoral	6	3	4	7	5
North	40	33	21	25	23
North West	11	6	6	8	6
West	8	8	7	6	9
South	8	6	10	21	7
South West	11	7	6	8	13
National Total	**20**	**16**	**11**	**13**	**13**

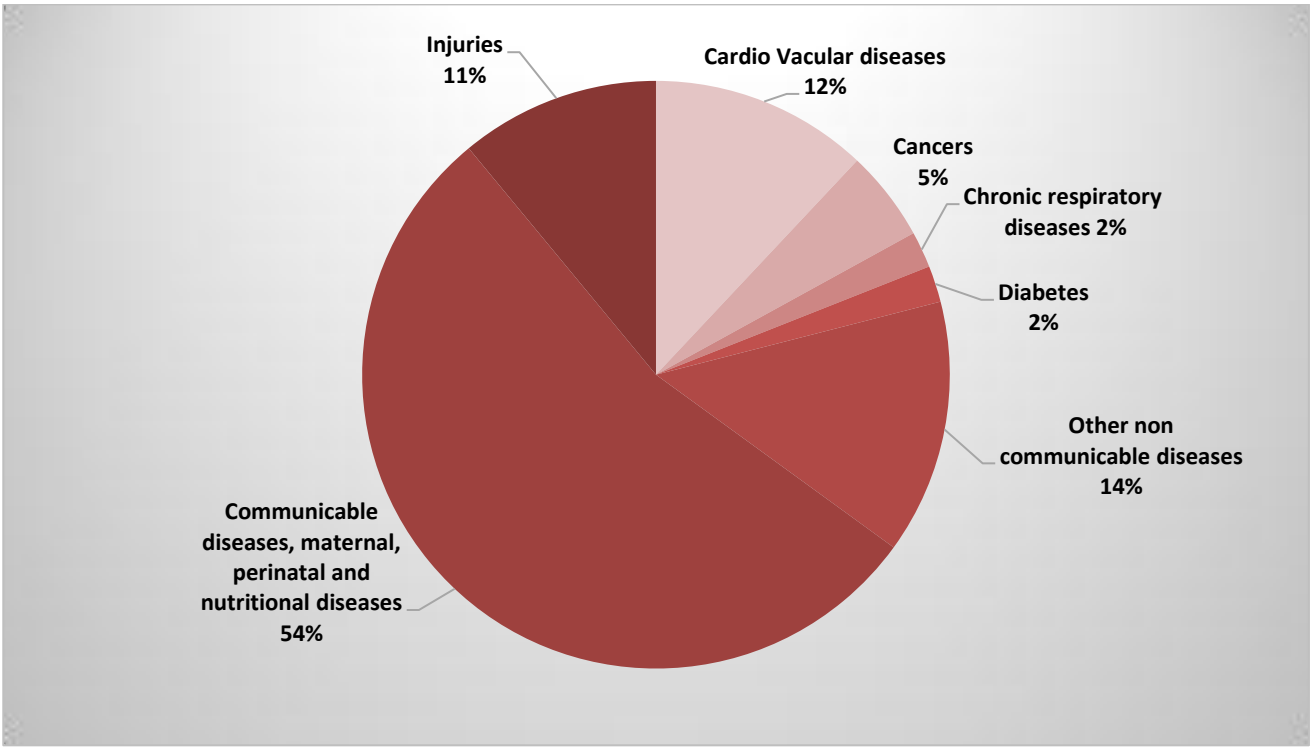
Source: MoH, 2014-2018 NMCP Annual Reports

12. Premature noncommunicable disease (NCD) mortality – SDG 3.4.1

Probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases, defined as the per cent of 30-year-old-people who would die before their 70th birthday from cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age s/he would not die from any other cause of death (e.g. injuries or HIV/AIDS). This indicator is calculated using life table methods.

WHO estimates the risk of premature death among 30-70 year-olds at 22% for men and 21% for women (Country Profile of Non-communicable Diseases, 2018). In addition, deaths attributable to non-communicable diseases accounted for 35% of the total 235,000 deaths estimated in 2016, with the largest number of deaths attributable to cardiovascular disease (12%), followed by cancers (5%), diabetes (2%) and chronic respiratory diseases (2%); deaths from other non-communicable diseases account for 14%. The SDG's target is to reduce the premature mortality rate by one-third through prevention and treatment.

Figure 5: Proportion of deaths due to non-communicable diseases in 2016 / Cameroon



Source: WHO, Country Profile of Non-communicable Diseases – Cameroon, 2018

Table 10: **Premature mortality from non-communicable diseases (NCDs), 2016**

		Years	Men	Women	Total
Premature Mortality from Non-Communicable Diseases	- Total deaths due to NCDs	2016	41,900	40,900	82,700
	- Risk of premature death between 30 and 70 years (%)	2016	22	21	22

Source: WHO, Country Profile of non-communicable diseases - Cameroon, 2018

13. Mortality from households and ambient air pollution – SDG 3.9.1

The mortality attributable to the joint effects of household and ambient air pollution can be expressed as number of deaths or death rates.

WHO estimates that this rate is 208 per 100,000 population, 228 for men and 189 for women per 100,000 population (Global Health Statistics, 2019). The SDG target is to reduce by 2030 the number of deaths and illnesses due to hazardous chemicals and contamination of water, air and soil.

14. Mortality from unsafe water, unsafe sanitation and lack of hygiene – SDG 3.9.2

Number of deaths from unsafe water, unsafe sanitation, and lack of hygiene (exposure to unsafe WASH services) in a year, divided by the population, and multiplied by 100,000.

WHO estimates that this rate is 45.2 per 100,000 inhabitants, 46.2 for men and 44.1 for women per 100,000 inhabitants (Global Health Statistics, 2019). The SDG's target is to reduce by 2030 the number of deaths and illnesses caused by hazardous chemicals and pollution and contamination of water, air and soil.

15. Mortality from unintentional poisoning – SDG 3.9.3

Number of deaths from unintentional poisonings (per 100,000 population), for the year indicated.

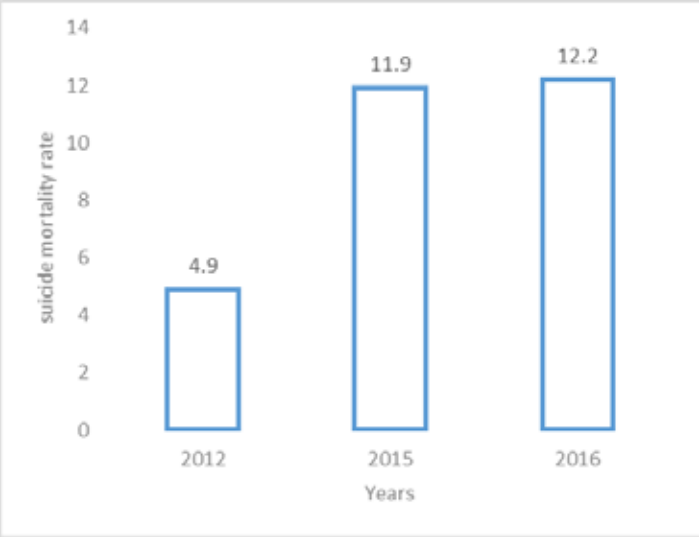
WHO estimates that this rate is 3.1 per 100,000 population, i.e. 4.0 for men and 2.2 for women per 100,000 population (Global Health Statistics, 2019). The SDG's target is to reduce by 2030 the number of deaths and illnesses caused by hazardous chemicals and pollution and contamination of water, air and soil.

16. Suicide rate – SDG 3.4.2

Suicide rate per 100,000 population in a specified period.

According to WHO, suicide rate in Cameroon rose from 4.9 in 2012, to 12.2 per 100 000 population in 2016 (Global Health Statistics, 2019). Among men, it is 17.1 versus 7.4 for women per 100,000 population. The SDG's target is to reduce by one-third the rate of premature mortality due to non-communicable diseases through prevention and treatment and to promote mental health and well-being.

Figure 6: **Suicide mortality rate in Cameroon 2012-2016**



Source: WHO, Global Health Statistics, 2019

17. Death rate due to road traffic – SDG 3.6.1

Number of road traffic fatal injury deaths per 100,000 population.

In 2016, WHO estimated the mortality rate from road traffic at 30.1 per 100,000 population. National SDG target is to halve fatalities and injuries from road accidents by 2020.

Table 11: **Changes in road traffic accidents recorded by the National Gendarmerie between 2001 and 2013 in Cameroon**

Years	Injury accidents		Fatalities		Accidental damage	Total Accidents
	Number	Injuries	Number	Deaths		
2001	2,085	5,982	680	876	922	3,687
2002	1,897	5,540	716	939	935	3,548
2003	1,879	5,187	712	1,058	898	3,489
2004	2,300	6,526	863	1,102	1,016	4,179
2005	2,290	6,631	887	1,150	902	4,079
2006	2,140	6,149	806	1,085	780	3,726
2007	1,829	5,016	791	1,018	697	3,317
2008	1,979	5,608	933	1,253	869	3,781
2009	1,728	5,038	947	1,189	827	3,502
2010	1,809	5,038	941	1,206	889	3,639
2011	1,629	4,980	1,065	1,588	828	3,522
2012	1,524	4,284	1,014	1,058	860	3,398
2013	1,407	4,630	897	1,170	767	3,071

Source: NIS, Statistical Yearbook, 2015

Table 12: **Road traffic accidents registered by the National Police department in Cameroon between 2007 and 2014**

Years	Injury Accidents		Fatalities		Accidental damage	Total Accidents
	Number	Injuries	Number	Deaths		
2007	2,160	NA	288	NA	5,697	8,145
2008	3,772	NA	443	NA	7,947	12,162
2009	3,973	NA	504	NA	8,979	13,456
2010	3,279	NA	611	NA	10,321	14,211
2011	3,450	NA	722	NA	11,225	15,397
2012	4,606	NA	991	NA	13,210	18,807
2013	3,361	NA	625	NA	10,576	14,562
2014	942	NA	542	NA	4,332	5,816

Source : NIS, Statistical Yearbook, 2015

18. Number of deaths, missing persons and persons affected by disaster per 100 000 people – SDGs 1.5.1; 11.5.1; 13.1.1

Number of deaths caused by disasters during or directly after, as a result of this hazardous event.

The number of people who died or were missing during or after a disaster is poorly documented. However, based on data collected from the Civil Protection Directorate of the Ministry of Territorial Administration, the data are compiled in Table N° 13. The SDG targets by 2030 linked to this indicator are primarily aimed at (i) enhancing the resilience of the poor and vulnerable and reducing their exposure and vulnerability to extreme weather events and other economic, social or environmental shocks and disasters, (ii) significantly reducing the number of people killed and the number of people affected by disasters, including those of water origin, and significantly reduce the amount of economic losses directly caused by such disasters as a proportion of the world's gross domestic product, with a focus on the protection of the poor and vulnerable, (iii) Strengthen resilience and adaptability in all countries to climate and climate-related natural disasters.

Table 13: Summary of Major National Disasters 2008-2018

Year	Number of deaths	Number of missing persons	Number of persons affected
2008	1,342	0	5,706
2009	1,290	1	5,345
2010	1,328	0	5,575
2011	1,073	0	4,329
2012	1,665	4	4,980
2013	1,170	0	4,630
2014	1,337	0	4,067
2015	1,091	0	4,058
2016	2,034		7,290
2017	285	34	4,142
2018	254	3	1,200

Source : MINAT/DPC, 2019

19. Mortality rate due to homicide – SDG.16.1.1

The killing of a person with intent to cause death or serious injury, by any means. Infanticide should be included.

In 2016, WHO estimates the number of homicide victims at 11.6 per 100,000 population (Global Health Statistics, 2019). The State of Human Right Report in Cameroon shows that 870 victims of voluntary homicides were registered in courts in 2015, including 669 men and 201 women. The SDG's target is to significantly reduce all forms of violence and associated mortality rates.

C - FERTILITY

20. Adolescent birth rate – SDG 3.7.2

Annual number of births to females aged 10-14 or 15-19 years per 1,000 females in the respective age group.

Data is available only for adolescent girls aged 15 to 19. At the same time, the country does not have data for 10-14 years old. The fertility rate among adolescent girls aged 15 to 19 has decreased from 127 per 1,000 girls for the 2005-2011 period to 122 per 1,000 girls for the 2011-2018 period.

Table 14: Fertility rate of adolescent girls per 1000 girls aged 15-19, for the three-year period preceding the survey in Cameroon from 1991 to 2018

Period	1988 - 1991	1995 -1998	2001 - 2004	2005 - 2011	2011 - 2018
Fertility Rate	164	162	138	127	122
Source	DHS 1991	DHS 1998	DHS 2004	DHS-MICS 2011	DHS 2018 Key results

Source: MoH, DHS 1991, 1998, 2004, 2011; MoH, Key results DHS 2018

Table 15: Fertility of adolescent girls aged 15-19 in Cameroon, 2018

Percentage of 15-19-year-olds who have already had a live birth or are pregnant with a first child and percentage of those who have already started their reproductive life, according to some characteristics (age, place of residence, level of education and economic well-being quintile)				
	Percentage of women of 15-19 yrs who		Percentage of those who have already started their reproductive life	Number of women
	Have already had a live birth	Pregnant with a first child		
Age				
15 yrs	2.9	1.5	4.4	832
16 yrs	8.5	4.6	13.1	610
17 yrs	18.5	4.2	22.7	555
18 yrs	29.9	7.2	37.1	765
19 yrs	42.0	7.1	49.1	548
Place of residence				
Douala/Yaounde	10.2	2.3	12.5	663
Other cities	16.1	4.1	20.2	1,136
Urban total	13.9	3.5	17.4	1,799
Rural	25.6	6.4	31.9	1,510
Level of education				
No	40.3	7.8	48.1	407
Primary school	22.2	6.1	28.3	726
Lower secondary education	17.4	4.6	22.1	1,466
Upper secondary education	8.5	2.3	10.8	646
Higher education	1,4	0	1.4	64

Economic well-being quintile				
First	24.0	6.0	30.0	496
Second	32.1	6.9	39.0	648
Third	21.9	6.4	28.4	699
Fourth	15.3	3.4	18.7	704
Fifth	6.3	1.9	8.3	762
Total	19.2	4.8	24.0	3,309

Source : MoH, Key Results DHS 2018

21. Total fertility rate

Mean number of children a woman would have by age 50 if she survived to age 50 and was subject, throughout her life, to the age-specific fertility rates observed in a given year. The total fertility is expressed as the number of children per woman.

The number of children per woman decreased from 5.1 to 4.8 between 2011 and 2018. This is a significant improvement in women's health. This trend of decline or retention is generally observed base on the residence, education level or economic well-being.

Table 16: **Total fertility rate per 1000 women aged 15-19, 1991-2018 (Number of children per women aged 15-19) by residence in Cameroon**

Year	1991	1998	2004	2011	2018
Urban	5.2	3.8	4	4	3.8
Rural	6.3	5.4	6.1	6.4	6
Total	5.8	4.8	5	5.1	4.8
Source	DHS 1991	DHS 1998	DHS 2004	DHS-MICS 2011	DHS 2018 Key Results

D - MORBIDITY

22. New cases of vaccine-preventable diseases

Number of confirmed new cases of vaccine-preventable diseases that are included in the WHO recommended standards for surveillance of selected vaccine-preventable diseases, and vaccine-preventable diseases reported on the WHO-UNICEF reporting form in a specified time period.

Data from WHO/UNICEF joint report form for 2014 to 2018 shows a decline in confirmed cases of vaccine-preventable diseases. However, efforts must be maintained to confirm this trend and move towards the eradication of these diseases.

Table 17: Number of confirmed cases of certain Vaccine-Preventable Diseases 2014-2018

Disease	2014	2015	2016	2017	2018
Diphteria	NA	NA	NA	NA	NA
Measles	831	1809	338	180	295
Neonatal Tetanus	33	26	58	55	27
Total Tetanus (neonatal and others)	110	120	58	55	27
Pertussis	NA	NA	NA	NA	NA
Yellow fever	3	2	61	4	5
Japanese Encephalitis	NA	NA	NA	NA	NA
Mumps	NA	NA	NA	NA	NA
Rubella	147	277	13	13	9
Congenital rubella syndrome	NA	NA	NA	NA	NA

Source: WHO/UNICEF, Joint Report Forms 2014-2018

23. New cases of IHR-notifiable diseases and other notifiable diseases

Number of new confirmed cases of IHR-notifiable diseases (immediately notifiable diseases) and other notifiable diseases (diseases that could cause serious public health impact and could spread rapidly internationally) per year.

According to the International Health Regulation/NFP event tracker 2019, Cameroon notified to WHO a human case of monkeypox in June 2016 (confirmed case in a chimpanzee), a case of meningitis in March 2017, a case of a monkeypox in May 2018, several cases of cholera as from May 2018 and one case of Polio cVDPV2 from environmental source in 2019.

Table 18: New cases of notifiable diseases determined by the IHR

Year of notification to WHO	Type of notification	Number of cases	Description
09/08/2016	Monkeypox	1	Confirmed in a chimpanzee
15/03/2017	Meningitis	14	
07/05/2018	Monkeypox	1	Zoonosis
15/05/2018	Cholera	161(*)	Acute diarrhea syndrome
23/05/2019	cVDPV2	1	Environmental
22/09/2019	Monkeypox	1	Confirmé in a human

Source : MoH/NHO, notification database of national IHR focal point, 2019
(*)Number of confirmed cases as of 31/08/2019 since outbreak

24. HIV prevalence rate

Percentage of people living with HIV. Prevalence measures the frequency of existing disease in a defined population at a specific time.

HIV prevalence in Cameroon has halved in 14 years, from 5.5% in 2004 to 2.7% in 2018 among people aged 15-49 years (Key Results DHS 2018). The prevalence is higher among women than men in 2011 (5.6% versus 2.9%) and 2018 (3.4% versus 1.9%). The age groups most affected are between 35 and 44 (see Table 19 below). Despite the overall decline, there are regional disparities (see Table 20 below).

Table 19: Prevalence of HIV by age and sex in Cameroon in 2018

Percentage of women and men aged 15 to 49 who are HIV positive in 2018 in Cameroon			
	Prevalence		
	Women	Men	Total
Age Group			
15 -19 yrs	0.8	0.7	0.75
20 - 24 yrs	2.4	1.6	2
25 - 29 yrs	3.7	1.7	2.7
30 - 34 yrs	4.1	2.7	3.4
35 - 39 yrs	6.5	3.6	5.05
40 - 44 yrs	6.4	3.2	4.8
45 - 49 yrs	4.9	1.8	3.35
50-64 yrs	4.8	1.9	3.35
Total 15-49	**3.4**	**1.9**	**2.7**
Total 15-64	3.6	1.9	2.8

Source : DHS 2018 Key Results

Table 20: HIV Prevalence by region in Cameroon, 2004 - 2018

Percentage of women and men aged 15 to 49 who are HIV positive			
Regions	2004	2011	2018
Adamawa	6.9	5.1	4.2
Center (except Yde)	4.7	6.1	3.8
Douala	4.5	4.6	2.5
East	8.6	6.3	5.5
Far North	2.00	1.2	1.1
Littoral (except Dla)	5.6	3.9	2.4
North	1.7	2.4	1.7
North-West	8.7	6.3	4.4
West	4.7	2.8	1.8
South	6.5	7.2	6.3
South-West	8	5.7	3.2
Yaounde	8.3	6.3	2.6
Cameroon	5.5	4.3	**2.7**
Source	DHS 2004	DHS 2011	**DHS 2018 Key results**

25. HIV incidence rate – SDG 3.3.1

Number of new HIV infections per 1,000 uninfected population. The incidence rate is the number of new cases per population at risk in a given time period.

According to the 2018 CAMPHIA study, the annual incidence among people aged 15 to 64 is 0.27%, or nearly 40,000 new HIV cases. The incidence of HIV is five times higher among women (0.45%) than among men (0.09%). The SDG's target is to end the AIDS epidemic by 2030.

Table 21: Annual incidence of HIV, by age and sex in Cameroon in 2018 (95% confidence* interval)

Age Group	Women	95% CI	Men	95% CI	Total	95% CI
15 - 49 ans	0.44	0.18 - 0.69	0.08	0.00 - 0.18	0.26	0.12 - 0.40
15 - 64 ans	0.45	0.2 -0.69	0.09	0.00 - 0.19	0.27	0.14 - 0.41
* Confidence Interval = CI						

Source: NIS-University of Columbia, CAMPHIA 2017

26. Hepatitis B surface antigen prevalence

Prevalence of hepatitis B surface antigen (HBsAg)-positive, adjusted for sampling design.

The prevalence of viral hepatitis B was 11.9% in Cameroon (Pastoral Center of Cameroon, 2015). According to the CAMPHIA study, active infection to hepatitis B prevalence is 8.3% in 2018 among 15-64 years old.

Table 22: Prevalence of Hepatitis B infection in Cameroon in 2018, by age, sex and HIV status

HIV Status and age	Women		Men		Total	
	Prevalence HBs Ag	95% CI*	Prevalence HBs Ag	95% CI	Prevalence HBs Ag	95% CI
HIV Positive 15 - 64 ans	7.9	5.4 - 10.4	9.5	5.8 - 13.3	8.4	6.5 - 10.4
HIV Négative 15 - 64 ans	5.4	3.4 - 7.4	11.3	8.0 - 14.6	8.3	6.4 - 10.3
Total 15 - 49 ans	6	4.2 - 5.3	12.4	1.7 - 2.4	9.2	3.1 - 4.0
15 - 64 ans	5.5	4.5 - 5.5	11.2	2.0 - 2.7	8.3	3.3 - 4.0
Test conducted with a subsample of 1962 adults aged 15-64 years * Confidence Interval= CI						

Source: CAMPHIA 2017, Cameroon population-based HIV impact assessment

27. Hepatitis B incidence – SDG 3.3.4

The number of new hepatitis B infections per 100,000 population in a given year is estimated from the prevalence of total antibodies against hepatitis B core antigen (Total anti-HBc) and hepatitis B surface antigen (HBsAg) positive among children 5 years of age, adjusted for sampling design.

The incidence of hepatitis B is estimated at 1.9% in Cameroon (Report of a meeting on strategic information on hepatitis in Cameroon, 2019). The SDG's target is to fight hepatitis.

28. Sexually transmitted infections (STIs) incidence rate

Number of new cases of reported STIs (syndromic or etiological reporting) in a specified time period (year).

The country does not have national data on the incidence of STIs. However, according to the DHS survey (2004, 2011), the reported prevalence STIs in the 12 months prior to the survey in women and men who had sex is shown in the Table 23 below.

Table 23: Percentage of women and men who had sex and reported having sexually transmitted infections in the last 12 months prior to the survey, by socio-demographic characteristics, between 2004 and 2011

Année	2004		2011	
	Women	Men	Women	Men
Cameroon	4.5	6.9	4.7	5.0
Regions				
Adamawa	0.4	6.3	3.4	3.1
Center except Yde	7.9	6.2	3.8	8.1
Douala	8.5	7.7	7.1	4.0
East	3.6	12.3	1.9	8.5
Far North	0.6	5	2.0	2.2
Littoral except Dla	6	4.3	6.3	5.0
North	0.4	2.2	1.0	1.8
North West	3.1	7.3	6.7	4.8
West	5.7	4.1	4.8	4.1
South	6.9	6.7	5.0	5.1
South West	4.9	5.4	8.8	6.2
Yaounde	7.8	8.8	7.3	8.2
Well-being Quintile				
Poorest	1.4	4.4	1.4	3.3
Second	2.6	4.9	3.6	4.2
Medium	4.8	5.2	4.9	4.1
Fourth	5.4	7.1	6.6	5.1
Richest	7.6	8.5	6.3	6.7
Source	DHS 2004		DHS-MICS 2011	

Table 24: Percentage of women and men, aged 15-49, reporting condom use during last sexual intercourse in Cameroon, 2004-2014

Year	2004	2011	2014
Men	54.7	46.5	49.5
Women	40.5	71.8	43.1
Total	47.6	59.1	46.3
Source	DHS 2004	DHS-MICS 2011	MICS 2014

29. Congenital syphilis rate

Congenital syphilis rate per 100 000 live births.

Congenital syphilis is a preventable disease that prenatal screening and treatment of infected pregnant women could eliminate. Infact, congenital syphilis is closely related to syphilis in pregnant women. The country does not have administrative data to populate this indicator. However, according to studies on seroprevalence of maternal syphilis for the period 1997-2003, the seroprevalence rate among pregnant women was 2.81% (Global Elimination of Congenital Syphilis, 2009). Moreover, a recent study estimates that syphilis prevalence in Africa among pregnant women is 1.68% (Global burden of maternal and congenital syphilis in 2008 and 2012, 2016). Syphilis transmitted from mother to child is the second leading cause of preventable mortality just behind malaria (ending preventable stillbirths births study group, 2016).

30. TB incidence rate – SDG 3.3.2

Estimated number of new and relapse TB cases (all forms of TB, including cases in people living with HIV) arising in a given year, expressed as a rate per 100,000 population.

The TB incidence rate was 194 per 100,000 population in 2018 (Tuberculosis World Report, 2018). The SDG's target is to end the TB epidemics by 2030.

31. TB notification rate

Number of new and relapse TB cases notified in a given year, per 100,000 population.

We observe that the rate of reporting TB cases is gradually decreasing from one year to another. It has decreased from 126 cases in 2011 to 95 cases in 2018 per 100,000 population (NTCP Annual Report, 2018).

Table 25: TB cases notification rate, all forms and new cases of smear positive pulmonary tuberculosis per 100 000 population, Cameroon 2006-2018

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Smear positive pulmonary tuberculosis (TBP SM+) / New cases	82	76	79	79	77	77	75	73	72	69	65	55	55
Tuberculosis in all forms (Notification)	138	132	131	127	122	121	118	118	116	121	116	103	95

Source : MoH/NTCP, Annual Reports 2006-2018

32. Malaria parasite prevalence among children aged 6–59 months

Percentage of children aged 6-59 months in the population with malaria parasites in blood.

The prevalence of malaria decreased, from 30% in 2011 to 24% in 2018. It is higher in rural areas (32%) compared to urban areas (14%).

Table 26: Malaria prevalence, by residence/ percentage of children aged 6-59 months between 2011 and 2018, in Cameroon

	2011	2018
Cameroon	**30**	**24**
Douala / Yaounde	12.5	11
Other cities	25.1	16
Total urban	20.6	14
Total rural	37.1	32
Source	DHS 2011	DHS 2018 Key Results

33. Malaria incidence rate – SDG 3.3.3

Number of confirmed reported malaria cases per 1,000 persons per year.

Malaria is endemic throughout the country. In 2018, the percentage of malaria cases among patients received in consultation in the country's health facilities increased from 24.5% to 25.8% between 2014 and 2018. The incidence of confirmed malaria cases increased from 75 to 86 cases per 1,000 inhabitants during the same period. The regions with the highest incidence of malaria are the East, Adamawa and Center regions. The regions with the lowest incidence include the West and North West mountain regions.

Table 27: Malaria incidence rate (per 1,000 population) 2014 - 2018

Regions	2014	2015	2016	2017	2018
Adamawa	93	115	90	123	110
Center	52	60	86	100	103
East	172	197	159	183	161
Far North	75	75	51	63	85
Littoral	63	64	72	79	75
North	83	79	61	61	77
North West	61	61	60	75	63
West	66	75	69	73	70
South	46	69	68	77	72
South West	96	123	111	111	74
National Total	**73**	**80**	**76**	**86**	**86**

Source : MoH/NMCP, Annual Reports 2014-2018

34. Cancer incidence, by type of cancer

Number of new cancers of a specific site/type occurring per 100,000 population.

Based on available data in the cancer registry, WHO estimated and produced the 2018 GLOBOCAN (Estimated World Cancer incidence, Mortality and prevalence in 2018) report. The number of new cancer cases increased between 2010 and 2018, from 10,000 to 15 769. In 2018, the five most common cancers are breast cancer (20.8%), cervical cancer (14.9%), prostate cancer (14.0%), liver cancer (6.1%) and colorectal cancer (5.5%).

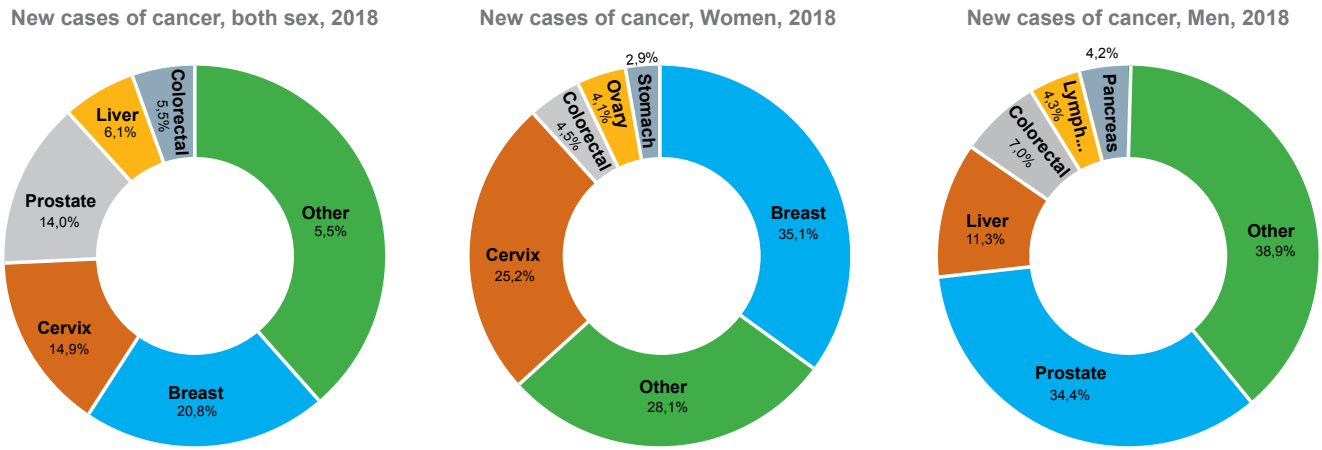
More specifically, the most common cancers among men in 2018 were : prostate cancer (34.4%), liver cancer (11.3%), colorectal cancer (7.0%), non-Hodgkin's lymphoma (4.3%) and pancreatic cancer (4.2%). Within the same period, most common cancers among women were : breast cancer (35.1%), cervical cancer (25.2%), colorectal cancer (4.5%), ovarian cancer (4.1%) and stomach cancer (2.9%).

Table 28: Statistics on cancer in Cameroon in 2018

	Men	Women	Both sex
Population	12,353,173	12,325,060	24,678,233
Number of new cases	**6,434**	**9,335**	**15,769**
Standardised age of incidence rate (World)	100.5	116.9	108.7
Risk of developing cancer before age 75 (%)	10.4	11.4	10.9
Number of deaths from cancer	4,505	6,028	10,533
Risk of death before age 75 (%)	7.1	8.2	7.7
Prevalence of cases in the last 05 years	9,858	17,190	27,048
	Men	Women	Both sex
The five most common cancers, excluding melanoma of the skin, in order of importance	Prostate Liver Colorectal Non-hodgkin's Lymphoma Pancreas	Breast Cervical Colorectal Ovaries Stomach	Breast Cervical Prostate Liver Colorectal

Source : WHO, Globocan, 2018

Figure 7: New cancer cases in Cameroon, 2018



Source: WHO, Country Profile Cameroon GLOBOCAN 2018

Chapter 2

RISK FACTOR INDICATORS

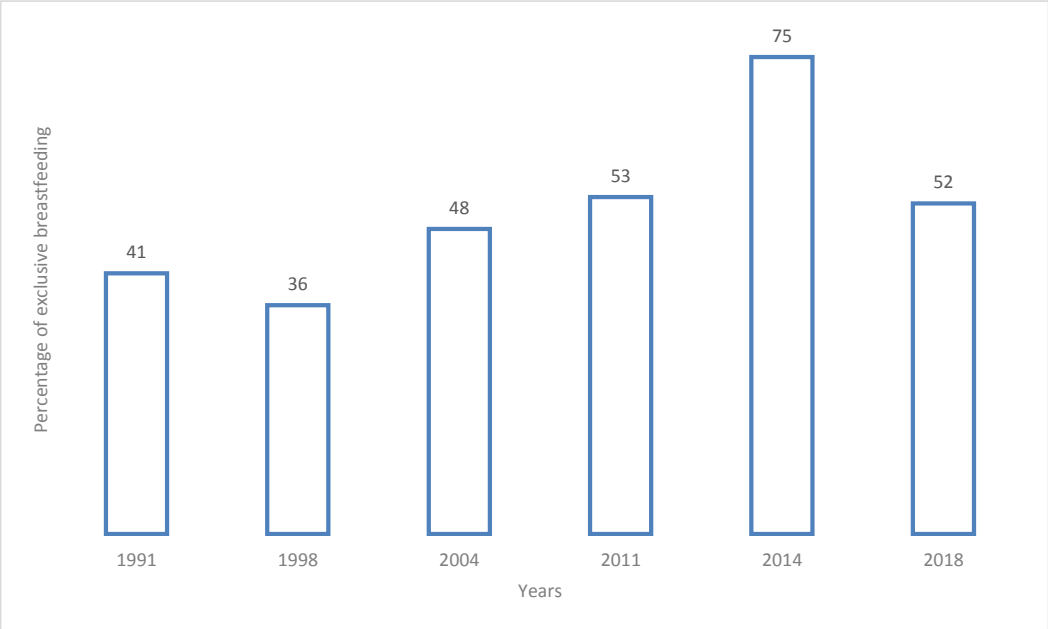
E - NUTRITION

35. Exclusive breastfeeding rate 0-5 months of age

Percentage of infants 0-5 months of age (<6 months) who are fed exclusively with breast milk.

Exclusive breastfeeding almost doubled between 2011 and 2018, from 20.4% to 39.7%.

Figure 8: Trends in exclusive breastfeeding among infants from 1991 to 2018 in Cameroon, expressed as a percentage



Source: MoH, DHS 1991-1998-2004-2011; MICS 2014; Key results DHS 2018

36. Early initiation of breastfeeding

Percentage of new-borns breastfed within 1 hour of birth in a specified time period.

Early initiation to breastfeeding went from 39.9% in 2011 to 31.2% in 2014.

Table 29: Evolution of early initiation to breastfeeding between 2011 and 2014, in Cameroon, in children aged 0 to 1 month, expressed as a percentage

	2011	2014
Early initiation to breastfeeding	39.9	31.2
Source	DHS-MICS 2011	MICS 2014

37. Incidence of low birth weight among newborns

Percentage of live births that weigh less than 2500 g.

Low birth weight is a major cause of early childhood mortality and morbidity. Low birth weight can affect the child's health, development, or even school behaviour and learning abilities.

The incidence of low birth weight among newborns has stagnated between 2011 (8.4%), and 2014 (8.3%) with several regional disparities.

Between 2011 and 2014, the incidence of low birth rate declined in the Eastern Region (from 11.7% to 8%), the Far North Region (from 14.1% to 12.7%), the Western Region (from 9.1% to 6.3%) and the South West Region (from 9.1% to 7.4%). At the same time, the incidence of low birth weight increases in the Center Region (from 5.1% to 7.6%), the North West Region (from 4.8% to 6.5%), the Southern Region (from 5.7% to 7.7%) and in the city of Yaounde (from 7% to 8.9%).

Table 30: Percentage of most recent live births in the last two years weighing less than 2500gr at birth / low weight infants between in 2011 and 2014

Regions	2011	2014
Adamawa	7.5	7.3
Center except Yde	5.1	7.6
Douala (Dla)	10.1	10.1
East	11.7	8
Far North	14.1	12.7
Littoral except Dla	8.2	8.6
North	8.1	8.2
North West	4.8	6.5
West	9.1	6.3
South	5.7	7.7
South West	9.1	7.4
Yaounde (Yde)	7	8.9
Cameroon	**8.4**	**8.3**
Source	DHS -MICS 2011	MICS 2014

38. Children under 5 years who are stunted-SDG 2.2.1

Percentage of stunted (moderate and severe) children aged 0-59 months.

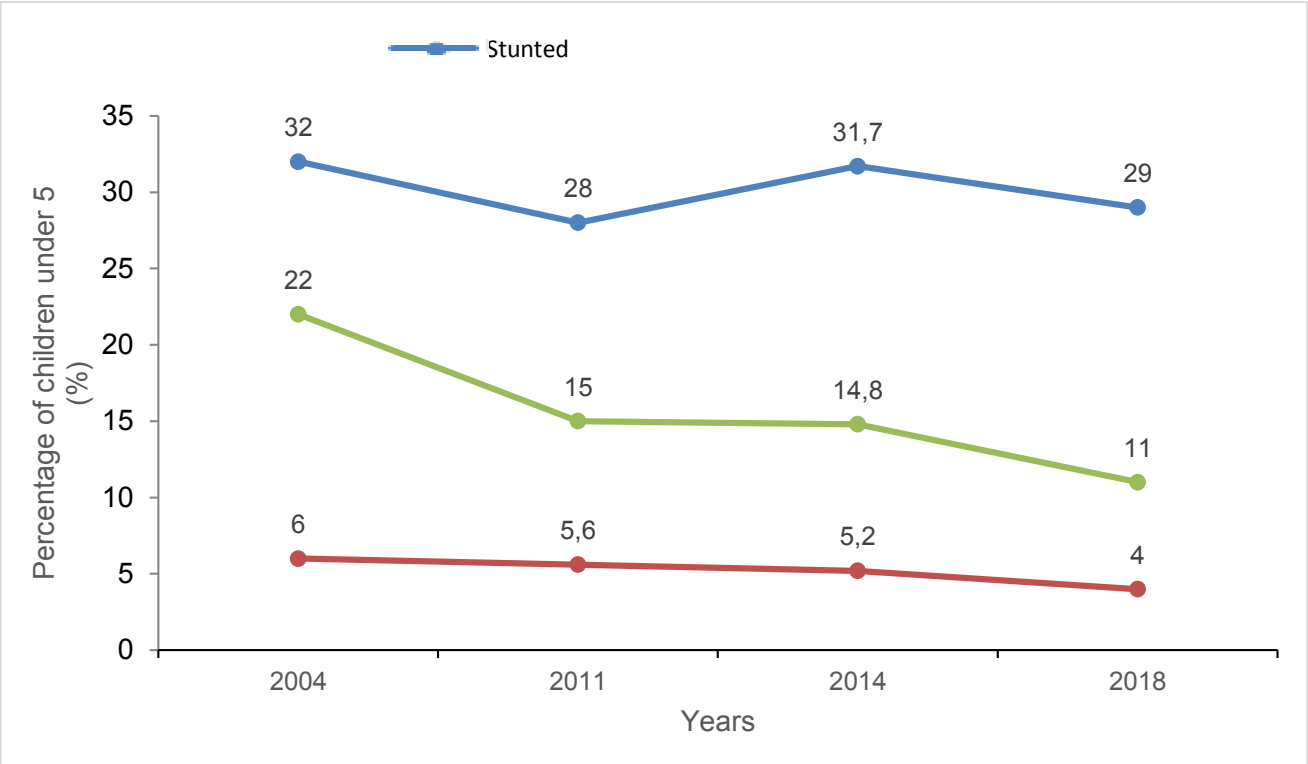
The percentage of stunting children less than 5 years rose from 28% in 2011 to 28.9% in 2018. This percentage remains problematic. The SDG's target is to end all forms of malnutrition by 2030, including by 2025 achieving internationally agreed targets (reducing the number of stunted children under five by 40%).

39. Children under 5 years who are wasted – SDG 2.2.1

Percentage of wasted (moderate and severe) children aged 0-59 months.

The percentage of wasted children decreased from 5.6% in 2011 to 4% in 2018. The SDG's target is to end all forms of malnutrition by 2030; including by 2025 reaching, the internationally agreed targets (reduce and maintain under 5% wasting).

Figure 9: Malnutrition (moderate or severe) for children under 5 from 2004 to 2018



Source: MoH, Key Results DHS 2018

40. Children aged under 5 years who are overweight – ODD 2.2.2

Prevalence of weight-for-height in children aged 0–59 months defined as above +2 standard deviations of the WHO Child Growth Standards median.

The prevalence of overweight children under five years of age increased from 6.2% to 11% between 2011 and 2018. The SDG's target is to end all forms of malnutrition by 2030, including by 2025 reaching the internationally agreed goals on overweight children (no increase on overweight children).

41. Anaemia prevalence in children

Percentage of children aged 6-59 months with a haemoglobin concentration of less than 110 g/L, adjusted for altitude.

The prevalence of anemia in children aged 6 to 59 months decreased by 3% in Cameroon, from 60% in 2011 to 57% in 2018. Since 2004, male children are the more anemic than female. The regions where anemia among children aged 6 to 59 months reduced the most between 2011 and 2018 include the South West (from 69.9% to 41.9%); the South (from 73.6% to 50.9%); the City of Douala (from 67.5% to 56.5%); the West (from 45.5% to 56.6%) and the North West (52.4% to 44.3%). The decline is reflective of the household's economic welfare quintiles except for the second quintile.

Table 31: Prevalence of anemia among children aged 6-59 months, by sex, region, mother's education and well-being in Cameroon, 2004-2018

	2004	2011	2018
Cameroon	68	60	57
Sex	2004	2011	2018
Male	71.9	61.8	59.2
Female	64.6	58.8	55.5
Regions	2004	2011	2018
Adamawa	66.6	61,9	60.2
Center except Yde	73.5	65.8	65.2
Douala	62.2	67.5	56.5
East	73.2	66.8	64.8
Far North	74.9	63.5	64
Littoral except Dla	73.4	56.8	54.8
North	69.5	62.2	56.9
North West	54.7	52.4	44.3
West	61.5	45.5	56.6
South	66.8	73.6	50.9
South West	81.3	69.9	41.9
Yaounde	58.8	46.9	42.7
Mother's education	2004	2011	2018
No	72.9	66.9	
Primary school	70.8	62	
Secondary school	61.7	54.25	
Economic well-being Quintile	2004	2011	2018
Poorest	74	66.4	65.6
Second	71	60.1	62.4
Median	68.9	63	57.9
Fourth	63.7	58.7	51.2
Richest	58.8	60.3	44
Source	DHS 2004	DHS-MICS 2011	DHS 2018 Key Results

42. Anaemia prevalence in women of reproductive age

Percentage of women aged 15-49 years with a haemoglobin concentration less than 120 g/L for non-pregnant women and lactating women, and less than 110 g/L for pregnant women, adjusted for altitude and smoking.

The prevalence of anemia among women of reproductive age increased from 39.5% in 2011 to 39.7% in 2018 with strong regional disparities.

Table 32: Prevalence of anemia among women aged 15 – 49 in Cameroon, by status, by region, education and weel-being between 2004 and 2018

		2004	2011	2018
Cameroon		**44.9**	**39.5**	**39.7**
Regions		**2004**	**2011**	**2018**
	Adamawa	30	35.8	44.2
	Centre except Ydé	43	48.1	43.4
	Douala	59.4	53.2	53.9
	East	49.5	43.5	32.2
	Far North	42.5	36.5	43.2
	Littoral except Dla	56.8	37.6	45.7
	North	29.9	40.7	39.2
	North West	35	30.3	23.7
	West	44.7	23.1	33.8
	South	45.5	52.6	40.4
	South West	55.7	53.6	35.9
	Yaounde	48.1	35.6	32.4
Woman's education		**2004**	**2011**	**2018**
	No	38.5	39.4	43.8
	Primary school	46.4	36.9	38.2
	Secondary school	47.1	43.5	39.2
	Higher education			35.5
Economic well-being quintile		**2004**	**2011**	**2018**
	Poorest	42	36	43.1
	Second	43.9	35.4	39.5
	Median	43.6	41.1	38.3
	Fourth	46.6	40.9	38
	Richest	47.6	42.3	40.3
Source		DHS 2004	DHS-MICS2011	DHS 2018 Key Results

F - INFECTIONS

43. Prevention of HIV in key populations

Sex workers: % reporting condom use with most recent client.
Men who have sex with men: % reporting condom use at last anal sex with a male partner.
Injection drug users: needles/syringes distributed per person.
General population: % of women and men who had more than one partner in the past

- ***Sex workers*** : percentage reporting condom use with most recent client is 77.5% (IBBS Report, 2018)
- ***Men who have sex with men*** : percentage reporting condom use at last anal sex a male partner is 75.80% (IBBS Report, 2019)
- ***Injection drug users*** : no information available on the number of needles/syringes distributed per person
- ***General Population*** : percentage of men and women who had more than one partner in the past 12 months who used a condom during their last sexual intercourse is 38,8% (Key Results DHS, 2018).

G - ENVIRONMENTAL RISK FACTORS

44. Population using safely managed drinking-water services – SDG 6.1.1

Population using an improved drinking water source (piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tube wells; protected dug wells; protected springs, rainwater, packaged or delivered water) which is located on premises, available when needed, and free of faecal and priority chemical contamination.

The proportion of the population using improved water source increased between 2011 and 2014, from 68.6% to 72.9%. The SDG's target is to ensure universal and equitable access to safe drinking water at an affordable cost by 2030.

Table 33: Proportion of the population using an improved water source, by residence, between 2004 and 2014 in Cameroon, expressed as a percentage

Year	2004	2011	2014
Urban	82	89.7	93
Rural	35.9	49.6	54
Total	58.95	68.6	72.9
Source	DHS 2004	DHS-MICS 2011	MICS 2014

45. Population using safely managed sanitation services – SDG 6.2.1a & 6.2.1b

Population using

(i)an improved sanitation facility (flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets) that is not shared with other households and where excreta are safely disposed of in situ or treated off site.

(ii) at the same time having equipment for hand washing with soap and water.

Between 2011 and 2014, the percentage of households with non-shared improved toilets moved from 39.9% to 34.9%. Within the same period, this percentage is lower in rural areas (from 26.1% to 15.5%) than in urban areas (from 55.4% to 51.1%). The SDG's target is to ensure equitable access to adequate sanitation and hygiene services for all, and to put an end to open defecation, paying particular attention to the need of women and girls and vulnerable people by 2030.

Table 34: Distribution of households with improved toilets (flushing, improved latrines) not shared between 2004 and 2014 in Cameroon

Year	2004	2011	2014
Urban	56.2	55.4	51.1
Rural	28.6	26.1	15.5
Total	42.4	39.9	34.9
Source	DHS 2004	DHS - MICS 2011	MICS 2014

46. Population with primary reliance on clean fuels and technologies – SDG 7.1.2

Percentage of households/population with primary reliance on clean fuels and technologies for cooking/heating/lighting where clean is defined by the recommendations set forth in the WHO guidelines for indoor air quality: household fuel combustion.

Across the country, three out of four households (75%) use solid fuel for cooking, mainly wood (71%). In rural areas, 93% of households use wood, in urban households even though wood is still the most used fuel in cities (49%) more than a third of these households use what does this mean/natural gas/biogas (34%),. The SDG's target is to ensure that everyone has access to reliable and modern energy services at an affordable price by 2030.

Table 35: Evolution of the population using solid / modern fuels for cooking from 2011 to 2014

	2011	2014
Cameroon	74.50%	80.40%
Urban	54.40%	61.7%
Rural	95.40%	97.50%
Source	DHS-MICS 2011	MICS 2014

47. Air pollution level in cities –SDG 11.6.2

The annual mean concentration of fine suspended particles of less than 2.5 microns in diameters, population-weighted for urban population in a country, expressed in microgram per cubic meter [ug/m3].

In 2014, the level of urban air pollution in Cameroon was estimated by WHO at 64 µg/m3 for suspended particles less than 2.5 µm in diameter (PM2.5) compared to an average of 37.4 µg/m3 in Africa (WHO 2016). In addition, the level of CO2 emissions per capita in cities changed between 2011 (0.28 µg/m3) and 2013 (0.31 µg/m3). However, the first results of the ATMOTRACK study carried out by the Consortium of consultants in charge of the development of the Urban Mobility Plan in 2018 show that the levels (in fine particles) very often exceed 500 µg/m3, 10 times the standard of 50 µg/m3 recommended by WHO. In addition, WHO estimates the level of air pollution in cities in Cameroon at 65.3 µg/m3 (World Health Statistics, 2019). The SDG's target is to reduce the negative environmental impact of cities by its inhabitants, with a particular interest, on air quality and municipal waste management by 2030.

In the same vein, preliminary studies show that the country is suffering the adverse effects of an inert natural gas called radon. Radon is a natural radioactive gas from uranium and thorium found in soil and building materials. It is the second leading cause of lung cancer after smoking (WHO, 2009). It has been proven that 3 to 14% of lung cancer cases worldwide are caused by radon (WHO, 2009). WHO and ICRP have defined baseline values of 100 and 300 Bq / m3 from which mitigation actions are needed for prevention. In any case, the reference value must not exceed 300 Bq / m3. Preliminary results on about 500 dwellings in Cameroon show that 43% and 1% of dwellings respectively have a radon concentration higher than 100 and 300 Bq / m3 (Saïdou et al, 2019a, 2019b, 2015, Ndjana Nkoulou et al, 2019). Takukam et al, 2019). The average concentration obtained is 113 Bq / m3 whereas it is 40 Bq / m3 for the world average.

As part of the technical cooperation between the International Atomic Energy Agency and Cameroon, the Institute carried out a national radon measurement campaign in 2019.

of Geological and Mining Research (IRGM). It has made it possible to deploy radon measurement dosimeters in 1500 homes across the country. The results will be published in 2020. The National Radiation Protection Agency (ANRP) and the IRGM to reduce the risk at the national level are currently drafting radon regulations and the national radon plan. Validation will take place in the course of 2020.

48. Total alcohol per capita (age 15+ years) consumption – SDG 3.5.2

Total alcohol per capita is the total amount (sum of recorded alcohol per capita three-year average and unrecorded alcohol per capita) of alcohol consumed per adult (15+ years) in a calendar year, in litres of pure alcohol. Recorded alcohol consumption refers to official statistics (production, import, export, and sales or taxation data), while unrecorded alcohol consumption refers to alcohol which is not taxed and is outside the usual system of government control. In circumstances in which the number of tourists per year is at least the number of inhabitants, tourist consumption is also taken into account and is deducted from a country's recorded alcohol per capita.

Alcohol abuse is defined according to the national context as the consumption of pure alcohol (in litres) per inhabitant (aged 15 years or older) in a calendar year. According to WHO, the amount of alcohol (ethanol) consumed per inhabitant (15 years or older) in Cameroon rose from 7.9 liters in 2008, to 9.9 liters in 2016 (Global Health Statistics, 2017).

National data for 2014 (MICS 2014) shows that the rate of consumption of alcohol by men in the last month before the survey doubles that of women. The SDG's target is to strengthen prevention and treatment of psychoactive substance abuse, including drugs and alcohol by 2030.

Table 36: Prevalence of alcohol consumption among 15 + / age specific comparison rates in 2014

Alcohol Consumption in Cameroon		2014
Percentage of people aged 15 to 49 who have never drank alcohol	Women	46.6
	Men	30.7
Percentage of people aged 15 to 49 who have drunk at least one alcoholic drink at any time in the last month	Women	10.4
	Men	20.6
Percentage of people aged 15 to 49 who drank at least one alcoholic drink before the age of 15	Women	33
	Men	52.2
Source		MICS 2014

49. Tobacco use among persons aged 15+ years – SDG 3.a1

Age-standardized prevalence of current tobacco use among persons aged 15+ years. "Smoked tobacco products" includes cigarettes, cigarillos, cigars, cheroots, bidis, pipes, shisha (water pipes), roll-your-own tobacco, kreket, and any other form of tobacco that is consumed by smoking.

The prevalence of current tobacco use among 15-49 year olds is estimated at 0.3% among females versus 11% among males (MICS 2014). In 2017, WHO estimates 5.7% of current smoking among youth (13-15 years) and 4.6% among adults (15 years and older).

Analysis of anti-smoking laws (table 38) shows that national laws prohibit smoking only in health facilities, schools and universities (WHO.2017). The SDG's target is to strengthen the World Health Organization Framework Convention on Tobacco Control.

Table 37: Data on tobacco use from the latest survey results as of December 31, 2016

	Tobacco use among youths		Tobacco use among adults		Cigarettes among adults	
Prevalence (%)	Common use of tobacco	Curent smoking	Regularly	Daily	Regularly	Daily
Men	13.8	8.3	11.8	9.1	11.7	2.2
Women	5.7	2.5	0.6	0.5	0.5	3.8
Total	10.1	5.7	6.0	4.6	5.9	3.0
Youths : Global Youth Tobacco Survey, 2014, National, age 13-15 Adults : Global Adult Tobacco Survey (GATS), 2013, National, age 15 and over						

Source : WHO, Country Profile Tobacco, 2017

Table 38: Tobacco Control Policies in Public Spaces in 2016

No smoking	Yes/No
Health facilities	Yes
Schools (without Universities)	Yes
Universities	Yes
Government buildings	No
Offices and workplace	No
Restaurants	No
Pubs et bars	No
Public Transport	No

Source : WHO, Country Profile Tobacco, 2017

50. Raised blood pressure among adults

Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg), and mean systolic blood pressure.

This prevalence was estimated at 22% by WHO in 2010 (World Health Statistics, 2014) and 19% in 2016 (non-communicable diseases country profile, 2018). Moreover, national studies have shown an urban prevalence of high blood pressure at 29.7% (Kingue et al. 2015) and 30.9% (Kuate-Defo et al. 2019).

Table 39: Prevalence (95% CI) of high blood pressure by region and living environment in 2018

Region	
Adamawa	28.0
Center	31.8
East	30.8
Far-North	35.5
Littoral	32.3
West	36.3
North	30.6
North-West	34.9
South	17.1
South-West	30.9
Residence	
Rural	25.4
Urban	31.4

Source : Kuate Defo et al., Blood pressure and burden of hypertension in Cameroon, a microcosm of Africa: a systematic review and meta-analysis of population-based studies, 2019

51. Overweight and obesity in adults

Percentage of adults (18+ years) who are overweight (defined as having a BMI ≥ 25 kg/m²) and obese (defined as having a BMI ≥ 30 kg/m²).

In 2016, WHO estimated obesity prevalence among population aged 18 or older was 10%, with 5% among men and 14% among women. Furthermore, National data on obesity is available only for women aged 15-49, showing an increased prevalence rate between 2004 and 2011 from 8.2% to 10.7%, and a rise from 20.6% to 21.5% for overweight, as shown in Table 40 below.

Table 40: Trends in obesity and overweight among women, by residence, between 2004 and 2011 in Cameroon

	2004	2011
Overweight		
Urban	25.1	25
Rural	12.2	15.5
Obesity		
Urban	15	17.1
Rural	3.2	4.8
Source	DHS 2004	DHS-MICS 2011

Table 41: Nutritional status of women aged 15 to 49/ Evolution of obesity and overweight between 2004 and 2011 in Cameroon

	2004	2011
Average Body Mass Index (BMI)	23.6	23.9
Overweight/big (BMI* =25 - 29,9)	20.6	21.5
Obese (BMI > or equal to 30,0)	8.2	10.7
Overweight or Obese (BMI > or equal to 25, 0)	28.8	32.2
Source	DHS 2004	DHS-MICS 2011

52. Raised blood glucose/diabetes among adults

Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years or on medication for raised blood glucose (defined as fasting plasma glucose value ≥ 7.0 mmol/L (126 mg/dL) or on medication for raised blood glucose among adults aged 18+ years).

The prevalence of raised blood glucose in the general population was estimated by WHO at 5.8% in 2010 (Global Health Statistics, 2014), and 5% in 2016 (Country Profile of Non-Communicable diseases). Moreover, a 2013 study reveals a 6.6% prevalence of raised blood glucose in urban areas (Kingue et al., 2015).

53. Salt intake

Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years.

An international study published in 2013[3], shows that the amount of salt intake in grams per day (g/d) for people aged 20+ was 5.3g/d in 2010. However, WHO estimates that the average salt intake among adults aged 20+ was 5g/d in 2016 (Country Profile on Non-communicable diseases, 2018), i.e.: 6g/d for men and 5g/d for women. Moreover, in 2014, 69% of Cameroonian households had sufficiently iodized salt (≥ 15 PPM iodine), while 16% did not have enough iodized salt intake (Any level of iodine > 0 PPM) (MICS 2014).

54. Insufficient physical activity in adults

Age-standardized prevalence of insufficiently physically active persons aged 18+ years (percentage of adults aged 18+ years not meeting any of the following criteria: 150 minutes of moderate-intensity physical activity per week; 75 minutes of vigorous-intensity physical activity per week; an equivalent combination of moderate- and vigorous-intensity physical activity accumulating at least 600 metabolic equivalent minutes per week (minutes of physical activity can be accumulated over the course of a week but must be of a duration of at least 10 minutes).

The prevalence of insufficient physical activity among adults was estimated at 29.3% in 2010 by WHO (World Health Statistics, 2014), and 27% in 2016. It revealed that women practice less physical activity, with 34% of them inactive, compared to 20% in men (WHO, 2018).

[3] Global, regional and national sodium intakes in 1990 and 2010, a systematic analysis of 24 h urinary sodium excretion and dietary surveys worldwide, 2013

I - INJURIES / HARMFUL TRADITIONAL PRACTICES

55. Intimate partner violence prevalence – SDG 5.2.1

Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months.

WHO estimates that the prevalence of intimate partner violence in the period 2009-2017 is 33% (World Health Statistics, 2019). National data (MICS 2014) shows that (i) emotional violence is by far the most common (43.65%), (ii) physical violence (31%), and (iii) sexual violence (11%). The SDG's target is to end-up all kind of violence against women and girls, including trafficking and sexual exploitation and other forms of exploitation from public and private life, by 2030.

Table 42: Percentage of women aged 15-49, in union or in union breakdown who experienced various forms of violence by their husband/partner in the last 12 months preceding the survey, in Cameroon in 2014

	2014	
Physical Violence	According to women	According to men
Has been shook	20,7	20.4
Was slapped	25,8	26.4
Had her arm twisted or her hair pulled	12,2	9.1
Was hit with a punch or with something that can hurt	14,4	10.1
Kicked, dragged to the floor	12,5	8.7
Tried to strangle her or burn her	8,6	5.8
Threatened with a knife or other weapon	8	5.5
All forms	**30,8**	**31.2**
Sexual Violence	According to women	According to men
All forms	13,5	8.5
Was physically forced to have sex with husband/partner when she did not want	13,2	7.9
Was forced to practice sexual acts she did not want	8,9	6.4
All forms	**13,5**	**8.5**
Emotional Violence	According to women	According to men

Husband/partner said something to humiliate in front of other people	36.8	30.4
The husband/partner has violently threatened her or someone close to her	36.6	30
Husband/partner insulted or demeaned her	41.5	48.7
All forms	47.2	40.1
	According to women	According to men
Any form of physical or sexual violence	32.7	32.2
Any form of physical, sexual or emotional violence	52.6	47.7
Any form of physical, sexual and emotional violence	10.7	6.4
Source	MICS 2014	

56. Non-partner sexual violence prevalence - SDG 5.2.2

Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months.

Table 43 shows the percentage of women who reported different type of sexual violence. It also shows that overall, 34% of women were sexually abused. The SDG's target is to eliminate all type violence against women and girls, including trafficking and sexual exploitation and other forms of exploitation from public and private life by 2030.

Table 43: Perpetrators of sexual violence against women. Among women who reported experiencing sexual violence, Percentage who reported different types of perpetrators of violence at the time of the first experience of sexual violence among 15 +, Cameroon 2011

Perpetrators of violence	Percentage (%)
Father	0.1
Step father	0.2
Other Parent	2.6
Step Parent	1.0
Friend or acquaintance	12.0
Family friend	4.3
Teacher	1.0
Employer/anybody in the workplace	0.2
Police officer/Military officer	0.6
Priest/religious	0.2
Stranger	7.9
Others	6.4

Source : MoH/NIS, DHS-MICS 2011

57. Prevalence of female genital mutilation/cutting – SDG 5.3.2

Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting.

According to WHO, female genital mutilation (FGM) is the partial or total removal of external genitals for non-medical reasons. In 2004, the prevalence of FGM among women aged 15-49 was 1.4%. Affected regions were Far North (5.4%), South West (2.4%), North (2.2%), East (1.6%), West (0.4%) and Adamawa (0.2%). The SDG's target is to eliminate all harmful practices, such as child marriage, early or forced marriage and female genital mutilation by 2030.

58. Sexual violence against children – SDG 16.2.3

Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18.

Sexual violence against children is characterized by all sexual intercourse imposed on children by force, coercion, threat or surprise. Thus, the concept of sexual violence encompasses the idea of coercion. It may be physical or moral. However, more often than not, it is moral. Seduction, valuing the child, rewards, blackmail and threatens for both, the act and the secret to keep. On a daily basis, several cases of sexual violence against children are reported in the press, but there are no recent national data on the subject, except for a few ad hoc studies. However, the results of the MICS 2014 report that nearly 85% of children aged 1 to 14 years, among which 85.2% of them are boys and 84.8% girls have been subjected to psychological assaults or corporal punishment. The SDG's target is to end child abuse, exploitation and trafficking, and all forms of violence and torture by 2030.

59. Early marriage – SDG 5.3.1

Percentage of women aged 20-24 who were married or in a union before age 15 and before age 18.

MICS 2014 data show that 11.4% women and 1% men got married or are in common-law relationships before the age of 15. At the same time, 36% women and 5.4% men got married or were in common-law relationship before 18 years old. The SDG's target is to eliminate all harmful practices such as child marriage, early or forced marriage and female genital mutilation.

Table 44: Proportion of early marriages in 2014

		2014
Percentage of people aged 15-49 who married or were in a relationship before the age of 15	Women	11.4
	Men	1
Percentage of people aged 20-49 who married or were in a relationship before the age of 18	Women	36
	Men	5.4
Percentage of young people aged 15-19 who are married or in a relationship	Women	20.1
	Men	0.9
Source		MICS 2014

60. Frequency rates of occupational injuries – SDG 8.8.1

Frequency rates of fatal and non-fatal occupational injuries provide information on the number of cases of fatal and non-fatal occupational injury per hours worked by the concerned population during the reference period. It is a measure of risk of having a fatal or non-fatal occupational injury based on the duration of exposure to adverse work-related factors.

According to the statistical yearbook 2017 and 2018 of the National Social Insurance Fund (NSIF), the number of reported accidents at work was 771 and 684 respectively. The data do not include injuries to public sector employees (civil servants, contractors and government employees), as NSIF deals with private and informal sector employees (for those who have subscribed to a voluntary insurance scheme). The SDG's target is to defend workers' rights, promote workplace safety and ensure the protection of all workers, including migrants, especially women and those in precarious employment.

Table 45: Distribution of occupational injuries by type of injury in 2018

Type of injury	Total
Amputations and enucleations	23
Other wounds	73
Other ill-defined trauma and trauma	195
Wounds	66
Commotions and other internal fractures	4
Bruising and crushing	43
Harmful effects of electricity	6
Sprains and strains	11
Fractures	99
Multiple lesions of different types	93
Dislocation	4
Superficial trauma	9
Not specified	58
Total	**684**

Source : NSIF, Statistical yearbook, 2018

Chapter 3

SERVICE COVERAGE INDICATORS

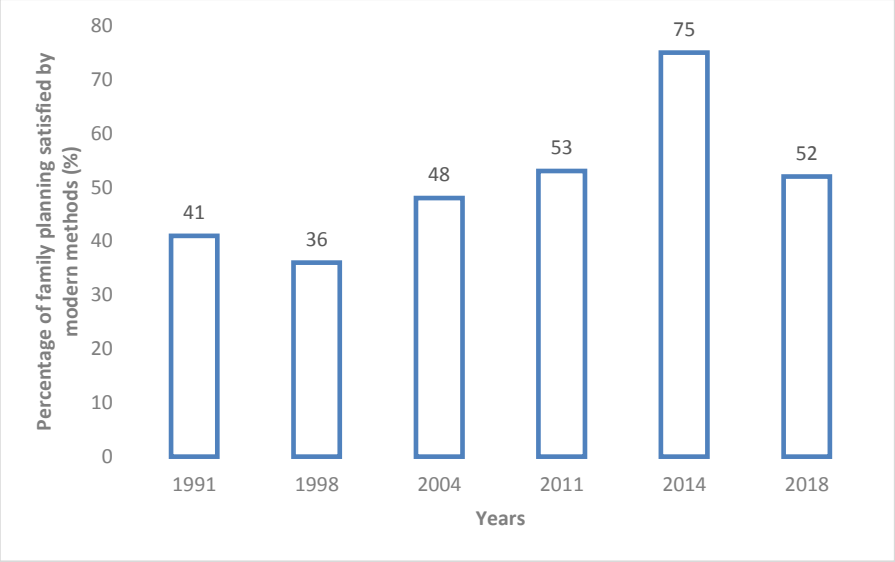
J - REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT

61. Demand for family planning satisfied with modern methods – SDG 3.7.1

The percentage of women of reproductive age (15-49 years) who desire either to have no (additional) children or to postpone the next child and who are currently using a modern contraceptive method.

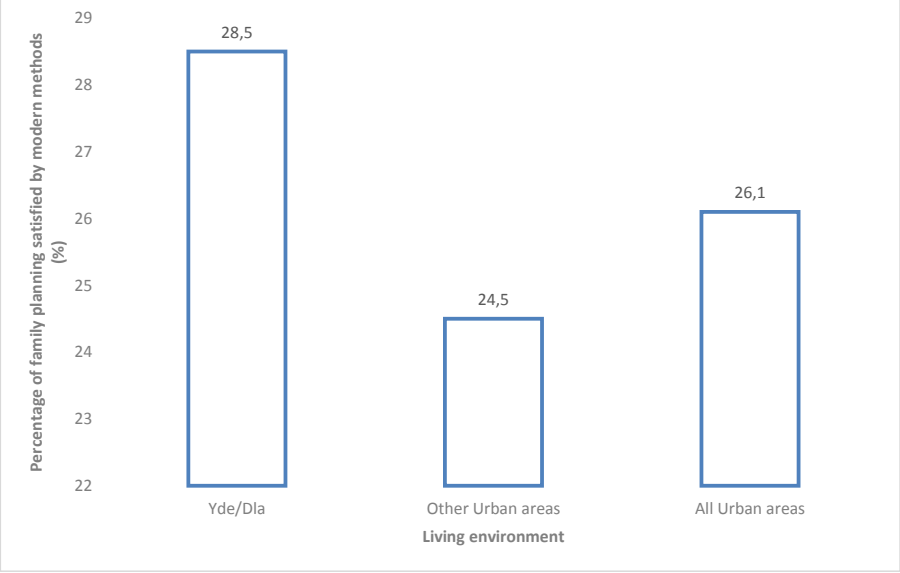
In Cameroon, family planning needs satisfied decreased from 23.7% in 2011 to 15.4% in 2018. The SDG's target is to ensure access to sexual and reproductive health services for all, including family planning, information and education and consideration of reproductive health in national strategies and programs.

Figure 10: Evolution of satisfied needs and demand in family planning through modern methods from 1991 to 2018 in Cameroon



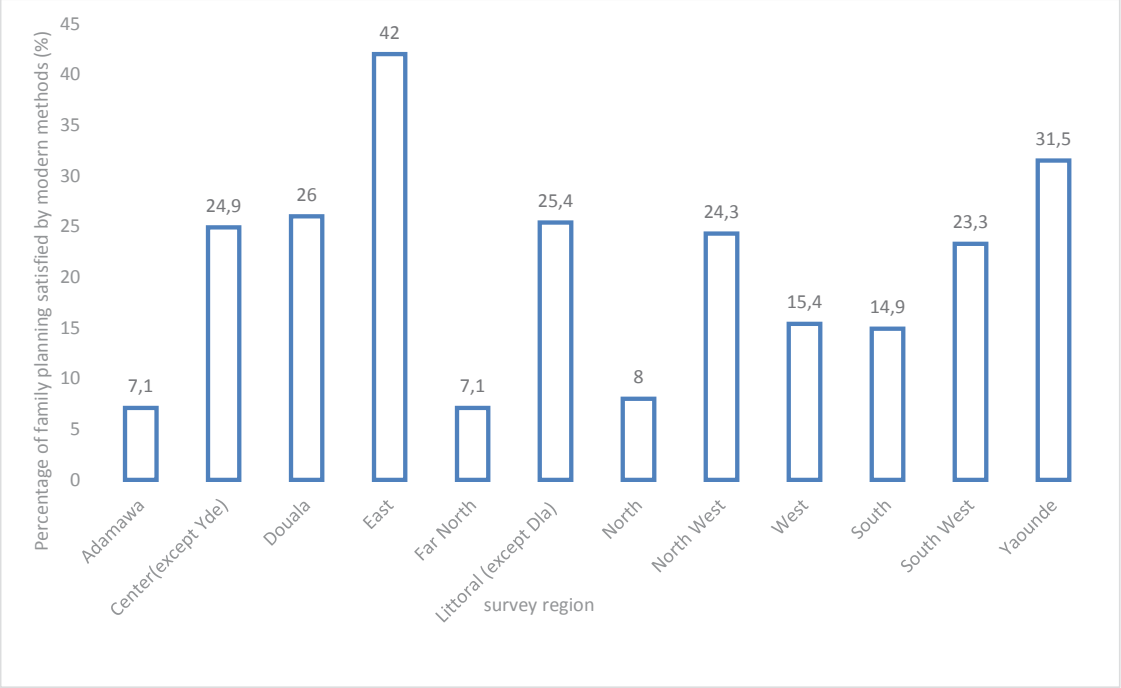
Source: MoH, DHS 1991-1998-2004-2011; MICS 2014; Key results DHS 2018

Figure 11: Family-planning needs satisfied among women aged 15 – 49 (in relationship) by residence in Cameroon in 2018



Source: MoH, DHS 1991-1998-2004-2011; MICS 2014; Key results DHS 2018

Figure 12: Family-planning needs satisfied among women aged 15 – 49 (in relationship) by region in Cameroon in 2018



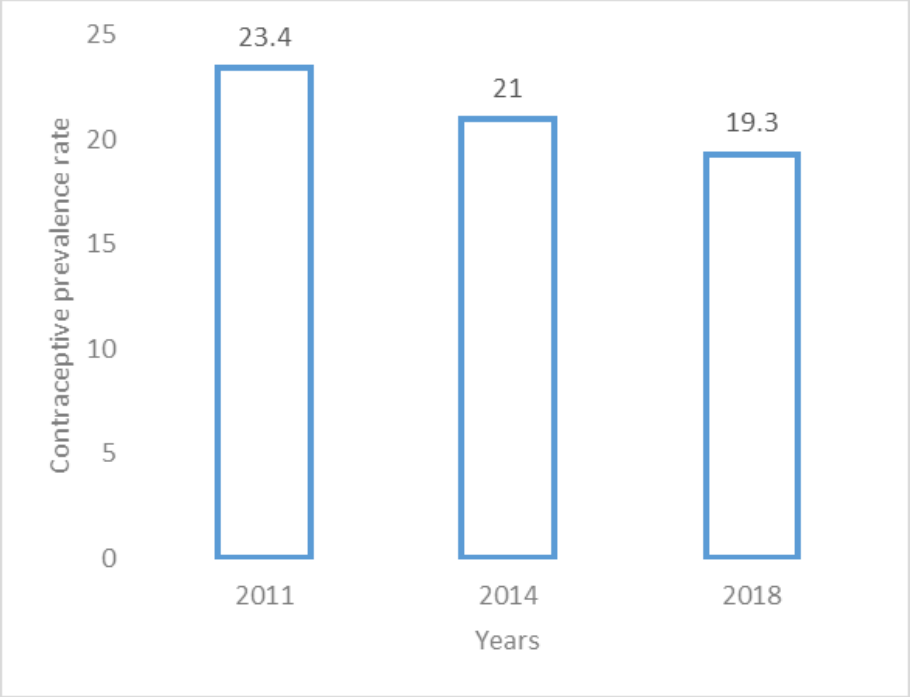
Source: MoH, DHS 1991-1998-2004-2011; MICS 2014; Key results DHS 2018

62. Contraceptive prevalence rate

Percentage of women aged 15-49 years, married or in union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.

The trend in contraceptive prevalence for women aged 15-49 years in a union has been declining since 2011. It went from 23.4% in 2011 to 19.3% in 2018 as indicated in figure 13 below.

Figure 13: Trends in contraceptive prevalence from 2011 to 2018 in Cameroon



Source: MoH, DHS 2011; MICS 2014; Key results DHS 2018

Figure 14: Contraceptive prevalence rate among women aged 15-49 (in union) by residence in Cameroon in 2018

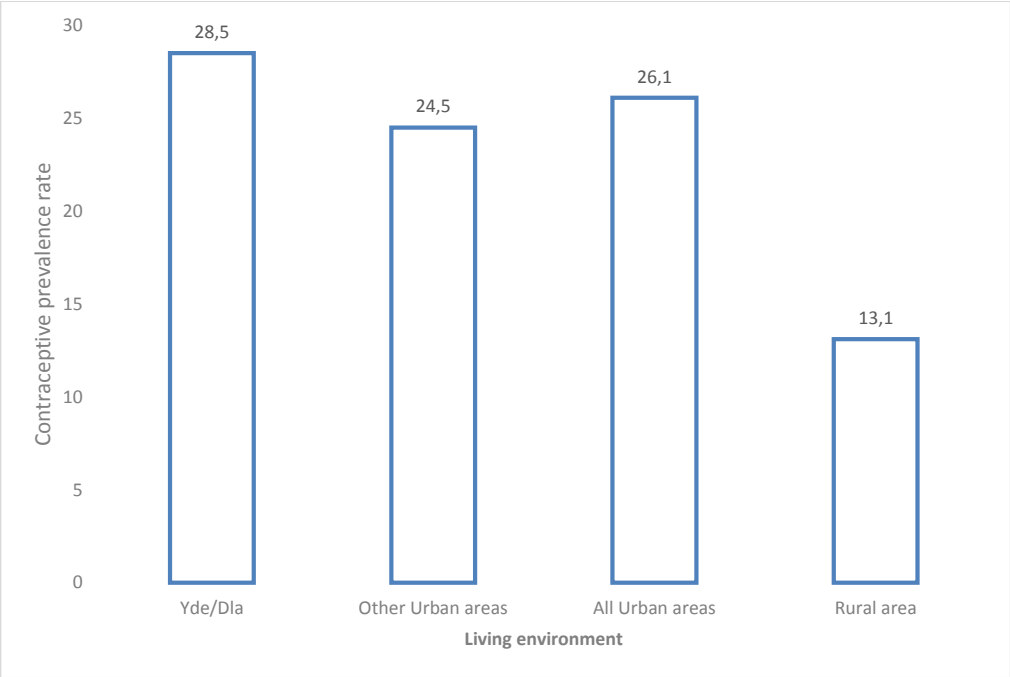
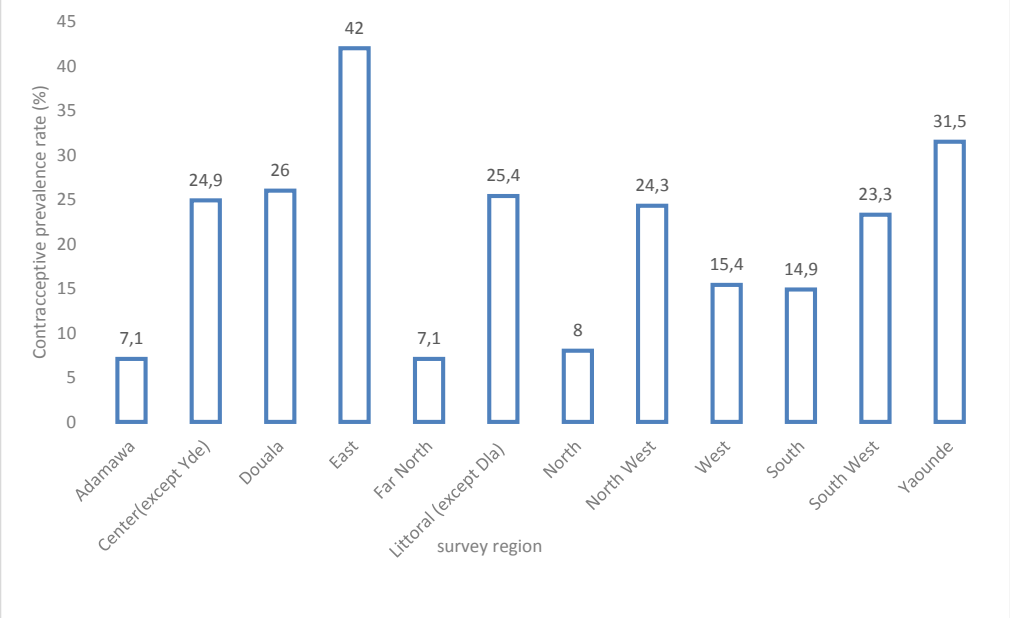


Figure 15: Contraceptive prevalence rate among women aged 15-49 (in union) by region in Cameroon in 2018



Source: MoH, Key results DHS 2018

63. Antenatal care coverage

Percentage of women aged 15-49 years with a live birth in a given time period who received antenatal care, four times or more times from any provider.

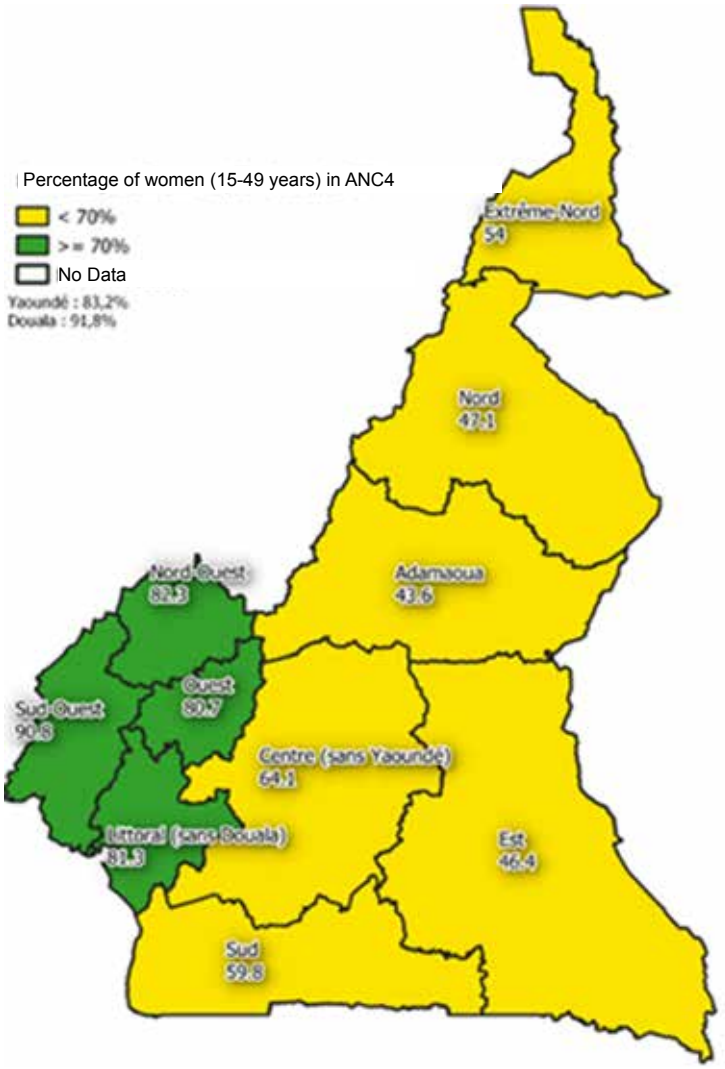
There is an increase in ANC4 and above coverage between 2011 (62.2%) and 2018 (64.9%) with significant regional disparities (see Table 46).

Table 46: Percentage of coverage in ANC 4 and above/ births attended by skilled personnel between 1991 and 2018 in Cameroon

Year	1991	2004	2011	2014	2018
ANC4 and above	49	59	62.2	58.8	64.9
Source	DHS 1991	DHS 2004	DHS-MICS 2011	MICS 2014	DHS 2018 Key results

Table 47: Percentage of women aged 15-49 who made 4 or more antenatal visits per Residence in 2018

Residence	
Yaounde/Douala	87.5
Other Urban areas	72.9
All Urban area	78.7
Rural	52.2
Source : **MoH/NIS, Key results DHS 2018**	



64. Births attended by skilled health personnel – SDG 3.1.2

Percentage of live births attended by skilled health personnel during a specified time period.

The number of deliveries in health facilities increased from 61.2% in 2011 to 67% in 2018. The number of deliveries attended by skilled health personnel increased from 63.6% in 2011 to 69% in 2018 as indicated in table 48 below. This indicator contributes to SDG's target 3.1.2 which states that by 2030 the maternal mortality rate should be below 70 per 100 000 living births.

Table 48: Percentage of births attended by skilled personnel between 1991 and 2018 in Cameroon Percentage of deliveries attended by skilled personnel between 1991 and 2018 in Cameroon

	1991	2004	2011	2014	2018
Deliveries attended by skilled personnel	64	60	63.6	64.7	69
Deliveries in health units	62	59	61.2	61.3	67
Source	DHS 1991	DHS 2004	DHSC-MICS 2011	MICS 2014	DHS 2018 Key results

65. Postpartum care coverage – women

Proportion of women who have postpartum contact with a health provider within 2 days of delivery.

The percentage of women (aged 15 to 49 years) who received postpartum care increased from 37% in 2011 to 59% in 2018.

Table 49: Percentage of women aged 15-49 who received Postpartum care within two days of birth between 2011 and 2018

Year	2011	2014	2018
Mothers	37%	65%	59%
Source	DHS/MICS 2011	MICS 2014	DHS 2018, Key results

Table 50: Percentage of women aged 15-49 or older who received postnatal care within 2 days of birth in Cameroon in 2018

Residence	
Yaounde/Douala	72.3
Other Urban	72.4
Urban area	72.4
Rural	48.5
Region	
Adamawa	49.6
Center (except Yaounde)	58.3
Douala	73.2
East	49.3
Far North	39.9
Littoral (except Douala)	64.8
North	41.7
North-West	82.2
West	84.5
South	67.8
South-West	90.9
Yaounde	71.4

Source : MoH/NIS, Key results DHS 2018

66. Postnatal care coverage – newborn

Proportion of newborns who have a postnatal contact with a health provider within 2 days of delivery.

Before 2014, this indicator was not captured in national surveys. According to the MICS 2014, 68.5% of newborns received postnatal care.

Table 51: Percentage of newborns receiving postnatal care two days after birth in 2014

	2014
Newborns	68.5*
Source	MICS 2014

*this percentage was obtained by adding the exclusive postnatal consultation coverage rate to the combined postnatal consultation coverage rate of the parent/child couple

67. Care-seeking for symptoms of pneumonia

Percentage of children under 5 years of age with suspected pneumonia (cough and difficult breathing NOT due to a problem from a blocked nose) in the two weeks preceding the survey taken to an appropriate health facility or provider.

The proportion of children consulted in health facilities for suspected pneumonia symptoms declined between 2004 (11%) and 2011 (5.4%).

Table 52: Request for care for children under 5 years with ARS symptoms in the last 2 weeks between 2004 and 2011 in Cameroon

Year	2004	2011
%	11	5.4
Source	DHS 2004	DHS-MICS 2011

68. Coverage of diarrhoea treatment

Percentage of children under 5 years of age with diarrhoea in the last two weeks receiving ORS (fluids made from ORS packets or pre-packaged ORS fluids) and zinc supplement.

The percentage of children under-five with diarrhoea who received ORS rose from 5.2% in 2014 to 7.7% in 2018 with regional disparities. In 2018, the South Region registered the lowest coverage, 1.6% whereas Douala had the highest coverage 14.7%.

Table 53: Percentage of children with diarrhoea receiving Oral Rehydration Salts between 1991 and 2018 in Cameroon

Year	1991	1998	2004	2011	2014	2018
%	18	21.9	16.8	17.2	5.2%*	7.7*
Source	DHS 1991	DHS 1998	DHS 2004	DHS-MICS 2011	MICS 2014	DHS 2018

* Percentage given ORS and zinc; Prior to 2014 this indicator was calculated separately for SRO and zinc

Table 54: Percentage (among children with diarrhoea) who were given ORS and zinc in Cameroon in 2018

Residence	
Yaounde/Douala	9.8
Other Urban	8.3
Urban area	8.9
Rural	6.5
Region	
Adamawa	5.9
Center (excluding Yaounde)	7.6
Douala	14.7
East	5.0
Far North	7.3
Littoral (excluding Douala)	(11.6)
North	8.3
North-West	(8.0)
West	7.6
South	1.6
South-West	*
Yaounde	6.3

Source : MoH/NIS, Key results DHS 2018

69. Vitamin A supplementation coverage

Percentage of children aged 6-59 months who received two age-appropriate doses of vitamin A in the past 12 months.

In Cameroon, this indicator is available for children aged 0-59 months who received two doses of vitamin A in the last 6 months prior to the survey, and not for the last 12 months. Between 2004 and 2011, significant progress in vitamin A supplementation was observed overall (from 38% to 55.3%); also in rural area (from 35% to 58%) and in urban area (from 40% to 51.3%).

Table 55: Percentage of children 0-59 months who received vitamin A supplementation in the last 06 months prior to the survey, between 2004 and 2011 in Cameroon

	2004	2011
Urban	40	51.3
Rural	35	58.4
Total	38	55.3
Source	DHS 2004	DHS-MICS 2011

K - IMMUNIZATION

70. Immunization coverage rate by vaccine for each vaccine in the national schedule – SDG 3.b.1

Percentage of the target population that has received the last recommended dose of the basic series for each vaccine recommended in the national schedule by vaccine. This should include all vaccines within a country's routine immunization schedule.

Considering the tracer antigen Penta 3, immunization coverage decreased from 82% in 2014 to 72% in 2018 (Key results, DHS 2018). According to joint WHO/UNICEF estimates validated by the country, immunization coverage for the same antigen dropped from 87% in 2014 to 79% in 2018. Regardless of the data source, immunization coverage is decreasing. The objective of the SDG is to support research and development of vaccines and drugs against communicable and non-communicable diseases that primarily affect people in developing countries, to provide access, at an affordable cost, to essential medicines and vaccines.

Figure 16: Evolution in the percentage of children aged 12 to 23 months vaccinated (all vaccines) between 1991 and 2018 in Cameroon

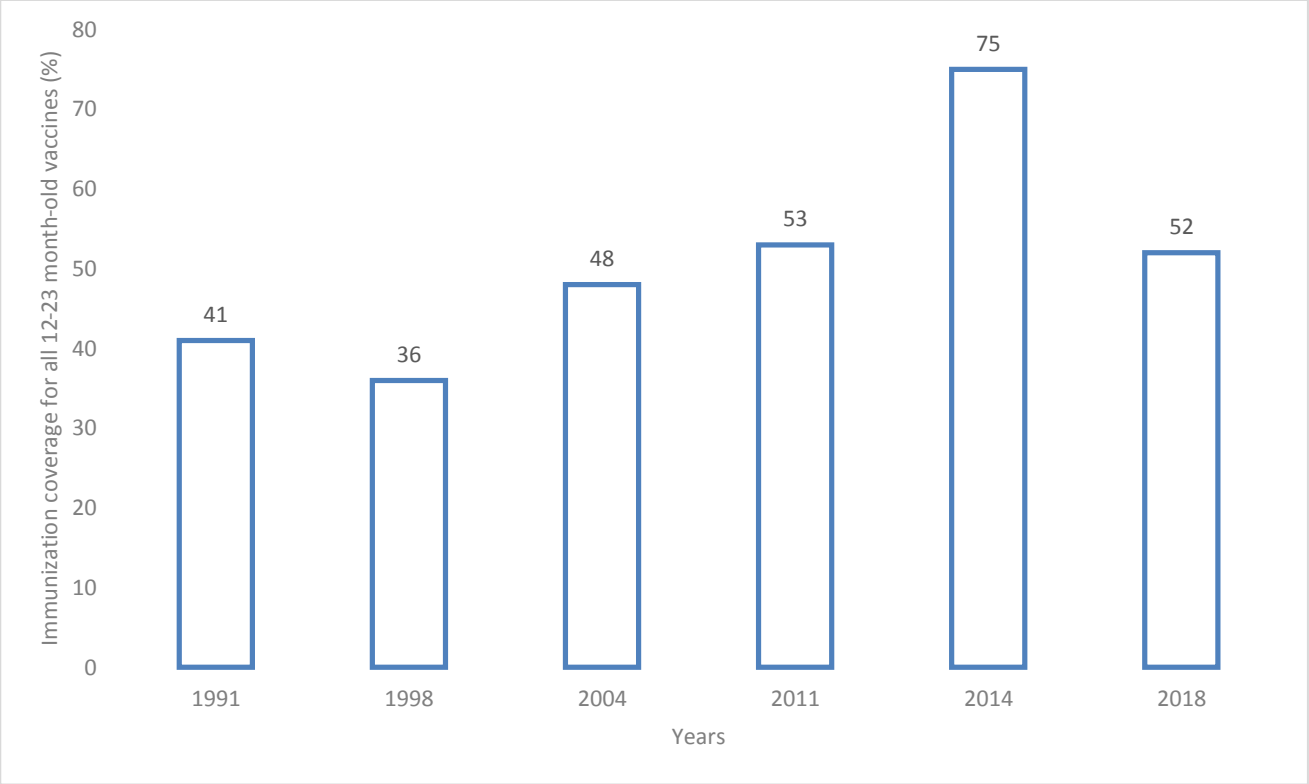


Table 56: Percentage of children aged 12 to 23 months vaccinated between 1991 and 2018 in Cameroon

	1991	1998	2004	2011	2014	2018
BCG	76	75	86	87	92	87
DPT 3 / Pentavalent	48	51	65	68	82	72
Polio 3	50	47	67	70	87	67
Measles	56	54	65	71	86	65
All	41	36	48	53	75	52
No vaccin	22	12	5	5	4	10
Source :	DHS 1991	DHS 1998	DHSC 2004	DHS-MICS 2011	MICS 2014	DHS 2018 Key results

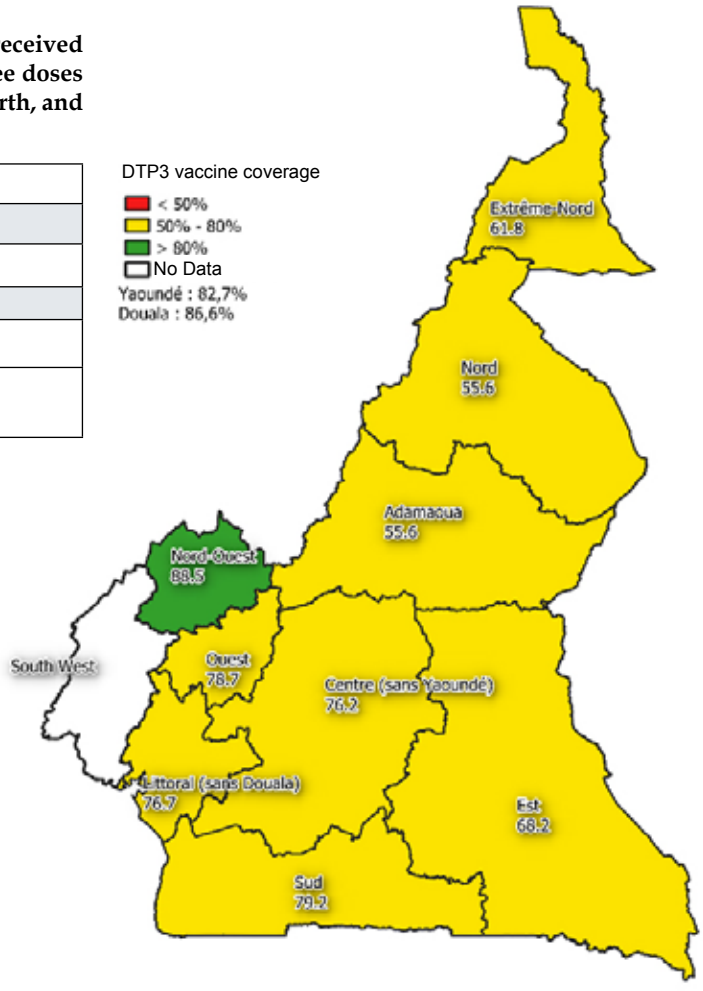
Table 57: Percentage of children aged 0 to 11 months vaccinated between 2011 et 2018 in Cameroon

	2011	2012	2013	2014	2015	2016	2017	2018
BCG	80	81	82	82	74	70	91	88
DPT 3 / Pentavalent	82	85	89	87	84	85	86	79
Polio 3	80	85	88	86	83	83	84	78
Measles	76	82	83	80	79	78	77	71
Yellow fever	75	80	83	80	77	78	78	74

Source : WUENIC 2019 WHO and UNICEF estimates of immunization coverage

Table 58: Percentage of children 12-23 months of age who received all basic vaccines (BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (not including polio vaccine given at birth, and one dose of measles vaccine) in Cameroon in 2018

Residence	
Yaounde/Douala	67,1
Other Urban	57,7
Urban area	61,2
Rural	45,3
Source : MoH/NIS, Key results DHS 2018	



L - HIV

71. People living with HIV who know their status

Percentage of people living with HIV who know their status.

Between 2017 and 2018, the proportion of people living with HIV who know their status increased from 60% to 64%, representing an estimated number of identified PLWHIV of 333,772 and 337,862 respectively (NACC Annual Reports 2017-2018).

Table 59: Estimates of the number of people living with HIV who know their status in Cameroon in 2018 by region

Survey region	Not on ARV	On ARV
Adamawa	2.5	33.4
Center (excluding Yaounde)	5.7	37.4
East	2.8	48.4
Far North	4.2	25.3
Littoral (excluding Douala)		
North	5.8	24.2
North West	3.3	66.8
West	1.9	46.6
South	4.6	42.2
South West	8.0	40.1
Yaounde	5.3	43.9
Douala	2.7	42.7

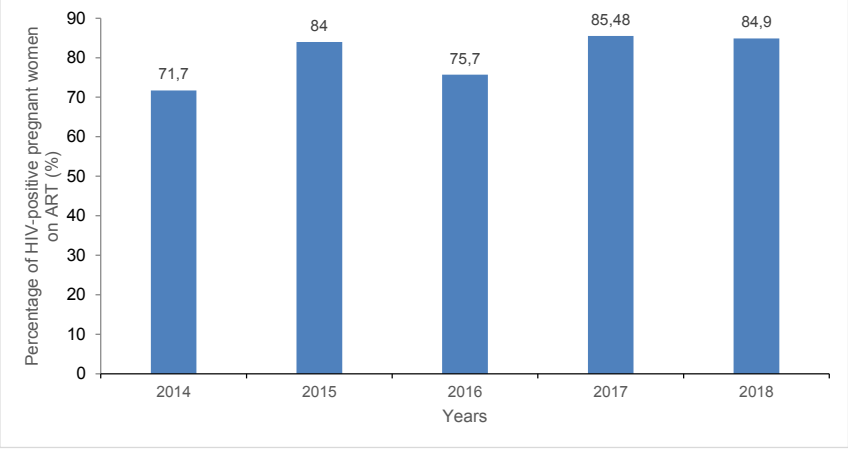
Source : MoH/University of Columbia, CAMPHIA 2018

72. Prevention of mother-to-child transmission

Percentage of HIV-positive pregnant women provided with ART to reduce the risk of mother-to-child transmission during pregnancy.

Although still below 90%, ART coverage for HIV positive pregnant women increased between 2014 and 2018 from 71.7% to 84.9%.

Figure 17: Percentage of HIV-positive pregnant women on ART between 2014 and 2018 in Cameroon



Source : MoH/NACC, Progress Report PMCT N°12 & 13, 2017-2018; Annual Reports NACC 2016, 2017, 2018

The PMTCT Progress Report #13 indicates that, in 2018, at the regional level, programmatic ART coverage rates for HIV+ pregnant women range from 53% in the West to 91% in the South. Six regions (South 91%, Center 90%, Northwest 81%, North 77%, East 75% and Littoral 74%) had a program coverage rate that is above the national average of 72.8%. At the national level, this rate dropped from 85.67% in 2017 to 72.8% in 2018.

Table 60: ART Coverage for HIV+ Pregnant women (%) by region from 2016 to 2018

	2016	2017	2018
Adamawa	80.5	96.1	66
Center	68.9	82.2	90
East	64.1	82.8	75
Far-North	46.7	70.6	62
Littoral	78.1	86	74
North	86.9	92.2	77
North-West	91.6	91.7	81
West	78.4	88.5	53
South	96	99.1	91
South-West	84.5	79	59
National	80.97	85.67	72.8

Source : MoH/NACC, Annual Reports 2016-2017-2018

73. Antiretroviral therapy (ART) coverage

Percentage of people living with HIV currently receiving ART among the estimated number of adults and children living with HIV.

The number of people living with HIV receiving antiretroviral therapy doubled between 2014 and 2018 from 145,038 to 281,083. Antiretroviral therapy coverage also evolved in the same direction from 27.4% to 54% in the same period. This positive development allows Cameroon to move closer to achievment of the second 90, which targets 90% adherence to treatment of people who know their HIV status by 2020.

Table 61: Antiretroviral treatment (ART) coverage in Cameroon between 2014 and 2018

Year	2014	2015	2016	2017	2018
% ART Coverage	27.4	27.1	33.3	45.2	54%
Number of PHAs on treatment	145,038	168,249	205,382	253,715	281,083

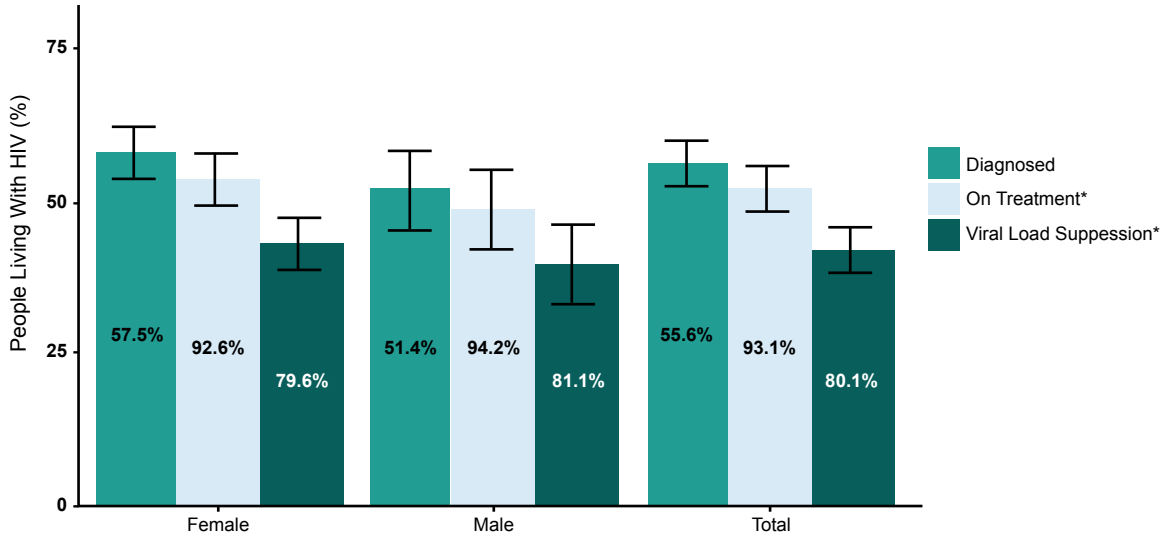
Source : AAnnual Reports NACC, 2008 -2018

74. HIV viral load suppression

Percentage of people on ART who are virologically suppressed (VL level ≤ 1000 copies/mL).

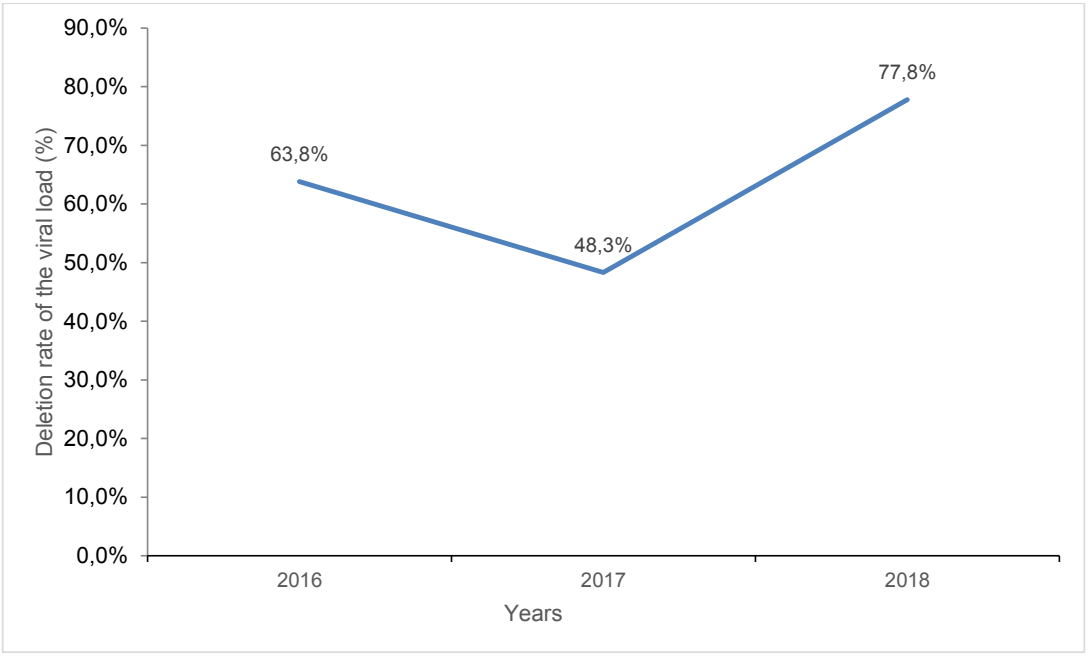
The new WHO guidelines, adopted by Cameroon, place HIV viral load (VL) at the center of biological follow-up for patients under ART, indeed it is the only test to monitor the effectiveness of ART. The goal of ARV therapy is to eliminate viral load in HIV-infected patients. According to the HIV management guidelines, PLWHA under treatment must undergo a viral load test six months after initiation to treatment, and then annually for check-ups. As part of the acceleration of ARV therapy, viral load tests were scheduled for 117,639 PLWHA under treatment. According to the annual reports of the NACC, the rate of viral suppression among patients with ART rose from 63.8% in 2016 to 77.8% in 2018.

Figure 18: Viral load suppression rate in Cameroon in 2018



Source: CAMPHIA 2018

Figure 19: Evolution of viral load suppression in Cameroun 2016 - 2018



Source : Annual Reports NACC, 2016 -2018

M - HIV / TB

75. Coverage of treatment for latent TB infection

Number of people started on treatment for latent TB infection expressed as a percentage of the total number of eligible people in a specified time period, usually one year, for (a) people newly enrolled in HIV care and (b) children < 5 years old who are household contacts of bacteriologically confirmed new or relapse TB patients.

For children under five, the activity takes place in some health facilities. Systematic data collection began in 2018. Out of 14,356 bacteriologically confirmed case, new and relapsed cases, 2,444 contacts received preventive treatment by isoniazide (NTCP data, 2018).

76. HIV test results for TB patients

Number of new and relapse TB patients who had an HIV test result recorded in the TB register, expressed as a percentage of the number registered in a specified time period.

The percentage of TB patients with HIV test results in the TB registry increased from 87% in 2014 to 95% in 2018 (NTCP Annual Reports).

Figure 20: Percentage of TB patients tested with HIV from 2007 to 2018

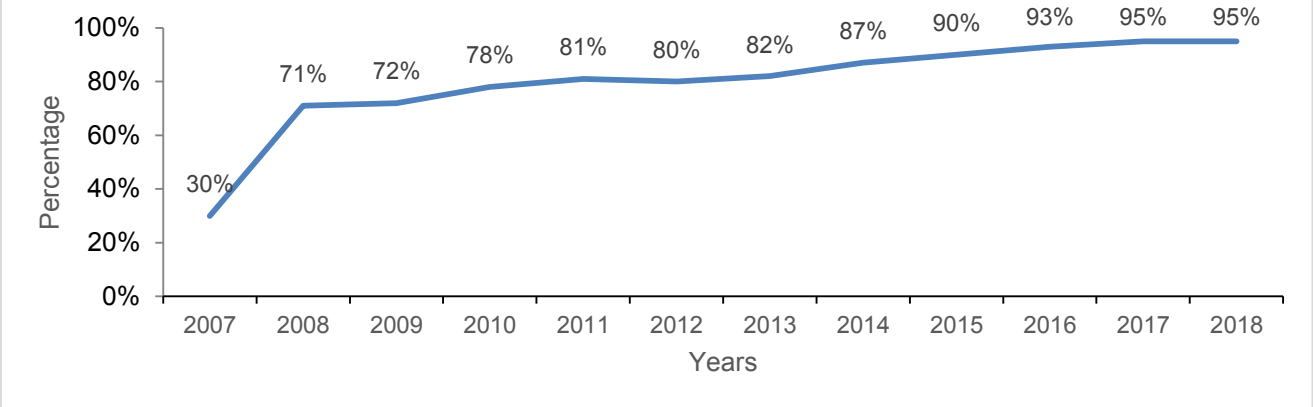


Table 62: Percentage of TB patients tested with HIV in 2018 per region in Cameroon

Region	Notified TB cases	HIV Test realized	HIV positive	% Test	% Positive
Adamawa	1,652	1,528	425	92%	28%
Center	1,519	1,450	463	95%	32%
Yaounde	3,812	3,615	1353	95%	37%
East	1,934	1,678	507	87%	30%
Far North	3,257	2,978	360	91%	12%
Littoral	649	643	174	99%	27%
Douala	4,506	4,358	1,321	97%	30%
North	2,107	2,037	319	97%	16%
North-West	1,043	1,044	515	100%	49%
West	1,049	1,035	291	99%	28%
South	942	9,15	277	97%	30%
South West	1,287	1,285	452	100%	35%
Total	**23,757**	**22,566**	6,457	95%	29%

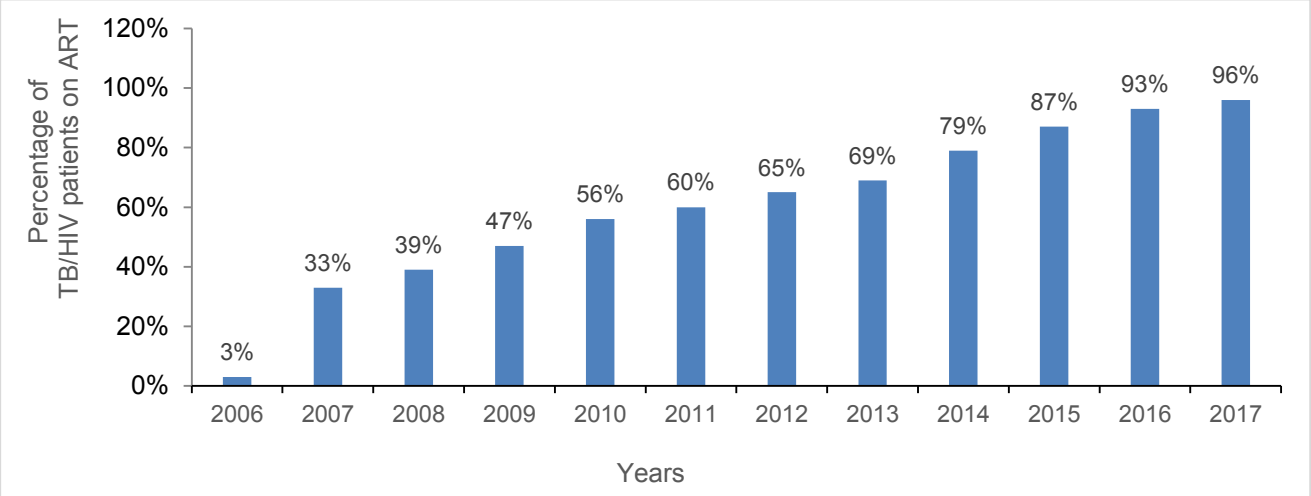
Source : MoH/NTCP, Annual Reports 2018

77. HIV-positive new and relapse TB patients on ART during TB treatment

Number of HIV-positive new and relapse TB patients who received antiretroviral therapy (ART) during TB treatment, expressed as a percentage of those registered for TB treatment in a specified time period.

There is an annual increase in the percentage of TB and HIV patients under ART during TB treatment from 79% in 2014 to 96% in 2017.

Figure 21: Percentage of TB/HIV patients under ART between 2006 and 2017



Source: MoH, Activity Report NTCP 2006 to 2017

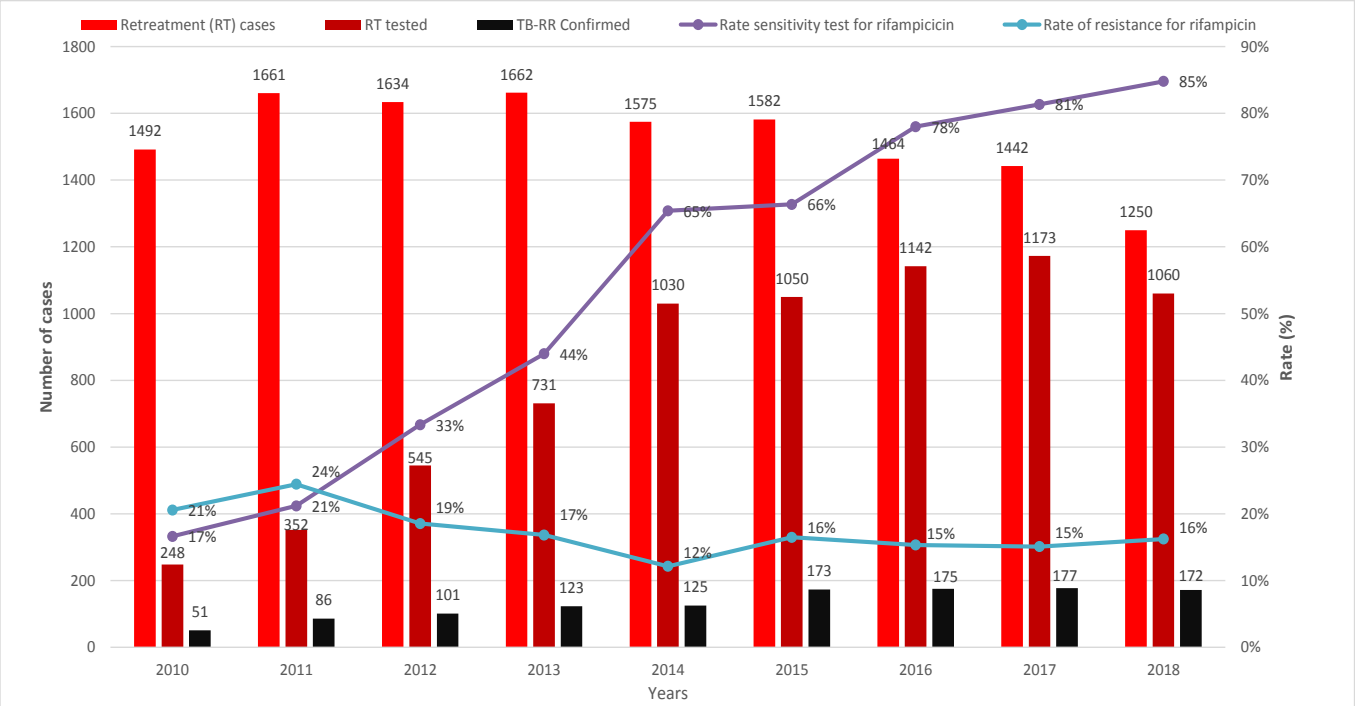
N - TUBERCULOSIS

78. Drug susceptibility testing coverage for TB patients

Percentage of TB cases with drug susceptibility test results for at least rifampicin, during a specified time period (usually one year).

In Cameroon, rifampicin sensitivity tests are performed for the reprocessing group (recoveries + relapses + failures). The percentage of cases tested increased from 65% in 2014 to 84% in 2018.

Figure 22: Percentage of TB patients with sensitivity test and resistance for rifampicin between 2010 and 2018



Source: MoH/NTCP, Annual Reports 2010-2018

Table 63: Percentage in sensitivity testing of reprocessing TB patients in 2018 by region

Regions	RT recorded	XPERT done	%
Adamawa	42	39	93%
Center	268	199	74%
East	77	44	57%
Far-North	83	85	102%
Littoral	444	387	87%
North	106	91	86%
North-West	58	61	105%
West	44	40	91%
South	79	78	99%
South-West	71	45	63%
Total	**1272**	**1069**	**84%**

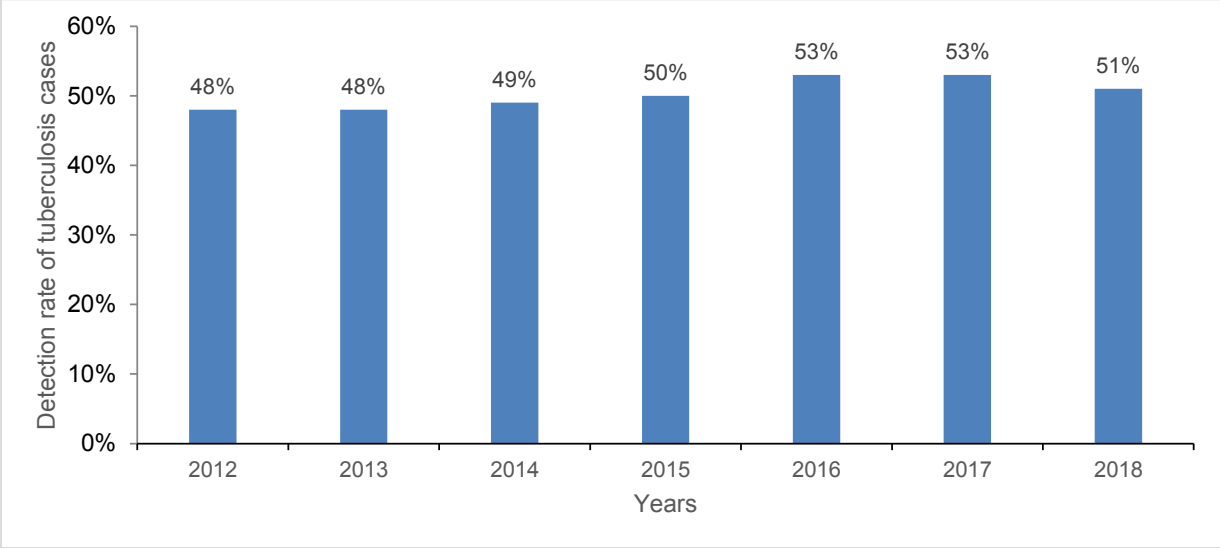
Source: MoH/NTCP, Annual Report 2018

79. TB treatment coverage

Number of new and relapse cases that were notified and treated in a given year, divided by the estimated number of incident TB cases in the same year, expressed as a percentage.

According to WHO, the detection of tuberculosis cases in Cameroon increased from 49% in 2014 to 51% in 2018 (Global Tuberculosis Report 2018).

Figure 23: Trends in the detection rate of tuberculosis cases in Cameroon 2010 - 2018

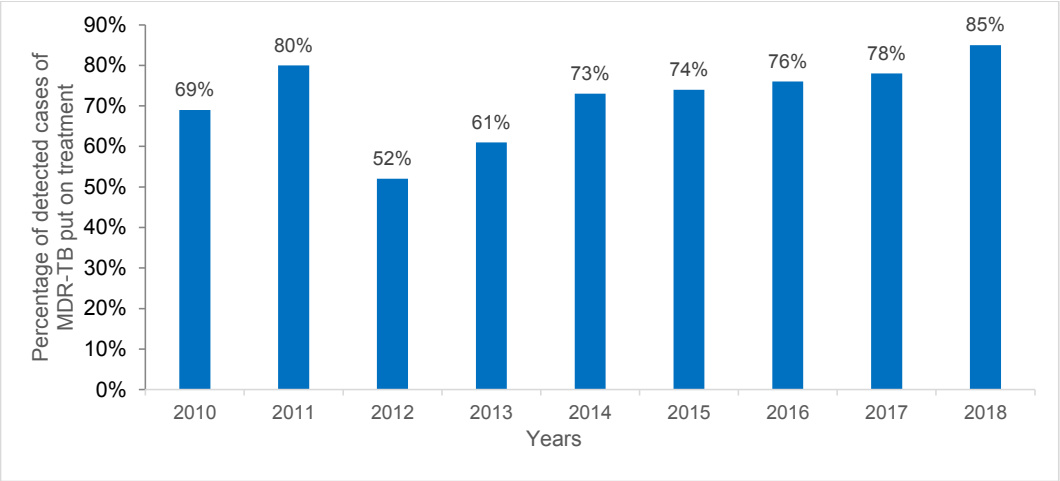


80. Treatment coverage for drug-resistant TB

Number of cases of MDR/RR-TB who were detected and enrolled on a second-line MDR-TB treatment regimen in a given year, divided by the estimated number of MDR/RR-TB cases among notified TB cases in the same year, expressed as a percentage.

In Cameroon, WHO estimates 1,500 cases of multi-drug-resistant tuberculosis in 2017 (Global Tuberculosis Report 2018). The country has detected and processed 151 cases of MDR-TB (2018 NTCP Annual Report), representing 10% of the number estimated by WHO. The following table shows the cases of MDR-TB detected, the cases put on treatment and the percentage of cases put on treatment.

Figure 24: MDR-TB Treatment Coverage in Cameroon in 2010 and 2018



Source: MoH/NTCP, Annual Reports 2010-2018

O - MALARIA

81. Intermittent preventive therapy for malaria during pregnancy (IPTp)

Percentage of women who received three or more doses of intermittent preventive treatment during antenatal care visits during their last pregnancy.

The percentage of pregnant women who received at least three doses of IPT increased from 26% in 2014 to 31.9% in 2018.The percentage of pregnant women who received at least three doses of IPT is 8 points higher in urban areas (40.4%) than in rural areas (25.3%). However, regardless of the place of residence, the IPT3 coverage rate is low compared to the 2014-2018 NMCP targets of 80%.

Table 64: Percentage of women having received at least 3 doses of IPT during antenatal consultation in 2014 and 2018

Residence	**2014**	**2018**
Douala / Yaounde	26.5	44.2
Other cities	27.2	38.3
Urban areas	26.9	40.4
Rural	25.2	25.3
Whole Country	**26.0**	**31.9**
Source	MICS 5 2014	DHS 2018 – Key Results

82. Use of insecticide treated nets (ITNs)

Percentage population in malaria-endemic areas who slept under an ITN the previous night.

From 2011 to 2014, the use of ITNs in the general population increased from 14.8% in 2011 (DHS-MICS 2011) to 47.5% in 2014 (MICS 5, 2014). During the same period, the percentage of children under five who slept under an insecticide-treated bed net the previous night rose from 21% to 54.8% and pregnant women from 19.8% to 52.3%. From 2014 to 2018, there was a decline in the use of ITNs in target groups (children under five and pregnant women). The regions with the lowest ITNs usage rates among pregnant women are Adamawa (21.2%), Far North (27.4%), North (35.5%) and East (37.9%).

Table 65: Percentage of children under 5 who slept under an ITN the night before the survey in 2011, 2014 and 2018

	2011	2014	2018
Residence			
Douala / Yaounde	29.2	64.3	55.5
Other cities	21.3	53.4	43.4
Urban areas	**24.1**	57.2	47.7
Rural	**18.7**	53.2	36.1
Regions			
Adamawa	27.6	48	21.2
Center (except Yde)	23.9	62.2	56.4
Douala	37	64.9	55
East	22.5	47.1	37.9
Far-North	5.4	50.3	27.4
Littoral (except Dla)	31.9	58.7	61.1
North	16.9	61.6	35.5
North - West	38.6	**59.6**	**40.2**
West	18.5	42.7	44.3
South	19.5	68.2	55
South - West	26	**47.1**	**48.1**
Yaounde	21	63.4	56
Total	**21**	54.8	41.2

Table 66: Percentage of pregnant women who slept under an ITN the night before the survey in 2011, 2014 and 2018

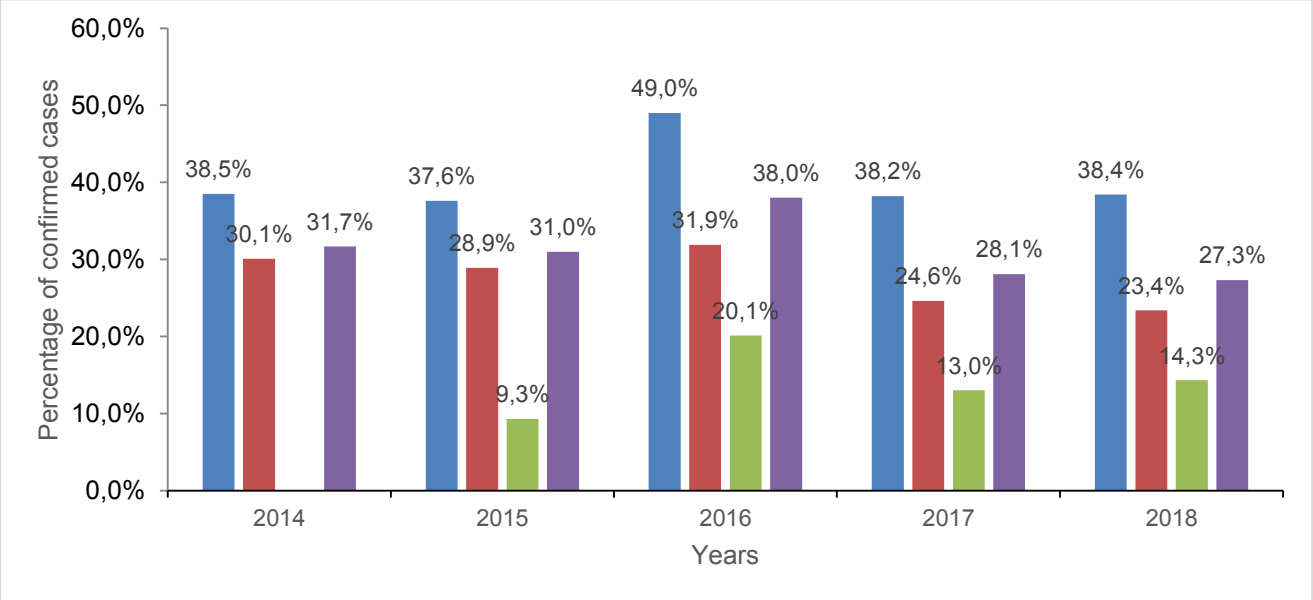
	2011	2014	2018
Residence			
Douala / Yaounde	30.8	53.8	52.3
Other cities	14.9	54.1	46.1
Urban area	21.2	54	48.3
Rural	8.6	51.1	42.6
Regions			
Adamawa	19.4	46	26.3
Center except Yde	23.5	57.1	64.6
Douala	34.6	49.9	51.2
East	27.2	46.2	35.7
Far-North	10.3	43.3	41.9
Littoral except Dla	19.3	50.4	82.1
North	12.9	72	37.5
North - West	**40**	**57.8**	**42.8**
West	14	42.4	40
South	29.2	82.1	44.2
South - West	**13**	**41.5**	**47**
Yaounde	24	56.6	53.2
National	19.8	52.3	45.3

83. Treatment of confirmed malaria cases

Percentage of confirmed malaria cases that receive first-line antimalarial treatment.

Management guidelines of confirmed malaria cases recommend ASAQ as first-line treatment for simple malaria and injectable artesunate for the treatment of severe malaria cases. From 2014 to 2018, the percentage of confirmed malaria cases (administrative data) receiving first-line antimalarial treatment decreased from 31.7% in 2014 to 27.3% in 2018.

Figure 25: Evolution of confirmed malaria cases receiving first-line treatment by target population group 2014 - 2018



Source: MoH, Annual Reports NMCP 2014 – 2018

84. Indoor residual spraying (IRS) coverage

Percentage of population protected by IRS during a specified time period.

In 2011, 2.3% of homes were sprayed with residual insecticide. Coverage was higher in urban areas (3.8%) than in rural areas (0.7%). It ranges from 0.0% in Adamaoua and North West to 8.1% in the city of Yaounde. Overall, indoor residual spraying was still low in Cameroon in 2011.

Table 67: Indoor residual spraying coverage by residence and economic region in Cameroon 2011

	2011
Residence	
Douala / Yaounde	5.9
Other cities	2.2%
Urban area	3.8%
Rural	0.7%
Total	2.7%
Regions	
Adamawa	0.0%
Center except Ydé	1.0%
Douala	3.8%
East	2.4%
Far North	0.5%
Littoral except Dla	4.9%
North	3.0%
North - West	0.0%
West	0.1%
South	4.5%
South - West	1.0%
Yaounde	8.1%
Source	DHS-MICS 2011

P - NEGLECTED TROPICAL DISEASES

85. Number of people requiring interventions against neglected tropical diseases (NTDs)– SDG 3.3.5

Number of people requiring treatment and care for any one of the neglected tropical diseases (NTDs) targeted by the WHO NTD Roadmap and World Health Assembly resolutions and reported to WHO (schistosomiasis, soil transmitted helminthiases, lymphatic filariasis, onchocerciasis).

NTD intervention needs are only partially met, either for population-wide interventions (lymphatic and onchocerciasis filariasis) or for interventions specifically targeting school-age children (Schistosomiasis, Soil transmitted helminthiases and trachoma). According to WHO estimates, response needs are important for all NTDs: 17 million for lymphatic filariasis, 10.9million for onchocerciasis, 2.1 million for schistosomiasis, 9.02 million for soil-transmitted helminthiases and 1.64 million for trachoma (see table 68).

Table 68: Treatment of the populations (millions) / 2016

Neglected tropical diseases	NeDHS	Distinctive features
Lymphatic Filariasis	17 M.	Populations
Onchocerciasis	10.9 M.	Populations
Schistosomiasis	2.1 M.	School-age children
Soil transmitted helminthiases	9.02 M.	School-age children
Trachoma	1.64 M.	Preschool and school-age children

Source : Uniting to Combat Neglected Topical diseases, Cameroon and Neglected Tropical diseases / Mass treatment Coverage rates in 2016

86. Coverage of preventive chemotherapy for selected neglected tropical diseases

Proportion of the population living in endemic areas requiring preventive chemotherapy that received treatment for at least one of the selected neglected tropical diseases (schistosomiasis, soil-transmitted helminthiases, lymphatic filariasis, onchocerciasis).

According to the NTD activity, reports (see Table 69); the therapeutic coverage of NTDs with preventive chemotherapy has evolved depending on the type of NTD. Between 2015 and 2016, there was a decrease in therapeutic coverage for Helminthiases (5 points decrease) and schistosomiasis (20 points decrease). During the same period, therapeutic coverage for onchocerciasis and lymphatic filariasis remained stable. Furthermore, estimates by Uniting to Combat Neglected Topical diseases (see Table below) confirm the upward trend in therapeutic coverage for lymphatic filariasis and onchocerciasis, and the downward trend for schistosomiasis and soil transmitted helminthiases.

Table 69: Therapeutic coverage of NTDs for preventive chemotherapy in Cameroon in 2015 and 2016

Neglected tropical diseases	Coverage rate		
	Specific objective for each disease / WHO	2015	2016
Lymphatic filariasis	65% and over	78.60%	79.33%
Onchocerciasis	65% and over	82.02%	81.80%
Schistosomiasis	75% and over	85.43%	64.63%
Soil transmitted helminthiases	75% and over	88.43%	83.60%
Trachoma	80% and over	ND	ND
NTDs national coverage index	ND	ND	ND

Source : MoH, Activity Reports NTD, 2015-2016

Table 70: Coverage of mass treatments for Neglected Tropical Diseases in 2016 in Cameroon/ Estimates

		Coverage rate		
Neglected tropical diseases	Specific Objective for each disease / WHO	2015	2016	Distinctive features
Lymphatic filariasis	65% and over	65%	71%	Populations
Onchocerciasis	65% and over	70%	75%	Populations
Shistosomiasis	75% and over	100%	77%	School-aged children
Soil transmitted helminthiases	75% and over	67%	61%	School-aged children
Trachoma	80% and over	26%	26%	Preschool and school-aged children
NTD national coverage index		20%	58%	

Source **: Uniting to Combat Negleted Topical diseases, Cameroon and Neglected Tropical diseases/ Mass treatment Coverage rates in 2016**

L - SCREENING AND PREVENTIVE CARE

87. Cervical cancer screening

Proportion of women aged 30-49 years who report they were screened for cervical cancer using any of the following methods: visual Inspection with acetic acid/vinegar (VIA), pap smear, human papilloma virus (HPV) test.

There is no systematic screening program in the country. The National Committee for Cancer Control (NCCaC) has implemented a program of sporadic screening by visual methods. The NCCaC team and its partners conducted free campaigns of cervical and breast cancers in several locations across the country. However, these different campaigns are poorly documented. According to the "Human Papillomavirus and related diseases in Cameroon" study, the percentage of screening for cervical cancer is estimated at 19.7% among women aged 18 years+.

M - MENTAL HEALTH

88. Coverage of services for severe mental health disorders

Percentage of persons with a severe mental disorder (psychosis, bipolar affective disorder, moderate-severe depression) who are using services.

According to WHO, this indicator stands at 0.1 per 100,000 population (Atlas Mental Health 2011) for admitted patients in general hospitals for psychiatric problems in 2011. 55% were women and 10% under 18 years of age. National data are poorly documented. The use of mental health services remains very low according to experts.

N - SUBSTANCE ABUSE

89. Treatment coverage for alcohol and drug dependence – SDG 3.5.1

Treatment coverage is defined as the proportion of people with alcohol or drug dependence (including those who are not seeking treatment) that are in contact with treatment services, i.e. currently receiving treatment or in remission or relapse, but still in contact with treatment services.

According to the 2017 Report on the epidemic of the abuse of psychoactive and addictive substances in Cameroon, about 2,100 patient drug users seek treatment in health facilities during the period from January 2016 to December 2017. The number of drug users seeking care from the specialized care units in functional addictologies, went from 1,264 in 2016 to 836 in 2017, a decrease of 20.38%. In addition, according to the 2018 statistics of the Cameroon's National Drug Control Committee (NDCC, Annual Report 2018), about 21% of the Cameroonian population have experienced drug use. The SDG's target is to strengthen the prevention and treatment of substance abuse, including drug and alcohol abuse.

Table 71: Proportion of new cases (Drug users and treatment applicants regularly registered in 2017)

New drug users and treatment applicants in 2017	Period : January 2016 – December 2017	
	N	%
Former patients registered in 2016 still followed or not followed by Specialized Units	**1,264**	60.19%
New Treatment Applicants Registered 2017	**836**	39.81%
Total Patients requesting for treatment or information for treatment in 2016 to the end of 2017	**2,100**	**100%**

Source: MoH/African Union, Report on the epidemic of the abuse of psychoactive and addictive substances in Cameroon, 2017

Table 72: Proportion of treatment episodes (episodes per treatment center) in 2017

Specialized Care Units and Reception Facilities/Guidance for the Treatment of Drug Abuse and Addictive Substances	Number of New Patients seeking ambulatory care, hospitalized or referred in 2017				
	New patients 2016	New patients 2017	Ambulatory care 2017	Viewed and referred 2017	Care and Hospitalization 2017
Psychiatry Department ''A'', Jamot Hospital, Yaounde	57	73	60	0	13
Psychiatry Department '' B'' Jamot Hospital, Yaounde	86	87	76	0	11
Psychiatry Unit of Efoulan Sisters' Catholic Hospital, Yaounde	17	45	37	0	8
Psychiatry Department Laquintinie Hospital, Douala	225	59	42	0	17
Psychiatry Department Regional Hospital, Garoua	62	41	27	0	14
Mental Health Department Regional Hospital, Maroua	29	44	31	0	13
Addiction Care and Reception Unit 'La Vie', Yaounde Central Hospital	41	65	9	56	0
Regional addictionology and Care Unit of the Regional Hospital of Bafoussam	26	48	33	4	11
Regional addictionology and Care Unit of the Regional Hospital of Bamenda	35	17	13	1	3
Regional addictionology and Care Unit of the Regional Hospital of Bertoua	19	33	21	3	9
Regional addictionology and Care Unit of the Regional Hospital of N'gaoundéré	59	27	18	2	7

Regional addictionology and Care Unit of the Regional Hospital of Buea	25	11	9	1	1
Regional addictionology and Care Unit of the Regional Hospital Annex of Limbe	30	9	5	2	2
Regional addictionology and Care Unit of the Regional Hospital Annex of Edea	18	13	7	3	3
Regional addictionology and Care Unit of the Reference Hospital of Sangmélima	06	7	5	1	1
Regional addictionology and Care Unit of the Regional Hospital of Ebolowa	26	12	7	1	4
Regional addictionology and Care Unit of the Regional Hospital Annex of Nkongsamba	NA	17	11	4	2
Regional addictionology and Care Unit of the Regional Hospital Annex of Ayos	NA	18	10	5	3

O - ESSENTIAL HEALTH SERVICES

90. Coverage of essential health services

The coverage of essential health services, as defined by SDG indicator 3.8.1, is the average coverage of essential services based on tracer interventions that include reproductive, maternal, and newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, between the general and the most disadvantaged population.

According to WHO/World Bank joint report on UHC in 2017, this coverage is estimated at 44% in 2015. This indicator is one of the pillars of universal health coverage (UHC). The tracer indicators concerned are: (i) Reproductive, Maternal, Neonatal and Child Health interventions; (ii) infectious diseases; (iii) non-communicable diseases; and (iv) accessibility and operational capacity of services (number of beds, health human resources, access to essential medicines, international health regulations).

Chapter 4

HEALTH SYSTEM INDICATORS

P - QUALITY AND SAFETY OF CARE

91. Perioperative mortality rate

All-cause death rate prior to discharge among patients having one or more procedures in an operating theatre during the relevant admission.

Perioperative mortality is poorly documented in the country. There are many sectoral or partial studies that do not enable us to have national estimate. However, a study published in 2018 by Lancet (carried out in 247 hospitals in 25 countries in Africa, including Cameroon) revealed that, ‘‘*approximately one in five patients in Africa suffers from post operating complications*”. The results of the study showed that compared to world statistics (0.5%), non-urgent surgery mortality rate reaches 1% in Africa.

92. Obstetric and gynaecological admissions owing to abortion

Percentage of admissions for (spontaneous or induced) abortion-related complications to service delivery points providing inpatient obstetric and gynaecological services, among all admissions (except those for planned termination of pregnancy).

Abortions are one of the causes of maternal mortality; unfortunately, this cause is very poorly documented in the country. This can be justified by the fact that abortions are often carried out clandestinely and by unskilled personnel. However, a study has been carried out in three university hospitals: Yaounde Central Hospital (HCY), Yaounde Gyneco-Obstetric and Pediatric Hospital (HGOPY), Yaounde University Hospital (CHU), from 1st June 2011 to 31st May 2016, for a period of five years. It shows that from the 524 maternal deaths (on 34,116 live births), 414 case files were usable, among which 100 (or 24.2%) involved abortions and 24 (or 5.8%) involved extra-uterine pregnancies (Tiako Kamga et al., 2017).

93. Institutional maternal mortality ratio

Number of maternal deaths among 100,000 deliveries in health facilities/institutions.

According to the results of the EONC (emergency obstetric and neonatal care) 2015 survey, the direct obstetrical lethality rate (calculated by relating the total number of maternal deaths to the total number of women with direct obstetric complications registered in health facilities) was 1.5%. The standard is less than 1%. For indirect causes, the rate of intra-hospital letality is 1.6%.

According to IDSR data, the hospital maternal mortality ratio was 107 deaths per 100,000 deliveries in 2017. Data for this indicator are considered under-reported as several health districts are silent hence we cannot measure the actual situation on the ground.

Table 73: Number of deliveries and maternal deaths in hospital per region in Cameroon 2014 - 2018

	2014		2015		2016		2017	
	Deliveries	Deaths	Deliveries	Deaths	Deliveries	Deaths	Deliveries	Deaths
Regions								
Adamawa	10,102	**25**	12,722	**22**	16,455	**22**	16,140	**25**
Center	45,175	**37**	41,553	**42**	50,702	**38**	59,102	**59**
East	6,488	**0**	8,067	**8**	10,621	**7**	13,512	**14**
Far-North	23,837	**62**	26,022	**50**	33,313	**50**	41, 859	**65**
Littoral	28,077	**25**	35,690	**23**	37,211	**39**	36,421	**21**
North	14,411	**49**	15,642	**24**	18,550	**35**	27,558	**51**
North -West	32,755	**38**	31,161	**18**	33,930	**37**	27,838	**15**
West	33,797	**22**	44,691	**26**	42,992	**27**	40,709	**21**
South	4, 662	**14**	4,027	**3**	6,366	**13**	7,487	**6**
South -West	12,753	**16**	16,436	**38**	19,465	**42**	21,331	**36**
Total	212,057	**288**	236,011	**254**	269,605	**310**	291,957	**313**

Source : MoH, IDSR Reports, 2014 to 2018

Table 74: Letality rate by region of investigation by type of direct obstetrical complications in 2015

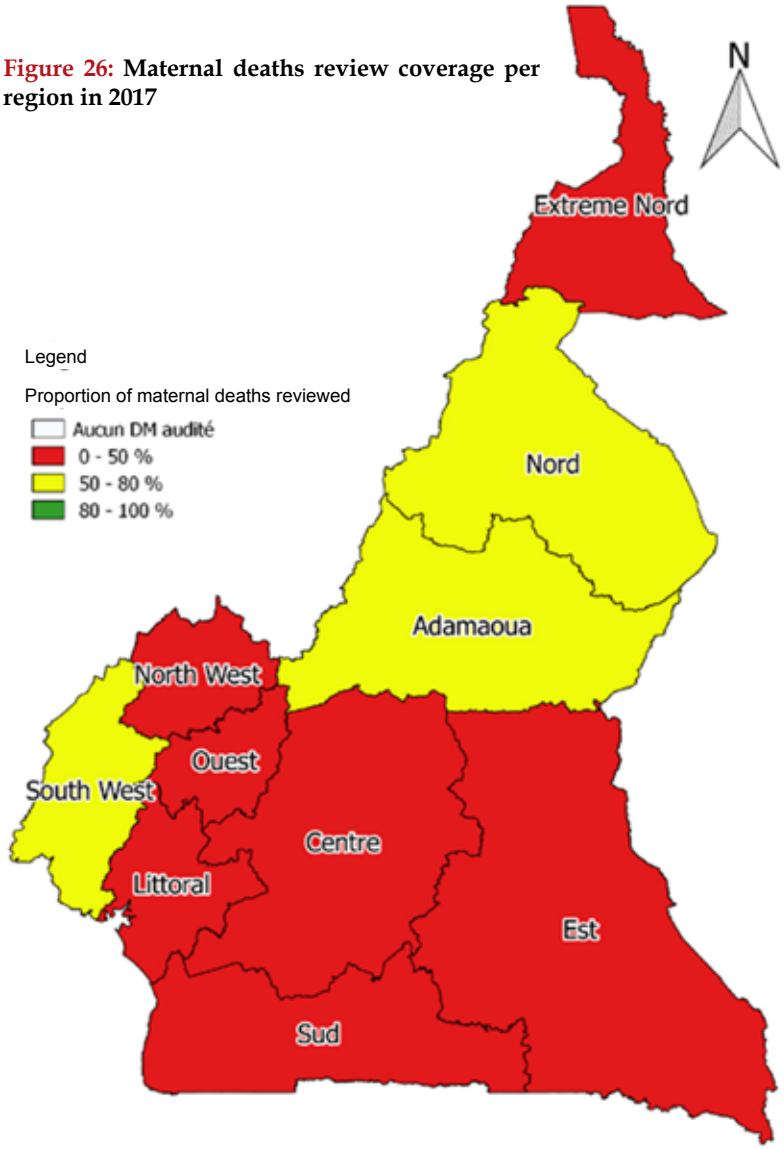
	Type of obstetrical complication										
	Antepartum hemorrhage	Post-partum haemorrhage	Placenta retention	Prolonged work/ dystocia	Uterine rupture	Severe post partum infection	Severe pre-eclampsia / eclampsia	Complication of abortion	Ectopic pregnancy	Other direct causes	Direct obstetric lethality rate
Region of investigation											
Adamawa	4.8	1.8	2.3	0.0	10.0	0.0	5.6	0.0	0.0	0.1	0.6
Centre (Except Yde)	0.0	1.6	0.0	0.0	3.1	0.0	1.8	1.8	0.0	1.9	1.0
Douala	3.9	2.9	0.0	0.4	11.3	0.0	0.9	2.1	1.1	0.2	1.2
East	3.0	3.2	1.4	0.7	10.0	2.7	4.5	0.0	9.7	1.7	2.0
Far-North	31.5	1.3	0.0	0.0	0.0	6.9	2.0	0.0	0.0	0.0	1.9
Littoral (except Dla)	1.6	2.3	0.0	1.2	7.7	0.0	0.0	6.4	2.2	0.7	1.4
North	8.3	1.6	3.9	0.4	24.2	3.2	6.8	1.1	0.0	0.4	2.9
North-West	2.3	2.1	1.9	0.3	0.0	0.0	0.0	0.7	2.0	1.6	1.3
West	1.4	2.7	0.0	0.2	5.3	4.2	2.4	4.8	3.8	0.4	1.2
South	0.0	2.9	0.0	0.8	0.0	0.0	0.0	0.0	2.9	0.0	0.7
South-West	2.1	12.2	0.0	2.0	10.3	0.0	13.0	33.3	0.0	4.2	5.4
Yaounde	0.5	2.6	2.4	0.5	1.9	6.6	1.4	0.0	0.8	0.1	0.8
Total	3.9	2.7	0.9	0.4	6.1	2.4	3.1	1.0	1.3	0.5	1.5

Source : MoH-NIS, Rapid NeDHS Assessment Survey for Emergency Obstetrical and Neonatal Care in Cameroon, 2015

94. Maternal death reviews

Percentage of maternal deaths occurring in the health facility that were audited and reviewed.

Figure 26: Maternal deaths review coverage per region in 2017



Source : MoH/DFH, Report of Maternal Death Review Committee 2018

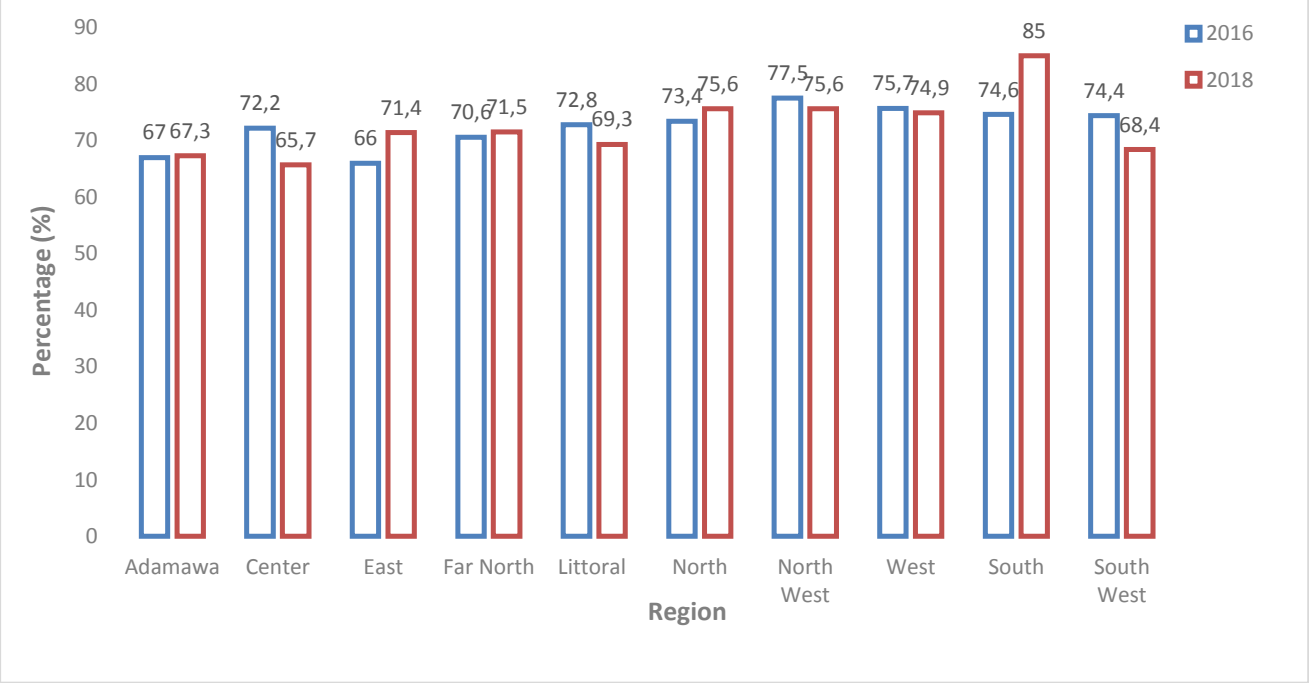
Maternal deaths review was officially launched in Cameroon in 2014 following a decision of the Minister of Public Health. This regulatory framework was strengthened in 2017 by institutionalizing maternal deaths review committees at all levels of the health pyramid. However, it must be made clear that this system is gradually being implemented. The 2017 data shows that coverage of maternal deaths review remains low, as 7 out of 10 regions have less than 50% death coverage and 3 out of 10 regions are above 50% deaths review coverage.

95. ART retention rate

Percentage of adults and children with HIV alive and on ART at 12 months (or 24, 36, 48 and 60 months) after initiating treatment among patients initiating ART during a specified time period.

The 12-month retention rate for ARV patients increased from 72.5% in 2016 to 71.34% in 2018 at the national level with regional disparities.

Figure 27: 12-month retention of phase on ART (%) by region in Cameroon between 2016 and 2018



Source: NACC, Annual Reports 2016 and 2018

96. TB treatment success rate

Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to national health authorities during a specified period, usually one year.

According to the NTCP annual reports for the period 2006-2017, TB treatment success rate has increased from 84% in 2014 to 86% in 2017.

Table 75: Therapeutic success rate for new cases of smear-positive pulmonary tuberculosis by treatment outcome and year in Cameroon, 2006-2017

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Treatment success	75	76	78	78	78	80	80	82	84	85	85	86
Failures	1	1	1	1	1	1	1	1	1	1	1	1
Deaths	6	7	6	6	6	6	7	6	6	6	6	5
Lost touch	14	11	11	10	10	9	8	7	6	6	6	6
Transfered	4	5	5	4	5	4	4	3	3	2	2	2
	100	**100**	**101**	**99**	**100**	**100**	**100**	**99**	**100**	**100**	**100**	**100**

Source : NTCP, Annual Reports 2006-2017

Table 76: Therapeutic success rate by region for the year 2017

	Registered cases	TS rate	Fail	Deaths	Lost touch	Transfered
Cameroun	**14 364**	**86%**	**1%**	**6%**	**6%**	**2%**
Adamawa	828	86%	1%	7%	4%	2%
Center	1,083	83%	0%	8%	7%	1%
Yaounde	1,966	81%	1%	4%	9%	5%
East	1,128	81%	0%	6%	9%	4%
Far-North	1,985	87%	1%	6%	5%	1%
Littoral	398	86%	1%	6%	6%	1%
Douala	2,351	85%	1%	4%	7%	2%
North	1,454	89%	1%	4%	3%	3%
North-West	922	92%	0%	6%	1%	1%
West	581	87%	1%	9%	3%	1%
South	758	85%	1%	6%	7%	1%
South-West	910	89%	2%	4%	4%	1%

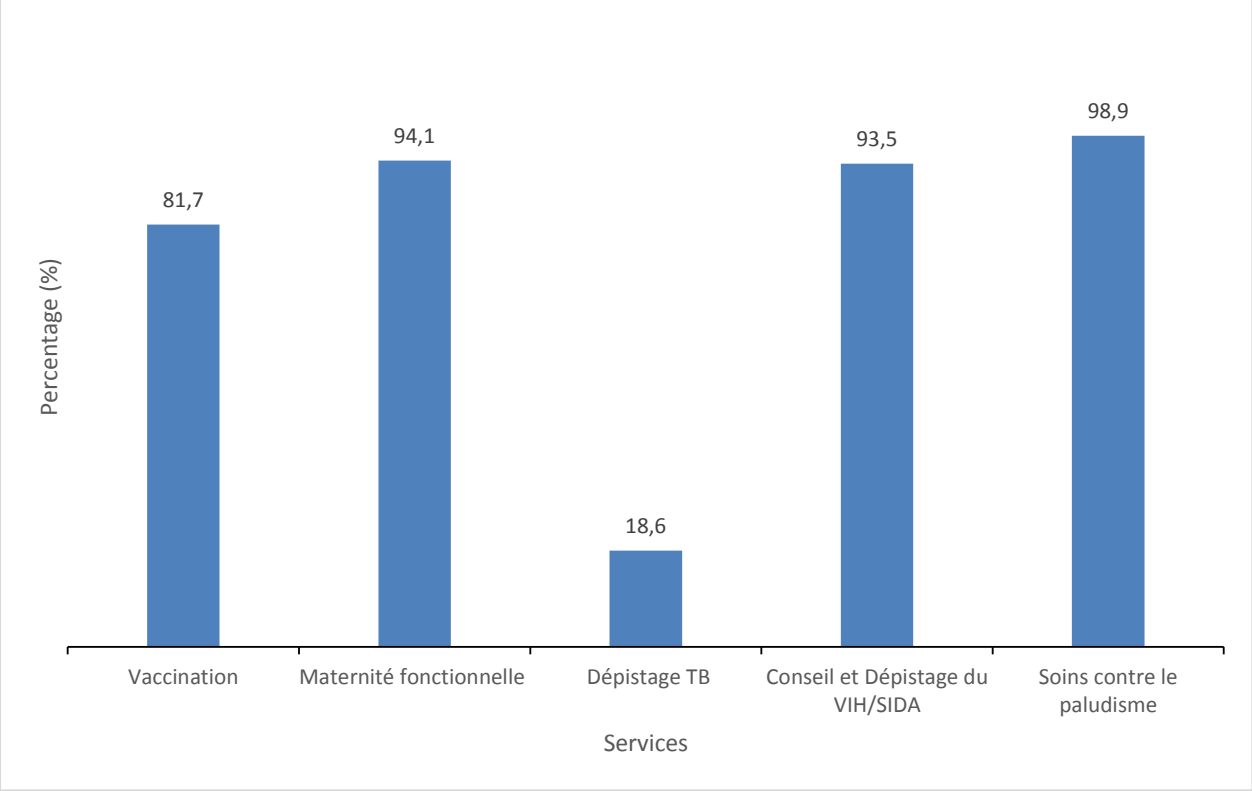
Source : NTCP, Annual Report 2017

97. Service-specific availability and readiness

Number of health facilities offering specific services per 10 000 population and meeting minimum service standards on the basis of a set of tracer criteria for specific services, etc.

All the specific services listed are available in Cameroon, with many disparities in regions and health districts.

Figure 28: Reported Availability of Essential Services Offered in Health Care Facilities in Cameroon in 2018



Source : MoH-IFORD, Survey Report SDI/HFA/DQR 2019

Table 77: Reported availability of essential services in Cameroon

Percentage of health services providers by region and type of health facilities						
	Vaccination	Operational maternity	TB screening	Counselling and screening HIV/ AIDS	Malaria care	Total
Type of health facilities						
IHC/Infirmery	89.7	95.8	11,9	95.8	98.7	377
CMA	90.7	97.7	25.6	97.7	97.7	43
District Hospitals / Military hospitals	84.5	98.3	79.3	100	100	58
Regional Hospital	100	100	0	100	100	1
Clinic/medical office / Others	60.5	88	10,8	85	99.4	167
Health facility Status						
Public	89.6	95.8	22.7	96.4	98.9	357
Private for profit	83.7	90.4	26	94.2	98.1	104
Private not for profit	65.4	93	6.5	87.6	99.5	185
Regions						
Adamawa	66.7	90	60	96.7	100	30
Center except Yde	84.5	96.4	13.1	88.1	98.8	84
Douala	68.1	91.7	5.6	93.1	97.2	72
East	94.1	94.1	20.6	100	97.1	34
Far-North	88	94	34	98	100	50
Littoral except Dla	77.8	93.3	11.1	95.6	97.8	45
North	97.2	97.2	22.2	100	100	36
North-West	78.3	93.5	45.7	97.8	100	46
West	91.6	93.7	9.5	95.8	98.9	95
South	77.8	94.4	11.1	91.7	100	36
South-West	94.9	100	30.8	100	100	39
Yaounde	68.4	92.4	5.1	81	98.7	79

Source : MoH-IFORD. Investigation Report SDI/HFA/DQR 2019

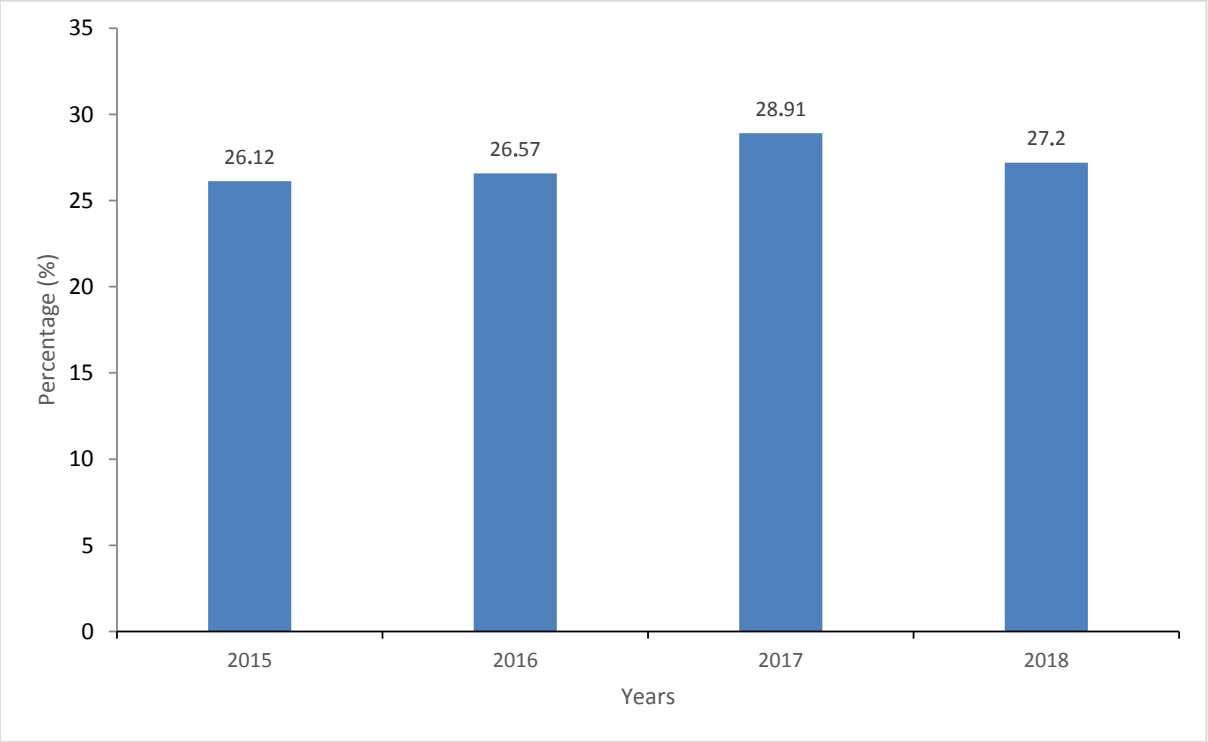
Q - UTIZATION AND ACCESS

98. Out patient service utilization

Number of outpatient department visits per person per year.

According to the 2015-2018 administrative data of the National Malaria Control Program, the number of consultations increased from 26.1 in 2015 to 27.2 per 100 population in 2018.

Figure 29: Outpatient service utilization (per 100 population) between 2015 and 2018



Source: MoH/NMCP, Database 2015-2018

Table 78: Outpatient service utilization (per 100 population) between 2015 and 2018

Regions	2015	2016	2017	2018
Adamawa	33.38	28.98	29.79	25.12
Center	17.12	25.79	29.91	28.90
East	50.13	43.71	45.17	43.23
Far-North	21.03	17.84	24.26	24.66
Littoral	28.82	33.32	33.52	31.54
North	22.93	17.41	19.64	20.20
North-West	38.53	35.59	35.18	32.45
West	20.25	18.30	20.10	21.30
South	17.10	20.40	20.48	19.87
South-West	39.81	38.36	37.70	25.97

Source : MoH/NMCP, Data base 2015-2018

99. Health facility density and distribution

Total number of health facilities per 10,000 population.

The availability of health facilities in Cameroon in 2016 was estimated at 2.19 per 10,000 inhabitants (Cameroon Health Map 2016). However, there is an unequal distribution throughout the country (0.92 in the Far North vs. 3.71 in the South and 3.68 in the West).

Table 79: Number of health facilities per 10,000 populations in 2016 and 2018

Regions	2016	2018
Adamawa	1.48	1.44
Center	2.99	2.9
East	2.55	2.34
Far-North	0.92	1.01
Littoral	2.58	3.23
North	1.09	1.09
North-West	2.06	2.48
West	3.68	3.8
South	3.71	3.84
South-West	2.03	2.71
National	**2.19**	**2.36**

Source : MoH, Health Map 2016 ; Health Unit Profile 2018

100. Hospital bed density

Total number of hospital beds per 10 000 population.

The density of hospital beds was 26.49 per 10,000 population in 2016 (Cameroon Health Map 2016) with regional disparities such as 72.90 compared to 5.80 hospital beds per 10,000 population in the Littoral and the North region respectively. According to the 2019 SDI/HFA/DQR survey, the average bed density per hospital is 17.6, of which an average of 12.5 is used for hospitalization, 3.8 for maternity and 2 for observation.

Table 80: Average number of beds available per region and per health facilities in Cameroon in 2018

Average bed availability for		Patients in the health unit	Hospitalization	Maternity	Observation
Survey Region					
	Adamawa	24.2	17.4	4.4	2.4
	Center except Yde	11.8	7.3	2.8	2
	Douala	11	7.7	2.5	0.7
	Far-North	20.7	13.5	3.7	4.4
	Littoral except Dla	17.7	11.5	5.1	0.9
	North	10.9	7.9	2.6	5.3
	North-West	24	18.4	6.6	1.1
	West	15.4	11.6	3.3	0.8
	South	14.3	10.2	2.5	1.6
	South-West	43	31.2	9.2	2.6
	Yaounde	16.3	12.4	2.3	1.8
	National	17.6	12.5	3.8	2

Source : MoH-IFORD, SDI/HFA/DQR Report, 2019

101. Access to a core set of relevant essential medicines – SDG 3.b.3

Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis.

The government, through CENAME and the Regional Funds for Health Promotion, has organized itself to ensure availability of essential drugs, at all levels of the health pyramid, throughout Cameroon. Progress have been made in terms of the average number of days of stock out for tracer drugs, which decreased from 21 days in 2012 to 13.69 days in 2015 (SSS 2016-2027). The results of the SDI/HFA/DQR survey (see table below) indicates that 57.7% of health facilities have an observed availability of essential medicines on WHO list with disparities between regions and type of structure. The observed availability of essential drugs is good in the North-West (87%), Adamaoua (86.7%) and North (80%) regions. The observed availability of essential medicines is low in the Center Region (44%) and especially in the cities of Douala (34.7%) and Yaounde (28.2%).

Table 81: Observed availability of essential medicines on WHO list by region and health unit in Cameroon

Regions	Percentage of health units	Total Number
Adamawa	86.7	100(30)
Center	44	100(84)
East	73.5	100(34)
Far-North	64	100(50)
Littoral	60.5	100(43)
North	80.6	100(36)
North-West	87	100(46)
West	56.8	100(95)
South	55.6	100(36)
South-West	90	100(40)
Douala	34.7	100(72)
Yaounde	28.2	100(78)
Total	57.8	100(644)
Health Unit Type		
IHC/Infirmery	61.2	100(376)
SDMHC	69.8	100(43)
District hospitals/Military Hospitals	80.7	100(57)
Regional Hospital	100	100(1)
Clinic/medical office/others	38.6	100(166)
Total	**57.7**	**100(643)**

Source : MoH-IFORD, SDI/HFA/DQR Report, 2019

R - HEALTH WORKFORCE

102. Health worker density and distribution

Density of health workers per 10 000 population.

According to data from the 2017 WHO Regional Human Resources Survey, the number of health workers in Cameroon is 27,978, a calculated density of 11.53 per 10,000 population,1.5 physicians per 10,000 population and 9,9 nurses per 10,000 population. In 2011, there were 38,207 health workers, or a density of 19 per 10,000 population (MoH, General Report of the General Census of Health Workers in Cameroon, 2011). In addition, the 2019 report of the SDI/HFA/DQR Health Services Delivery Indicators gives us the average number of staff employed per region.

In fact, according to the regions, the Health facilities (HU) with the highest number of health care workers are those in the South West (private for profit HU with 98 people on average), Adamawa (private for profit HU with 79 people on average), Yaounde (Public HU with 66 people on average) and Douala (public HU with 64 people on average). On the other hand, those where HU is the least provided with health-care workers are those of the Center with private for profit HU (5.2 people on average) or private not for profit (6.7 people on average), in the South Region.

Table 82: Observed availability of essential medicines on WHO list by region and health unit in Cameroon

	Health Unit Status			
	Public	Private for profit	Private not for profit	Total
Survey Regions				
Adamawa	14	79	8.3	33.2
Center	27.1	5.2	6.7	23
East	19.1	10.6	7.5	15.8
Far-North	20.1	20.3	9	20
Littoral	19.5	16.2	9.5	16.1
North	20.1	8.7	8.3	18.8
North-West	26.3	15.6	12.8	22.9
West	23.9	14.3	6.9	19.1
South	27.3	5.7	39.8	28.1
South-West	31.9	98.2	10.8	47
Douala	64	11.7	11.1	29.5
Yaounde	65.9	29	8.5	29.9
Total	**29.2**	**35.3**	**10.7**	**26.4**

Source : MoH-IFORD, SDI/HFA/DQR Report, 2019

Table 83: Average Distribution of health workforce in 2018 by region, status and type of health unitDistribution of health workforce in 2018 by region, status and type of health unit

	Doctors / Specialist doctors	Personnel providing general health care	Laboratory and pharmacy personnel	Personnel providing obstetric health care	Students and others	Total
Health Unit Status						
Public	47.5	27.1	26.5	29	13.4	29.2
For profit Private	59.9	33.7	28.8	52.7	28.3	36.2
Not for profit Private	13.6	10.6	10.5	9.1	11.4	10.8
Total	43	24.8	23.1	32.7	15.7	26.6
Regions						
Adamawa	41.4	33.4	13.9	25	77	32.9
Center	33.2	21.5	20.3	30	9.1	23
East	19.9	16.5	14.6	16.2	9.2	16.3
Far-North	28	18.4	25.6	19.8	8.5	19.8
Littoral	19.3	15.2	14.7	13.2	5	15.3
North	30.8	17.4	20.2	31.5	5	18.9
North-West	26.8	23.8	19.6	21.5	31	22.8
West	30.2	18	22.1	20.1	9	19.3
South	35.8	26.9	31.4	8	2	28.4
South-West	62.1	44.9	36.8	68.2	21	47.2
Douala	57.7	25.4	18.8	23.8	43.7	29.4
Yaounde	74.3	32.6	24.8	43.5	35.7	37.2
Total	**46.3**	**25.4**	**23.5**	**35.1**	**15.7**	**27.6**

Source : MoH-IFORD, SDI/HFA/DQR Report, 2019

103. Output training institutions

Density of graduates from health education and training programmes during the last academic year per 10 000 population.

According to the 2018 data from the Human Resources Department (DRH) of MINSANTE, nearly 5,000 professionals of paramedical health (nurses and health care) and on average 620 doctors come out each year from the various public and private training schools in the country since 2014.

Table 84: Recap of Para medical Health Workers Trained in Cameroon in 2018

Training courses	Number of people trained
State Registered Nurse	1793
State Registered Nurse-ANESTHESIA	63
Sanitary Engineering Technician	19
Medico-Sanitary Technician-PHARMACY	17
Medico-Sanitary Technician-DENTISTRY	19
Medico-Sanitary Technician- OPHTAMOLOGY	32
State Registered Nurse- OPHTAMOLOGY	15
Medico-Sanitary Technician-RADIOLOGY	36
Medico-Sanitary Technician-PHYSIOTHERAPY	26
Medical Laboratory Technician	440
State Registered Nurse-GERONTOLOGY	1
Medico-Sanitary Technician/ PSYCHOMOTOR-RELAXATION	3
State Registered Midwife	19
Assistant Medico-Sanitary Technician	694
Assistant Medico-Sanitary Technician/ MORTUARY ATTENDANT	39
Assistant Nurse -General	1641
Community Nurse Assistant	80
total	**4937**

Source : MoH/HRD, Sub Direction of Training,2019

Table 85: Number of graduates in Medicine, Odontostomatology and Pharmacy in Cameroon from 2014 to 2019

Domain	2014	2015	2016	2017	2018	2019	TOTAL
Medecine	427	466	739	843	615	622	**3712**
Odontostomatology	57	67	89	71	86	133	**503**
Pharmacy	102	158	180	193	131	118	**882**
Total	**586**	**691**	**1008**	**1107**	**832**	**873**	**5097**

Source : MINESUP, Directorate for the Coordination of Academic Activities, 2019

Table 86: Number of Medical Specialities graduates in Cameroon from 2014 to 2019

Filiere	2014	2015	2016	2017	2018	2019	TOTAL
Anatomy/Pathology	1	1	0	0	6	3	**11**
Anesthesia/Reanimation	1	6	4	4	3	8	**26**
Clinical biology	2	3	4	6	10	10	**35**
Surgery and specialties	6	15	16	15	20	20	**92**
Gynecology/Obstetrics	7	14	11	8	15	19	**74**
Internal Medicine and specialties	14	16	23	20	25	29	**127**
Ophtamology	6	5	4	6	6	10	**37**
ENT	1	3	2	5	6	8	**25**
Pediatrics	4	7	19	8	12	15	**65**
Psychiatrie	0	1	3	2	2	1	**9**
Radiology	8	15	9	8	10	8	**58**
Public Health	4	2	4	5	5	3	**23**
Total	**54**	**88**	**99**	**87**	**120**	**134**	**582**

Source : MINESUP, Directorate for the Coordination of Academic Activities, 2019

S - HEALTH INFORMATION

104. Birth registration – SDG 16.9.1

Proportion of children under 5 years of age whose births have been registered with a civil authority.

Data from the routine collection system is partial, as it is not yet systematically reported hence reliable results not achievable. However, data on the percentage of children under 5 years of age whose birth was recorded is available from surveys, and is estimated at 66.6% in 2014 (MICS 2014). The SDG's target is to ensure a legal identity for all, including through birth registration by 2030.

105. Death registration – SDG 17.19.2

Percentage of deaths that are registered (with age and sex).

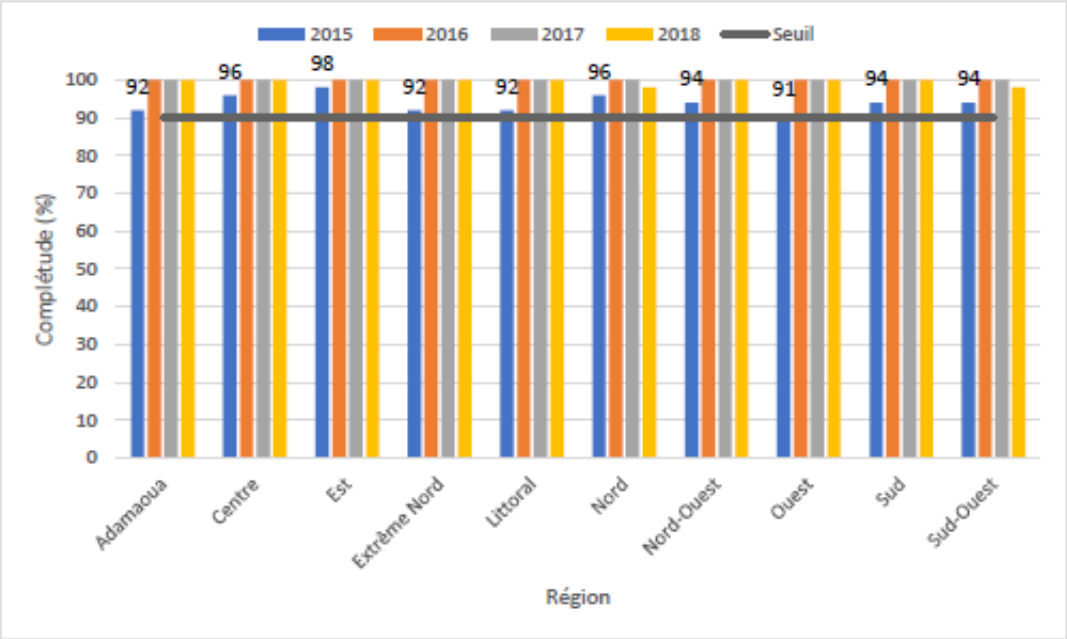
The data to produce this indicator are not yet systematic in the country. It is a process that must be systematic and work is underway through collaboration of the National Civil Status Registry and Ministry of Public Health. The SDG's target is to leverage existing initiatives to establish sustainable development progress indicators that would complement gross domestic product, and support statistical capacity building in developing countries.

106. Completeness of reporting by facilities

Percentage of facilities that submit reports within the required deadline.

According to the 2015-2018 surveillance report of diseases with epidemic potential in Cameroon (ONSP), health facilities in eight out of ten regions reached 100% in 2018 for a target of 90%, in terms of completeness, from regions to central level. However, timeliness remains a challenge for many regions that are still below the 90% threshold in 2018.

Figure 30: Completness of weekly IDSR surveillance data at the regional level from 2015 to 2018



Source: MoH/DFDEP, IDSR Database 2015-2018

Table 87: Completeness of IDS data from 2015 to 2018

Region/Year	2015	2016	2017	2018	2015	2016	2017	2018
	Completeness				Timeliness			
Adamawa	92	100	100	100	92	88	90	98
Center	96	100	100	100	96	98	96	81
East	98	100	100	100	94	90	94	98
Far-North	92	100	100	100	74	71	94	92
Littoral	92	100	100	100	89	73	96	92
North	96	100	100	98	89	94	88	87
North-West	94	100	100	100	51	71	43	67
West	91	100	100	100	81	63	81	87
South	94	100	100	100	57	65	48	69
South-West	94	100	100	98	66	73	56	50
National	**94**	**100**	**100**	**100**	**79**	**79**	**79**	**82**

Source : MoH/DFDEP, IDSData base 2015-2018

T - HEALTH FINANCING

According to the 2018 Public Health Expenditure Review (WB/Cameroon) although public health expenditures are progressive, they are not favourable to the poor. This applies to all regions of Cameroon (according to the Kakwani index).

Cameroon has made significant political commitment towards the UHC program, which is one of the pillars of financial protection. To achieve this objective, the WHO and World Bank recommend the monitoring of indicators on large household health expenditure, impoverishing health expenditure, protection against large and impoverishing health expenditures, and stakeholders contribution to reduce as much as possible household out-of-pocket payments.

In Cameroon, there are social protection mechanisms: (i) social security programs with the NSIF, free and subsidy policies targeting the mother and child, as well as economically vulnerable people (MoH/NHO, Analytical Health Profile of Cameroon, 2016), (iii) private schemes around mutual health, commercial insurance, health services offered by the employer, family solidarity, tontines and others (OASIS, 2016).

However, demand-side barriers persist, including (i) direct payment for health by households (60-70% of funds which constitute the primary source of health system funding _NHA, 2011, 2012), (ii) the prevalence of large health expenditure for 4.7 to 21% of households and (iii) difficulties in accessing health facilities in terms of physical access, quality of services and unreliable care, and variable and high direct payments (WB/Cameroon, 2018).

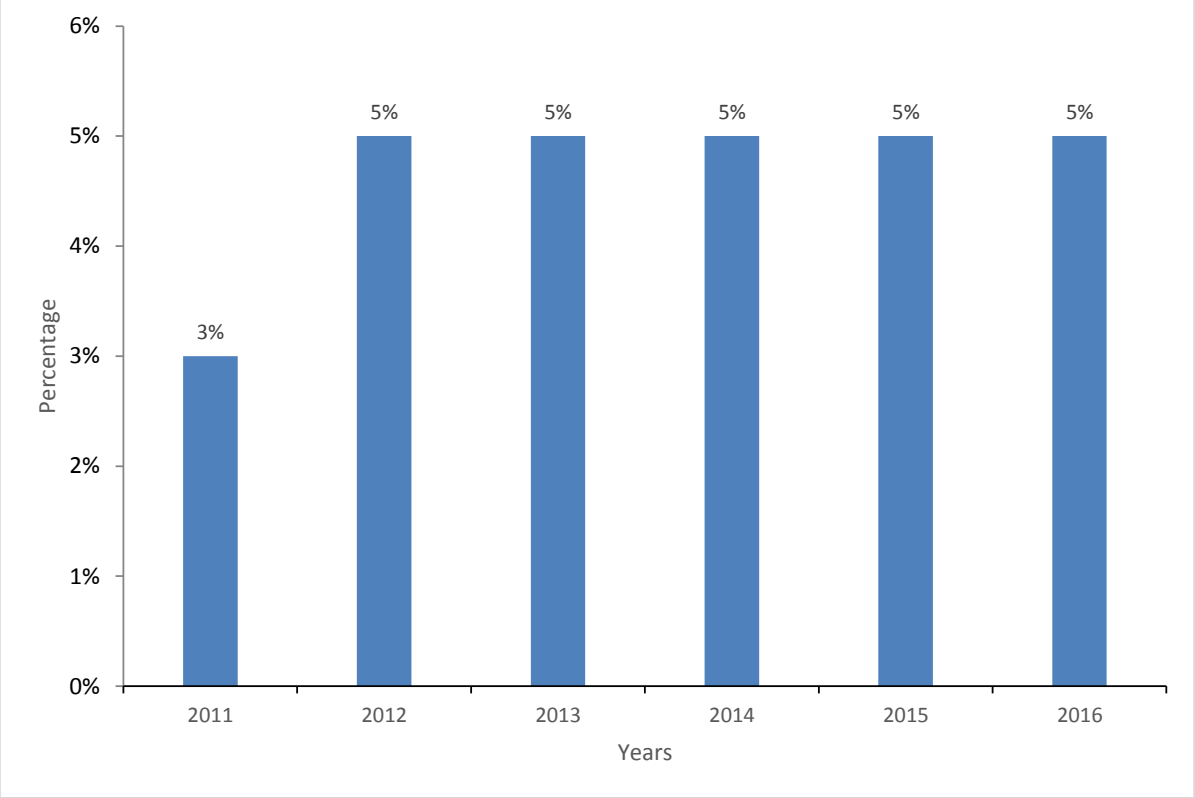
Cameroon has just developed its Health Finance Strategy (HFS) 2019-2027, largely based on WHO guidelines, which has four main functions: mobilizing resources, pooling these resources, the procurement of services and governance. The HFS 2019-2027 aims to contribute to the achievement of the objectives of the Health Sector Strategy (HSS) 2016-2027 and the UHC in Cameroon. The 2019-2027 HFS, developed through a participatory process, focuses among other things on financing demand in order to reduce direct payments from households and the catastrophic expenses that result from the disease. Provision is made for implementation, communication and monitoring and evaluation.

107. Total current expenditure on health as percentage of gross domestic product

Total current expenditure on health as a percentage of gross domestic product.

According to the 2011 and 2012 National Health Accounts, there is a change in the percentage of total current health expenditure as a percentage of public expenditure, not gross domestic product (GDP). It went from 4% to 5.4%.The review of public spending in Cameroon in 2018 (WB/Cameroon), it is reported that Cameroon spent 1.2% of its GDP on health in 2015, about half the average in sub-Saharan Africa.

Figure 31: **Total current health expenditure as a percentage of GDP from 2011 to 2016**



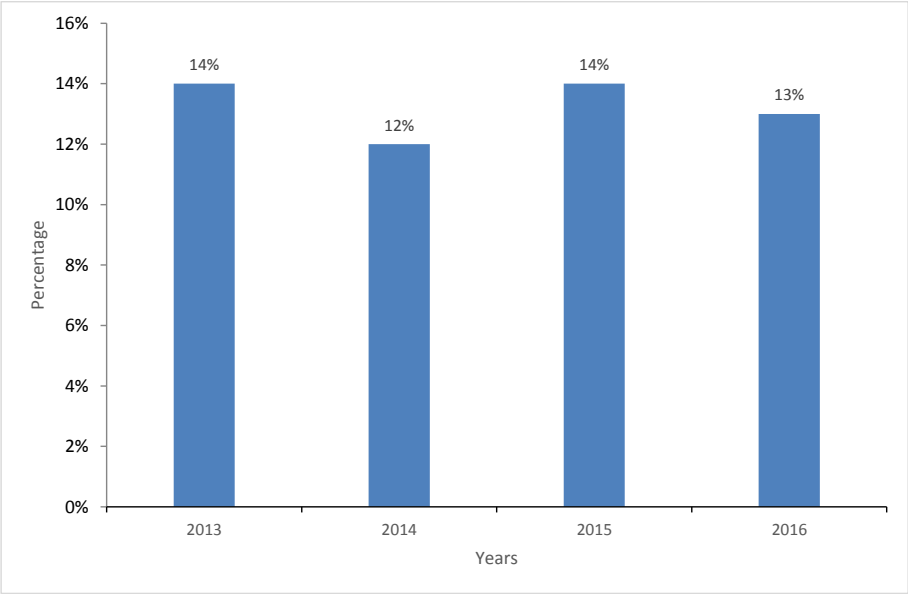
Source : WHO, GHED 2019

108. Public domestic sources of current spending on health as a percentage of current health expenditure

Current expenditure on health publically funded as a share of total current expenditure on health (expressed as a percentage of total current expenditure on health). This is the sum of current health outlays funded from domestic public funds such as taxes, social contributions, compulsory private insurance contributions or other government revenues.

Current public expenditure on health takes account of current expenditure on health by public authorities, compulsory schemes and external financing. Household spending is documented and is generally the only item to be considered as private spending. Private sector financing represents only 7% of total health spending in Cameroon (WB/Cameroon, 2018). Public expenditure on health (23% of Total Expenditure on Health) is low and falls as a proportion of the total national budget.

Figure 32: Sources of public and private domestic financing of current health expenditures as a percentage of current health expenditure from 2013 to 2016



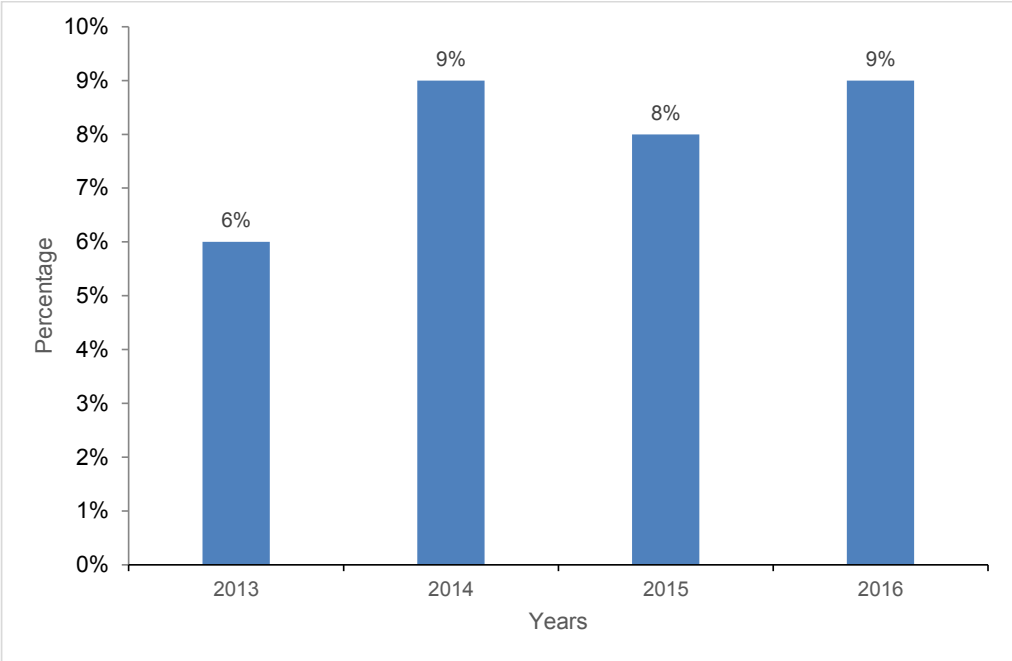
Source : WHO, GHED 2019

109. External source of current spending on health (% of current expenditure on health)

Current expenditure on health funded by external sources of revenue, expressed as a percentage of total current expenditure on health.

A significant proportion of external resources are included in the MoH national budget such as loans, debt relief contracts and co-financing. However, there are parallel mechanisms such as specific support for a program, a region, a health district or a health facility. External financing is therefore not easy to control.National health accounts in Cameroon indicate that external financing, which generally varies between 10 and 20%, depending on the years, has decreased from 14.40% in 2011 to 7.11% in 2012.

Figure 33: Current external health funding sources as % of current health spending 2013-2016



Source :WHO, GHED, 2019

Moreover, according to the 2018 report on public health spending in Cameroon, the National Participatory Development Program (NPDP) reported that between 2011 and 2015, external partners contributed an estimated US$1.9 billion to the health sector in Cameroon. The majority of this funding is concentrated in vertical programs such as HIV/AIDS, Malaria and Tuberculosis, especially for the purchase of drugs (anti-retroviral, anti-malarial, and anti-tuberculosis) and other inputs including vaccines.

110. Proportion of the population with impoverishing health expenditure

Proportion of the population where a household's total consumption expenditure or income including household expenditure on health is greater than the poverty line but the household's total consumption expenditure or income excluding household expenditure on health is below the poverty line.

According to the National Health Accounts (NHA) 2011 and 2012, household spending represented 60% to 70% of expenditure on health financing, since the early 2000s. This exposes the population to a high risk of catastrophic expenses especially of impoverishment. In fact, the NHA data show that 4.7% population annually spent more than 40% of household spending on health care. According to WB/Cameroon, (Public health expenditure 2015) total health expenditure (THE) per capita in Cameroon is relatively high, around US$61 and has been stagnant for almost a decade. The excessive burden of direct payments reduces the financial accessibility of households to health services and care.

111. Proportion of the population with large household expenditure on health as a share of total household consumption or income – SDG 3.8.2

Proportion of the population the population with large household expenditure on health as a share of total household expenditure or income.

According to Wagstaff, quoted by the WB/Cameroon survey on public health expenditure 2018, health expenditure is considered catastrophic when it exceeds 10% or 25% of household consumption. The prevalence of large household health expenditures ranged from 10% to 40% of household incomes, with 4.7% to 21% of affected households. In Cameroon, health expenditures increases the poverty rate by almost 2 points, and aggravates the intensity of poverty by almost 12 percentage points (see table 88).

Table 88: Impact of health expenditure on poverty indicators in Cameroon, 2012

Public expenditures	Before health expenditures (Gross)	After health expenditures	Percentage points difference	Percentage difference
Poverty rate	50.3	52.4	1.9	3.60%
Poverty severity	206	217.8	11.8	5.40%

Source : Analysis with the software ADePT of the NHA 2012 data, chapter concerning the diagnosis of the health financing strategy _ WB/Cameroon, public expenditure in Cameroon 2018

According to the WB/Cameroon report of 2018, health expenditure of wealthy households, in terms of percentage, is likely to impose a very high cost and sometimes even cause them to fall below the poverty line. On the contrary, among the poorest households, health expenditure tends to be modest in percentage terms. This latter category of household is most likely to face catastrophic health expenditure, which helps keep these households in poverty. Reducing household health expenditure in Cameroon could directly reduce both the incidence and severity of poverty, which is one of the main interests of UHC in Cameroon.

112. Total net official development assistance to medical research and basic health sectors – SDG 3.b.2

Total net official development assistance (ODA) to the medical research and basic health sectors is currently measured by the gross disbursements of total ODA from all donors to medical research and basic health sectors.

According to the DORH of MINSANTE, 106,375,500 FCFA and 31,897,000 FCFA were made available in 2018 and 2019 respectively for health research by development partners. However, this figure is underestimated because several studies / research are carried out thanks to the financing of development partners from other entities such as CIRCB, IMPM and universities.

U - HEALTH SECURITY

113. International Health Regulations (IHR) core capacity index

Percentage of attributes of 13 core capacities that have been attained at a specific point in time.

This indicator measures progress in the implementation of the International Health Regulations (IHR, 2005), of which the 13 main capacities required are: (1) legislation, policies and funding at the national level, (2) coordination and assured communications by national focal points, (3) surveillance, (4) action, (5) preparation, (6) risk communication, (7) human resources, (8) laboratories, (9)) entry points, (10) events of zoonotic origin, (11) food safety, (12) events of chemical origin and (13) radiological or nuclear emergency situations. This indicator is globally evaluated in 2017 at 40% of the 13 core capacities required by the IHR 2005. (WHO-MOH, 2017 Joint External Evaluation Report of IHR Core Capabilities).

According to the NHO, progress has been observed; the country has grown from 38% capacity in 2018 to 41% in 2019. This progress has been perceptible in 3 technical areas: Coordination for the RSI, Events related to zoonoses and human-animal interface, surveillance. The remaining 10 technical areas are stagnant.

Table 89: Percentage of core IHR capacity (2005) in 2018 and 2019

Capacities (IHR, 2005)	2018	2019
Legislation and Financing	27	27
Coordination for IHR and Functions of National Focal point IHR	40	50
Events related to Zoonoses and Human/Animal interface	60	80
Food safety	40	40
Laboratories	47	47
Surveillance	50	60
Human ressources	60	60
National Framework for Sanitary Emergency Situations	33	33
Health Services delivery	33	33
Risk Communication	20	20
Entry Points	20	20
Events of chemical origin	20	20
Radionuclear Emergency Situations	40	40

Source : Reports SPAR 2018 and 2019(State Party Self-Assessment Annual Reporting)

V - GOVERNANCE

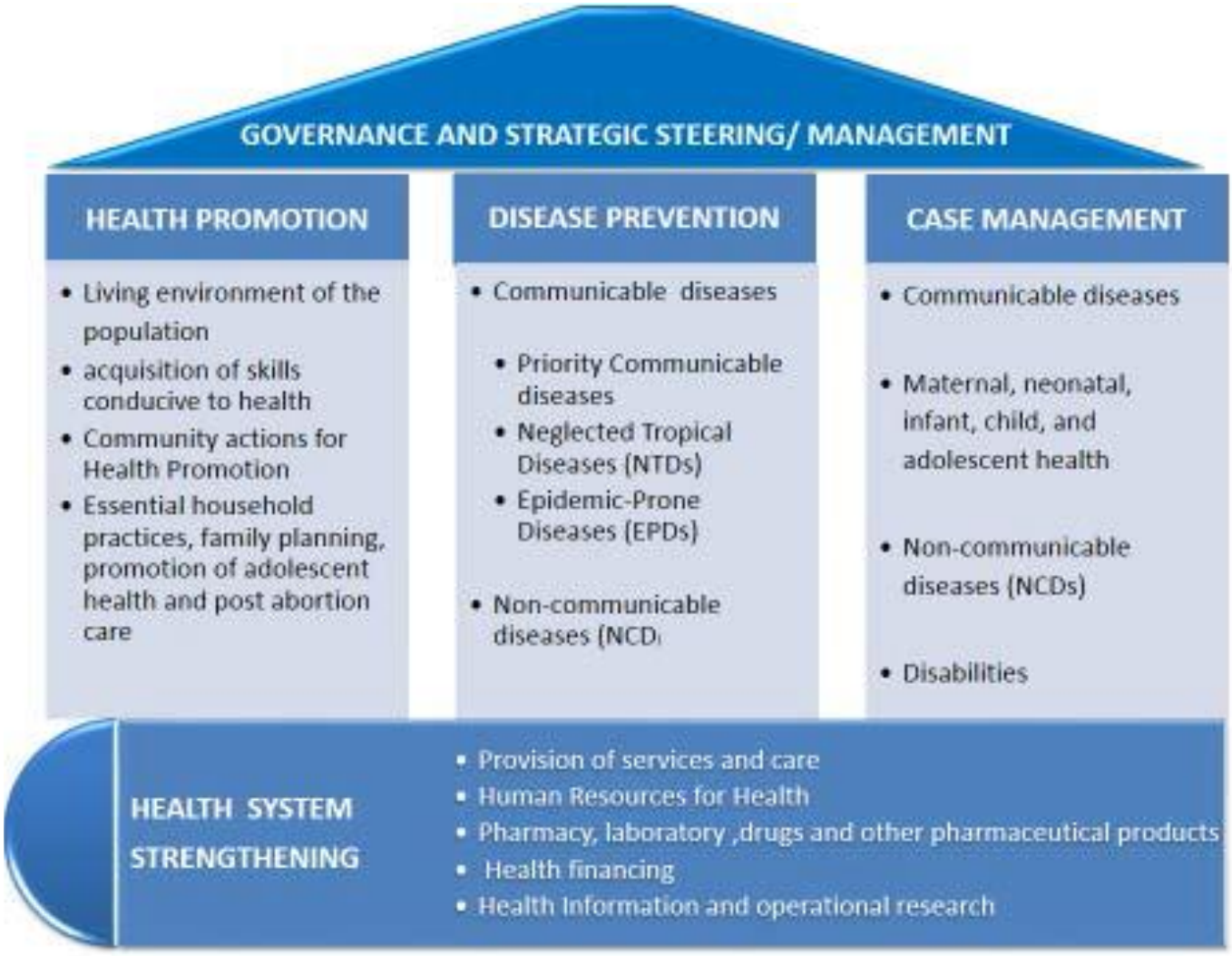
114. Existence of national health sector policy/strategy/plan

Existence of a comprehensive national health sector policy/ strategy/ plan with goals and targets, updated within the last 5 years.

Cameroon has a health sector strategy 2016-2027 under implementation. It also has the National Health Development Plan 2016-2020 and an integrated monitoring and evaluation plan (IMEP 2016-2020). The sectoral health strategy is based on the following national and international frameworks:

- The health legal framework ;
- The Cameroon Vision 2035 ;
- The Growth and Employment Strategy Paper (GESP 2010-2020)
- The Sustainable Development Goals 2015, health component (SDG)

The vision of the Health Sector is: «*Cameroon, a country where universal access to quality health services is ensured for all social strata by 2035, with the full participation of communities*». It is summarized in the figure below with the five strategic axes.

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