World Health Organization

African Region

Atlas of African Health Statistics 2022

Health situation analysis of the WHO African Region

Atlas of African Health Statistics 2022

Health situation analysis of the WHO African Region

Atlas of African Health Statistics 2022: Health situation analysis of the WHO African Region.
ISBN: 978-929023483-8

Suggested citation. Atlas of African Health Statistics 2022: Health situation analysis of the WHO African Rgeion. Brazzaville: WHO Regional Office for Africa; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Designed in Brazzaville, Republic of Congo

Contents

List of boxes

List of figures and tables

2.2 Health emergencies protection

2.3 Healthier populations

SECTION III: HEALTH IN SDG TARGETS

3.1 SDG 2 – No hunger

3.2 SDG 3 – Good health and well-being

3.3 SDG 4 – Quality education

3.4 SDG 5 – Gender equality

3.5 SDG 6 – Clean water and sanitation

3.6 SDG 7 – Affordable and clean energy

3.7 SDG 8 – Decent work and economic growth

3.8 SDG 11 – Sustainable cities and communities

3.9 SDG 13 – Climate action

3.10 SDG 16 – Peace, justice and strong institutions

3.11 SDG 17 – Partnerships for the goals

SECTION IV: HEALTH INPUTS AND PROCESSES

4.1 Health financing

4.2 Health governance

4.3 Health information

4.5 Health workforce

4.6 Health infrastructure

4.7 Health products

SECTION V: HEALTH OUTPUTS

5.1 Access

5.2 Demand

5.3 Quality

5.4 Resilience

SECTION VI: HEALTH OUTCOMES

6.1 Availability of essential services

6.2 Coverage of interventions

6.3 Risk factors and behaviours

6.5 Financial risk protection

SECTION VII: HEALTH IMPACT

7.1 Life expectancy and fecundity

7.2 Morbidity

7.3 Mortality by cause

7.4 Mortality by age

Message of the Regional Director

Since 2019, we have been implementing Phase 2 of the regional Transformation Agenda, which informs and aligns with the global WHO Transformation, to ensure WHO is accountable, driven by results and providing value for money in the pursuit of better health. Our global priority in this period is to contribute to delivering on the triple billion targets of expanding universal health coverage, protecting people from emergencies, and promoting health and well-being for people across the Region.

This year's Atlas of African Health Statistics is being produced in the context of the COVID-19 pandemic that we have been experiencing for over two years. The ongoing coronavirus pandemic, together with other health emergencies in the WHO African Region, is yet again testing the strength and resilience of our health systems. Indeed, the impact of COVID-19 is visible in the disruption of services. The report also presents the latest data for more than 50 health-related indicators of the Sustainable Development Goals and WHO's "triple billion" targets and provides comprehensive country-level statistics using the results chain of the AFRO framework of actions for strengthening health systems to achieve UHC and the health-related SDGs.

The Atlas shows that, although the trend is upward and improving, health systems in the WHO African Region are still weak and lagging far behind other regions of the world. It also shows that unless we increase our pace, we will not be able to achieve most of our SDG targets. This is unacceptable! The need for more accurate and timely data to effectively measure the progress and performance of our health systems and improve health decisions and accountability has never been greater – and yet, data availability and quality remain key challenges in the WHO African Region. I promised the Regional Committee my full commitment and that of each person working for WHO in the WHO African Region in supporting the Member States we serve. I will ensure strong support for activities relating to data generation, analysis and use to track our progress towards universal health coverage and the health-related Sustainable Development Goals.

I wish to thank all those who contributed to the preparation of the Atlas for their work. It is my hope that Member States and partners will find this Atlas 2022 a useful reference source.

Dr Matshidiso Moeti
WHO Regional Director for Africa

Foreword by the Assistant Regional Director

The Atlas 2022 outline is informed by the framework of actions for health system strengthening towards universal health coverage and the health-related SDGs. It consists of seven compact sections that allow for (i) tracking the targets of international agendas: the Sustainable Development Goals and the WHO triple billion targets; and (ii) measuring the situation of the Region in relation to the components of the framework of actions from inputs to impact.

The Atlas of African Health Statistics remains the most comprehensive tool for monitoring the health situation in the WHO African Region, providing up-to-date information on the state of health in countries, and serving as a baseline for monitoring progress on internationally agreed targets. The report shows overall increases in life expectancy and healthy life expectancy over the last 20 years, as a result of progress in many health areas including maternal health. However, the Region is still facing the triple burden of communicable diseases, noncommunicable diseases and violence.

First, available evidence shows that the COVID-19 pandemic has slowed progress towards some SDG targets, which means that more efforts and interventions are required to get back on track. This Atlas offers the opportunity to take a deeper look at the country situation and learn from those that are performing well in certain areas.

Some subsections of the Atlas use data that are not recent or up to date, which means that it is urgent and important to invest in data systems if we want to have quality evidence for decision-making. This is a collective effort involving all stakeholders at the national, regional and global levels. The WHO Regional Office for Africa is committed to working with all partners to support countries to produce quality data.

Dr Lindiwe Makubalo
WHO Assistant Regional Director for Africa

Acknowledgements

This Atlas 2022 has been prepared by a core team from the Assistant Regional Director Cluster of the WHO Regional Office for Africa under the leadership and guidance of the Cluster Director, Lindiwe Makubalo, and DAK (Data, Analytics and Knowledge Management) Team Leader, Humphrey Cyprian Karamagi. The technical core team was coordinated by Serge Bataliack and included Berence Relisy Ouaya Bouesso, Anaclet Geraud Nganga Koubemba, Bertha Kembabazi, Jadice Mandimba, Aminata Seydi, Sokona Sy, Monde Mambimongo Wangou, Auge Wilson Ondon and Moyo Thandekile.

The first draft of the Atlas was developed by consultants from the Health Systems Strengthening and Development (HSSD) group under the coordination of Samuel Ndame Ebongue with Ebongue Mbondji and Ursull Saha.

The information is consolidated from products and deliverables of the Life Course, Communicable and Noncommunicable Diseases, Healthier Populations, and Emergency Preparedness and Response Clusters.

Specific sections of the Atlas were reviewed by the relevant technical programmes and units in the Regional Office, under the guidance of the Cluster Directors and Team Leaders. Special thanks to Antonios Kolimenakis, Ali Ahmed Yahaya, Guy Mbayo, Juliet Nabyonga, Kone Brama and Laetitia Ouedraogo who completed a comprehensive review of the document and provided invaluable guidance and input to the team. And finally, special thanks to Matthias Reichwald who did the graphic design for this Atlas.

Abbreviations

AFRO	WHO Regional Office for Africa
AIDS	acquired immunodeficiency syndrome
ALG	Algeria
AGO	Angola
BEN	Benin
BWA	Botswana
BFA	Burkina Faso
BDI	Burundi
CD	communicable disease
CPV	Cabo Verde
CMR	Cameroon
CAR	Central African Republic
TCH	Chad
COM	Comoros
CON	Congo
CIV	Côte d'Ivoire
DRC	Democratic Republic of the Congo
EQG	Equatorial Guinea
ERI	Eritrea
ETH	Ethiopia
EVD	Ebola virus disease
GAB	Gabon
GMB	Gambia
GHA	Ghana
GIN	Guinea
GNB	Guinea-Bissau
HIC	high-income country
HIV	human immunodeficiency virus
HRH	human resources for health
HSS	health systems strengthening
ICT	information and communication technology
IHR	International Health Regulations (2005)
INFRA	infrastructure
JEE	joint external evaluation
KEN	Kenya
LIC	low-income country
LMIC	lower-middle-income country
LSO	Lesotho
LBR	Liberia
MDG	Madagascar
MWI	Malawi
MLI	Mali
MRT	Mauritania
MAU	Mauritius
MOZ	Mozambique
NAM	Namibia
NCD	noncommunicable disease
NER	Niger
NGA	Nigeria
RWA	Rwanda
SARA	Service Availability and Readiness Assessment
SDGs	Sustainable Development Goals
STP	Sao Tome and Principe
SEN	Senegal
SYC	Seychelles
SLE	Sierra Leone
SSD	South Sudan
SWZ	Eswatini
TB	tuberculosis
TGO	Togo
TZA	United Republic of Tanzania
UGA	Uganda
UHC	universal health coverage
UMIC	upper-middle-income country
WB	World Bank
WHO	World Health Organisation
ZAF	South Africa
ZMB	Zambia
ZWE	Zimbabwe

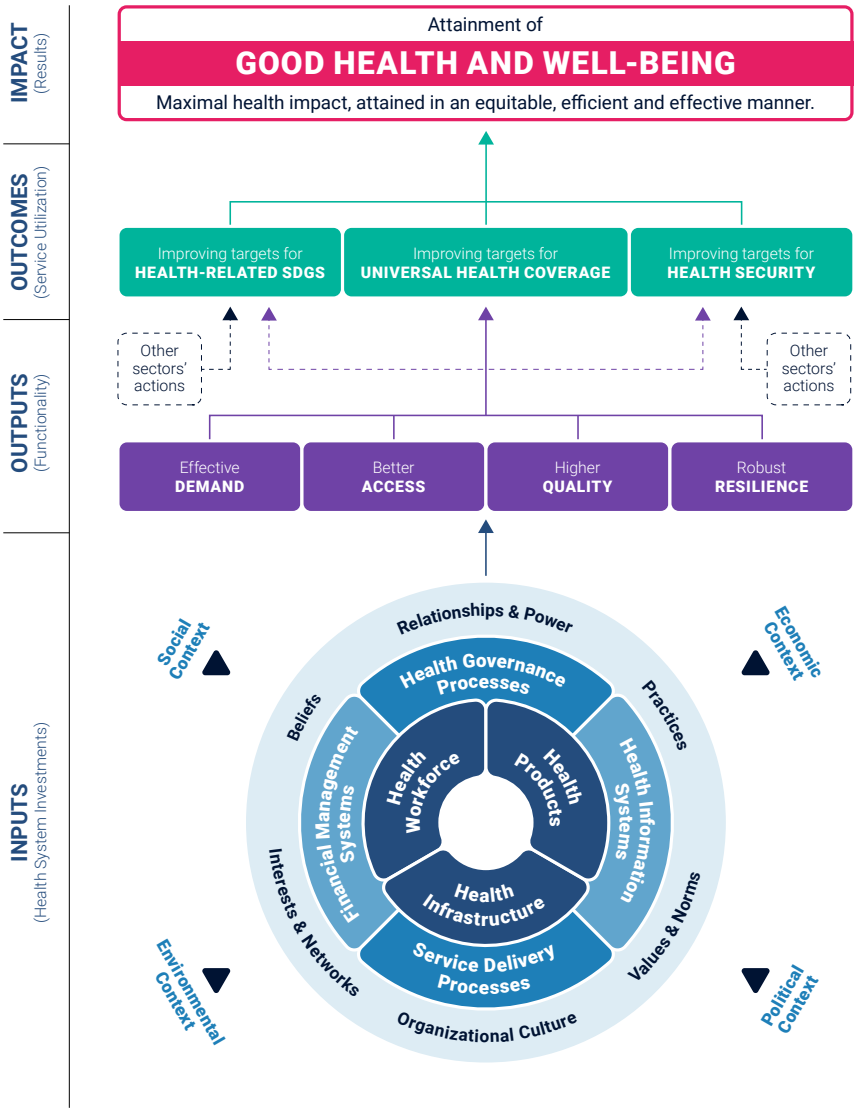
Conceptual Framework

In September 2015, Member States endorsed the overarching Agenda for Sustainable Development at the 70th UN General Assembly, following the post MDG-era. Attaining good health and wellbeing for all ages – goal 3 of the SDG agenda - became the focal point of health actions to be achieved through the health sector, under the overarching target of Universal Health Coverage (target 3.8), and in collaboration with other sectors.

Member States in the African Region have since focused on the need to develop strengthened health systems to attain their health goals, specifically, through commitment to achieving SDG 3 and UHC. A process to streamline movement towards UHC through a comprehensive PHC approach was initiated. In November 2016, all the 47 Member States of the region, agreed on the scope and expectations of a "Framework of Actions" to achieve UHC and other health-related SDG targets at a consultation in Windhoek, Namibia (Figure A). Further consultations led to the endorsement of a comprehensive framework at the 67th Regional Committee of African Member States at Dakar, Senegal in 2018.

This regional menu of options framework describes '**what**' countries should focus on when designing their health systems by emphasizing '**how**' countries should organize and target their efforts to achieve their health development goals (from inputs/investments to impact). A logical approach, derived from existing planning and monitoring and evaluation (M&E) frameworks, is utilized to guide expectations from when funds are mobilized for health until they achieve the desired health and well-being for all ages that a given Member State has identified for itself.

Figure A. Framework for health systems development towards UHC in the context of the SDGs



Methodology

This report mainly covers countries in the WHO African Region: Algeria, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe. However, the analysis of the indicators (to the extent that data are available) starts by presenting the overall situation of the Region in relation to the other WHO regions, then the distribution/coverage of the indicator among the countries of the Region, and when data allow, the report proposes a disaggregation by sex (Female/Male), residence (Rural/Urban), etc.

The Atlas 2022 relies on a range of data sources given the fact that there are many sections to develop. To enhance production of a robust and comprehensive view of Atlas of African health statistics, as well as to facilitate cross-country comparisons, data sources need to be consistent and comparable. The tables and figures will draw upon WHO Africa-wide and global datasets. For some indicators, there are instances where more accurate national or sub-national data is available through Demographic Health Survey or other standardized and international surveys such as SARA, HHFA, STEPS, etc. The following criteria are proposed to help identify the best data sources, although it is unlikely that every data source will satisfy all these criteria.

(1.) Credibility and validity of the data

(2.) National scope and potential to provide subnational level detail

(3.) Availability and consistency of the data over time and across sources

(4.) Timeliness of the data

(5.) Ability to support subgroup- and condition-specific analyses

(6.) Public accessibility of the data

(7.) Generalisability of the data/results to the country context

We have several types of data sources: (1) international data sources, (2) national/domestic data sources; and (3) scientific literature.

International sources include global and specialised international databases and / or databases of the United Nations system, those of WHO, UNICEF, UNFPA, and the World Bank. We also used data from the integrated African Health Observatory available at https://aho.afro.who.int which has a repository of key health indicators for the countries of the region from the various international and national data sources (with the direct contribution of the Member States).

The primary national/domestic sources are:

- Any official document produced by the Government and / or the Ministry of Health (MOH).
- Documents produced under the supervision of MOH or other state structures.
- Documents produced by the National Institute of Statistics.
- National Vital Statistics System
- Any research report produced by institutes, centres or local research organisations with robust methodology. The results of the research produced by the institutions of the United Nations system represented in countries.

Scientific literature includes publications in peer-reviewed national, regional, or international journals. This may also include grey literature (unpublished) which is based on a robust methodology and is generalisable to the country or Region situation.

NOTE: Some data from international and standardized data sources (which are derived from standard and validated methodologies) may be different from some values collected at national level via the routine data collection system. Indeed, to ensure a certain comparability between countries, only sources that could produce data for at least part of the countries in the WHO African Region were considered. On the other hand, for the country profiles (2 pages) countries were allowed to make inputs and for certain indicators with data from national sources (not always standardized) but validated and/or used by the country in various documents.

The development process of the Atlas of African Health Statistics 2022, required the following steps :

(a.) Development of the structure of the Atlas 2022 together with other WHO/AFRO clusters and country Offices. The structure is inspired by the results chain of the framework of actions with two additional sections dedicated to the general programme of work 13 (GPW 13) and the monitoring of the Sustainable Development Goals

(b.) Identification of data sources as defined above;

(c.) Extraction of data from the aforementioned sources: the most recent validated data were used;

(d.) Data review / cross-checking of additional information with programmes and clusters of the WHO Regional Office

(e.) Preparation of data collection matrices on Excel spreadsheet, for the production of charts and tables using Excel and Tableau Software;

(f.) Production of the first draft report for feedbacks and inputs from all the programmes of the WHO Regional Office

(g.) Second iteration of the full report and copy edit by Translation Interpretation and Printing Team in WHO/AFRO;

(h.) Production of the final document for validation in the e-Publication System;

(i.) Launch and dissemination of the report.

The first drafts were developed by a group of consultants under the supervision of the WHO Regional Office for Africa, then an internal review process (including countries) resulted in the final version.

However, the report has some limitations, including

- The age of some data sources: in fact, several indicators present data that are more than five years old and in the absence of new information, we have used them as such. This means that the situation presented could have improved or deteriorated, and there is an urgent need to invest in sustainable systems for monitoring indicators in the countries
- The poor capacity of the health information system to produce reliable routine data: in fact, some indicators remain unavailable for several countries, which limits the capacity to monitor certain themes
- The low dissemination of the results of certain studies: the results of several studies that could help to capture additional information are not accessible because they are not available in the public domain, which limits their effective

SECTION I

CONTEXT

Section summary

The population of the World Health Organization's (WHO) African Region was estimated to be 1 120 161 000 in 2020 and about 14.4% of the world's population of 7 758 157 000. It was 8 billion in 2021[1]. It is the third largest population among the WHO regions after South-East Asia and the Western Pacific. Between 2019 and 2020, the population differential was equivalent to that of a state of more than 28 million inhabitants. The five most populated countries account for more than 45% of the Region's population. Among these, Nigeria and the Democratic Republic of the Congo represent about 50% of the population of the West African and Central African subregions, respectively, and Ethiopia represents about 20% of the population of the East and Southern Africa subregions.

The average annual population growth in Africa was 2.5% in 2020. If the heterogeneity of the population growth between the regions of the world and between countries in the same subregion is considered, countries from and East and Southern Africa subregions seem to have lower population growth rates than countries in other large subregions, which show significantly higher increases. The current population density of Africa is low, estimated to be 36 inhabitants per km^2 for the whole continent. However, many areas are uninhabitable and some countries have relatively large populations. High population density is a concern that must be addressed through policies, because it could generate surges and high concentrations of populations in mega cities and urban slums, which can be an issue when it comes to accessing various qualitative services.

Gross domestic product (GDP) reflects a country's resources and therefore its potential to provide access to services to its people, particularly health services. This dynamic creates a circle, with healthier people going to work and contributing to the production of wealth for the benefit of the country. The most vulnerable people live from agriculture in rural areas, or in conflict-affected states. Difficulties in accessing health services, low education and inequalities between men and women are additional obstacles to poverty reduction.

The population of sub-Saharan Africa is expected to almost double over the next three decades, growing from 1.15 billion in 2022 to 2.09 billion in 2050. The world's population is expected to grow from 7.94 billion at present to 8.51 billion in 2030 and 9.68 billion in 2050.

The demographic dividend[2] for African countries will emanate from the acceleration of economic growth following a decrease in fertility with a change in the structure of the age pyramid where the active population, that is those aged 18–65 years, will be more important, reaching a certain optimum to make positive the ratio between the population able to finance health and education systems and the population that benefits from these systems. This is the human capital for development at a given moment. The demographic dividend appears to be an opportunity and an invitation to action, but it is also a real challenge, that of creating sustainable jobs to generate the development to activate the economic growth lever.

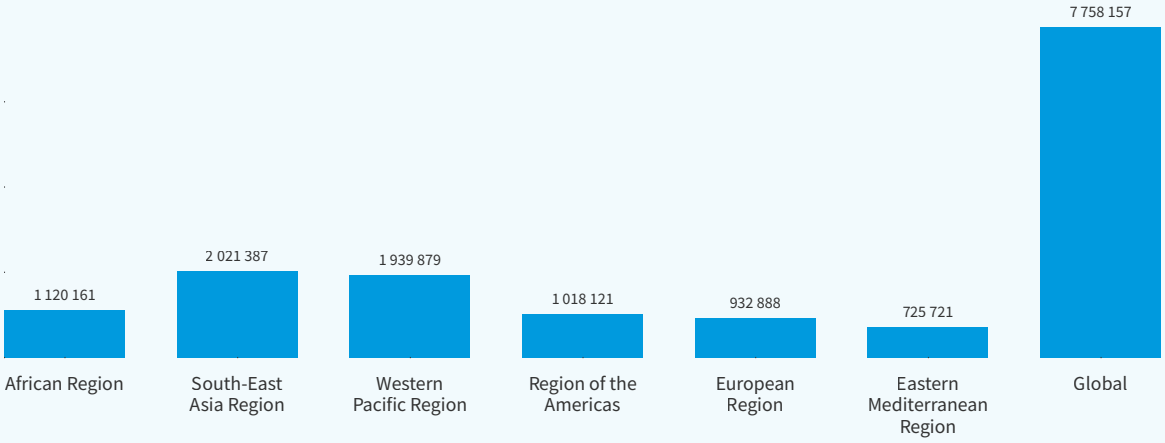
1 World Population Prospects. The 2022 Revision
2 Population Reference Bureau (2013)

1.1 Sociodemographic context

Population

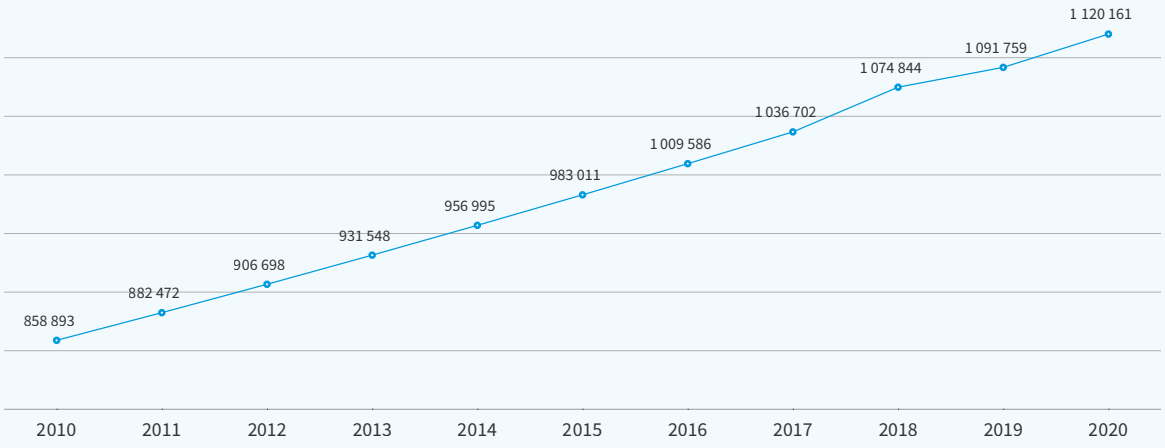
The population of the WHO African Region was estimated to be 1 120 161 000 in 2020, which was about 14.4% of the world's population of 7 758 157 000. It is the third largest population among the WHO regions after South-East Asia and the Western Pacific regions.

Figure 1.1.1. Population of the WHO regions in 2020 (in thousands), WHO



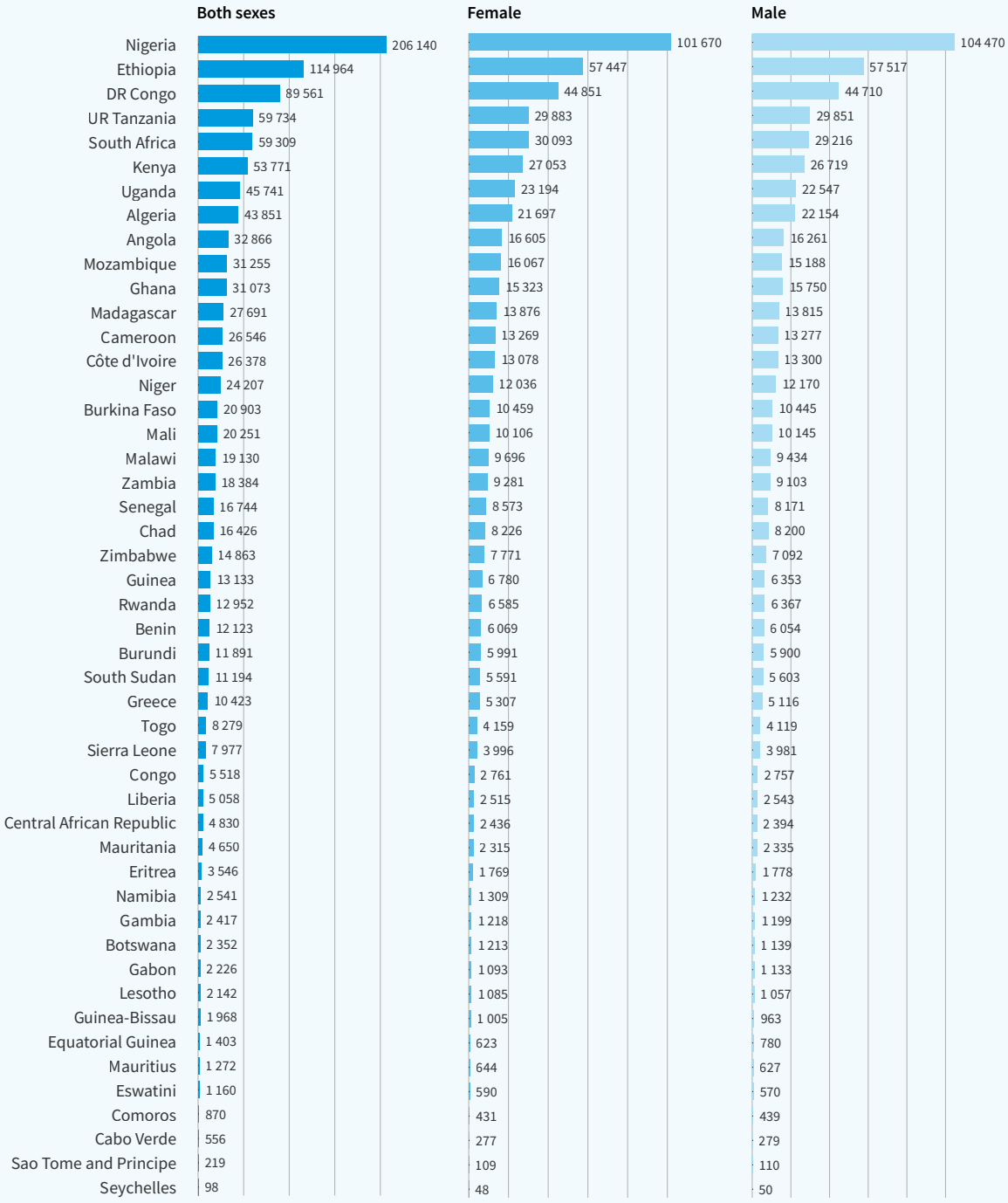
Based on United Nations data, there has been a continuous evolution of the population over the 10 years from 2011 to 2020, with its level rising by 26.9% during that period. For the single year of 2019–2020, the African population differential was equivalent to that of a country of more than 28 million inhabitants, which was well above the average population of the 47 countries in the Region, that is 23.0008 million.

Figure 1.1.2. Trend in population size (in thousands) in the WHO African Region, 2010–2020, UN Population



Nigeria, with 18% of the Region's population, has over 200 million people. Next is Ethiopia with 114 million people and then the Democratic Republic of the Congo with 89 million people. Along with the United Republic of Tanzania and South Africa, these countries account for more than 45% of the Region's people.

Figure 1.1.3. Population size (in thousands) of the countries in the WHO African Region, 2020, UN Population



Nigeria, Ethiopia and the Democratic Republic of the Congo, the three most populous countries, represent more than 45% of the population of their regional economic community, that is the Economic Community of West African States in the case Nigeria and the Economic Community of Central African States in the case of the Democratic Republic of the Congo.

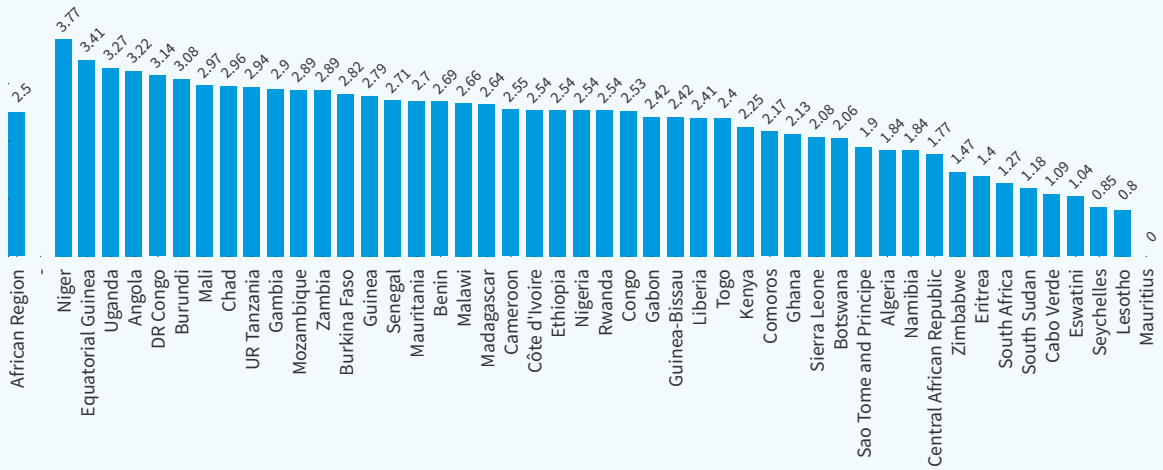
Demographic growth, country size and population density

Between 2015 and 2020, sub-Saharan Africa was said to have had the highest population growth with a rate of 2.7% compared with the global average of 1.1%,[3] the North African and Middle Eastern average of 1.8%, the Latin American and the Caribbean average of 1%, the South Asian average of 1.3%, the East Asian, the Pacific average of 0.7%, and OECD countries' average of 0.3%. The 2020 average population growth in Africa was 2.5%.

Europe and North America, which have populations comparable to that of the WHO African Region, have had population growth rates of less than 1% since the mid–1960s, dropping to near zero in 2021, while sub-Saharan Africa's population growth rate peaked at 3% in 1978 and remained above 2.8% through the 1980s. The population of the Region is expected to grow at 2.5% by 2022, which is more than three times the world average of 0.8% and the highest among the WHO regions.

Despite the heterogeneity of population growth across the regions and between countries in the same subregion, Angola, Burundi, the Democratic Republic of the Congo, Equatorial Guinea, Niger and Uganda have population growth rates of above 3%. Fertility remains high in African countries, particularly in those where population growth is among the highest, that is Angola, the Democratic Republic of the Congo and Niger.

Figure 1.1.4. Demographic growth (%), in the WHO African Region, 2020, World Bank



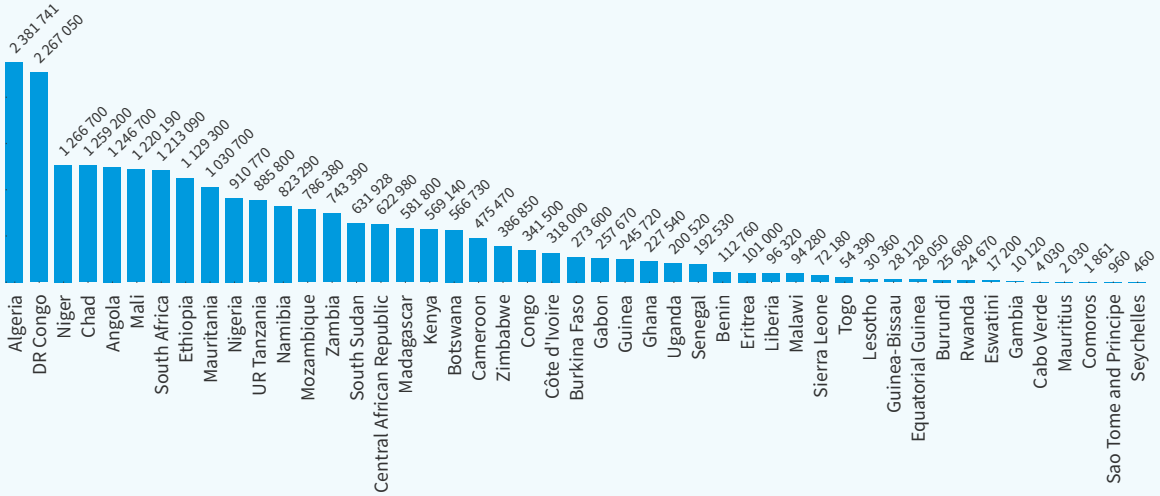
Population growth is explained by two demographic factors: the rate of natural increase of people, or the natural balance, which is the difference between births and deaths, and migratory movements, which reflect the difference between emigration and immigration. Migration has lesser weight than the natural increase of people in the demographic dynamics of Africa. In the face of the forecasts on resources, the current growth rates pose a challenge.

Population explosion can bring enormous challenges in provision of education, health and employment services, in particular. Unemployment rates are very high in most of the countries, even among graduates. Forward-looking analysis of population growth and evidence-based planning can help mitigate the negative effects of the population boom.

Countries in the East and Southern Africa subregions such as South Africa with a population growth rate of 1.3, Zimbabwe with a rate of 1.5% and Kenya with a rate of 2.4% seem to have lower population growth rates than those in the West and Central Africa subregions.

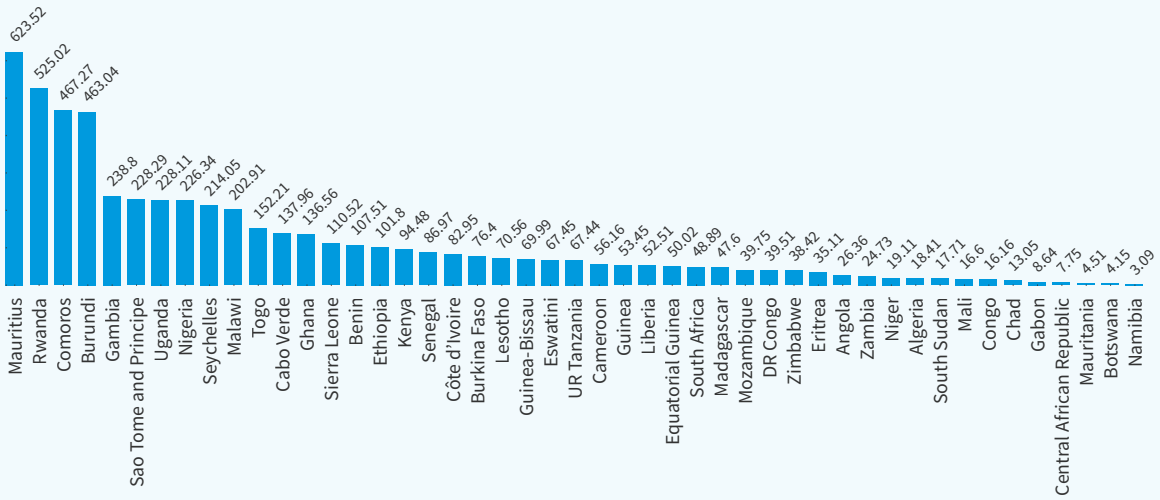
3 According to UN regions (2019)

Figure 1.1.5. Country size (km²) in the WHO African Region, 2020, World Bank



The countries' sizes and their numbers of inhabitants are not related and the largest countries do not necessarily have the greatest populations. Even the smaller countries like Burundi and Rwanda have relatively large populations. Seychelles, an ocean archipelago made up of 115 islands, is Africa's smallest country. It has a population of about 98 000.

Figure 1.1.6. Population density in 2020 (persons per km²) in the WHO African Region, 2020, World Bank



The current population density of 36 inhabitants per km2 for the whole continent is not very high overall, but many areas are uninhabitable while in others the population density is very high, for example in Nigeria, where it already reaches 190 inhabitants per km².

High population density can be a concern to be addressed through policies if it contributes to surges and high concentrations of populations in mega cities and urban slums or if it hinders access to various qualitative services. The challenges of cities such as Lagos with 20 million people, Kinshasa 14 with million or Luanda can be enormous, particularly in the ghettos, where the living conditions are miserable. Some examples are Kibera in Nairobi, Pikine near Dakar and Soweto in Johannesburg, which are cities growing beside large cities, where the inhabitants live in a context marked by social exclusion, without access to basic services and in deplorable sanitary conditions. The slums are the real gateways for people who immigrate into the cities to find a better life. The high concentration of the population exposes them to many health risks but without providing them access to the most basic rights.

BOX 1. **Demographic dividend**

Demographic dividend is a demographic transition or a total dynamic process that combines space and time, urbanisation and family composition, enhancing human capital and therefore economic development, resulting from the "Asian economic miracle."[4] It is demographic and economic analysis from the experience of Asian countries which consists in the acceleration of economic growth that may result from a rapid decline in a country's fertility, and sub- sequent changes in the age structure of the population[5].

Demographic dividend represents the economic chance offered by the situation in which a country reaches its maximum in the ratio between the non-dependent (active) population and the dependent population (the youngest and the oldest). This is the tipping point where children (boys and girls under 18) and people over 64, currently representing more than 50% of the population, will become less numerous than the working age population, that is people aged 18–64 years. Half of Africa's population currently is under 18 years of age. By 2035, however, the continent's working population will be larger than of any other region. The dependency ratio, that is children and retirees that each worker supports, will then fall to a level comparable to that of the United States or Europe.

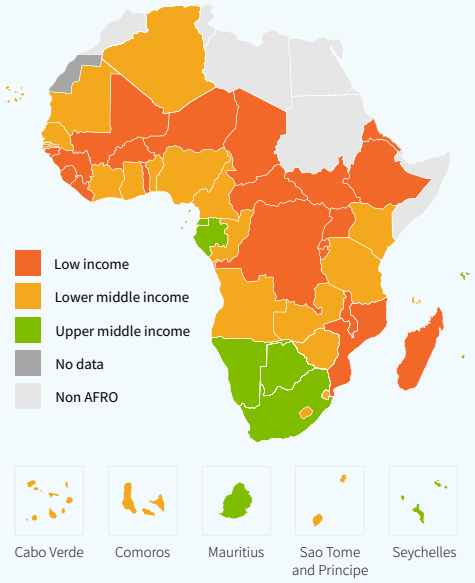
School attendance is also increasing and by 2035[6] university graduates are expected to account for almost 10% of the African population. But the African workforce is still largely under educated, which poses a problem for the integration of individuals into the labour market. According to Africa's economic prospects,[7] tens of millions of jobs will need to be created each year to absorb all the new entrants into the labour market. Beyond these considerations, however, the age at which the economic surplus begins to be created varies by region, being later in the WHO African Region, with subregional variations. We therefore refer to the global deficit over the life cycle, estimated to be between 20% and 40% of GDP.

4 John F. May and Jean-Pierre Guengant; Demography and economic emergence of sub-Saharan Africa, 2000
5 Population Reference Bureau (2013)
6 Rodrigo Deiana, Arthur Minsat (OCDE, Paris). Labor market consequences of Africa's demographic dividend, 2018
7 Africa's economic prospects, 2017

1.2 Economic context

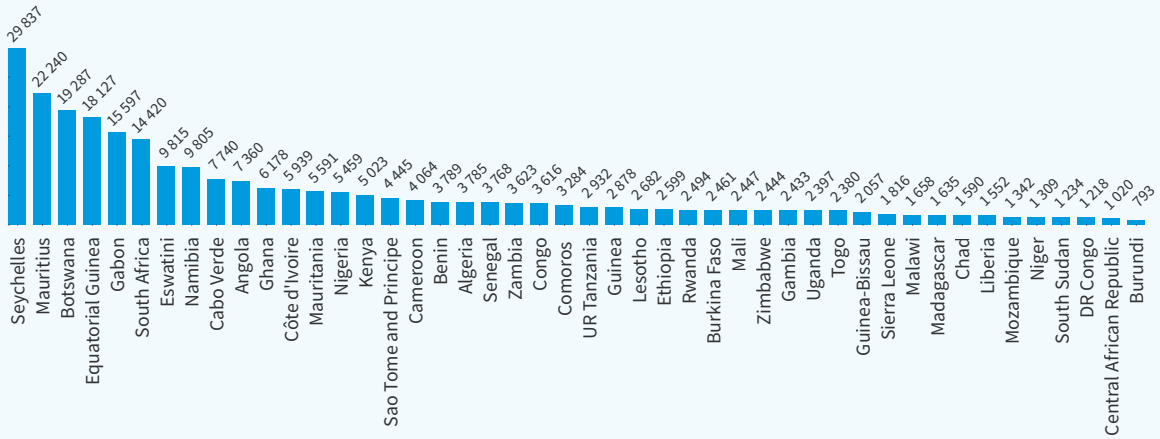
GDP per capita

Figure 1.2.1. Map of GDP per capita (Int $) in the WHO African Region, 20201, World Bank



GDP per capita is an indicator that gives a complementary view of a country's level of development. The figure 1.2.1 illustrates the GDP per capita for each country, adjusted for purchasing power. According to the latest IMF[8] estimates for 2022, the leading economies in terms of GDP per capita (constant US$) in the WHO African Region are Nigeria ($510.6bn), South Africa ($426.2bn), Algeria ($193.6bn), Angola ($124.9bn) and Kenya ($114.7bn).

Figure 1.2.2. Country-specific GDP per capita (Int $) in the WHO African Region, 2021, World Bank



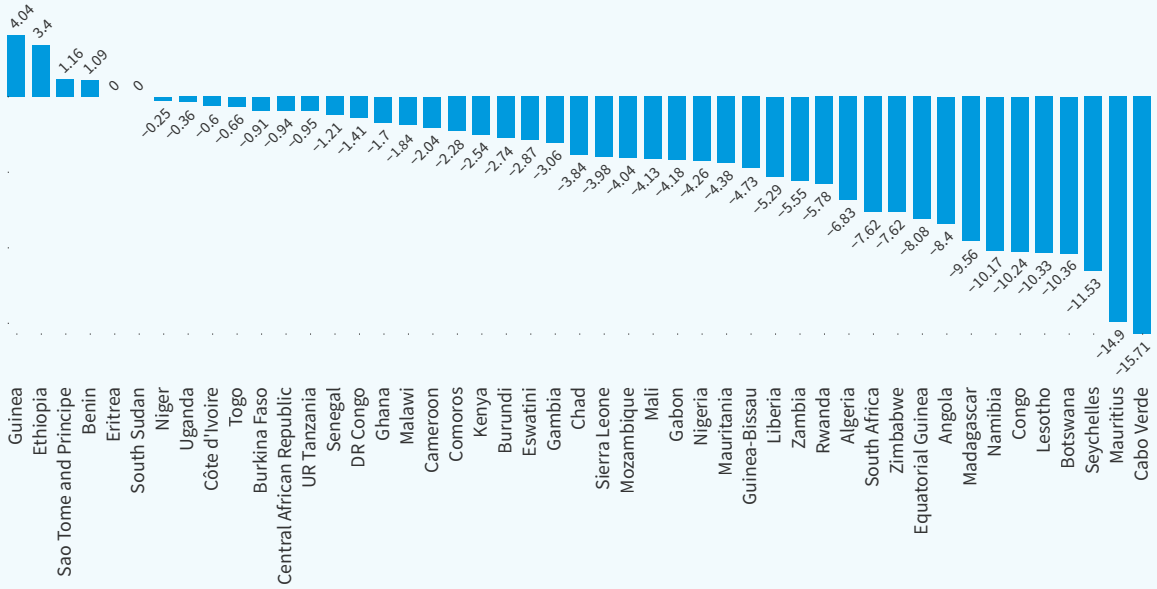
GDP reflects the country's resources and therefore access to services, particularly health services, and their availability. This dynamic creates a virtuous circle, with healthier people going to work and contributing to the production of wealth for the benefit of the country. Gross National Income per capita remains low. Most African Region countries have not reached a level of per capita income that allows significant economic dynamics, compared to the rest of the world.

Nigeria ranks 26th among the world's richest countries and, with its estimated GDP (constant US$) of US$ 510 billion in 2022, it is the richest African nation, according to the IMF. Its GDP grows by 2.7% year on year. Nigeria's GDP (in constant terms) is around 200 times that of countries such as Gambia and the Central African Republic.

8 IMF, Rethinking fiscal policy: public finance and equity in a transformed world. Finance & Development, International Monetary Fund Quarterly, March 2022, 59.

Economic growth rate

Figure 1.2.3. GDP growth (annual %) in the WHO African Region, 2020, World Bank



Most countries saw their GDP decline between 2019 and 2020, and only four have been doing well.

After growing by 6.9% in 2021, Africa's GDP is expected to slow down to 4.1% in 2022. Adding to the damage caused by the COVID-19 pandemic with its successive lockdowns in China, the conflict in Ukraine and its disruption of supply chains has exacerbated the slowdown in the global economy, which is entering a prolonged period of low growth and high inflation, according to the latest World Bank Global Economic Outlook (2022). Global growth is expected to fall from 5.7% in 2021 to 2.9% in 2022 and further to 2.2% in 2023, largely owing to the continued removal of fiscal and monetary support measures introduced during the pandemic. In emerging markets and developing economies, growth is also expected to fall from 6.6% in 2021 to 3.4% in 2022, well below the annual average of 4.8% seen over the 2011–2019 period.

In sub-Saharan Africa, growth is expected to moderate to 3.7% in 2022 and 3.8% in 2023. Sub-Saharan Africa is expected to remain as the only emerging and developing region where per capita incomes will not return to their 2019 levels even by 2023. Higher food and fuel import bills could also reverse the recent progress made in the fight against poverty in the Region, particularly in the countries with large vulnerable populations and in countries that are highly dependent on food imports. The health and economic crises feed off each other. For example, according to WHO (2021) forecasts, the continent may have to wait until 2024 to reach 70% COVID-19 immunisation coverage.

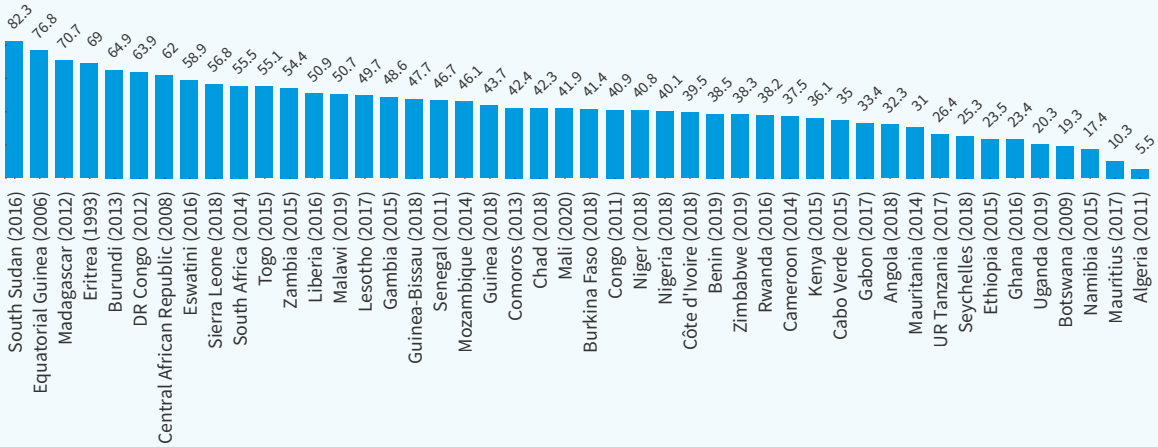
Inflation and poverty rates

Inflation reflects the loss of purchasing power in a country and the rise in prices and is, therefore, a reliable indicator of the economic health of a country. The rise of the inflation rate can be a disadvantageous indicator of health investments for a country. Estimates show the growth momentum in the Region's three largest economies of Nigeria, Angola and South Africa to have continued. For Angola and Nigeria, this is attributed to the high oil prices and the recovery of the non-resource sectors.

In the Region as a whole, persistent and high domestic inflation rates, power cuts and food and fuel shortages have weighed on recovery. In some countries, debt overhang, political uncertainty, social unrest and violence continue to undermine recovery, particularly in fragile and conflict-affected low-income countries.

Although the rising commodity prices are likely to support the recovery in the extractive industries, the rising inflation in many countries will tend to erode real incomes, weaken demand and increase poverty. Food price inflation and shortages are expected to hit vulnerable populations hard, further exacerbating food insecurity.

Figure 1.2.4. Poverty rate (%) in the WHO African Region, 2020, World Bank

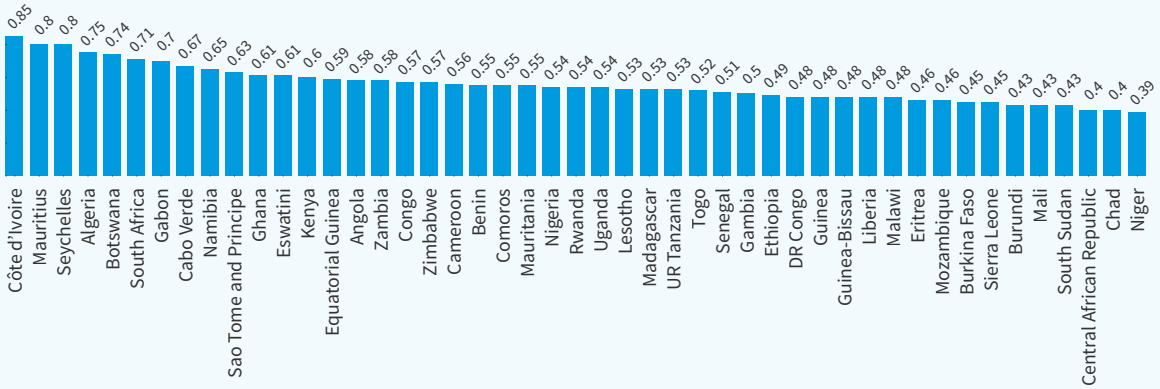


The poverty rate in Africa has declined, but the number of poor people has increased. The pandemic has undermined progress in poverty reduction in Africa, pushing at least 29 million more people into extreme poverty (Mahler et al., 2021). The World Bank predicts that by 2030, if nothing is done by decision-makers to address this issue, nine out of 10 poor people in the world will be African.

The most vulnerable people live on agriculture in rural areas or in conflict-affected states. Difficulties in health systems, low education and inequalities between men and women are additional obstacles to poverty reduction.

Human development index

Figure 1.2.5. Human development index in the WHO African Region, 2019, UNDP



In addition to dealing with the exigencies of the demographic transition, access to basic health care, strengthening education especially for young girls, ensuring economic autonomy of women and promoting agriculture, the development of various activities in the rural world must be taken in hand by the communities in the countries.

The United Nations promotes sustainable development and peace in Africa by helping to accelerate the integrated implementation of the 2030 Agenda for Sustainable Development and the African Union's Agenda 2063. In terms of the human development index (HDI), Africa has made significant progress, but strong inequalities remain.[9] Poverty, conflict and illiteracy remain major challenges (Beegle et al., 2016). Côte d'Ivoire comes first in the HDI ranking, even ahead of the island states.

HDI, a composite index based on the three indicators of life expectancy, education and income, certainly has had significant progress in certain countries, in particular thanks to the progress in access to drinking water, sanitation, hygiene, etc. But the progress made could be reversed if efforts are not made to face the threats linked to climate change and inequalities.

9 Tabapssi, T.F. Africa facing global economic and strategic challenges: realities and perspectives. Presence Africaine 2019, 1–2(199–200):9–110.

BOX 2. Population forecasts

The United Nations[10] estimates that the world population will reach 8 billion people in 2022, and the population of sub-Saharan Africa is expected to almost double by 2050. Achieving the Sustainable Development Goals (SDGs), especially those related to health, education and gender equality, will help reduce fertility levels and slow global population growth. In most countries of sub-Saharan Africa, the share of the working age population has increased due to the recent reductions in fertility.

This change in the age pyramid offers an opportunity to accelerate per capita economic growth,[11] or generate the demographic dividend. This should motivate countries to invest in the development of their human capital through providing access to health care and quality education at all ages and by promoting opportunities for productive employment and decent work. Very often, demographic projections in Africa are underestimated owing to the underestimation of the decline in mortality and life expectancy and the overestimation of the decline in fertility. The risk of child mortality has fallen sharply.

1.3 Health system organisation structure

Regions, provinces and health districts

Table 1.3.1. Number of regions or provinces and health districts in the WHO African Region, 2000–2020, WHO/Regional Office for Africa

Year	Country	Regions or Provinces	Health districts
2000	Benin	12	77
	Equatorial Guinea	7	18
	Eritrea	6	58
	Gabon	10	51
	Gambia	7	7
	Lesotho	10	10
	Liberia	15	15
	Mauritius	11	11
	Namibia	13	35
	Nigeria	37	769
	Rwanda	5	30
	Sao Tome and Principe	2	7
	Seychelles	6	15
	Eswatini	4	4
	Zimbabwe	10	63
2011	South Sudan	10	80
2016	Burkina Faso	13	70
	DR Congo	26	519
2017	Central African Republic	7	35
	Mozambique	11	161
2019	Algeria	48	48
	Angola	18	170
	Botswana	24	24
	Cabo Verde	9	22
2019	Comoros	3	17
	Ghana	16	260
	Guinea	8	38
	Madagascar	22	114
	Mali	11	75
	Mauritania	15	57
	South Africa	9	52
	Togo	6	44
	UR Tanzania	31	195
2020	Burundi	18	47
	Cameroon	10	190
	Chad	23	126
	Congo	12	52
	Côte d'Ivoire	33	113
	Ethiopia	11	104
	Guinea-Bissau	11	11
	Kenya	47	311
	Malawi	3	28
	Niger	8	73
	Senegal	14	78
	Sierra Leone	5	16
	Uganda	15	135
	Zambia	10	109

10 World population prospects, 2022

11 Tabutin, D., Bruno Schoumaker, B. the demography of sub-Saharan Africa in the 21st Century: review of changes from 2000 to 2020, prospects and challenges to 2050. Population 2020, 2–3(75): 169–295.

There is no direct relationship between the size of a country or the number of regions and the number of health districts. A country like Gabon with nine inhabitants/km^2 that is nearly twice as small as the neighbouring Cameroon, which has 58 inhabitants/km^2 and 10 times Gabon's population, has the same number of regions as Cameroon. Gabon has also the same number of regions and health districts as South Africa, which is about 4.5 times larger in area and has 30 times its population and nearly 50 inhabitants/km^2.

By 2050, demographic changes and rapid urbanisation with more than 1.1 billion Africans living in cities will occur, but Africa has 160 million urban dwellers living in informal settlements and slums; nearly a third of its population without access to clean water, sanitation, energy or mobility facilities; and 200 million young people about to enter the labour market but with little hope of finding decent work. In such a context, local and regional authorities or regions and municipalities, are often in the front line.[12] They are the first public authorities to have to deal with the consequences of situations arising from poverty and delays in the provision of infrastructure and basic services. This is also why most African local and regional governments welcomed the adoption of the 2030 Agenda and its SDGs and considered it as a possible way to make up for lost time in improving the living conditions of African populations, so that no one is left behind. The internal organisation of countries and the very diverse realities explain the creation of health districts. It is about the supply of health care services and their availability in the country and the level of income of the population.

The "United cities and local government report" highlights the key actions to integrate local and regional authorities in the implementation of the SDGs. These include better management of urbanisation and the interconnection of villages, medium-sized cities and large towns; allocation of adequate financial resources, combining decentralisation of powers with decentralisation of resources; and the creation of a network of local authorities.

12 United Cities and Local Governments. The localisation of global agendas: how local action is transforming cities and territories. GOLD V Regional Report on Africa, 2020.

References

1 World Population Prospects. The 2022 Revision

2 Population Reference Bureau (2013)

3 According to UN regions (2019)

4 John F. May and Jean-Pierre Guengant; Demography and economic emergence of sub-Saharan Africa, 2000

5 Population Reference Bureau (2013)

6 Rodrigo Deiana, Arthur Minsat (OCDE, Paris). Labour market consequences of Africa's demographic dividend, 2018

7 Africa's economic prospects, 2017

8 IMF, Rethinking fiscal policy: public finance and equity in a transformed world. Finance & Development, International Monetary Fund Quarterly, March 2022, 59.

9 Tabapssi, T.F. Africa facing global economic and strategic challenges: realities and perspectives. Presence Africaine 2019, 1–2(199–200):9–110.

10 World population prospects, 2022

11 Tabutin, D., Bruno Schoumaker, B. the demography of sub-Saharan Africa in the 21st Century: review of changes from 2000 to 2020, prospects and challenges to 2050. Population 2020, 2–3(75): 169–295.

12 United Cities and Local Governments. The localisation of global agendas: how local action is transforming cities and territories. GOLD V Regional Report on Africa, 2020.

SECTION II

GPW 13 TRIPLE BILLION TARGETS – UHC, PROTECTION FROM HEALTH EMERGENCIES, HEALTHIER POPULATIONS

Section summary

Making quality health services available for all and ensuring people are not pushed into poverty by health care costs are the main objectives of universal health coverage (UHC). As proposed by the United Nations, UHC could be called a practical expression of the right to health care for all. To achieve the goal of universality, there are measurable indicators to monitor. In the WHO African Region, even though great efforts have been made, by reaching only 46% of the population health care does not yet even cover every second citizen.

By 2021, reports were pointing out the deterioration in household financial protection, particularly because of falling incomes and rising poverty and inequality, meaning a movement away from UHC. In some low-income countries where services are very limited, the scope of health expenditure also is limited. The Abuja Declaration calls for the mobilisation of more resources from the government for the health sector in African countries.

The level of the family planning need among women aged 15–49 years satisfied with modern methods is one of the indicators of inequalities in reproductive health service coverage. It shows that in the Region only 56.3% of the women living in a couple or marriage relationship used family planning in 2020 compared with more than 75% on average in the rest of the world. For antenatal care and childbirth, families in urban and rural areas do not always have access to qualified health personnel, which compromises the well-being and future of children. Protecting the health of both newborns and adults requires immunisation, the coverage of which is declining worldwide and in Africa as well. This substantial decline of immunisation has been accentuated by the COVID-19 pandemic, which pushed back the targets to be reached and forced states everywhere to redouble their efforts to catch up on immunisation but with few resources available to them.

Tuberculosis (TB) treatment coverage, on the other hand, has shown an increase since 2014, although some countries are still lagging despite the free access to the drugs. In fact, only 57% of the affected patients are covered by treatment. The global response to HIV/AIDS has produced noticeable effects in the WHO African Region. By the end of 2017, a total of 15.3 million people in the WHO African Region living with HIV had access to lifesaving antiretroviral drugs. But malaria continues to strike mainly pregnant women and children, particularly in Africa.

Significant progress has been made in the universal access to basic water supply, sanitation and hygiene services, but considerable gaps remain in the quality of the services provided and there are inequities between and within countries. The WHO African Region remains the Region with the lowest coverage of water, sanitation and hygiene services with only 23% of the population having access to at least basic sanitation. Tobacco is the leading preventable cause of death worldwide, and Africa could become a playground for tobacco companies.

The COVID-19 crisis has demonstrated that more needs to be done to prepare for the next pandemic and public health emergencies. The frequency and pervasiveness of epidemics, disasters and other public health emergencies in Africa require substantial investments in the preparedness capacity in all countries. But while investing in emergency and disaster preparedness should be guided by global frameworks such as the International Health Regulations (2005) (IHR (2005)), it is the responsibility of each government to fund its needs. What is inescapable is that these actions require collaboration between countries and regional economic communities; financial, material and effective human resources; multidisciplinality and intersectorality in approaches; and certainly good leadership. The WHO African Region experiences more epidemics than any other part of the world. Before the emergence of COVID-19, the top five causes of epidemics were cholera, measles, yellow fever, meningococcal meningitis and influenza.

The encourageing news in pursuing the goal of a healthier population in the Region is that the prevalence of stunting among under-five children has been dropping in the Region since 2000, though slowly. Almost 80% of the countries have a high or very high prevalence of stunting among under-five children. Undernutrition is responsible for about 45% of the deaths of children in this age group in the low-income and middle-income countries. Regional data show a decline in overweight levels from 6.04% to around 4.54% from 2000 to 2021. This clearly shows that the aim of reducing overweight levels by 50% by 2025 might not be realised if nothing is done about it.

Suicide remains one of the leading causes of death worldwide. Its 5.7% decline in the Region over 2015–2019 was better than the global average decline of 3.2%. In the WHO African Region, the suicide level seems to be alarming in southern Africa. While the link between suicide and mental disorders is well established, many suicides occur during a crisis for the victim that he or she lacks the ability to cope with.

Africa missed the SDG 3.6.1 target of halving the number of global deaths and injuries from road traffic accidents by 2020 and, furthermore, estimates show that the number of cars on the road will likely double between 2015 and 2030.

Consumption of beer has been rising globally and in 2019 it increased for the second year in a row, supported by strong demand in Asia and Africa alongside their economic growth. That year consumers in the African and Asian regions spent more on beer purchases than in the previous year, with an increase in Africa of 5.2%.

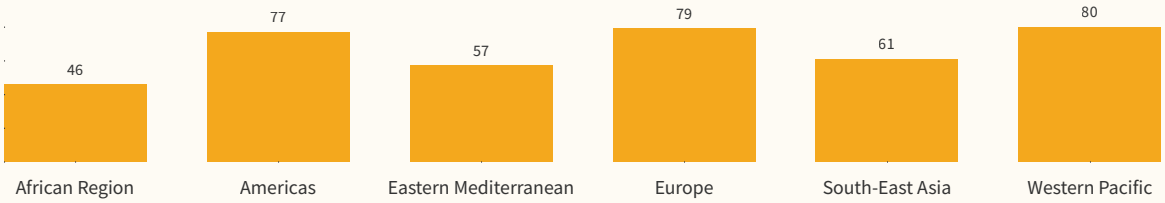
The global ambition of achieving net zero greenhouse gas emissions by 2050 is an added dimension for the energy sector. African countries are particularly well placed to take advantage of technological benefits from these efforts and attract increasing flows of green finance.

2.1 Universal health coverage

2.1.1 SERVICE COVERAGE

Service coverage index

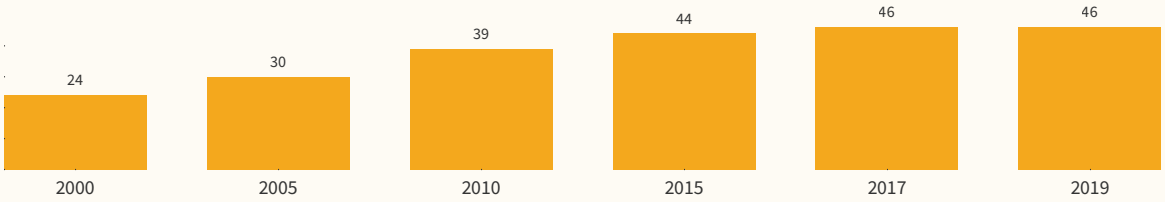
Figure 2.1.1.1. Service coverage index in the WHO regions, 2019, WHS2022



UHC means making quality health services available for all, ensuring that people are not pushed into poverty by health care costs. The construction of the UHC service coverage index (SCI) is based on 14 indicators extracted from various sources and organised into four broad categories of service coverage, namely reproductive, maternal, newborn and child health; infectious diseases; noncommunicable diseases; and service capacity and access. These indicators are meant to be indicative of the service coverage and should not be interpreted as a complete or exhaustive list of the health services or interventions that are required to achieve UHC.

During 2000–2019 substantial progress was made worldwide in the UHC SCI levels, especially in Asia and Africa.[1] In 2019 UHC SCI across the six WHO regions ranged from 46 to 80, with an average of 68. The WHO African Region, with an index of 46, is considered to have average UHC, as is the Eastern Mediterranean Region, with an SCI of 57. The regions of South-East Asia, the Americas and Europe with indices of 61, 77 and 79, respectively, are considered to have high UHC coverage. Only the Western Pacific Region, with an index of 80, is considered to have very high UHC.

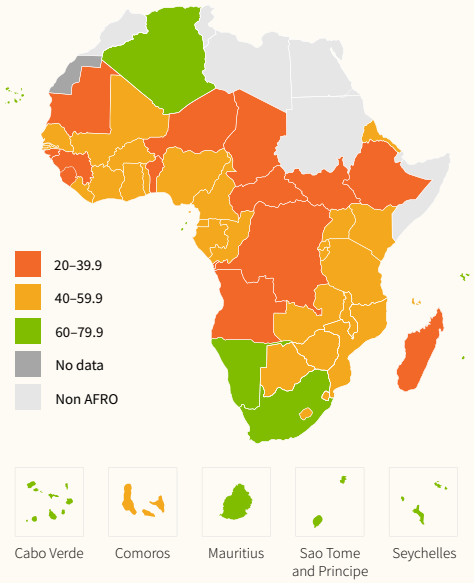
Figure 2.1.1.2. Service coverage index in the WHO African Region, 2000–2019, WHS2022



SCI rose from 45 to 68 globally between 2000 and 2019 and from 24 to 46 in the WHO African Region. The goal of the service coverage dimension of UHC is to help ensure that people in need of promotive, preventive, curative, rehabilitative or palliative health services receive them, and that the services are of sufficient quality to achieve potential health gains. Africa still has more than half of its population without access to quality health services and will have to increase its efforts in the face of the financial constraints, environmental challenges, wars and disasters, but also a growing population.

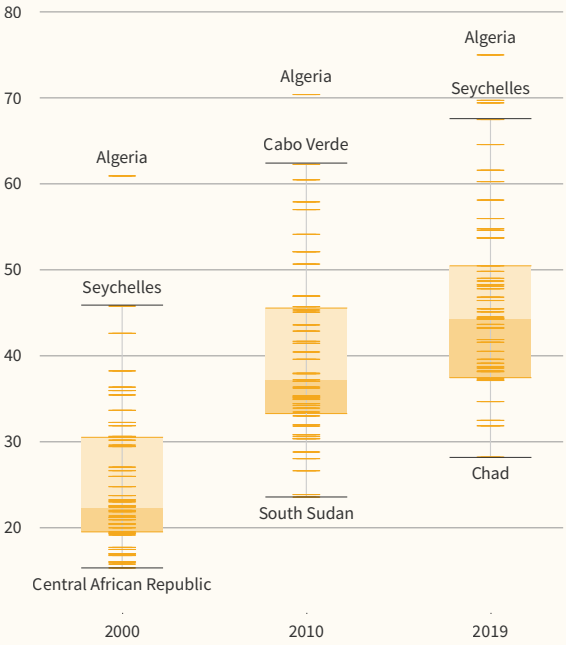
1 WHO and the World Bank; Tracking universal health coverage; 2021 Global Monitoring Report

Figure 2.1.1.3. Service coverage index in the WHO African Region, 2019, WHS2022



The relationship between SCI and GDP per capita suggests a link between income and the coverage of essential health services. The average SCI score observed in low-income countries seems to be lower than that in high-middle-income countries. Countries in southern and eastern Africa had better SCI scores than most other countries in 2019.

Figure 2.1.1.4. SCI box plot in the WHO African Region, 2000, 2010 and 2019, WHS2022

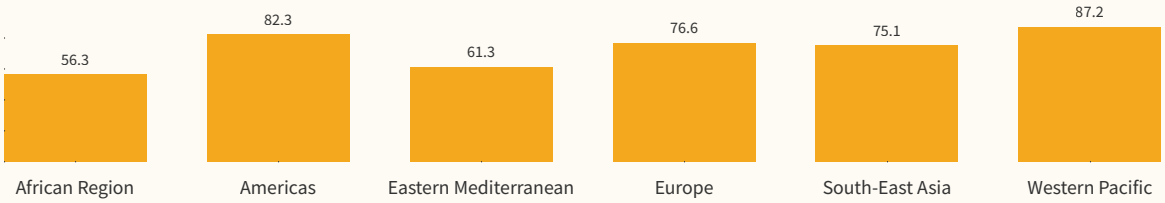


Analyses at the country level indicate that regional performances in 2019 and progress over 2000–2019 mask the considerable variations across the countries. Despite the progress made, the constraint of limited resources means that some countries fall short in fulfilling the requirements of the ambitions of UHC in some of its dimensions such as the size of the population covered, services offered etc.

The average SCI has improved compared to the 2000s, but the bottom quartile of the countries has widened, creating a disparity between this group of countries with a larger gap in service coverage index in 2019. On the other hand, countries with a higher index made more progress than those with a lower index. Seychelles and Algeria stood out from among the countries in the top quartile.

Need for family planning satisfied with modern methods among women aged 15–49 years who are married or in a union

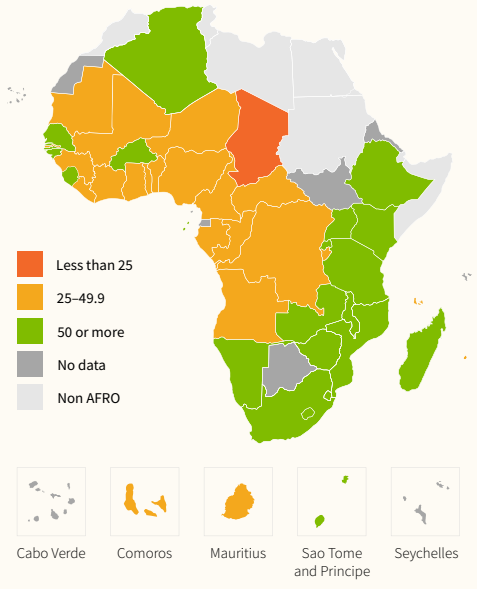
Figure 2.1.1.5. Need for family planning satisfied with modern methods among women aged 15–49 years who are married or in a union (%) in the WHO regions, 2020, WHS2022



The need for family planning satisfied with modern methods in women aged 15–49 years who are married or are in a union is one of the indicators of inequalities in reproductive health service coverage. Reproductive health, maternal health, child immunisation and management of childhood illnesses are part of a continuum of health services that is used in identification of inequalities between population subgroups.

In Africa, only 56.3% of the women living in a couple or are married used family planning in 2020 compared with more than 75% on average in the rest of the world. At the regional level, countries can be divided into three groups, with just Chad in the least advanced group in terms of family planning, almost the entire East and Southern Africa subregion, along with a few countries in West Africa, in the group with the highest rates of family planning, and the rest of the countries in Central Africa and a large part of West Africa in the intermediate group, in which 25–50% of the family planning needs of women of reproductive age and in a union are satisfied.

Figure 2.1.1.6. Need for family planning satisfied with modern methods among women aged 15–49 years who are married or are in union (%) in the WHO African Region, 2012–2020, WHS2022

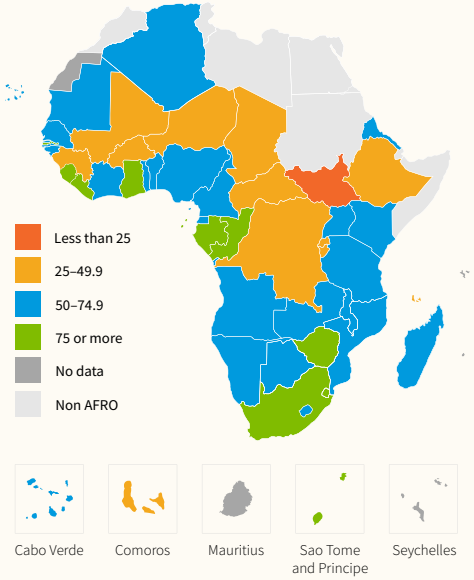


The prevalence of modern methods of contraception among married women of reproductive age has increased globally by just a little more than two percentage points over the past 10 years. The slowness of this increase is explained by the limited choice of contraceptive methods; limited access to services, especially for the young, poorest and unmarried people; fear or experience of side effects; cultural or religious barriers; low quality of available services; preconceptions of users and also providers against certain methods; and gender-related barriers to accessing services. Less than half of the family planning needs are satisfied in Central and West Africa.

There is no direct relationship between a country's income level and the need for modern contraceptive methods among women aged 15 to 49 years. Family planning needs reflect regional patterns of nuptiality, with early marriage, universal marriage, significant polygamy, extended families etc. as important in West Africa; late marriage, significant celibacy, little polygamy, more family nuclearisation etc. as important in southern Africa, and a combining of some of these factors as important in East Africa (Lesthaeghe et al., 1989; Tabutin and Schoumaker, 2004; Hertrich, 2007).

Antenatal care coverage

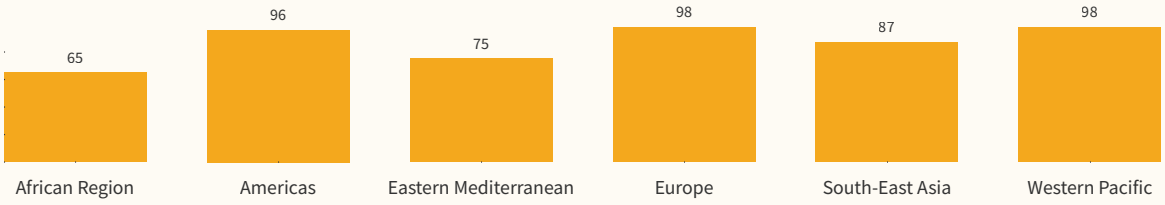
Figure 2.1.1.7. Antenatal care coverage (+4 visits), 2011–2017 in the WHO African Region, WHO/AFRO



Antenatal care coverage (+4 visits) is an important link in the continuum of care. Ensuring accessible and good quality continuity of care before and during pregnancy, at delivery and in the postnatal period reduces maternal and neonatal mortality. Major efforts are still needed in most countries in antenatal care, including ensuring an optimal number of visits, the minimum of which should be four. About 10 countries, most of which are located in areas of sociopolitical instability or war areas, do not have a reach of 50% coverage in their ANC needs. High-income and middle-income countries have better ANC coverage, although the high income and high ANC coverage relationship is not systematic for all countries at the different income levels.

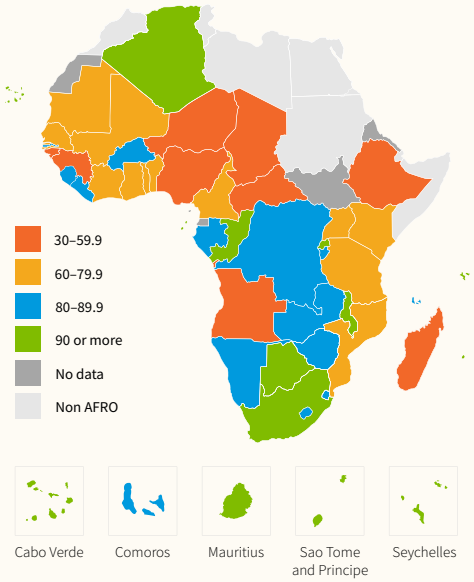
Skilled birth attendance

Figure 2.1.1.8. Proportion of births attended by skilled health personnel (%) in the WHO regions, 2015–2021, WHS2022



Despite the progress in the participation of skilled attendants during birth delivery in the WHO African Region, one third of births still do have skilled health personnel attending. The high cost of the services and the low availability of qualified health personnel are parts of the cause.

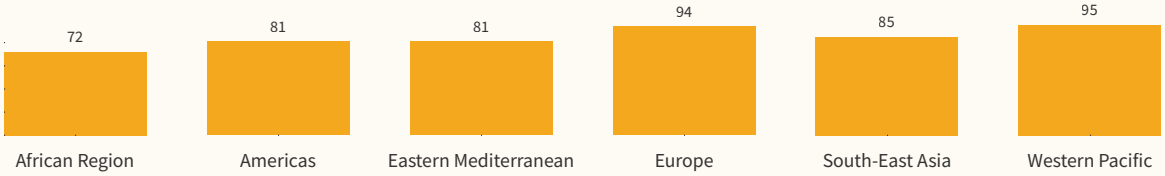
Figure 2.1.1.9. Proportion of births attended by skilled health personnel (%) in the WHO African Region, 2012–2021, WHS2022



Preventing childbirth deaths remains a huge challenge. In the United Republic of Tanzania, where 64% of childbirths have a professional attendant, 9000 women die each year from complications related to childbirth. In Kenya, a country in which professional attendants are present at 70% of the births, a maternity ward located near two of the largest slums in Nairobi helps around 27 000 mostly poor women under the age of 20 years to give birth every year. Nigeria has a health care professional present in 43% of births and is witnessing increasing cases of obstetric fistula at levels of 800 000 each year caused by problems during childbirth. About three quarters of the countries in the Region have a skilled birth attendant coverage above 70%.

DTP3 immunisation coverage for children aged 1 year

Figure 2.1.1.10. DTP3 immunisation coverage for children aged 1year (%) in the WHO regions, 2020, WHS2022



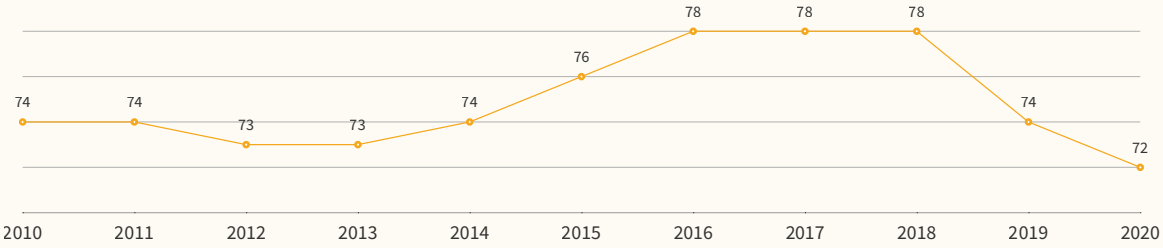
The minimum immunisation schedule recommended by WHO for all countries for DTP3 coverage of 90% at the national level and 80% at the district[2] level is far from being applied for all children in the WHO African Region. The oldest vaccines in the expanded immunisation programme such as BCG and vaccines against diphtheria, tetanus, whooping cough and measles benefit less than half of the children.

Globally immunisation coverage declined over 2019–2020 from 86% to 83%. It is estimated that 23 million children under the age of 1 year have not received basic vaccines, the highest figure since 2009. Of the 23 million children, more than 60% live in 10 countries that include Angola, the Democratic Republic of the Congo, Ethiopia and Nigeria, which are in the WHO African Region. In 2020, the number of completely unvaccinated children increased by 3.4 million.

The decline in vaccination coverage, particularly among children living in fragile environments where access to immunisation services is often difficult, is explained by the increase in misinformation and problems related to the COVID-19 pandemic such as disruption of services and the supply chain, reorganisation of resources and introduction of COVID-19 containment measures that have limited access to and availability of immunisation services. For UNICEF,[3] this is a red flag for children's health. It is the largest uninterrupted decline in child immunisation in a generation and it is not abating. It is imperative to make up for lost time for the millions of children who have not been immunised, or we will inevitably see more outbreaks of vaccine-preventable diseases, more sick children and more strain on health systems already under strain, and the consequences could be counted in human lives.

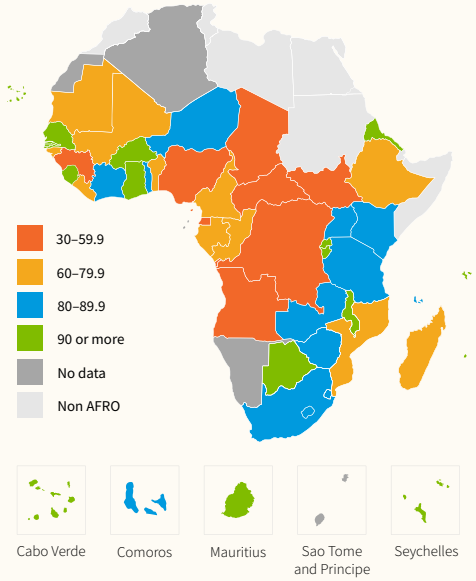
2 WHO/UA; Fulfilling the promise: ensuring vaccination for all in Africa; ministerial Conference on immunisation in Africa; 2016
3 WHO-UNICEF Joint Statement, GENEVA/NEW YORK, 15 July 2022

Figure 2.1.1.11. DTP3 immunisation coverage for children aged 1 year (%) in the WHO African Region, 2010–2020, WHO/UNICEF



The lowest rates of DTP3 vaccination in 2020 were in the WHO African Region with 72% coverage for children under 1 year old. A total of 14 countries had coverage levels below this and three of them[4] had lower than 50% coverage. DTP3 immunisation coverage in children aged 1 year has changed little over the past 10 years, although it has decreased slightly since 2018 and continued that way even with the COVID-19 crisis.

Figure 2.1.1.12. DTP3 immunisation coverage for children aged 1 year (%) in the WHO African Region, 2020, WHO/UNICEF



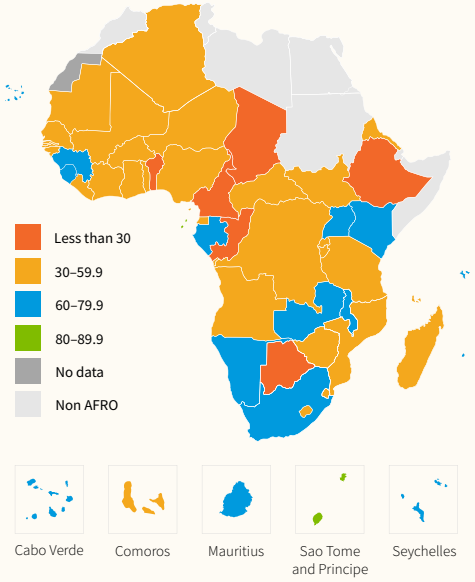
Disparities in DTP3 immunisation exist among the countries in the Region. The countries from the Central African subregion have the lowest coverage rates with the majority at lower than 60%. The Southern and Eastern African countries have the highest rates with most of them at more than 80% coverage. West African countries are in between, with diverse situations between countries.

Many countries need to intensify efforts to catch up with routine immunisation and expand outreach services in underserved areas to reach children who have missed out on immunisation and implement campaigns to prevent disease outbreaks.

4 Central African Republic, Guinea, South Sudan.

Care seeking for under-five children with suspected pneumonia

Figure 2.1.1.13. Care seeking for children with symptoms of pneumonia in the WHO African Region, 2010–2019, WHO



Pneumonia continues to be one of the leading causes of death in under-five children globally, even if the implementation of safe, effective and affordable interventions has reduced mortality from this disease.

In general, care seeking for children with symptoms of pneumonia is still quite low in the Region. Only about 10 countries in the Region have acceptable levels of care provision for children with symptoms of pneumonia, most of which are in Eastern and Southern Africa. Most of the countries in the Region are in the 30% to 60% range of coverage for care seeking for children with symptoms of pneumonia.

TB treatment coverage

Of the 10 million TB cases diagnosed worldwide each year, a quarter are in Africa. TB spreads faster in countries where the proportion of people living with HIV is high. Since 2014, the TB treatment coverage curve has shown an upward trend. Despite the free access of TB drugs, many countries are still lagging, with treatment covering only about 57% of the people affected by the disease.

Figure 2.1.1.14. TB treatment coverage (%) in the WHO African Region, 2010–2019, WHO

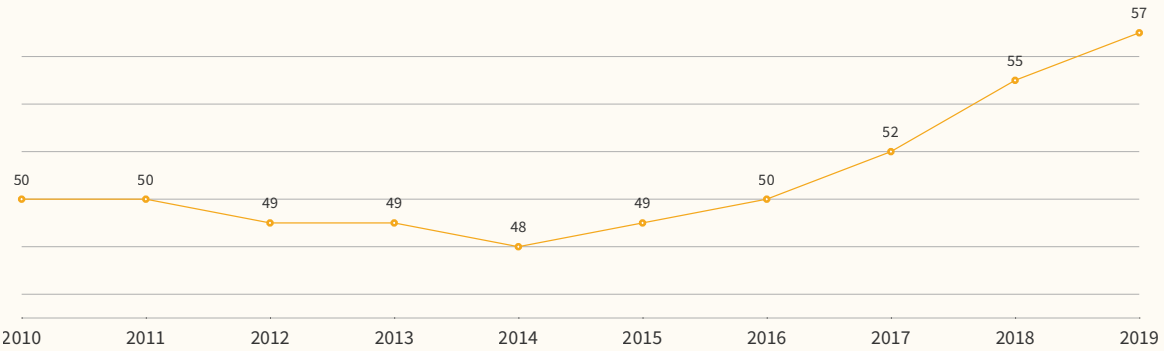
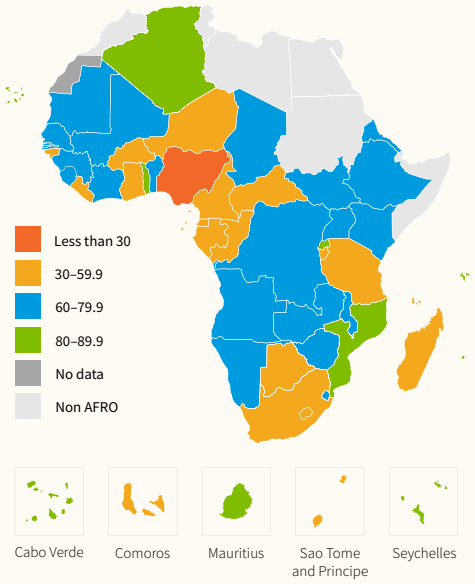


Figure 2.1.1.15. TB treatment coverage (%) in the WHO African Region, 2019, WHO

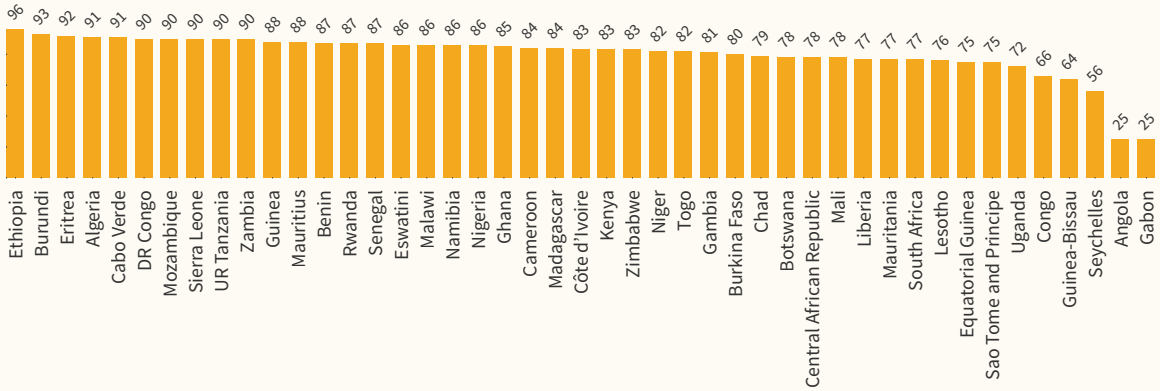


Africa accounts for 500 000 of the 1.2 million annual global deaths attributed to TB. The most affected countries are the Democratic Republic of the Congo, Nigeria and South Africa.

Countries with well-organised health care systems or good economic growth do not necessarily have good TB treatment coverage, meaning that other factors also play a role.

Only seven countries manage to treat eight out of their 10 patients affected by TB and another seven have lower treatment coverage than one out of two patients.

Figure 2.1.1.16. TB treatment success rate (%) in the WHO African Region, 2017, WHO

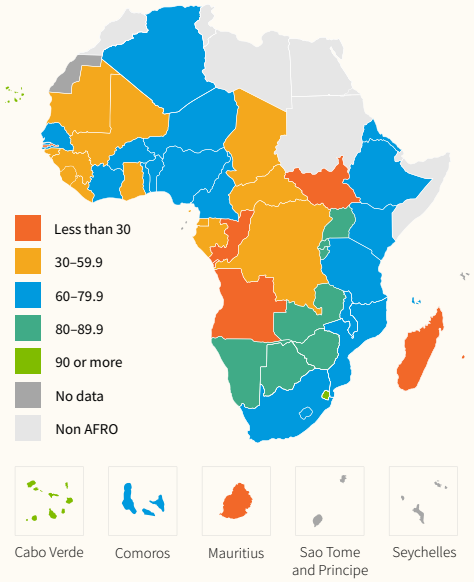


One of the targets of the SDGs is to end the epidemic TB. Africa has the highest per capita incidence of TB in the world. Consequently, the eradication of the disease in Africa will have a significant positive impact in achieving global eradication goals.

Fewer than half of the countries in the Region meet the 85% TB treatment success rate recommended by WHO. There seems to be no direct link between the TB treatment success and the economic growth of the countries. Indeed, countries with the best rates are in the lower-income or lower-middle-income groups.

HIV ART coverage

Figure 2.1.1.17. Coverage of antiretroviral therapy (ART) in the WHO African Region, 2019, UNAIDS



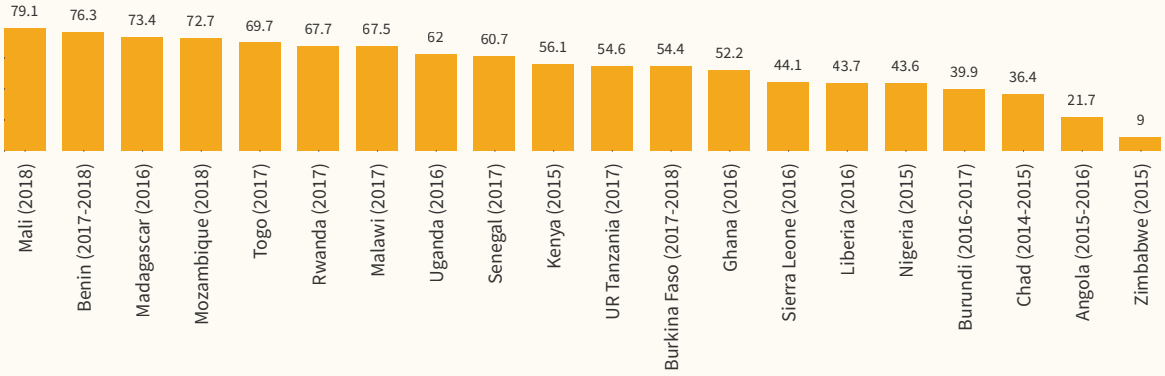
The global response to HIV/AIDS has produced noticeable effects in the WHO African Region. By the end of 2017, some 15.3 million people living with HIV in the Region had access to lifesaving antiretroviral drugs. This represented 70% of the world's population with access to ART, then estimated to be 21.7 million. A total of 15 countries in the Region are at this coverage rate or surpass it, with two countries exceeding 90%. The countries in Central Africa have lower coverage rates than the other countries.

Eastern and Southern African countries offer more access to antiretrovirals than does the rest of Africa. Effective tests, coupled with good therapeutic coverage, have made it possible to diagnose more than eight out of 10 people living with HIV, and one out of three people with HIV infection who know his or her serological status is on ART.

Some 52% of the people on ART have had their viral load suppressed. Furthermore, in the West and Central Africa subregions, 48% of people living with HIV have been diagnosed, 40% of the people with HIV who know their serological status are on ART, and 29% of the patients on treatment have had their viral load suppressed. WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) had a target of suppressing the viral load in 90% of the people living with HIV and on ART by 2020. The realisation of this ambitious goal has been compromised by the increase of the prevalence of HIV drug resistance.

Insecticide-treated net (ITN) use among people living in malaria endemic areas

Figure 2.1.1.18. Use of ITNs in the WHO African Region, latest available data, MIS, WHO



Malaria continues to strike mainly pregnant women and children, particularly in Africa. The cases were estimated to be 241 million in 2020, with 627 000 deaths. While the global proportion of under-five children and pregnant women sleeping under ITNs increased from 3% to 49% between 2000 and 2020, for Africa there has been a decline since 2017. This is attributed to reasons such the increasing investment needs in other humanitarian emergencies such as those on Ebola and COVID-19 diseases that affected the continuity of the services for malaria. However, the latest data indicate that a few countries[5] in the Region have an ITN coverage rate of more than 70%.

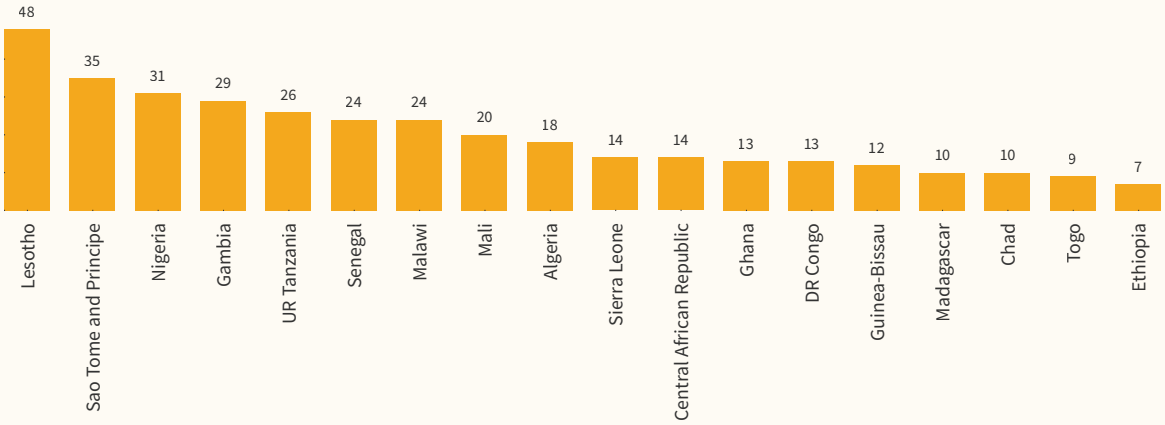
Population access to basic sanitation

Figure 2.1.1.19. Population access to at least basic sanitation (%) in the WHO regions, 2020, WHS2022

The report on the inequalities in access to water, sanitation and hygiene reveals that more than half of the world's population does not have safe sanitation services. Although significant progress has been made in the universal access to basic water supply, sanitation and hygiene services, considerable gaps remain in the quality of the services provided. It is estimated that 785 million people do not even have access to these basic services, that is one in 10 people. The data also show that in rural areas, eight out of 10 people are deprived of these services and that coverage of basic services is at least twice as high among socioeconomically advantaged groups than the poorest groups.

5 Burundi, Mali, Benin, Madagascar, Mozambique, Togo.

Figure 2.1.1.20. Population access to at least basic sanitation (%) in the WHO African Region, 2020, WHS2022

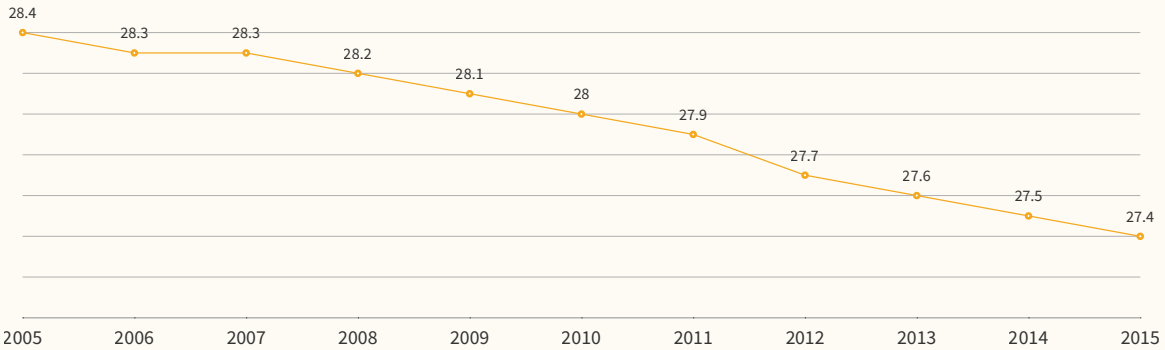


The WHO African Region has the lowest coverage of sanitation among the WHO regions, with only 23% of its population having access to at least basic sanitation. This level represents half of the coverage in South-East Asia and a third of Europe's. The socioeconomic level of countries is gauged by the universality of access by their citizens to basic services such as water supply, sanitation and hygiene.

If nothing is done to improve sanitation coverage, the goal of having universal access to basic sanitation services by 2030 will not be achieved and diseases such as diarrhoea, cholera, typhoid, hepatitis A and intestinal parasites that should have long been eradicated will continue to affect the population of the Region. It should be noted that few data are available for this indicator and those available might be underestimated.

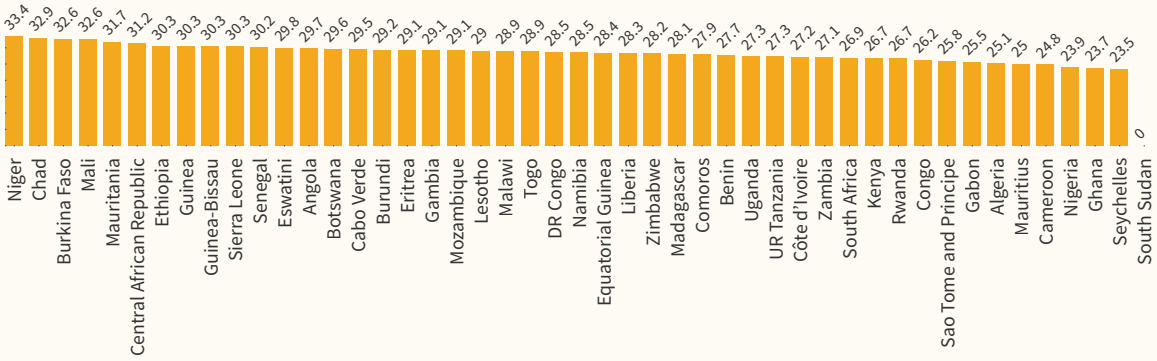
Prevalence of raised blood pressure in adults aged 18 years or older

Figure 2.1.1.21. Prevalence of raised blood pressure in adults aged 18 years or older (%) in the WHO African Region, 2005–2015, WHO



Hypertension affects 1.28 billion people worldwide, 82% of whom live in low-income or middle-income countries, including 580 million who are unaware of their condition, having never received a diagnosis. Hypertension is a major public health problem in developing countries and in Africa it affects women more than men. Both Hypertension rates for both men and women have gone down slightly over the last 10 years.

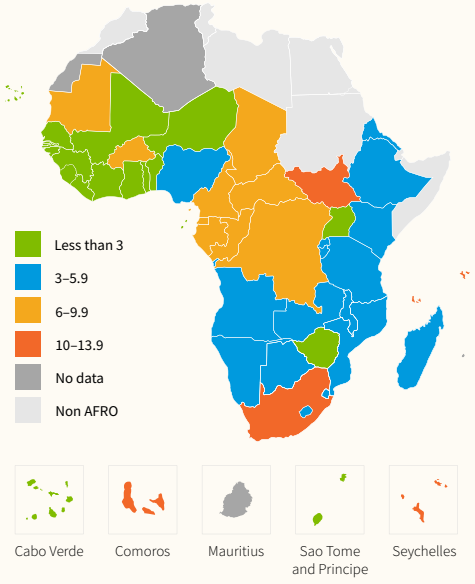
Figure 2.1.1.22. Prevalence of raised blood pressure in adults aged 18 years or older (%) in the WHO African Region, 2015, WHO



In the WHO African Region, as in all the other regions, there are differences in the prevalence of hypertension among countries, between men and women and by age. A link can be observed between the socioeconomic level of a country and its prevalence of hypertension (2015 data).

Mean fasting blood glucose in adults aged 18 years or older

Figure 2.1.1.23. Age standardised prevalence of raised blood glucose/diabetes among persons aged 18 years or older or on medication



Noncommunicable diseases (NCDs) are increasingly becoming the main cause of death in sub-Saharan Africa, where they were responsible for 37% of the deaths in 2019 compared with 24% in 2000. Their upsurge is mainly associated with weaknesses in the implementation of essential control measures such as prevention, diagnosis and care.

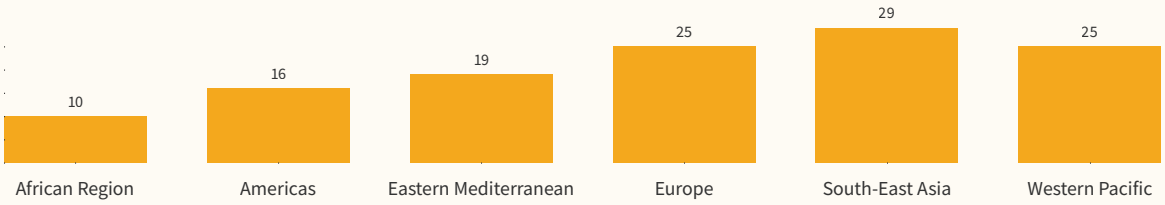
The growing burden of NCDs is a serious threat to the health and lives of millions of people in Africa and accounts for more than a third of the deaths, particularly among people under the age of 70.

In 2014, 8.5% of adults aged 18 or older had diabetes worldwide. In 2019, diabetes was the direct cause of 1.5 million deaths, to which must be added deaths due to higher than normal blood sugar levels leading to cardiovascular disease, chronic kidney disease, etc. In the WHO African Region, the number of people living with diabetes is expected to reach 47 million by 2045, up from 19 million in 2019.[6]

6 WHO Noncommunicable Disease Progress Monitor, 2022

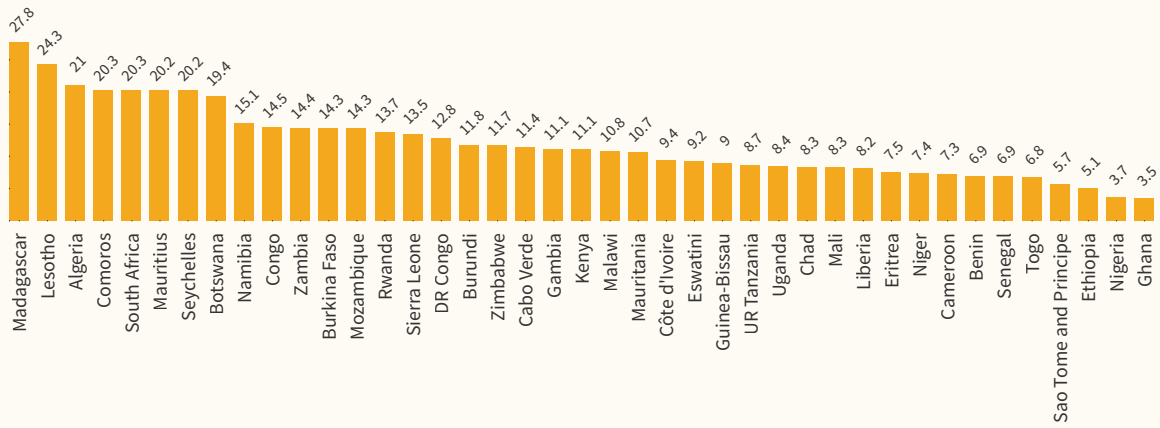
Tobacco use in the last 30 days among adults aged 15 years or older

Figure 2.1.1.24. Tobacco use in the last 30 days in adults aged 15 years or older (%) in the WHO regions, 2020, WHS2022



Tobacco is the leading preventable cause of death worldwide. Its control efforts aim to prevent young people from starting to use tobacco, to help current smokers quit and to protect non-smokers from exposure to second-hand smoke. Countries in the WHO African Region are experiencing increasing levels of tobacco use. The rapid population growth in sub-Saharan Africa and the increasing purchasing power of consumers mean that African markets are getting larger and more accessible. This is coupled with intensive efforts by the tobacco industry to develop African markets.

Figure 2.1.1.25. Tobacco use in the last 30 days in adults aged 15 years or older (%) in the WHO African Region, 2020, WHS2022

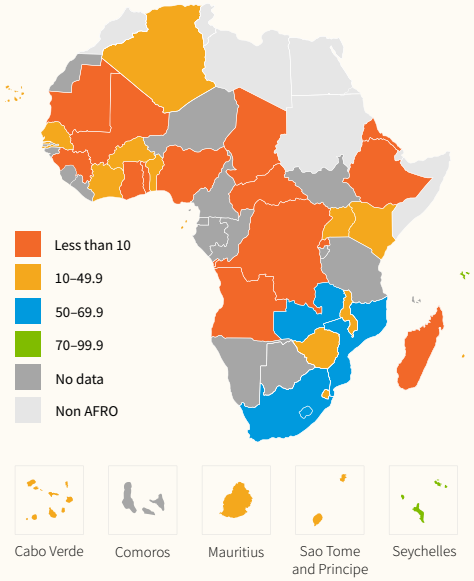


Tobacco use data from the month before the survey showed a low rate of 10% for the WHO African Region compared with the rates of 16% for the Americas and 29% for South-East Asia.

In the WHO African Region, smoking among people aged 15 years or older is highest in Madagascar (27.5%), then Lesotho (24.3%) followed by Algeria (21%). It is lowest in Ghana (3.5%), Nigeria (3.7%) and Ethiopia (5.1%). The highest income countries are in the top 10 with the highest proportions of tobacco users.

Coverage of the national cervical cancer screening programme

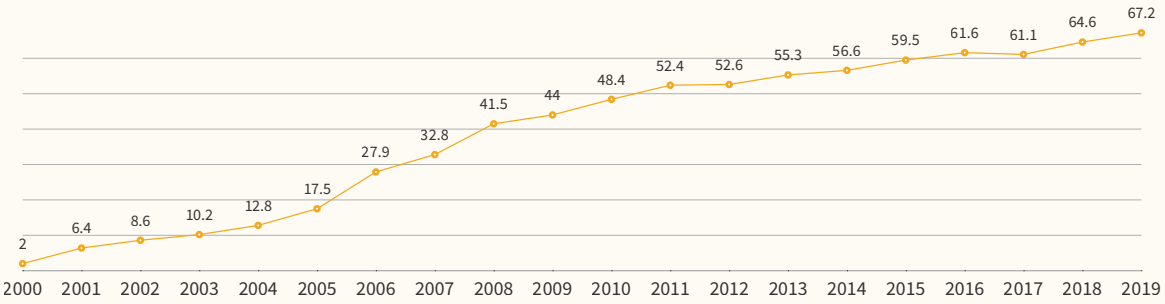
Figure 2.1.1.26. Coverage of the national cervical cancer screening programme in the WHO African Region, 2015–2019, WHO



The burden of cervical cancer weighs heavily on Africa in an inequitable way. It is on the African continent that we find 19 of the 20 countries most affected by the disease in the world. With cervical cancer rates up to six times higher in Africa than in North America, the disease is inequitable. The regional perspective has set as its guideline the suggested elimination threshold of less than four cases per 100 000 people per year, as well as the 90/70/90 targets. These targets intend that 90% of women should be fully immunised by age 15, 70% of women should be screened with high accuracy by age 35 and 90% of women with cervical disease should receive appropriate treatment and care.

Cervical cancer can be prevented by vaccinating girls aged 9 to 14 years, the age range at which the vaccine exhibits the highest immune response; by routine screening for cervical cancer for all women aged 30 to 49 years and by early treatment for those with precancerous lesions, as recommended by WHO.

Figure 2.1.1.27. Coverage of the national cervical cancer screening programme (%) in South Africa, 2000–2019, NHMIS

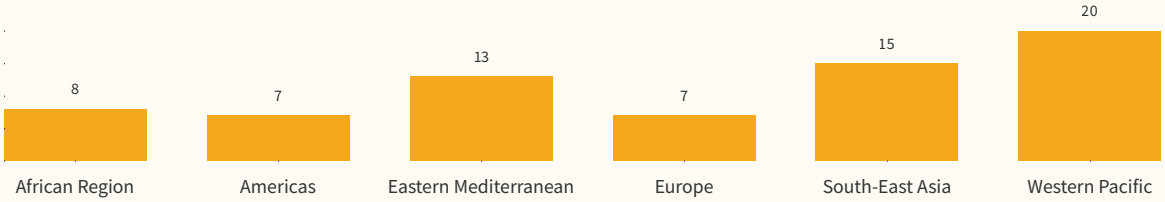


In South Africa, the national cervical cancer screening programme covered 67% of women in 2019 and has steadily grown since its establishment in 2000. The global strategy proposes that 90% of girls be fully immunised against the human papillomavirus (HPV) before the age of 15 years, that 70% of women be tested for efficient screening before the age of 35 and then again before the age of 45 years, and that 90% of women with cervical cancer receive treatment. Meeting these goals could reduce the median of the cervical cancer incidence rate of 42% by 2045, averting 300 000 deaths by 2030.

2.1.2 FINANCIAL RISK PROTECTION

Households spending over 10% of their expenditure on health

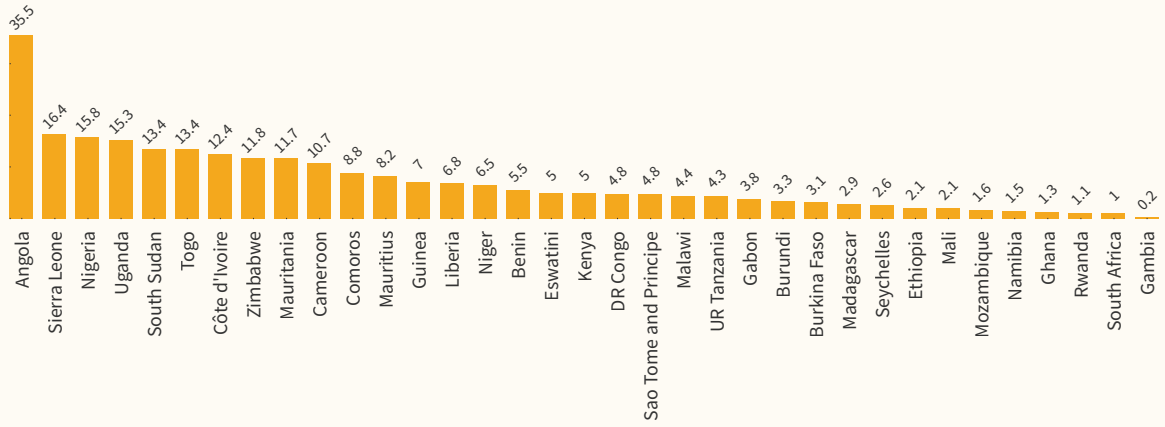
Figure 2.1.2.1. Proportion of population with the large household expenditure on health of more than 10% of the total household expenditure (%) in the WHO regions, 2017, WHS2022



According to the "Global monitoring report on financial protection in health 2015", some 926.6 million people incurred out-of-pocket health expenditure exceeding 10% of their household budget (total amount of consumption or income) in 2015.

Between 2015 and 2017, the proportion of the population whose direct health expenditure exceeded 10% of their domestic budget rose from 12.7% (940 million people) to 13.2% of the population (996 million people). The 2021 edition of the report pinpointed a probable deterioration in the financial protection of households due to the drop in income and consumption and the increase in poverty and inequality. Health expenditure is still a big load for the people in the WHO African Region. The Region comes third after Europe and the Americas with 8% of its population incurring direct health expenditure exceeding 10% of their household budget in 2017.

Figure 2.1.2.2. Proportion of population with the large household expenditure on health of more than 10% of the total household expenditure (%) in the WHO regions, 2017, WHS2022

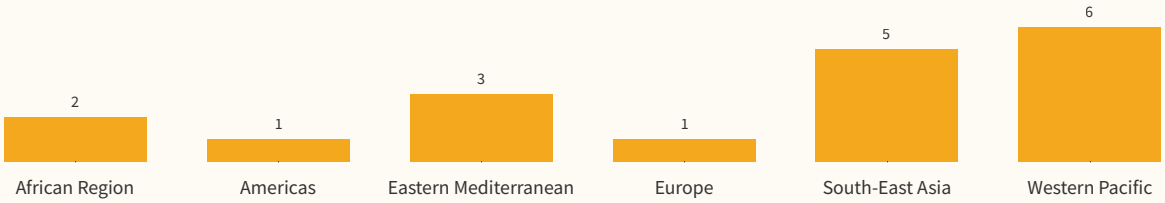


The world population with direct expenditure on health exceeding 10% of household expenditure increased by an average of 3.6% per year over 2000–2015. In that period, the WHO African Region experienced the highest increase in direct expenditure in terms of the number of people affected, averageing 5.5% per year.

Angola stands out with its rate of 35.5% for the population with direct health expenditure exceeding 10% of household expenditure. It is followed by Sierra Leone with 16.4%. There is a relationship between a country's income level and the financial protection in health for its people, with implications on the number of its people with of out-of-pocket health spending exceeding 10% of household expenditure.

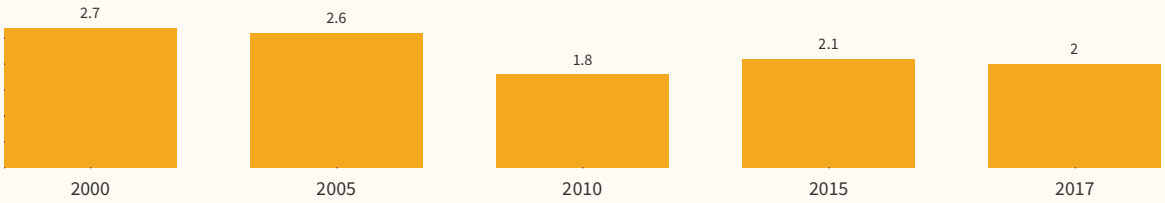
Households spending over 25% of their expenditure on health

Figure 2.1.2.3. Proportion of population with a large household expenditure on health of greater than 25% of the total household expenditure (%) in the WHO regions, 2017, WHS2022



All regions except North America have seen an increase in the number of people incurring expenses above the 25% threshold. The 2019 WHO and World Bank report on financial protection in health highlights the fact that more than 200 million people incurred out-of-pocket health expenditures that exceeded 25% of the household budget, that is the total amount of consumption or revenue. The proportion of households spending more than 25% of their income on health varies across regions, from 1% in the European and Americas regions to 6% in the Western Pacific Region.

Figure 2.1.2.4. Proportion of the population with a large household expenditure on health of greater than 25% of the total household expenditure (%) in the WHO African Region, 2000–2017, WHS2022

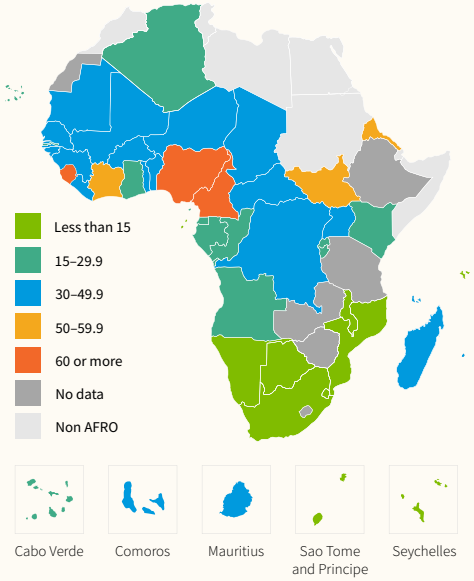


The proportion of households spending more than 25% of their household income on health declined in the WHO African Region between 2000 and 2017, going from 2.7% to 2%. Angola had the highest proportion of households (12.5%) with health expenditure exceeding the threshold of 25%, followed by Zimbabwe (7%).

According to the World Bank's Operations Evaluation Department, Zimbabwe was affected by the civil service reform that reduced the number of government staff. At the same time the government was unable to control the budget deficit, which was financed by borrowing at high interest rates and for which the interest payments reached a quarter of all government revenue. Moreover, Zimbabwe had been more severely hit by the AIDS epidemic than any other country, according to UNAIDS.

Out of pocket spending as a percentage of the total health expenditure

Figure 2.1.2.5. Out of pocket spending as a percentage of the total expenditure in the WHO African Region, 2014, WHO



Experts recognise the difficulty of data comparison between countries, given the extreme differences in health systems and economic context. However, a certain number of parameters have been adopted on a global scale to assess the progress made towards UHC.

The global figures show that:

– Eight hundred million people devote more than 10% of their budget to health expenditure;

– One hundred million people fall into extreme poverty each year from having to incur excessive health care costs;

– Africa and Asia represent 97% of the world's population impoverished by direct health expenditure.

Nigeria, Cameroon and Sierra Leone are the three African countries where in 2014 out-of-pocket health expenditure accounted for the highest portion of the total household expenditure with levels above 60%.

Out of pocket spending as a percentage of the total health expenditure is an important indicator of the progress of UHC programmes, which aim specifically to reduce personal expenditure on health care in order to minimise the risks of impoverishment linked to health expenditure.

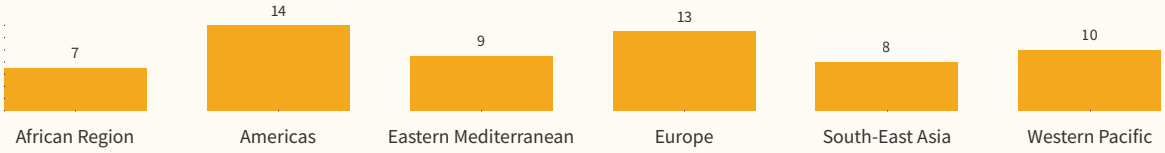
All countries in the WHO African Region have agreed to ensure that by 2030:

– All populations, regardless of individual income, expenditure or wealth, place of residence or gender, benefit from at least 80% coverage of essential health services;

– Everyone benefits from 100% coverage of the financial risk linked to direct payments for health services. But the question of funding remains crucial.

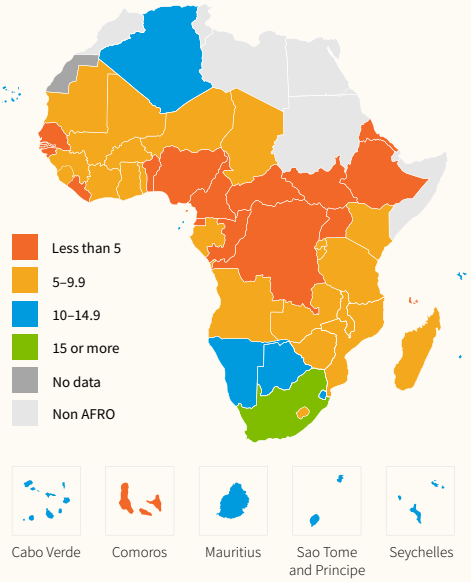
Government health expenditure as a percentage of total government expenditure

Figure 2.1.2.6. Government health expenditure as a percentage of the total government expenditure in the WHO regions, 2019, WHS2022



Public spending on health plays a central role in UHC, but there is no clear pattern in the priority accorded to health by African governments. The Abuja Declaration is a call for mobilisation of more resources from public coffers for the health sector, and African governments refer to this declaration in their health sector objectives and policy documents.

Figure 2.1.2.7. Government health expenditure as a percentage of the total government expenditure in the WHO African Region, 2019, WHS2022



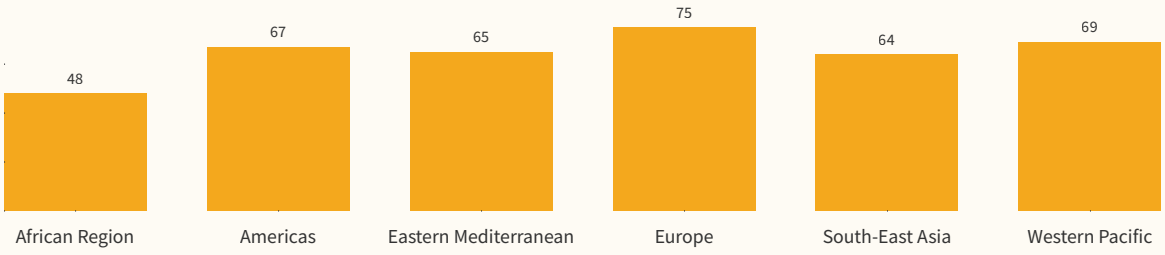
Although Africa has experienced better economic growth than other regions, it is known that when African countries get richer public spending on health does not automatically increase. In addition, development assistance for health has crowded out government resources and created donor dependency. The WHO African Region has the least government health expenditure as a percentage of total government expenditure compared with the other regions, and only one of its countries (South Africa) has attained the objective set by the Abuja Declaration to allocate at least 15% of the total government expenditure on health.

2.2 Protection from health emergencies

2.2.1 PREPAREDNESS FOR IHR CAPACITIES

IHR index

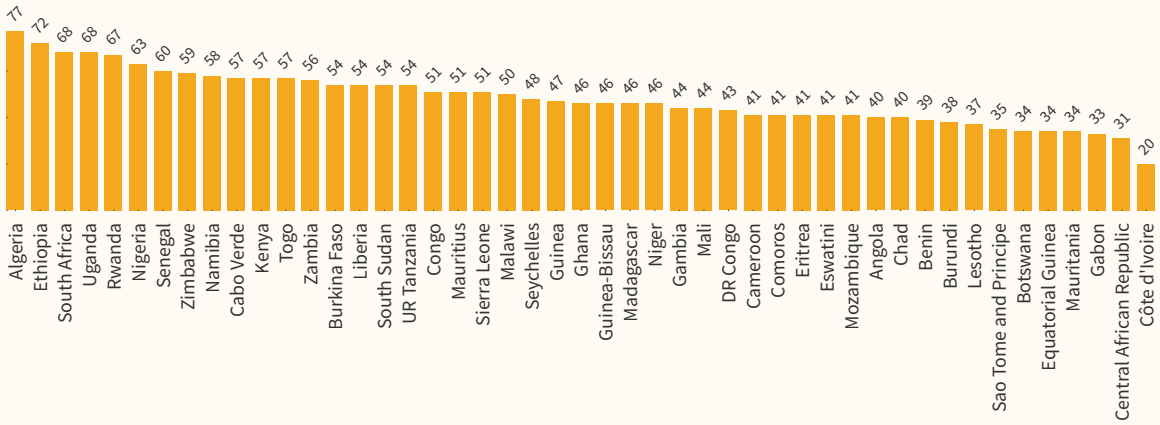
Figure 2.2.1.1. Average of 13 IHR core capacity scores in the WHO regions, 2021, WHS2022



IHR (2005) is an essential instrument for ensuring global health security. IHR capacities in the WHO African Region are reported through the "State party self-assessment annual report" and periodically using an independent joint external evaluation. In addition, the After action reviews (AAR) and simulation exercises (SimEX) are part of the IHR monitoring and evaluation framework to complement the "State party self-assessment annual report" and the joint external evaluation in the development and implementation of national action plans for health security. The WHO African Region has a lower score than that of the other regions (49%) and is far behind South-East Asia, the second one from the last, while Europe has real governance on the issue with a score of 75%.

The COVID-19 pandemic health crisis has demonstrated that more needs to be done to prepare for and respond to public health emergencies, and one of the ways to do this is through strengthening the resilience of health systems. Moreover, capacity building and collaboration between countries are needed to strengthen global preparedness for epidemics.

Figure 2.2.1.2. Average of 13 IHR core capacity scores in the WHO African Region, 2021, WHS2022

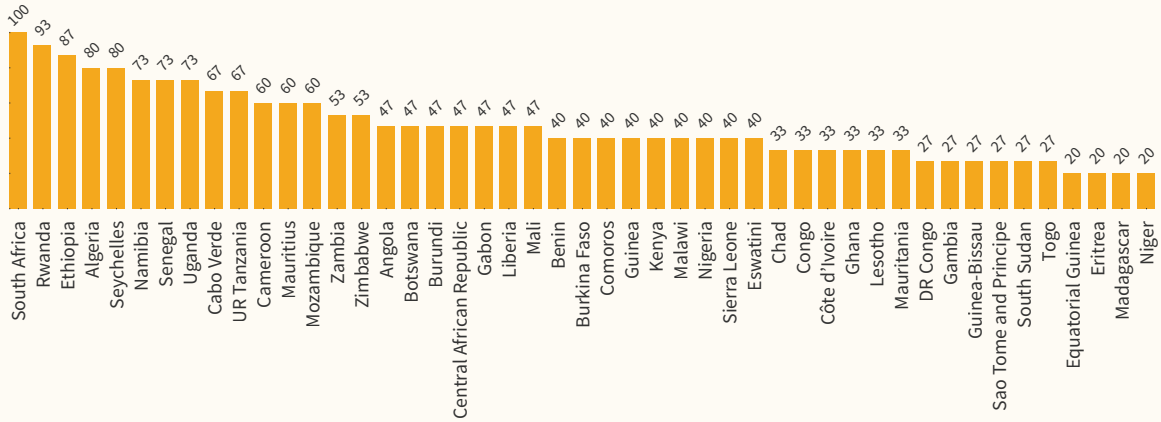


The COVID-19 pandemic revealed the global differences in response to health emergencies. Past disparities in detecting, assessing, reporting and responding to international health emergencies led to the signing of IHR (2005).

Almost all Member States in the Region are implementing IHR (2005) to strengthen national capacities and have submitted annual IHR self-assessment reports for 2017–2021, with the regional average score being 49. Only 13 countries had at least eight core capacities at the developed level or more advanced level in 2021. In addition, all Member States have completed joint external evaluations of their IHR capacities. The mapping of the 19 joint external evaluation technical areas to health systems building blocks reveals significant gaps in leadership and governance, medicines and technologies, as well as multisectoral collaboration, which is crucial, considering the importance of the One Health approach.

National legislation, policy and financing score

Figure 2.2.1.3. National legislation, policy and financing score in the WHO African Region, 2020, WHO



For about three quarters of the countries in the Region, the national legislation, policy and financing score was lower than 50 and only five countries had scores above 80. This points to the urgent need to develop the basic required elements to ensure appropriate preparedness, readiness and response to health emergencies in countries in the Region. The legal architecture[7] related to the obligations of IHR (2005) has various gaps, and countries have largely failed to implement the required measures, particularly in the WHO African Region.

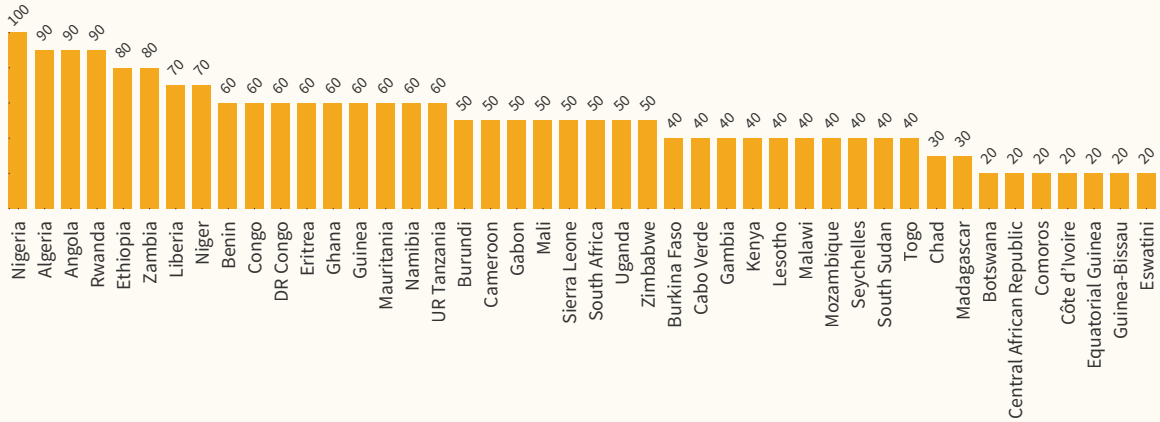
It is important to remember that almost 80% of WHO's budget is from voluntary contributions and that much of the budget is in the form of earmarked funds, which impedes holistic preparedness efforts and hampers WHO's ability to provide a global safety net. These characteristics suggest that there is limited international solidarity to help the weakest countries build capacity, and this was recognised in the 2015 "IHR Review Committee report".

The "2019 state preparedness report" shows an inadequate level of preparedness for countries in the WHO African Region, with an average score of around 40. As a result, various informal structures were created to help address these concerns, such as the Global Preparedness Monitoring Board, composed of high level independent experts and supported by WHO. Other initiatives such as the Global Health Security Programme involve private actors and international organisations. The aim was to accelerate progress, raise awareness and improve the capacity of states to comply not only with IHR (2005) but also with other international treaties and standards, through a multisectoral approach.

7 Giulio Bartolin; The Failure of 'core capacities' under the WHO International Health Regulations; British Institute of International and Comparative Law; Cambridge University Press; 2020

IHR coordination and national IHR focal point function

Figure 2.2.1.4. IHR coordination, communication and advocacy score in the WHO African Region, 2020, WHO



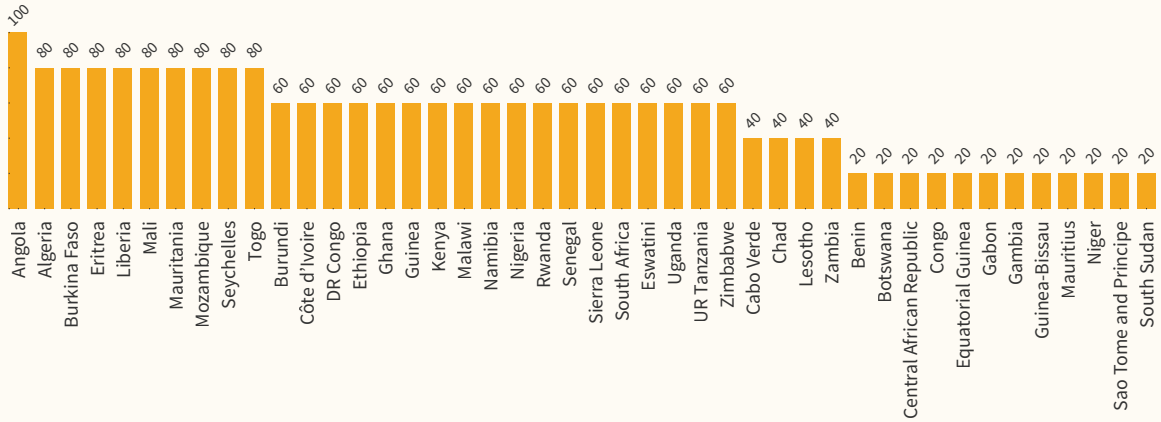
The national IHR focal point function has the responsibility to strengthen coordination, communication and advocacy regarding IHR, as well as its application, and consolidate and maintain in place a multisectoral and multidisciplinary mechanism for coordination and communication that is regularly tested and updated. The IHR coordination, communication and advocacy score shows that lots of effort is still needed in Africa. However, some countries such as Algeria, Angola, Nigeria and Rwanda are showing great achievements in that area.

To address the gaps identified, 39 Member States[8] have developed a National Action Plan for Health Security (NAPHS), that, if funded and implemented, can significantly improve health security and health system strengthening. The Member States not in this initiative are in the process of developing their own plans. The resources needed to close the gaps have been costed in the national action plans for health security indicating that an average annual budget of US$ 150 million per Member State is required.[9]

8 Except Algeria, Cabo Verde, Equatorial Guinea, Madagascar, Mauritius, Sao Tome and Principe, Seychelles and Togo.
9 WHO (WHO). The investment case for public health emergency preparedness and response (Unpublished). WHO. 2019

Zoonotic events and the human–animal interface score

Figure 2.2.1.5. Zoonotic events and the human–animal interface score in the WHO African Region, 2020, WHO



Developing and applying operational frameworks in dealing with zoonoses, emerging and re-emerging infectious diseases, antimicrobial resistance threats and environmental risk factors using the One Health approach has shown the approach's importance in tackling the latest and largest epidemics faced by Africa the last 10 years. Preparedness for such events is a priority, and Angola is top in the Region in this area with a score of 100. About one third of the countries in the Region have a score of less than 50.

The COVID-19 pandemic has shown that the study and understanding of emergencies in general requires (i) detailed analysis of the interdependence of the pertinent sectors with a transdisciplinary vision and (ii) both the production of upstream knowledge to understand the mechanisms of transmission and adaptation of a zoonotic pathogen to humans, and (iii) the development or improvement of surveillance and early detection tools downstream.

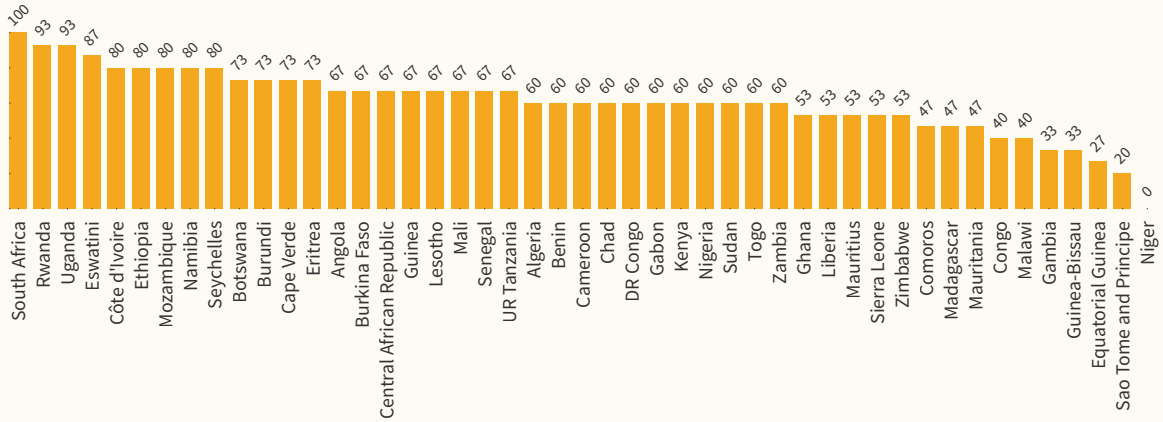
Zoonoses are one of the health risks where the deep interconnections of human, animal and environmental health are most visible. Around 60% of existing human infectious diseases are zoonotic and 75% of emerging infectious diseases, including Ebola, HIV, influenza and COVID-19 have an animal origin.[10] Controlling zoonotic pathogens at their animal source is the most effective and economic way of protecting people from them.

Africa has a rapidly growing population with a need for animal-derived foods. Demographics are also pointing to increasing urbanisation and expansion of cities into wildlife habitat. Road, rail, sea and air links increase the risk of spreading zoonotic disease outbreaks from remote, sparsely populated areas to large urban areas.

10 https://www.genevaenvironmentnetwork.org/

Laboratory score

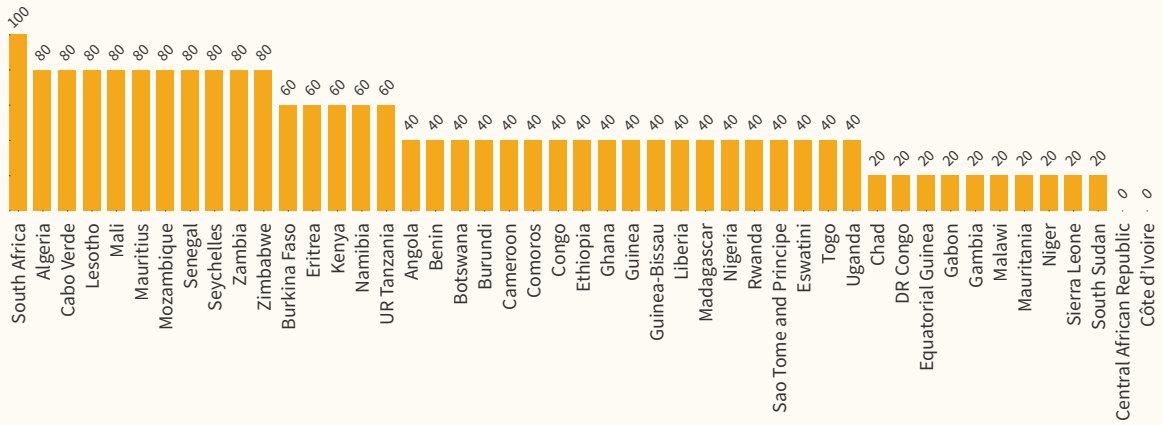
Figure 2.2.1.6. Laboratory score in the WHO African Region, 2020, WHO



The average laboratory score in the Region was 60 in 2020. The aim should be to strengthen national laboratory systems and networks for the detection, confirmation, further characterisation and monitoring of priority diseases and pathogens. Strengthening of the laboratory systems means building laboratory capacity, including through appropriate training, provision of reagents, twinning of laboratories for technology transfer and networking for sample referral. The response to COVID-19 has helped countries to develop their capacity for RT-PCR testing to detect SARS-COV-2 and also for genome sequencing of the SARS-COV-2 strains, which could help in the detection and surveillance of the integrated disease surveillance and response (IDSR) priority diseases.

Food safety score

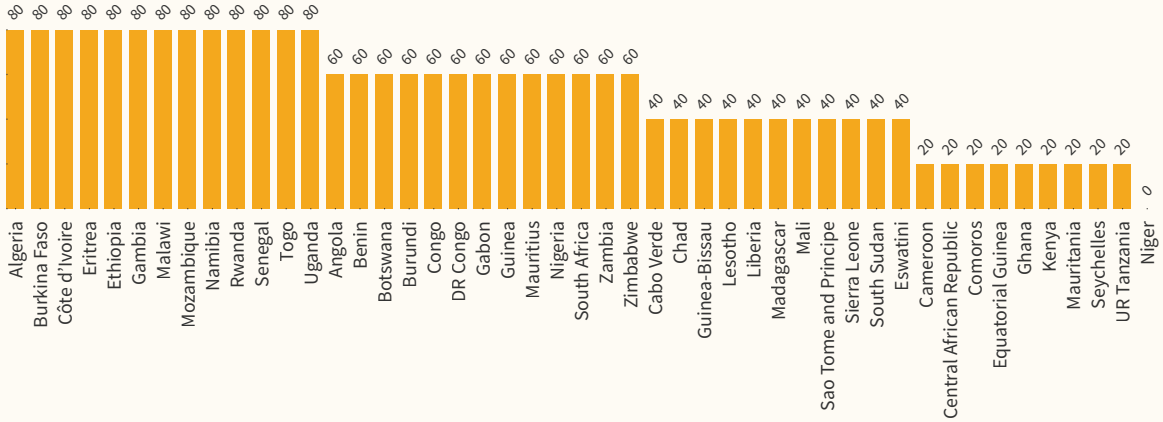
Figure 2.2.1.7. Food safety score in the WHO African Region, 2020, WHO



Less than one third of the WHO African Region countries have scores higher 50 for food safety. Major efforts still are needed in this area. Countries need to define their operational frameworks for food safety, and water quality monitoring is needed. Such frameworks might include the designation of food safety focal points in relevant sectors and the establishment of operational links between public health surveillance and officials specialised in emergency response, food safety and water, animal health and laboratories.

Human resources score

Figure 2.2.1.8. Human resources score in the WHO African Region, 2020, WHO

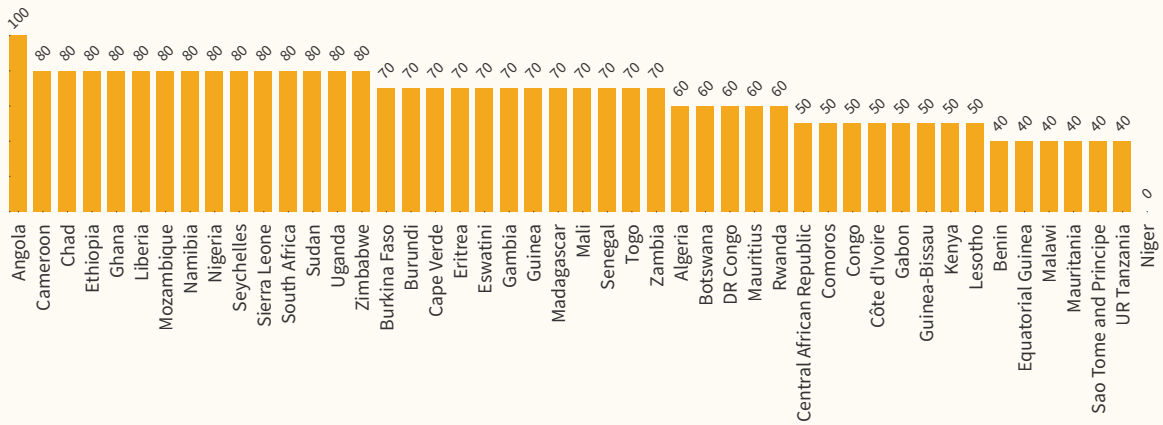


Mobilizing and retaining human resources to establish the core capacities required under IHR (2005) and to implement the disaster risk management strategy are important steps for preparedness and response. This will include training programmes in applied epidemiology related to human and animal health and designing an emergency public health workforce strategy.

Almost half of the countries in the Region have a score above 50 for human resources. That is an asset in promoting of south–south and north–south cooperation and in mobilizing regional and global health personnel who can be deployed in emergencies. Bringing more countries to a higher score will contribute to the creation of the envisaged database of African volunteer health corps.

Surveillance score

Figure 2.2.1.9. Surveillance score in the WHO African Region, 2020, WHO



The factors scored in strengthening IDSR for both event and syndromic surveillance were developing and maintaining interoperable, interconnected and electronic data management and reporting systems and improving the capacity to analyse and disseminate information and best practices.

On the onset of the COVID-19 pandemic, many African countries rapidly increased their diagnostic and surveillance capacity, allowing for better detection of events.

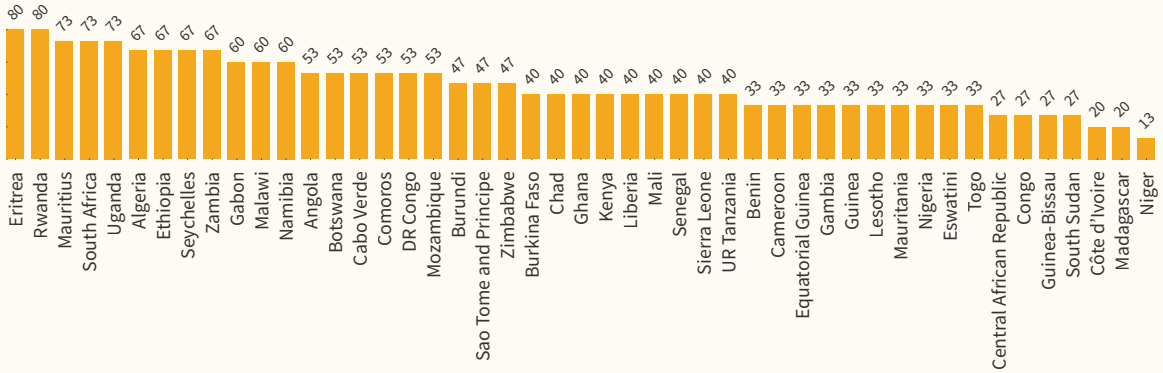
Most African countries were quick to adopt non-pharmaceutical interventions such as curfews and facility closures to limit COVID-19 transmission, but this compromised access to care. The WHO Regional Office for Africa considers the low testing capacity in the Region as likely to have contributed to the low detection rates for COVID-19 in Africa. Insufficient data reporting may result in the lack of meaningful representation. The intersection between public health and emergency management is illustrated by the emergency management cycle[11] whose complete model includes event prevention, preparedness, detection, risk assessment, response and recovery.

Many African countries have implemented the IDSR framework to meet IHR (2005) requirements and 15 countries have a score of 80 or more. A core function of the IDSR framework is data reporting at all levels of health system, which has been a challenge for many countries.[12] With this tool, examining national data reporting practices among African nations during the COVID-19 pandemic could reveal important insights for handling future pandemics.

11 Rose DA et al. The evolution of public health emergency management as a field of practice; American Journal of Public Health 107, S126–S133; 2017
12 Wolfe CM et al. Systematic review of Integrated Disease Surveillance and Response (IDSR) implementation in the WHO African Region; PLoS ONE 16, 0245457; 2021

Health service provision score

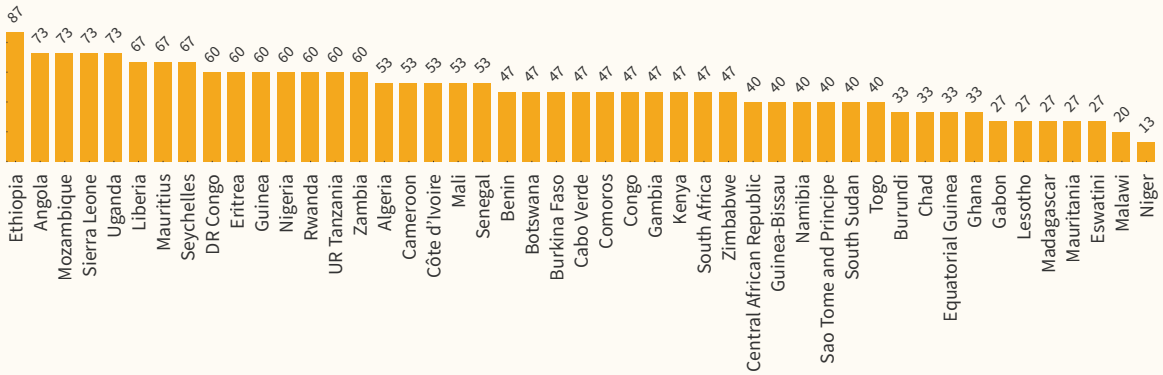
Figure 2.2.1.10. Health service provision score in the WHO African Region, 2020, WHO



Health service provision quality is low in most African Region countries. Surprisingly, the best three scores on service provision in 2020 were from low-income countries. Member States are urged to collaborate and invest in actions to prevent a repeat of the supply chain challenges encountered during the COVID-19 response. This may necessitate legislation to facilitate pooled procurement and purchasing, expediting of supply chain procedures during emergencies, mainstreaming of supply chain functions, inclusion of logistics content in training institutions' curricula and recruiting qualified logisticians and supply chain specialists in the health sector. The Region should establish and operate a regional logistics information system to ensure timely distribution of essential supplies from the regional depots and redistribution of surpluses from Member States.

National health emergency framework score

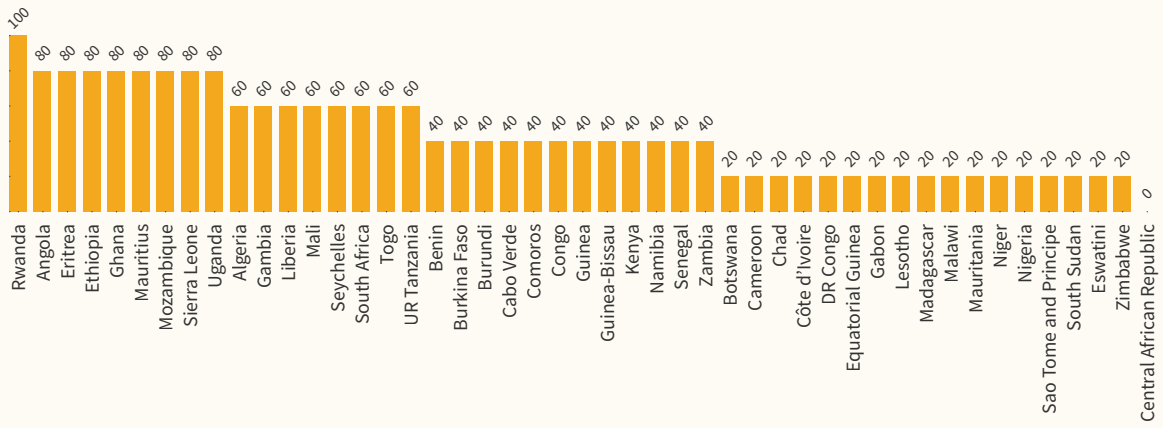
Figure 2.2.1.11. National health emergency framework score in the WHO African Region, 2020, WHO



In general, national health emergency frameworks exist in the countries but show limits. There is a need to update the emergency frameworks and ensure that they comply with international standards, considering each country's context and threats. The status in African countries clearly shows that it is the low-income countries that have high scores. Thirty-nine Member States have a national action plan for health security that, if funded and implemented, can significantly improve health security and the health system. The rest of the Member States are in the process of developing their plans. The resources needed to fill the gaps in the emergency frameworks have been costed in the action plans for health security.

Risk communication score

Figure 2.2.1.12. Risk communication score in the WHO African Region, 2020, WHO



The importance of risk communication has been demonstrated in the recent outbreaks of diseases with community transmission. But the Region needs to strengthen its capacity in this area.

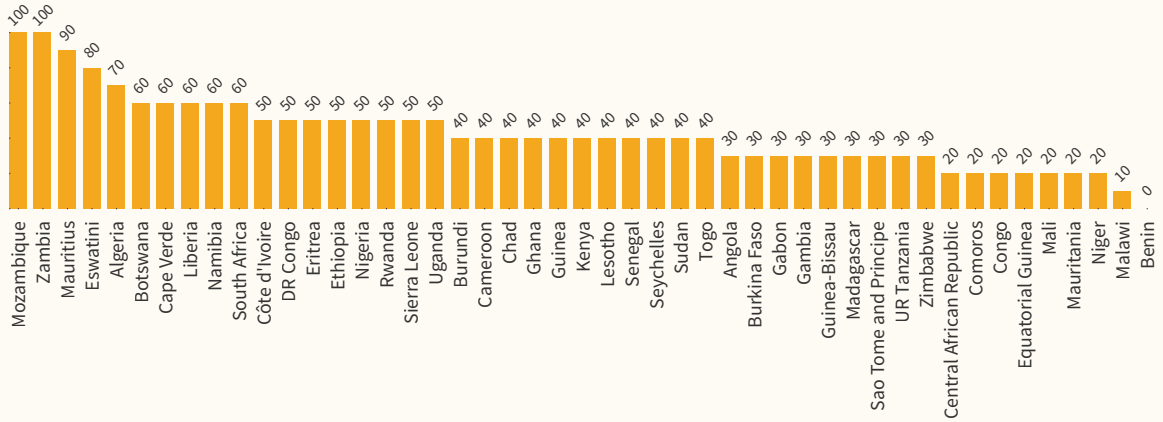
Public health data reporting and information sharing are critical at regional, national and international levels throughout the emergency management cycle. IHR (2005) require countries to report "all available essential information immediately to the appropriate level of health-care response" during health emergencies. Essential information according to IHR (2005) includes "clinical descriptions, laboratory results, sources and type of risk, numbers of cases and deaths, conditions affecting the spread of the disease and the health measures employed". Moreover, the joint external evaluation highlights the need for "interoperable, interconnected, electronic real-time reporting systems" that could consider other sectors in the context of the One Health approach.

Globally, countries have used diverse methods to report data on the COVID-19 pandemic. A variety of systems have been employed to report COVID-19 data from African nations including online dashboard systems, national reporting systems for researchers, private and public channels for decision-makers' communication with the public etc. Therefore, assessing publicly available national data can provide important insights on the data reporting practices of nations and identify gaps to be closed for mitigating of future pandemics.

Member States should be supported to develop risk communication and community engagement strategies and plans and to establish multisectoral mechanisms for their coordination at national and subnational levels. Such coordination mechanisms need to be linked to expert training and scientific resources on the science of risk communication and community engagement. There is also a need to develop frameworks and tools to engage communities as partners in emergency preparedness and response.

Points of entry score

Figure 2.2.1.13. Points of entry score in the WHO African Region, 2020, WHO

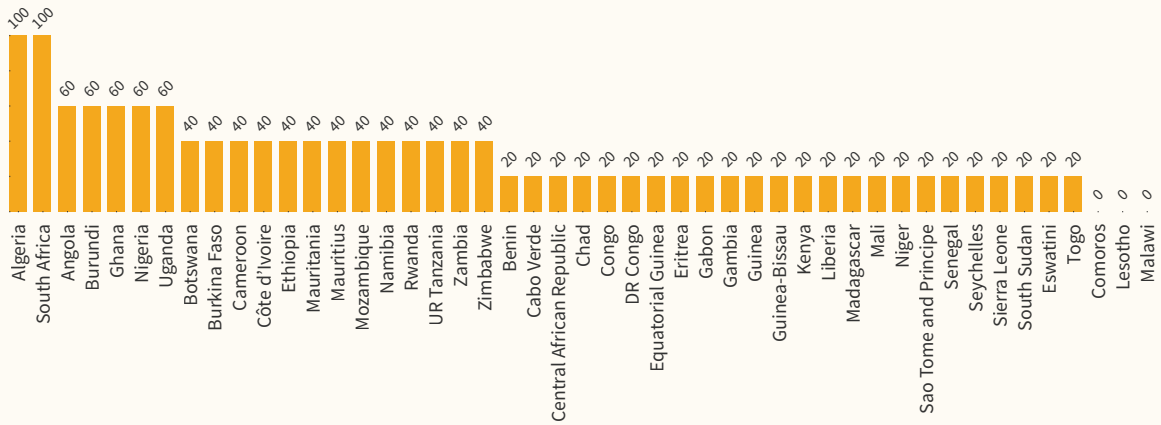


Following the joint external evaluation on the implementation of IHR (2005) that was conducted in 2018 on 19 technical areas and that revealed limited capacity and major gaps under the points of entry, together with WHO, the Southern African Development Community countries of Botswana, Eswatini, Lesotho, Mozambique, Namibia, South Africa and Zimbabwe, launched initiatives to strengthen their border health systems with the COVID-19 pandemic situation. This initiative pulls together local, national and regional levels to collectively agree on the approaches to build capacity at entry points and in border areas. It aims to identify and respond to public health events, strengthen regional public health information sharing and coordination and understand the patterns of population mobility and connectivity in the Region.

Countries should support data collection and analysis on population mobility and connectivity patterns in the Region, focusing on mutually identified priority geographic areas. Presumably, some of the countries initiating this effort have adapted their response and improved their points of entry score. Most countries still need to do that. Some 60% of the countries in the WHO African Region have not reached half of the score.

Radiation emergencies score

Figure 2.2.1.14. Radiation emergencies score in the WHO African Region, 2020, WHO



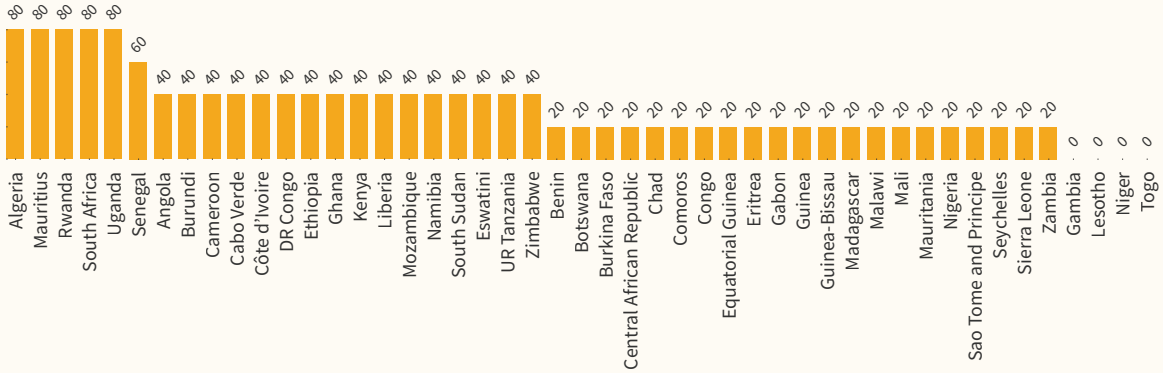
Data on radiation emergencies show that although countries like South Africa and Algeria are doing well, very few countries in the Region can claim a good score. This also applies to scores for chemical events, where a few more countries have good scores. Radiation emergencies can cause emotional and psychological distress, and people exposed to high doses of radiation could be at a greater risk than others of developing cancer later in life.

An emergency exercise to prepare to effectively respond to radiation emergencies and plan for recovery was organised by Botswana with the support of the International Atomic Energy Agency (IAEA). Some 23 experts from 21 other African countries attended the exercise and experienced first-hand how radiation emergency exercises are organised and executed. The African experts involved realised that the challenges they faced in their home countries were similar, the main issue being the difficulty of bringing all relevant organisations together. The exercise allowed the comparison of the national response procedures of the countries represented.

The International Atomic Energy Agency develops standards and guidelines and works to define and promote common approaches to harmonise emergency response between countries. It carries out its work under the Convention on Early Notification of a Nuclear Accident, also known as the Early Notification Convention.

Chemical events score

Figure 2.2.1.15. Chemical events score in the WHO African Region, 2020, WHO



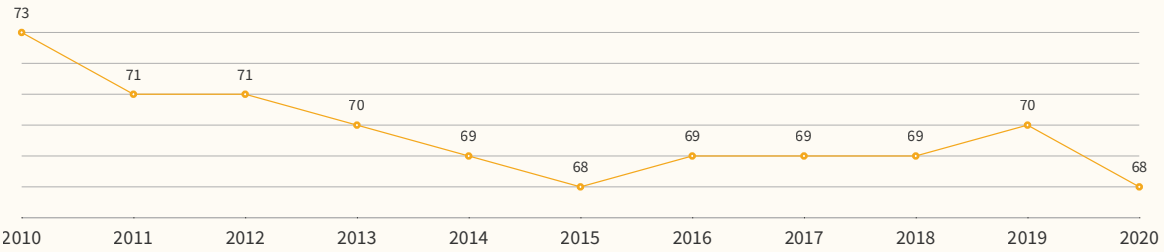
The strategic approach to international chemicals management provides a framework for action on chemical safety around the world. The management of chemical accidents and emergency situations requires a multidisciplinary and multisectoral approach that expects the health sector to play an influential complementary role, or even the leading role, at different stages of the management process.

A chemical release can be caused by a natural phenomenon. When it is the result of a technological accident, it is called a Natech (natural-technological) phenomenon. As the African continent is highly exposed to natural disasters, it would be important to develop plans to deal with such events and secondary technological disasters.

2.2.2 DISEASE PREVENTION

Immunisation coverage for measles

Figure 2.2.2.1. Immunisation coverage for measles (%) in the WHO African Region, 2010–2020, WHO/UNICEF

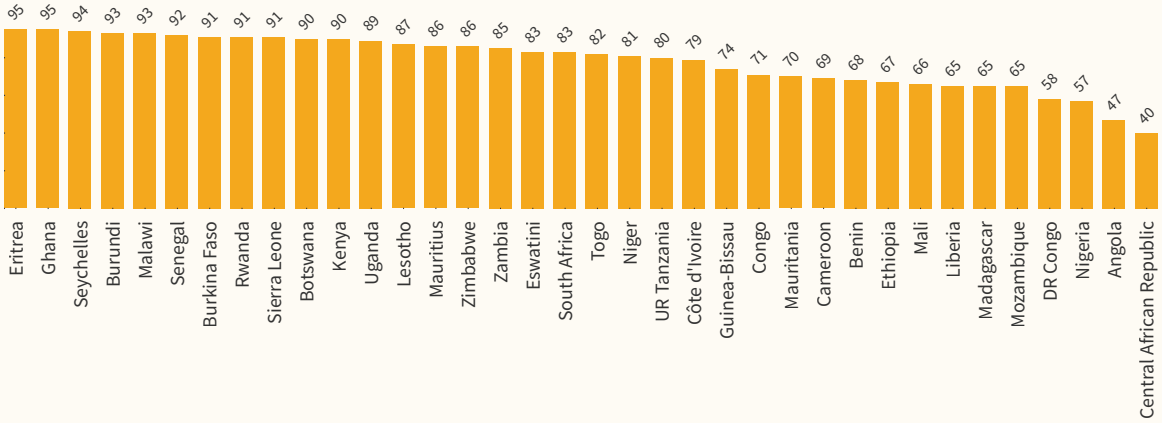


Despite the major efforts and variety of means deployed in immunisation in the WHO African Region, the coverage of measles vaccination remains at 68%, the lowest level among the WHO regions. Only six countries have attained the full coverage level of 80% for the two doses, with Seychelles and Rwanda as the only countries to have a coverage of above 90%.

The WHO African Region experiences more epidemics than any other part of the world. Before the emergence of COVID-19, the top five causes of epidemics were cholera, measles, yellow fever, meningococcal meningitis and influenza, most of which are preventable by strengthening routine immunisation[13].

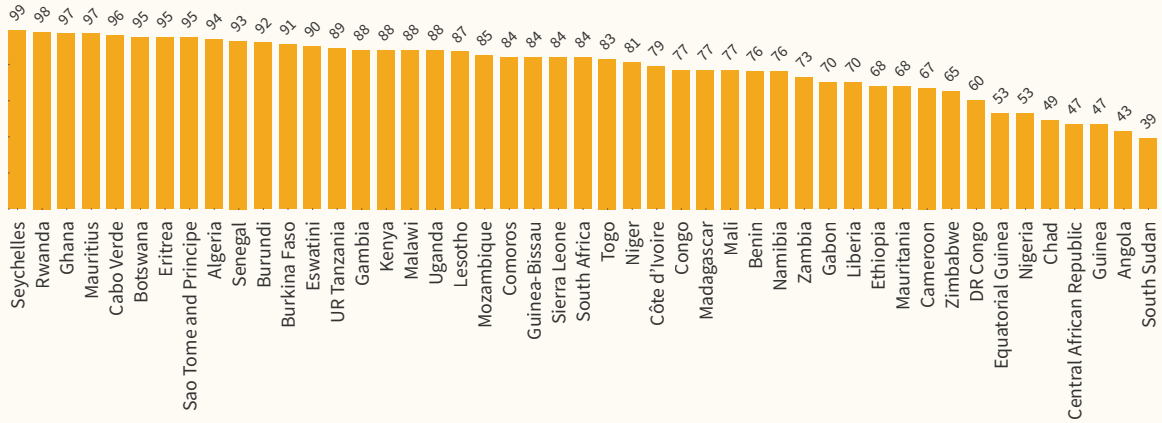
13 Talisuna AO, Okiro EA, Yahaya AA, Stephen M, Bonkoungou B, et al. Spatial and temporal distribution of infectious disease epidemics, disasters and other potential public health emergencies in the WHO African Region, 2016–2018, Global Health. 2020

Figure 2.2.2.2. Measles-containing-vaccine second dose immunisation coverage (%) in the WHO African Region, 2020, WHS2022



Immunisation coverage for polio

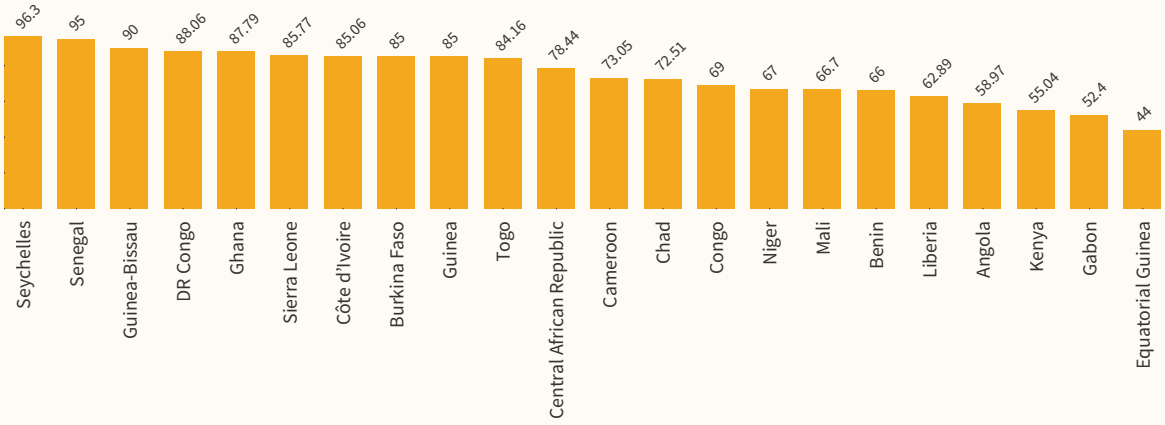
Figure 2.2.2.3. Immunisation coverage for polio in the WHO African Region, 2019, WHO/UNICEF



In general, immunisation coverage for polio in the Region is good. The countries in the Central African subregion have lower than average coverage rates. The strategy should ensure sustained and predictable investments, leverage the current favourable political will and enable the repurposing of resources from polio eradication and COVID-19 to support strategic investments in systems and tools for health emergencies. Aligned with the efforts to achieve universal health coverage, the health-related SDGs and efforts to build resilient health systems, the new strategy will accelerate the use of contemporary evidence and innovations.

Immunisation coverage for yellow fever

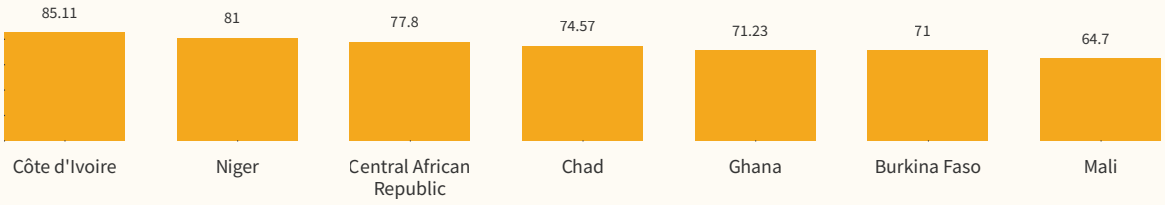
Figure 2.2.2.4. Immunisation coverage for yellow fever in the WHO African Region, 2020, WHO/UNICEF



Yellow fever is endemic in more than half of the countries in the WHO African Region. However, yellow fever vaccination coverage remains relatively unsatisfactory. Only 10 countries have above 80% vaccination coverage and only three of these have achieved more than 90% coverage. Countries like Angola, which in 2016 experienced one of the most devastating yellow fever outbreaks of the past 10 years, has a coverage of only 59%.

Immunisation coverage for meningitis

Figure 2.2.2.5. Immunisation coverage for meningitis in the WHO African Region, 2020, WHO/UNICEF



In Africa, 26 countries located in the zone called the meningitis belt, which extends from eastern Ethiopia to western Senegal, are the most affected by meningitis and experience regular epidemics of the disease. However, immunisation coverage for meningitis in the Region is still unsatisfactory.

2.2.3 DETECTION AND RESPONSE

Large-scale and protracted disease outbreaks can be prevented through early detection, notification and rapid control. Despite all the gaps identified in the capacities required for heath security, it is only now that reforms in health emergency programmes are beginning to produce results. Responses to health emergencies are now faster, better coordinated and more effective. The median time from detection to containment was reduced from 418 days in 2016 to 51 days in 2018.[14] Nevertheless, health emergencies continue to exact a heavy toll on health systems and economies, threatening to erase decades of hard-earned gains. Many countries in the WHO African Region continue to experience recurrent disease outbreaks. Lessons gained from each outbreak response have helped to improve the response to subsequent outbreaks, the reason for the reduction in the time taken to end the COVID-19 pandemic. The low levels of human resources for controlling outbreaks of vaccine-preventable diseases compared with foodborne or waterborne disease outbreaks may reflect the challenges associated with vaccine acquisition, uptake and access, particularly in hard to reach areas. National and international stakeholders should continue to support Member States in strengthening their capacity for early detection, notification and rapid control of epidemics. It is equally necessary to support Member States to enable them to track key milestones systematically for continuous measurement of outbreak response performance.

2.3 Healthier populations

Prevalence of stunting among under-five children

Prevalence of stunting among under-five children has been dropping slowly in the WHO African Region since 2000, however, from 2000 to 2020, the Region dropped from second to first place with the worst prevalence of child stunting among the WHO regions. Almost 80% of the countries in the Region have a high or very high prevalence of stunting among under-five children and only Algeria and Seychelles have a prevalence of less than 10%. This seems to be linked to the country's economic wealth.

Prevalence of malnutrition among under-five children

Of the global population of under-five children, 52 million are wasted, 17 million are severely wasted and 155 million are stunted, while 41 million are overweight or obese. While undernutrition is responsible for about 45% of deaths of under-five children in low-income and middle-income countries, the rates of overweight or obesity among children are on the rise. It is expected that there will be 15.4 million cases of acute malnutrition in under-five children, a third of them severe, in West and Central Africa in 2020 if adequate measures are not put in place now. This represents a 20% increase over the January 2020 estimate, according to an analysis on the impact of food insecurity combined with COVID-19 on acute malnutrition in 19 countries in the Region.

Trans-fats policy

Industrially produced trans-fats are formed when fats and oils are modified using industrial processing techniques. Limiting trans-fat content in foods through legislation has been shown to generate the greatest reduction in trans-fat in the food supply.

In the WHO African Region, the rules on trans fats differ among the countries. In the South African legislation the trans-fat content of any oils and fats should not exceed 2 grams per 100 grams. Products with higher trans-fats levels are prohibited from entering or being sold in the country. Kenya is considering adopting an East African regulation on trans-fats to promote NCD prevention and control. Uganda and the United Republic of Tanzania are also working to adopt this regulation with the aim of establishing an effective regional regulatory mechanism for the elimination of industrially produced trans-fats within the food supply in the East African Community, in line with WHO's recommendation.

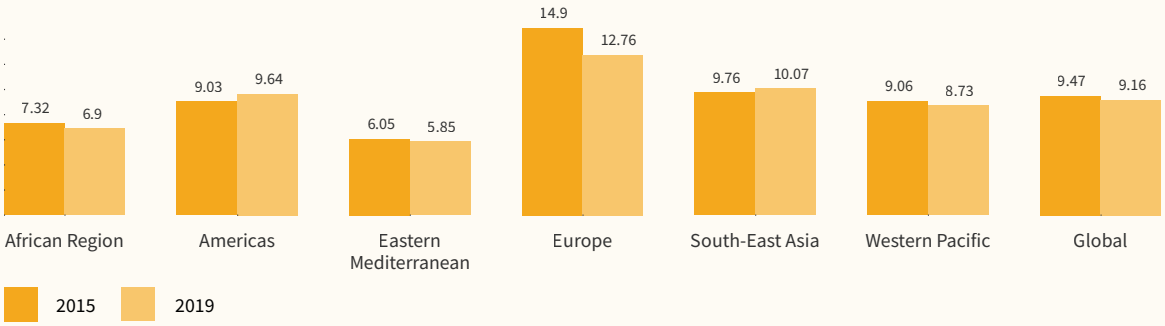
14 Impouma B, Roelens M, Williams GS, Flahault A, Codeço CT, Moussana F, Farham B, Hamblion EL, Mboussou F, Keiser O. Measuring Timeliness of Outbreak Response in the WHO African Region, 2017–2019. Emerg Infect Dis. 2020 Nov;26(11):2555–2564. doi: 10.3201/eid2611.191766. PMID: 33079032; PMCID: PMC7588517.

Obesity

The number of overweight or obese adults worldwide is 1.9 billion. The five voluntary global diabetes-related targets for 2025 include to halt the rise in diabetes and obesity. Regional figures show a decline in overweight levels from 6.04% to around 4.54% from 2000 to 2021. That clearly shows that reducing overweight levels by 50% by 2025 will not be possible if nothing is done. Focusing on the most affected countries, a cross analysis[15] of data confirms that obesity is rising fastest in emerging economies, where also the double burden of malnutrition prevails.

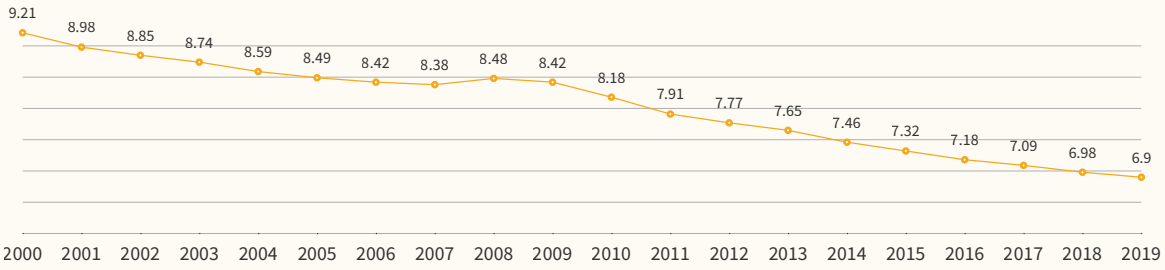
Suicide mortality

Figure 2.3.1. Crude suicide mortality rate (per 100 000 population) in the WHO regions, 2015 and 2019, WHO



Suicide remains one of the leading causes of death worldwide, according to the latest WHO estimates published in "Suicide worldwide in 2019". In 2019, more than 700 000 people committed suicide, that is one in every 100 deaths. Suicide is not happening just in high-income countries, it is a global phenomenon. In fact, more than three-quarters of suicides in 2019 occurred in low-income and middle-income countries. This reality has led WHO to develop new guidance to help countries improve their suicide prevention and management approaches.

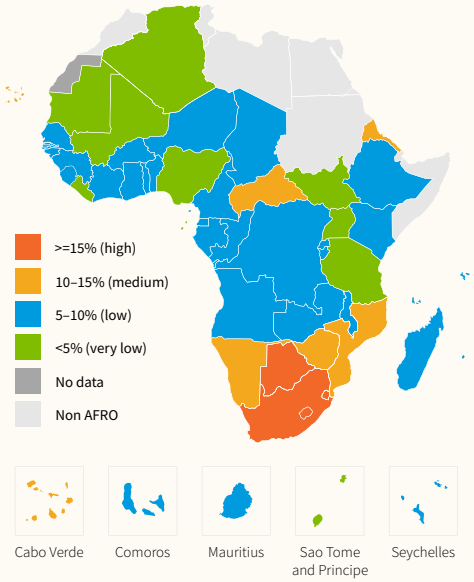
Figure 2.3.2. Crude suicide mortality rate (per 100 000 population) in the WHO African Region, 2000–2019, WHO



The decline in suicide levels in the Region of 5.7% during 2015–2019 was better than the global average of 3.2%. After Europe, where the suicide rate decreased by 14.4% in the 5 years, Africa has the most favourable rate. The other regions have seen their suicide rates increase over the 5 years, by 6.8% in the Americas and 3.2% in Western Pacific. Globally, the suicide rate is declining, and during the 20 years from 2000 to 2019, the decline was 25% in the WHO African Region, but this was lower than the global average of 36%.

15 WHO discussion paper, Draft recommendations for the prevention and management of obesity over the life course, including potential targets; Version dated 19 August 2021

Figure 2.3.3. Age standardized suicide mortality rate (per 100 000 population) in the WHO African Region, 2019, WHO

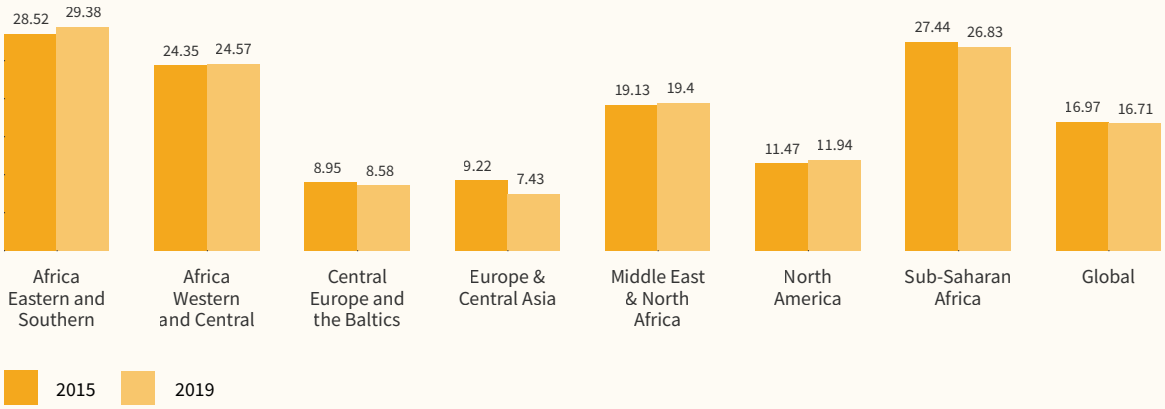


For the WHO African Region, the suicide situation seems to be alarming in Southern Africa. In fact, six countries there and Cabo Verde and the Central African Republic had rates above 12 per 100 000 in 2019.

While the link between suicide and mental disorders is well established, many suicides occur in a time of crisis and when the victim lacks the ability to cope with life stresses. In addition, conflict, disaster, violence, abuse or grief and feelings of isolation are strongly associated with suicidal behaviour. Suicide rates are also high in groups facing discrimination such as refugees, migrants and people in prison, or people whose sexual orientation can be source of discrimination. Many countries do not collect data on suicide owing to taboos surrounding this type of death. This results in its underreporting.

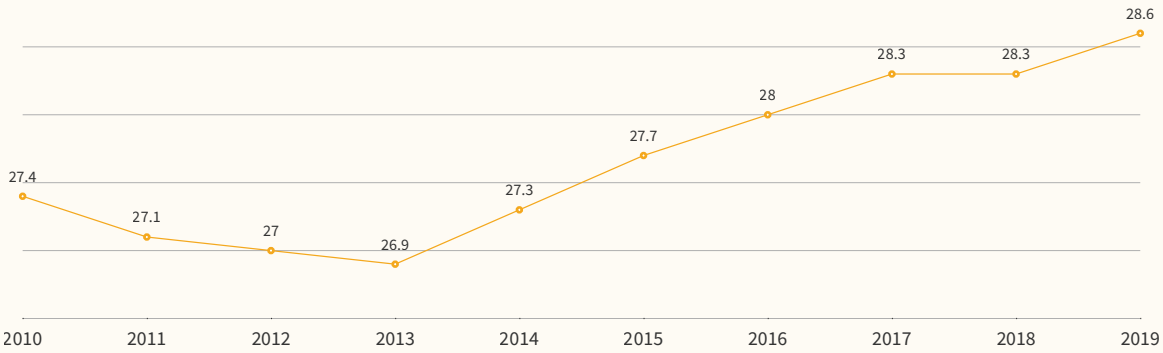
Death due to road traffic injuries

Figure 2.3.4. Mortality caused by road traffic injury (per 100 000 population) in the WHO regions, 2015 and 2019, WHO



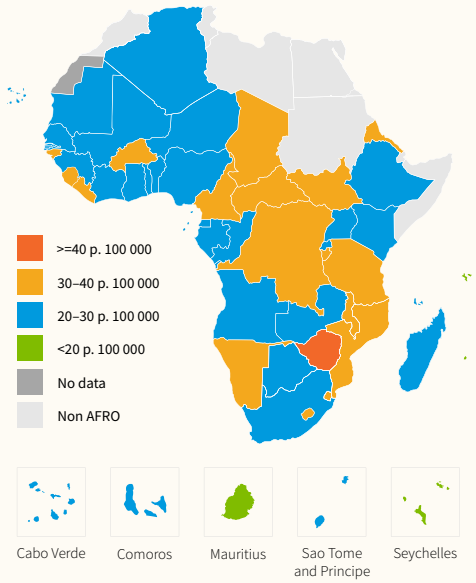
Road crashes result in approximately 1.3 million deaths per year and up to 50 million injuries, and many of the victims remain disabled from their injuries. About 93% of road deaths occur in low-income and middle-income countries, which have only about 60% of the world's vehicle fleet. Road traffic fatalities were expected to be 16.3 per 100 000 worldwide in 2019 and 28.6 in the WHO African Region. Death rates due to road accidents declined across the world between 2015 and 2019 except in North America and Africa, where they rose. The increase in the WHO African Region is greater than for Eastern and Southern Africa (3%), sub-Saharan Africa (2.2%) and West and Central Africa.

Figure 2.3.5. Mortality caused by road traffic injury (per 100 000 population) in the WHO African Region, 2010–2019, WHO



The WHO African Region had an increase of 3.2% in the rate of mortality due to road accidents between 2015 and 2019. These data confirm that Africa missed the SDG 3.6.1 target of halving the number of global deaths and injuries from road traffic accidents by 2020. Further, estimates reveal that between 2015 and 2030 the number of cars on the road is likely to double. New targets need to be defined and strong and sustainable measures need to be taken stem the carnage from road accidents.

Figure 2.3.6. Mortality caused by road traffic injury (per 100 000 population) in the WHO African Region, 2019, WHO



The differences in mortality rates between the countries are relatively large. There is a huge gap of 11.3 deaths per 100 000 population between Zimbabwe and Seychelles. Zimbabwe has the highest rate of traffic deaths in the WHO African Region of 41 people per 100 000 population, and even in the world, according to a United Nations report. The number of road transport fatalities recorded by the authorities increased by 34% between 2011 and 2019, according to the "Road safety performance review report" produced by the Zimbabwean authorities in collaboration with the United Nations Economic Commission for Africa.

Population using safely managed drinking-water services

Refer to page N° 100

Achieving the SDGs on water, sanitation and hygiene in Africa will require a dramatic acceleration of the current progress, according to a UNICEF/WHO Africa-focused special report. On the continent, 418 million people still lack basic drinking-water services, 779 million lack basic sanitation services and 839 million lack basic hygiene services. If current trends continue, very few countries would achieve universal access to safe drinking-water and sanitation or basic hygiene services by 2030. The WHO and UNICEF joint monitoring programme's report, "Progress on household drinking water, sanitation and hygiene 2000–2020" has a number of recommendations for the future. It shows that some progress has been made towards achieving universal access to basic water, sanitation and hygiene services but that this is insufficient.

Population using safely managed sanitation services

Refer to page N° 101

Part of the goal of SDG 6 is to ensure that everyone has access to safely managed sources of drinking-water such as piped, borehole or protected well source. The sources must be close to the home and provide uncontaminated water throughout the day. In 2017 this criterion was met for 71% of the households or 5.3 billion people, up from 61% in 2000. Ensuring water is safe is a demanding standard. For many low-income and middle-income countries, the priority is still to expand access to basic services. In many countries the poorest households have the least access to sanitation services. Sub-Saharan African countries have a concentration of the lowest rates of access to basic hand hygiene including the Democratic Republic of the Congo, Liberia, Lesotho and Rwanda, which have rates of less than 5%.

Population with primary reliance on clean fuels and technologies

Refer to page N° 103

Africa has the most to gain from the transition to clean energy. Of its people, 600 million do not have access to electricity and 970 million do not have access to clean cooking fuels, with disastrous consequences for health, particularly for women and children, hindering economic and social progress and with significant environmental impacts. The global ambition of achieving net zero greenhouse gas emissions by 2050 has set a new direction for the energy sector. African countries are particularly well placed to take advantage of the technological benefits of these changes and attract increasing flows of green finance.

Air pollution level in cities

Refer to page N° 106

The WHO Global Ambient Air Quality Database collects air quality information from 4 387 cities and towns in 108 countries, including 10 in sub-Saharan Africa. Dakar in Senegal and Johannesburg in South Africa are reported to be among the five most polluted cities in the world. Data are difficult to compare owing to factors such as the differences in the location of the measuring stations and the methods and quality of the measurements, and seasonal variations. The database includes only cities that submit data to WHO.

Alcohol consumption among people aged 15 years and older

Refer to page N° 82

In 2017, WHO reported that Uganda and Namibia led in alcohol consumption with an average of 11.8 litres of alcohol per year. The most abstinent countries in the WHO African Region were Mauritania and the Comoros with a consumption rate 0.2 litres of pure alcohol per year. South Africa led the continent's most beer consuming countries and was ranked 12th in the world with a volume 3.62 million kilolitres, an increase of 5% from the previous year. In 2019, consumers in the African and Asian regions spent more on beer purchases than the previous year with the increase for Africa being 5.2%. Global beer consumption in 2019 increased for the second year in a row, supported by a strong demand in Asia and Africa associated with their economic growth.

Age-standardised prevalence of current tobacco use among persons aged 15 years and older

Refer to page N° 87

According to the WHO, tobacco use will explode in Africa by 2025 if nothing is done to stem it. The African continent is now affected by the damage caused by smoking. About 80% of the 1.1 billion smokers in the world live in low-income and middle-income countries. However, the smoking rate in the WHO African Region is the lowest among all WHO regions. About 18% of men and 2% of women in the Region smoke, but there is a lot of variation between countries. The highest smoking rate among men is in Lesotho (53%) and the lowest in Ghana (7%). Among women, the highest rate is found in Namibia (9%), and rates below 1% are common in West African countries.

Kenya, Mauritius, Senegal, Seychelles and Uganda have the most ambitious tobacco control policies in the WHO African Region. Senegal is the only country on the continent that has implemented tobacco addiction treatment programmes to facilitate smoking cessation. Although tobacco production is driving economic growth in some countries like Zimbabwe, many countries have introduced measures to over-tax cigarettes, such as Mauritius, Seychelles and Madagascar where taxes constitute between 70% and 80% of the selling price of cigarettes.

Under-five children who are developmentally on track

Refer to page N° 93

Developmental health has been defined as physical and mental health, well-being, coping and competence of human beings (Keating, 1999) and is the combination of health and developmental outcomes. Many different factors can positively or negatively affect developmental health. Fewer than half of infants under 6 months of age are exclusively breastfed in two thirds of the countries with data. Fewer than half of the young children in one third of the countries with data receive the benefits of early stimulation by adults in the home. More than three quarters of the children between the ages of 1 year and 4 years' experience violent discipline from their caregivers. In half of the countries with data, less than three quarters of the children aged 36–59 months are developmentally on track in at least three key domains of development, that is literacy numeracy, physical, social-emotional and learning.

Early child development usually follows a sequence, as the child needs to master one skill before he or she can acquire the next, although all children develop at their own rate. The development areas are growth, nutrition, feeding skills, dental health, sleep, perceptual development, character development, etc. The "On track guide" encourages professionals to connect children and their families to community resources and, if needed, to appropriate services.[16] Many countries still lack data on key indicators of early childhood development.[17]

16 On track, Supporting Healthy Child Development and Early Identification in the Early Years
17 UNICEF/UN, A Resource for Monitoring and Action: Country Profiles on Early Childhood Development; Countdown to 2030 Women's, Children's & Adolescent's health

Intimate partner violence prevalence

Refer to page N° 94

It is estimated that 36.6% of women in the WHO African Region have experienced physical and/or sexual violence from an intimate partner resulting in immediate or long-term physical, mental or sexual health problems. In a multi-country WHO study, 13–61% of women surveyed said they had experienced physical violence from a partner and 6–59% said they had experienced sexual violence from a partner at some point in their lives.

Africa has the highest proportion of ever-partnered women and girls aged 15–49 years who are subjected to physical and/or sexual violence by an intimate partner in 2022. Among the African subregions, Central Africa leads with 24%, particularly the Democratic Republic of the Congo with 36%. The prevention and response to intimate partner violence and sexual violence against women initiative identified several barriers to programme implementation at the country level, including:

- Insufficient financial resources and infrastructure, particularly in rural areas;
- Lack of training of actors, particularly health professionals;
- Weakness of coordination between different sectors;
- Limited availability of comprehensive and quality data;
- Lack of evaluation of interventions, with a perspective of scaling up good practices.

Violence against children

Refer to page N° 109

African children are exposed to various forms of physical and psychological violence, sexual abuse and exploitation, neglect and child labour. In a context of urbanisation, armed conflict, displacement and globalisation, they also face threats to their survival and well-being from the effects of technology and humanitarian crises such as attacks on civilians.

The estimated economic value of disability-adjusted life years resulting from violence against children is 4.3% of a country's GDP. Significant efforts are being made to end violence against children in Africa. There is a strong continental legal and policy framework on children's rights that addresses violence against them. The widely ratified Convention on the Rights of the Child and its optional protocols and the African Charter on the Rights and Welfare of the Child are the cornerstones. The adoption of Agenda 2063, Agenda 2040 and the SDGs reinforces the efforts of these legally binding instruments to address violence against children.

Progress has been uneven, fragmented and too slow. Some countries have made remarkable progress while others have stagnated or, worse, regressed. Establishing programmes to end violence against children that focus on its prevention by addressing its causes provides additional protection for the most vulnerable children such as street children, child domestic workers and children in conflict and humanitarian emergencies. Children's participation in decision-making on such programmes should be promoted.

References

1 WHO and the World Bank; Tracking universal health coverage; 2021 Global Monitoring Report

2 WHO/UA; Fulfilling the promise: ensuring vaccination for all in Africa; ministerial Conference on immunisation in Africa; 2016

3 WHO-UNICEF Joint Statement, GENEVA/NEW YORK, 15 July 2022

4 Central African Republic, Guinea, South Sudan.

5 Burundi, Mali, Benin, Madagascar, Mozambique, Togo.

6 WHO Noncommunicable Disease Progress Monitor, 2022

7 Giulio Bartolin; The Failure of 'core capacities' under the WHO International Health Regulations; British Institute of International and Comparative Law; Cambridge University Press; 2020

8 Except Algeria, Cabo Verde, Equatorial Guinea, Madagascar, Mauritius, Sao Tome and Principe, Seychelles and Togo.

9 WHO (WHO). The investment case for public health emergency preparedness and response (Unpublished). WHO. 2019

10 https://www.genevaenvironmentnetwork.org/

11 Rose DA et al. The evolution of public health emergency management as a field of practice; American Journal of Public Health 107, S126–S133; 2017

12 Wolfe CM et al. Systematic review of Integrated Disease Surveillance and Response (IDSR) implementation in the WHO African Region; PLoS ONE 16, 0245457; 2021

13 Talisuna AO, Okiro EA, Yahaya AA, Stephen M, Bonkoungou B, et al. Spatial and temporal distribution of infectious disease epidemics, disasters and other potential public health emergencies in the WHO African Region, 2016–2018, Global Health. 2020

14 Impouma B, Roelens M, Williams GS, Flahault A, Codeço CT, Moussana F, Farham B, Hamblion EL, Mboussou F, Keiser O. Measuring Timeliness of Outbreak Response in the WHO African Region, 2017–2019. Emerg Infect Dis. 2020 Nov;26(11):2555–2564. doi: 10.3201/eid2611.191766. PMID: 33079032; PMCID: PMC7588517.

15 WHO discussion paper, Draft recommendations for the prevention and management of obesity over the life course, including potential targets; Version dated 19 August 2021

16 On track, Supporting Healthy Child Development and Early Identification in the Early Years

17 UNICEF/UN, A Resource for Monitoring and Action: Country Profiles on Early Childhood Development; Countdown to 2030 Women's, Children's & Adolescent's health

SECTION III

HEALTH IN THE SDG TARGETS

Section summary

The latest edition of *The state of food security and nutrition in the world* estimates that nearly 690 million people were hungry in 2019, representing an increase of 10 million from the previous year. Asia has the largest number of people affected by hunger, but the level is rising faster in Africa, with the percentage of people facing difficulties in accessing food having increased from 52% to 59% between 2015 and 2019 in sub-Saharan Africa.

Conflicts, the COVID-19 pandemic, soaring prices, climate change and rising inequality are converging to threaten global food security. Since the beginning of the COVID-19 pandemic, an estimated 350 million more Africans have not had regular access to adequate food. In 2020, 28.2% of African under-five children were stunted owing to many reasons, including poor nutrition, making the WHO African Region the most affected among the WHO regions. Pregnant women and women of reproductive age also are vulnerable to undernourishment leading to iron deficiency and anaemia. The prevalence of anaemia among pregnant women and women of reproductive age is particularly high in the WHO African Region at 39.6%, with more than half of the countries having an anaemia prevalence above 40%. However, some indicators show positive progress, such as the reduction foreseen in wasting among under-five children to less than 5% by 2025 and its maintenance at that level, for which the target could be reached if the current trend is preserved.

Nearly 99% of maternal deaths occur in developing countries, with more than half in sub-Saharan Africa, which accounts for 525 maternal deaths per 100 000 live births and 27 neonatal deaths per 1000 live births. Only three countries, Cabo Verde, Mauritius and Seychelles, have levels below the internationally agreed target of 70 maternal deaths per 100 000 live births. The current trend shows that by 2030 the Region will still record high levels of maternal deaths of 390 per 100 000 live births and will be very far from the target. The factors contributing to these deaths are numerous and include shortage of qualified health workers, which contributes to the low rate of skilled birth attendance of 65%; high prevalence of women of reproductive age with unmet needs for family planning (44%); and a high adolescent birth rate among women aged 10–14 years which, at 102 births per 1000 women in that aged, is the highest in the world.

The continent remains subject to several threats such as TB, HIV, malaria, neglected tropical diseases (NTDS) and non-communicable diseases (NCDs), which, despite their decline, remain well above the global average. Unhealthy lifestyle habits such as innutritious diets, smoking, alcohol consumption, violence, suicide, etc. and air pollution also are on the rise in the Region, and there are increased mortality levels associated with them.

Women suffer the most on the continent from gender inequality and marginalisation. Indeed, 34% of girls are forced into marriage before the age of 18, compared to 4% of boys. In addition, 33% of women fall victim to partner violence and 36% of women aged 15–49 years undergo genital mutilation. Many countries in the Region still do not have laws that guarantee the rights of women. Although there has been a decline in this marginalisation, over the past 2 years the COVID-19 pandemic has slowed actions against these practices.

The births of 49% of under-five children (nearly 89.5 million children) in sub-Saharan Africa are still unregistered, a decrease of 2% since 2008. If nothing is done, the trends show that the number of unregistered children in Africa will continue rise. Many countries do not perform well in terms of completeness of death registration and medical certification of causes of death, making data availability in this area a major challenge for civil registration and vital statistics. For these two vital events of birth and death, only seven of Africa Region's countries reach 90% completeness, which is the satisfactory level.

The WHO African Region is one of the most fragile and insecure, hosting several conflicts. The Region is prone to natural disasters that have a human, economic and psychological impact. The types of energy and technologies used in the Region are not modern or sustainable, especially in the rural areas, which generates challenges in ensuring the environment is healthy.

The African people using basic drinking-water services in 2020 was 32% of the population, far from the 80% target intended to be reached by 2030, which is becoming more unlikely to be achieved. The situation is similar for the use of basic sanitation services, for which only 23% of the population is covered. These water and sanitation shortfalls, in addition to poverty, are high risk factors for the faecal peril diseases that prevail in the Region.

The countries in the WHO African Region need to make additional efforts and adopt new strategies and laws to improve their performance on the indicators for the health-related SDGs to be achieved by 2030. While most of the goals are still alive, some goals have reached their deadlines or are close to reaching them. Almost none of the goals close to expiring has reached close to its target and they need to be updated. These include the goals to ***halve the number of road traffic deaths and injuries worldwide by 2020***, which has not been achieved; to ***reduce childhood wasting to less than 5% by 2025 and maintain it at that level***, which is on track; and to ***halve anaemia prevalence in women of reproductive age by 2025***, which seems impossible to achieve. Conversely, the internationally agreed goal of reducing overweight in under-five children to less than 5.6% by 2025 has been achieved and now needs to be monitored.

Experiences from other regions with significant progress or successful achievements can be capitalised on and adapted to the WHO African Region to preserve the gains and to guarantee further significant progress.

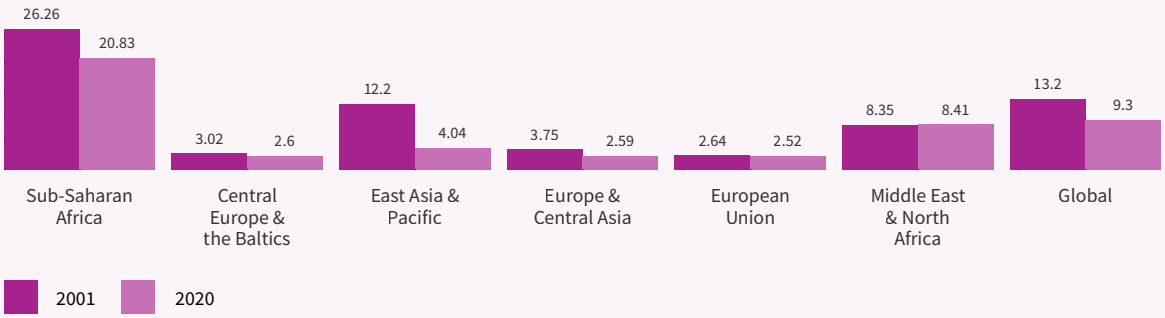
3.1 SDG 2 – No hunger

As hunger increases and malnutrition persists, achieving the zero-hunger goal by 2030 is becoming challenging. The latest edition[1] of *The state of food security and nutrition in the world* estimates that between 702 million and 828 million people in the world, or between 8.9% and 10.5% of the world's population, faced hunger in 2021, representing an increase of 46 million from 2020 and a total of 150 million more people since 2019, which was before the COVID-19 pandemic. Africa bears the heaviest burden of hunger. One in five people in Africa or 20.2% of the population was facing hunger in 2021 compared to 9.1% in Asia.

Prevalence of undernourishment

After a decline in the prevalence of undernourishment in the world from 15% over 2000–2004 to 8.9% in 2019, its levels have been on the rise again and were estimated to be 9.9% in 2020.[2]

Figure 3.1.1. Prevalence of undernourishment (% of population) in the WHO regions, 2001 and 2020, WHO



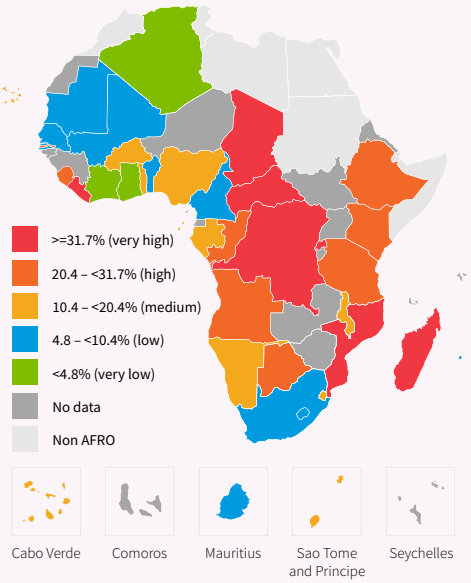
In Africa, 20% of the population was undernourished in 2019, compared with 8.9% worldwide. Estimates for 2020 are also showing an increase to 21%.

Figure 3.1.2. Trends in the prevalence of undernourishment in the WHO African Region, 2001–2020, WHO

The significant fall of prevalence of undernourishment that was observed between 2000 and 2013 followed by a virtual stabilisation between 2004 and 2018, reversed direction and has been increasing since 2019. If the current trends continue, achieving the no hunger target by 2030 might be compromised in Africa.

1 FAO. The State of Food Security and Nutrition in the World 2020. Transforming food systems for healthy and affordable food. Rome, 2020.
2 FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

Figure 3.1.3. Prevalence of undernourishment in the WHO African Region, 2020, WHO

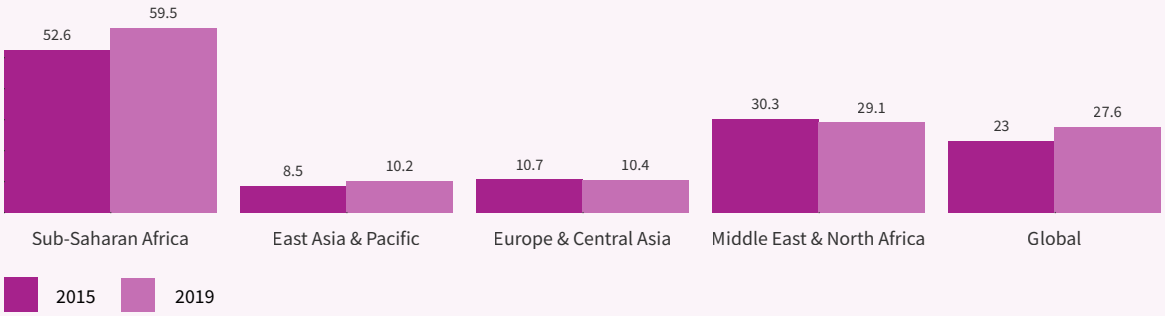


Conflicts, COVID-19 pandemic, climate change and the rising inequality are all factors that have contributed to affect global food security, with a visible effect on the prevalence of undernourishment in the WHO African Region. Moreover, soaring prices affected 47% of the countries worldwide in 2022,[3] up from 16% of the countries in 2019.

A total of 14 countries in Africa had a prevalence of undernourishment that was higher than the average for the Region in 2020, with seven countries being the most affected. Among these, three, that is the Central African Republic (48%), Madagascar (43.2%) and the Democratic Republic of the Congo (41.7%) had prevalence levels that were two times the regional average.

Prevalence of food insecurity in the population, based on the Food Insecurity Experience Scale

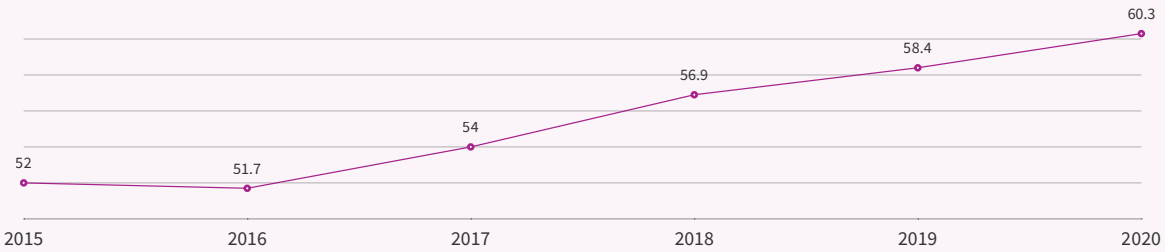
Figure 3.1.4. Prevalence of food insecurity in the WHO regions, 2015 and 2019, FAO



This indicator provides internationally comparable estimates of the proportion of the population facing moderate or severe difficulties in accessing food. Food insecurity worsened globally between 2015 and 2019, with the highest level occurring in sub-Saharan Africa, which was double the global average. In 2021, nearly one in three people (or 2.3 billion people) was moderately or severely affected by food insecurity. This increase of almost 350 million people from 2020 was mainly associated with the COVID-19 pandemic.

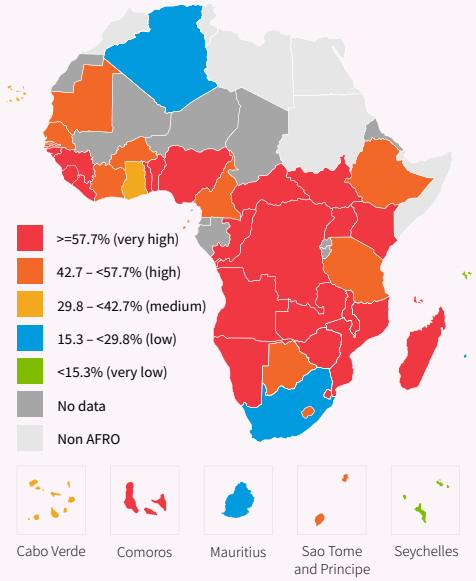
3 UN, Report on the Sustainable Development Goals 2022

Figure 3.1.5. Prevalence of food insecurity in the population of the WHO African Region, 2015–2020, FAO



Since 2016, the evolution of food insecurity in Africa has been of increasing concern. Africa is not isolated in this trend, as the whole world is facing food insecurity. Estimates for 2020 show a new increase to 59.6% in the prevalence of moderate or severe food insecurity in the African population (FAO). The factors involved vary from country to country and include drought, insecurity, political instability, wars, etc. In addition, the, COVID-19 pandemic has largely affected the economy of African countries, with a direct impact on food security. Given the current trend, it becomes unrealistic to expect the achievement of this objective by 2030. The target should be revised for African countries, geared towards reversing the trend and moving closer to the global average.

Figure 3.1.6. Prevalence of food insecurity in the WHO African Region, 2020, FAO

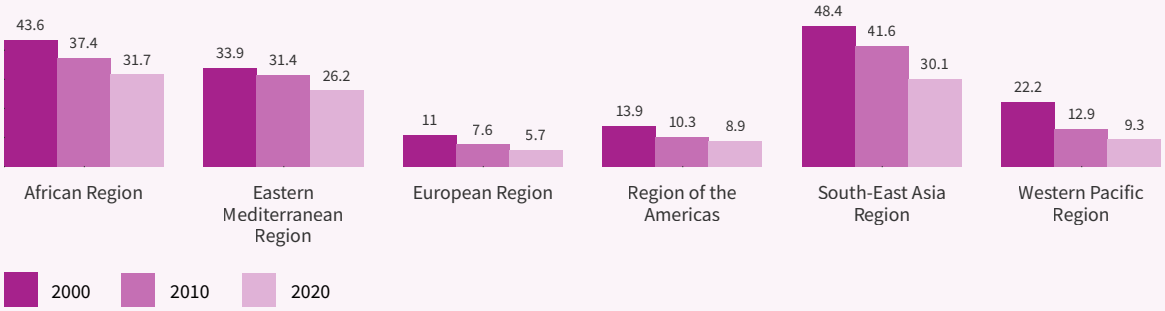


It is estimated that in 2020, 346 million people in Africa – that is more than a quarter of Africa's people – were affected by the food crisis (FAO, AU).[4] More than 93% of these people were in sub-Saharan Africa and the most affected countries were in East Africa (128 million), followed by West Africa (113 million). About 90% of the countries in the WHO African Region have food insecurity levels higher than the global average of 29%. These alarming figures have so far gone unnoticed, increasing the challenge of ensuring access to sufficient food for all by 2030. This also confirms the need to revisit the targets and reorient strategies.

4 FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

Prevalence of stunting among under-five children

Figure 3.1.7. Prevalence of stunting among under-five children in the WHO regions, 2000, 2010 and 2020, WHO

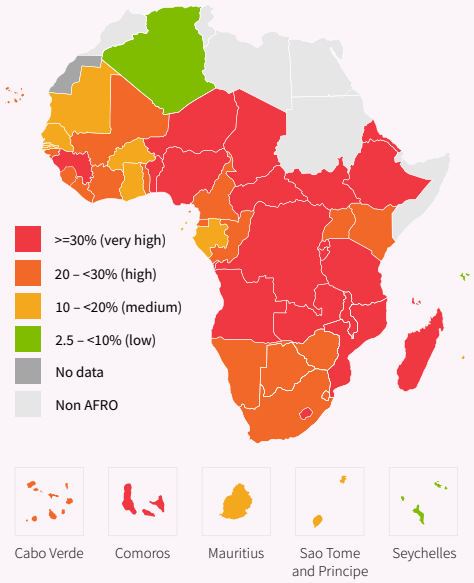


Despite the decline in the prevalence of stunting in under-five children, the WHO African Region moved from being the second most affected region after South-East Asia to the most affected Region in 2020. In addition, the Region is the only one showing an increase in the prevalence of children with stunting, which went up from 48.6 million in 2000 to 54.9 million in 2020 owing to the high birth rate. Stunting (low height for age) is the result of long-term nutritional deprivation and often results in delayed mental development, poor school performance and reduced intellectual capacity.

Figure 3.1.8. Prevalence of stunting among under-five children in the WHO African Region, 2000–2021, WHO

Although the prevalence of stunting among under-five children is declining in the WHO African Region, few countries are on track to achieve the 2030 target. The average of the decline is 2.9% every 5 years, meaning that if nothing is done, the prevalence will be around 25–26% by 2030. As we are the approaching the deadline, it is time to accelerate action.

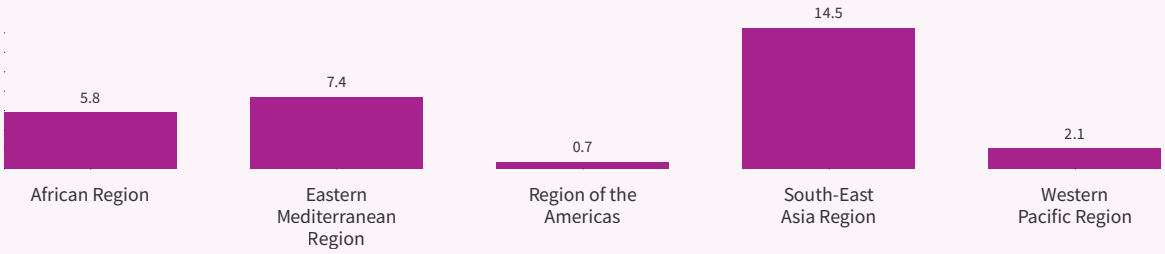
Figure 3.1.9. Prevalence of stunting among under-five children in the WHO African Region, 2020, WHO



The situation of the WHO African Region in 2021 showed that only Algeria and Seychelles were on track to achieve the target for stunting levels among under-five children by 2030, while 79% of countries in the Region still had high stunting prevalence rates. The growing food insecurity due to a cascade of events such as COVID-19, other emerging diseases, climate change, conflicts, growing inequalities, etc. and their side effects on the African economy contribute to the hampering of efforts to achieve this goal and should be considered in new plans.

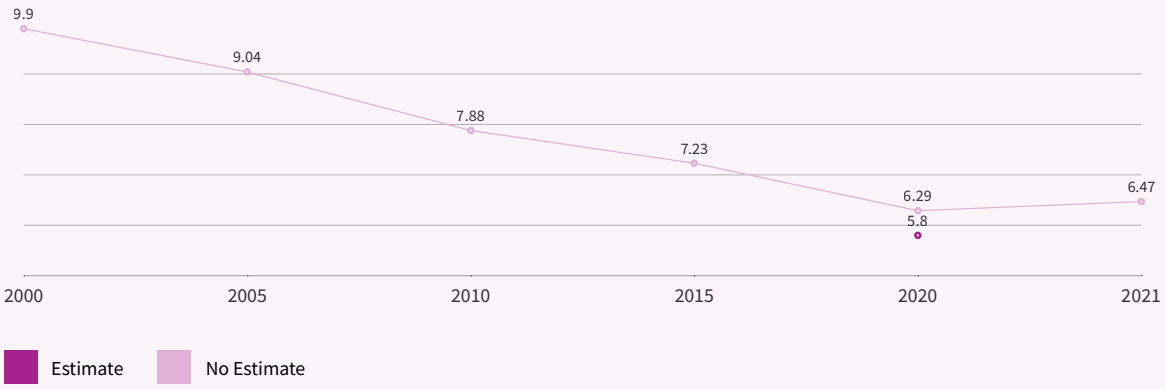
Prevalence of wasting among under-five children

Figure 3.1.10. Prevalence of wasting among under-five children in the WHO regions, 2020, WHO



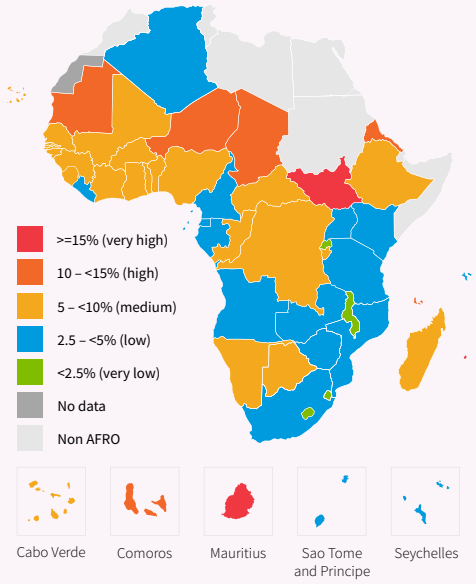
Child wasting refers to the condition in which a child is too thin for his or her height and is the result of recent rapid weight loss or the failure to gain weight. A child who is moderately or severely wasted has an increased risk of death, but treatment is possible. With a stunting prevalence of 5.8% in 2020, the WHO African Region still needs to take serious action if it is to meet the 2030 target or get close to it.

Figure 3.1.11. Prevalence of wasting among under-five children in the WHO African Region, 2000–2021, WHO



The trends in the prevalence of wasting among under-five children in the WHO African Region show very positive progress since 2000. If this is maintained, the Region will be close to the global target of not having more that 5% of the under-five children with wasting by 2025 and maintaining it at that level. However, there are significant disparities between countries. Furthermore, the ongoing food security crisis in the Horn of Africa and Sahel countries puts millions of children at risk of malnutrition, jeopardising the current progress.

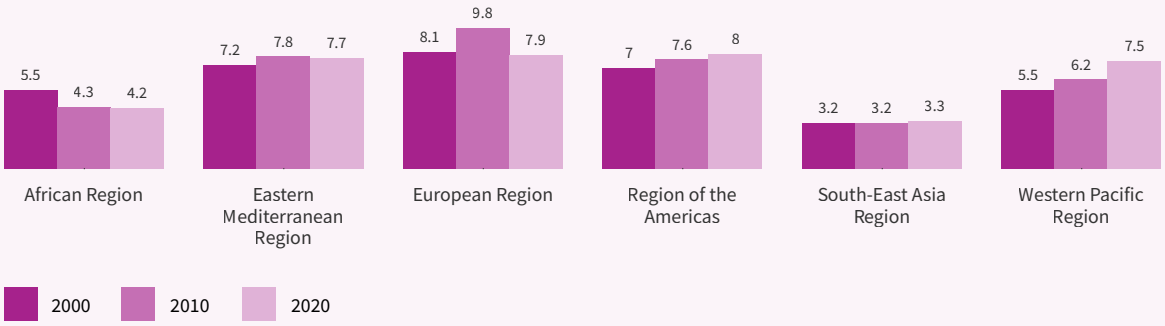
Figure 3.1.12. Prevalence of wasting among under-five children in the WHO African Region, 2020, WHO



In 2020, only two countries of the WHO African Region had a prevalence of wasting above 15% among under-five children, that is Sudan with 22% and Mauritius with 15.7%. These levels were classified to be very high public health concerns. In many countries the wasting level in under-five children is classified as of medium or low public health concern. Eleven countries, namely Rwanda, Malawi, Eswatini, Lesotho, Algeria, Zimbabwe, Equatorial Guinea, Cameroon, Gabon and Uganda have already achieved the target for this indicator. The positive experiences of these countries can be used to lift the countries left behind.

Prevalence of overweight among under-five children

Figure 3.1.13. Prevalence of overweight among under-five children in the WHO regions, 2000 and 2010 and 2020, WHO

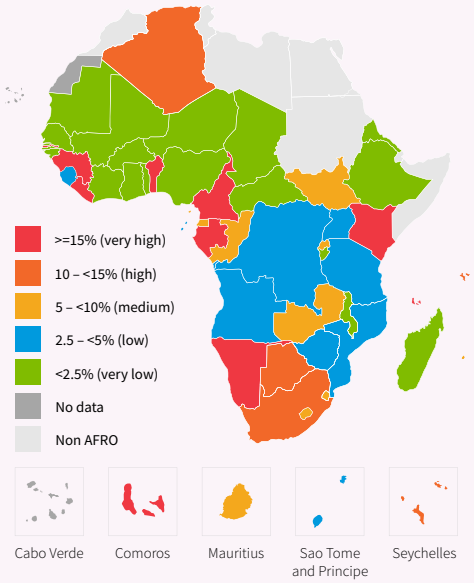


Overweight in children refers to a condition in which a child is too heavy for his or her height. In 2020, the prevalence of overweight in the WHO African Region was 4.2%, the second lowest level for under-five children among the regions after the South-East Asian Region which had 3.3%. However, the absolute number of children with overweight increased from 6.2 million to 7.3 million between 2000 and 2020.

Figure 3.1.14. Prevalence of overweight among under-five children in the WHO African Region, 2000–2021, WHO

The latest data for the Region show that the internationally agreed target for under-five children aiming to reduce overweight to be less than 5.6% by 2025 has been achieved. However, the slight increase seen in the estimated level calls for caution as the Region works at maintaining this status.

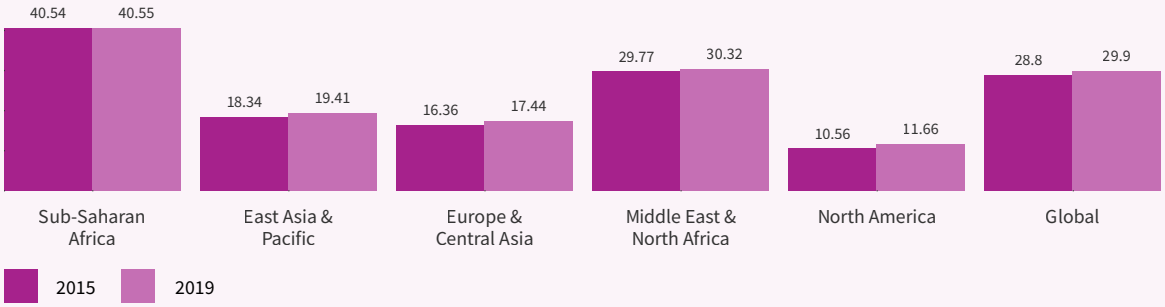
Figure 3.1.15. Prevalence of overweight among under-five children in the WHO African Region, 2020, WHO



Most countries in the Region have achieved the SDG target for this goal or are on track to achieve it. The countries that have achieved the target are mostly from the West and Central Africa subregions, with a few others scattered within the Southern and East Africa subregions.

Prevalence of anaemia in women aged 15 to 49 years

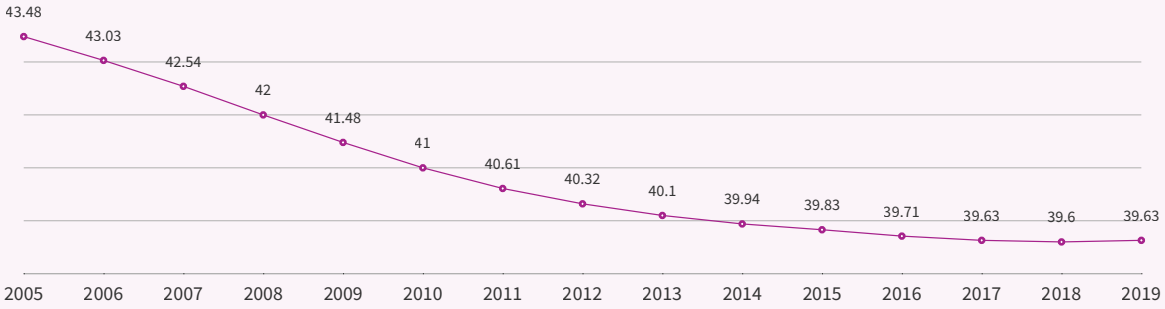
Figure 3.1.16. Prevalence of anaemia among women of reproductive age (15–49 years) in the WHO regions, 2015 and 2019, WHO



The WHO African Region has the highest prevalence of anaemia among women of reproductive age, with West and Central Africa being the most affected areas with a level of 50.8% in 2019. Between 2015 and 2019, the prevalence of anaemia in sub-Saharan Africa remained constant, making it challenging to achieve the goal of halving the disease's prevalence in women of reproductive age (15–49 years) by 2030.[5]

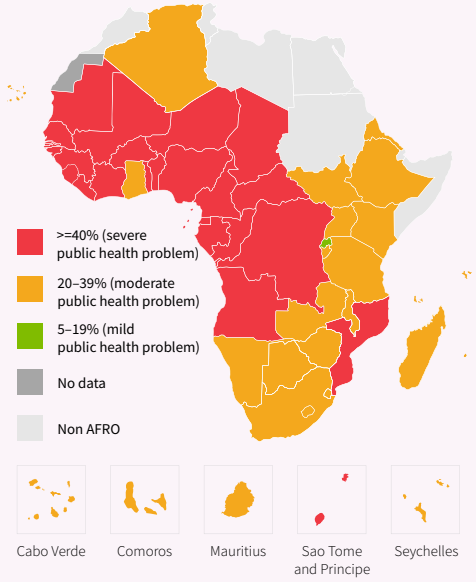
5 WHO; 2014. Global nutrition targets 2025. Anaemia Policy Brief (https://thousanddays.org/wp-content/uploads/Anameia-Policy-Brief.pdf, accessed 24 August 2022).

Figure 3.1.17. Prevalence of anaemia among women of reproductive age (15–49 years) in the WHO African Region, 2005–2019, WHO



The decline in the prevalence of anaemia among women of reproductive age between 2005 and 2016 from 43.5% to 39.9% was not sufficient to allow prediction of the halving of that level by 2025. Moreover, the prevalence level remained virtually unchanged from 2014 to 2019, making the target increasingly unlikely to be met.

Figure 3.1.18. Prevalence of anaemia among women of reproductive age (15–49 years) in the WHO African Region, 2019, WHO

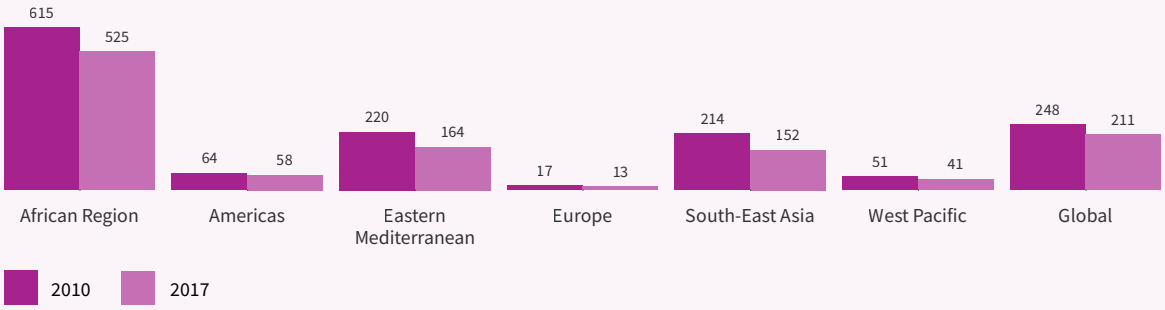


In 2019, more than half of the countries in the WHO African Region still had a very high anaemia prevalence of more than 40% among women aged 15–49 years, and almost all the Region was at least moderately affected by anaemia among this group. Only Rwanda had a prevalence of less than 20%.

3.2 SDG 3 – Good health and well-being

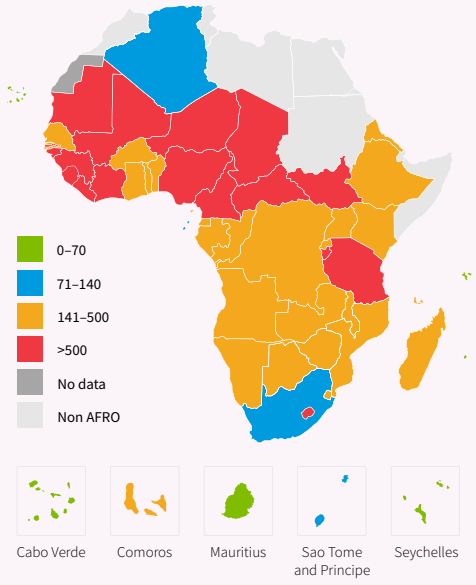
Maternal mortality

Figure 3.2.1. Maternal mortality ratio in the WHO regions, 2010 and 2017, UN MMEIG



One of the targets of SDG 3 is to reduce the global maternal mortality ratio (MMR) to below 70 per 100 000 live births and to have no country having an MMR higher than twice the global average. Despite the drop of 15% between 2010 and 2017, MMR in the WHO African Region is still the highest in the world and is still far from the level defined in the SDG objective. Global partners in maternal health and health systems should increase their mobilisation of efforts to get as close as possible to the target set in SDG 3.

Figure 3.2.2. Maternal mortality ratio in the WHO African Region in 2017, UN MMEIG



MMR in sub-Saharan Africa was about 525 per 100 000 live births in 2017. This means that for every 1000 live births one mother died. West and Central Africa subregions were the most affected, while the East Africa and Southern Africa subregions were doing slightly better, although they were still far from the target. Only Cabo Verde, Mauritius and Seychelles, all island countries, had ratios below the target of 70 deaths per 100 000 live births.

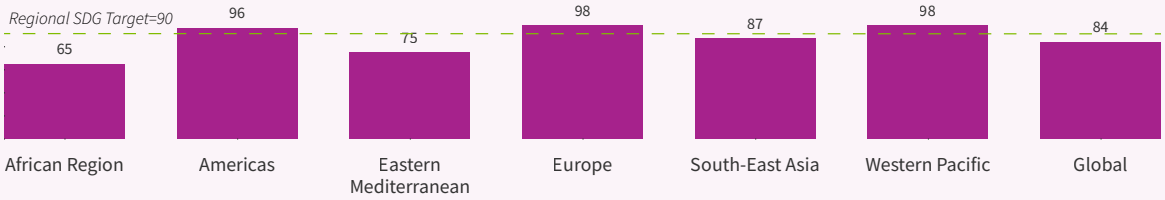
A whopping 99% of all maternal deaths occur in developing countries, with more than half of them in sub-Saharan Africa and almost a third in South Asia. More than half of all maternal deaths occur in unstable and humanitarian crisis areas. Africa has more than twice as many maternal deaths as the global average and 40 times as many as Europe. The country with the highest MMR on the continent is South Sudan, followed by Chad and Sierra Leone.

Figure 3.2.3. Trends in MMR in the WHO African Region, 2000–2017 and projections to 2030, UN MMEIG (the projections are estimates based on ARR modelling)

To reach SDG 3 by 2030, the MMR level of 2017 will need to be reduced by 86%, which seems unrealistic if the speed of reduction that would be needed is considered. Estimates based on ARR modeling indicate that by 2030 there will still be 390 maternal deaths per 100 000 live births. With more efforts to reduce MMR in the Region, the levels can at least be lowered to less than double the global average.

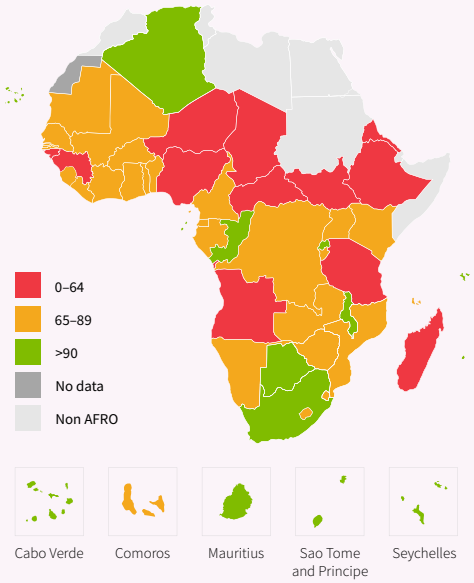
Births attended by skilled health personnel

Figure 3.2.4. Proportion of births attended by skilled health personnel in the WHO regions, 2021, WHO



Globally, the WHO African Region has the lowest proportion of births attended by skilled health personnel, which was 65% in 2021. It is followed by the Eastern Mediterranean Region with 75%. To meet the target of SDG 3.1, the gap of 25% in skilled birth attendance must be closed.

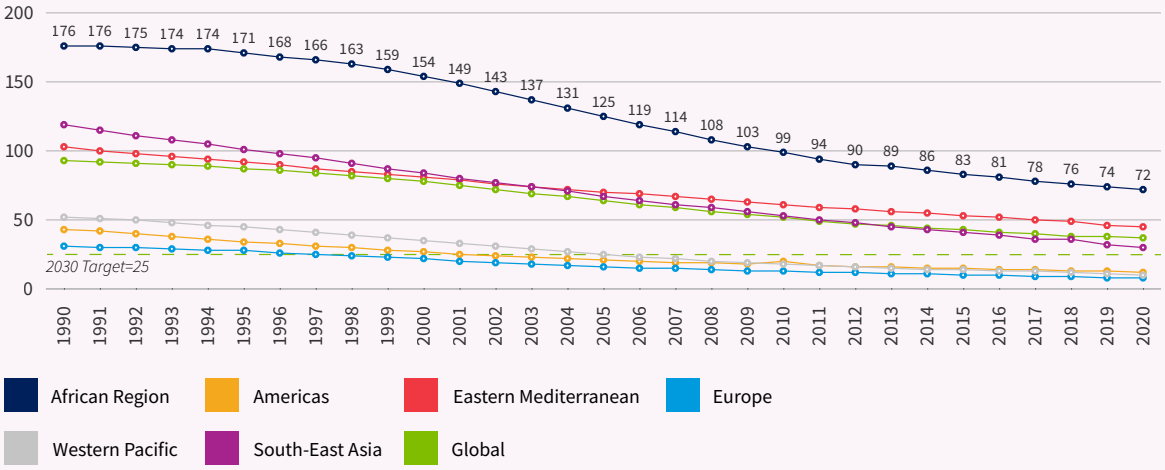
Figure 3.2.5. Proportion of births attended by skilled health personnel in the WHO African Region, 2021, WHO



Having a skilled health professional at the time of delivery is a vital necessity for women and newborns. By 2021, 10 African countries had taken up the challenge and provided skilled health personnel for more than 90% of births. These were Mauritius, Botswana, Seychelles, Algeria, South Africa, Sao Tome and Principe, Cabo Verde, Rwanda, Congo and Malawi.

Under–five mortality

Figure 3.2.6. Trends in under-five mortality rate in the WHO regions, 1990–2020, UN IGME



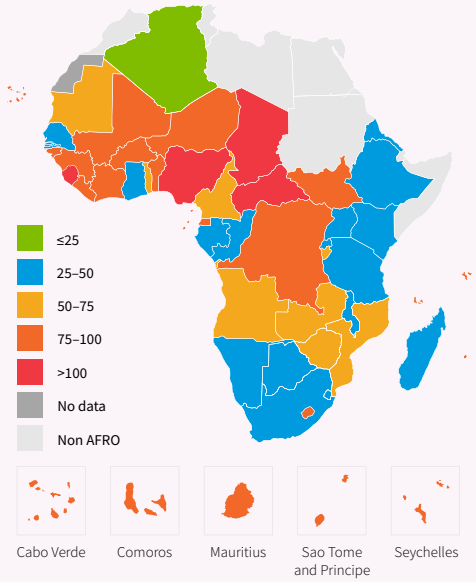
The goal of SDG 3 is to reduce under-five mortality to no more than 25 per 1000 live births in all countries by 2030. All regions of the world have seen improvements in this indicator since 1990. Although Africa has made the most progress, its level of change has been slowing down over the last decade.

In 2019, an estimated 5.2 million under-five children died mostly from preventable or treatable diseases. Most of these deaths occurred in Africa, which still has the highest levels of under-five mortality compared with the other regions. Children aged 1–11 months accounted for 1.5 million of these deaths, while children aged 1–4 years accounted for 1.3 million of the deaths. Newborns aged under 28 days accounted for the remaining 2.4 million deaths. Their mortality levels should be a priority area of focus in the coming years.

Figure 3.2.7. Trends in under-five mortality rate in the WHO African Region, 1990–2020, UN IGME

Sub-Saharan Africa remains the region with the highest under-five mortality rate in the world, with one in 13 children dying before their fifth birthday. The Region experienced a sharp decline in under-five mortality between 1990 and 2010, when the levels went from 176 to 99 deaths per 1000 live births, but the pace slowed down from then to 2020.

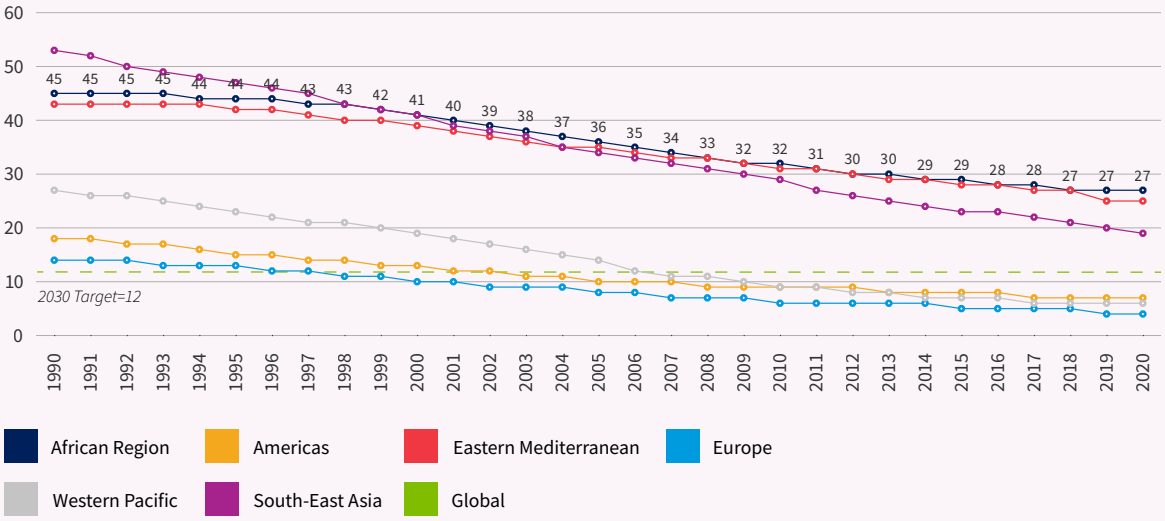
Figure 3.2.8. Under-five mortality rate in the WHO African Region, 2020, UN IGME



In 2019, half of all the deaths among under-five children occurred in just five countries, three of which were in the WHO African Region, that is Nigeria, the Democratic Republic of the Congo and Ethiopia. These are the three most populated countries in Africa. The other two were India, in the South-East Asian Region, and Pakistan, in the Eastern Mediterranean Region. Algeria has almost reached the goal of having an under-five mortality ratio of no more than 25 per 1000 live births, while a few other countries mainly in the East Africa and Southern Africa subregions are not far from this goal. The worst performing countries are mainly in the Central Africa subregion.

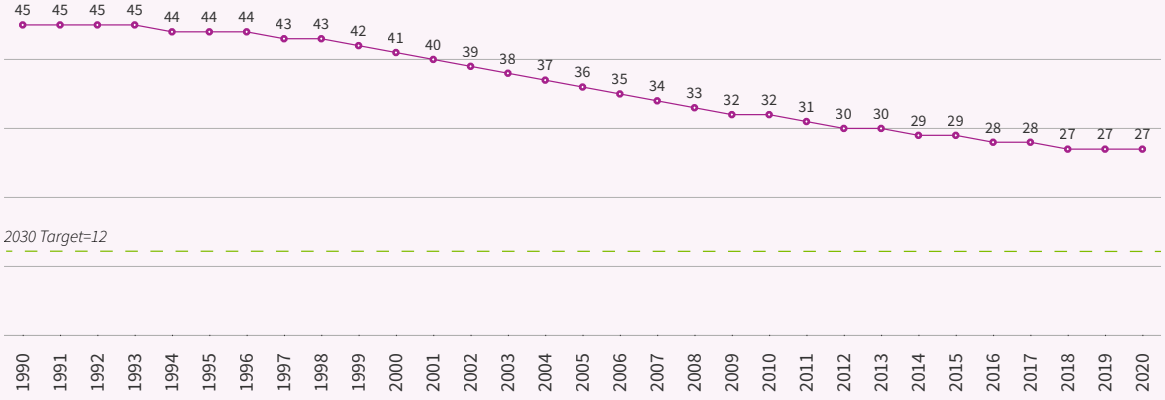
Neonatal mortality

Figure 3.2.9. Trends in neonatal mortality rate in the WHO regions, 1990–2020, UN IGME



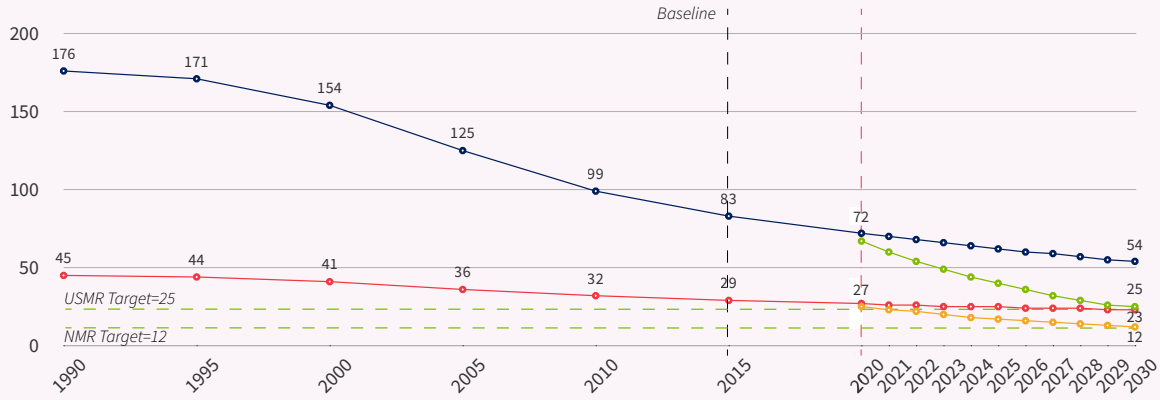
There are 2.4 million neonatal deaths each year worldwide. This is the group with the highest proportion of mortality in under-five children. The SDGs set the target of reducing neonatal mortality to no more than 12 per 1000 live births in all countries by 2030. By 2020, only Europe, the Americas and the Western Pacific regions had achieved this goal. The other regions are still above the global average, with the WHO African Region having the highest neonatal mortality rate at 27 deaths per 1000 live births. It should be noted that neonatal mortality declined by 17% in the WHO African Region between 1990 and 2020, but this was at a lower level than that of the South-East Asian Region, which was 35% over that period. The successful experiences of the best performing regions can be contextualised and replicated in the WHO African Region to catch up.

Figure 3.2.10. Trends in neonatal mortality rate in the WHO African Region, 1990–2020, UN IGME



The WHO African Region saw a decline in neonatal mortality of14% in the 20 years from 1990 to 2010, but the pace seems to have slowed down with the rate declining by only 4% in the decade of 2010–2020. If nothing is done to accelerate the decline of neonatal mortality, the Region will not be able to reach the SDG target by 2030. Efforts should be made more in West and Central Africa.

Figure 3.2.11. Under-five mortality rate and neonatal mortality rate in the WHO African Region, 1990–2020 with projections to 2030, UN IGME



Under-five mortality rate

- Scenario of continuing trend based on the current AARR* of 3.1%
- Scenario of projections based on the AARR of 10.6% needed to reach the SDG Target

Neonatal mortality rate

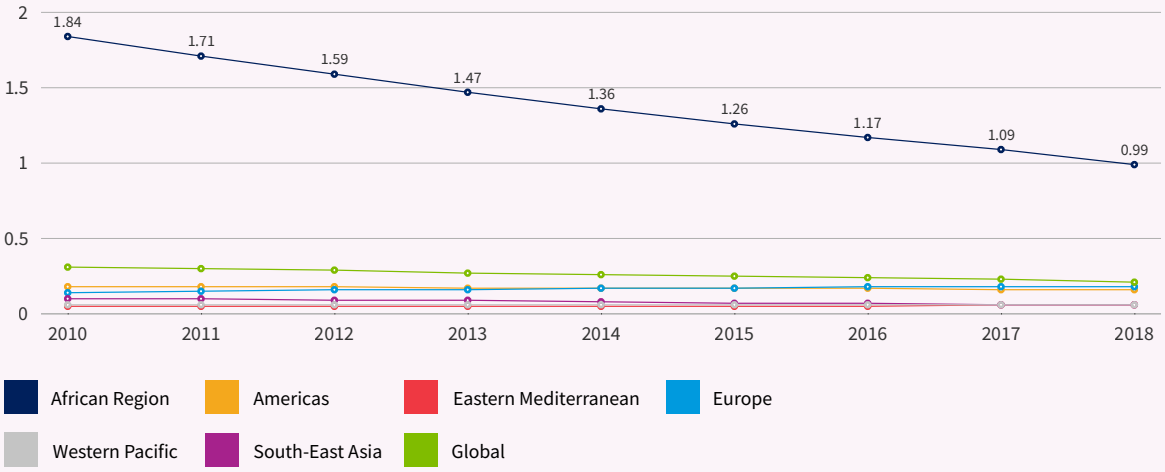
- Scenario of continuing trend based on the current AARR of 1.4%
- Scenario of projections based on the AARR of 8.1% needed to reach the SDG Target

**AARR: Annual average rate of reduction*

Annual average rate of reduction (AARR) projections on what is needed to attain the SDG target show that there is a larger gap in reaching the under-five mortality reduction goal than the neonatal mortality reduction goal. However, given that neonatal mortality accounts for nearly half of all under-five mortality, accelerating the agenda to meet its reduction goal will be a major step toward reducing the under-five mortality rate to less than 25 deaths per 1000 live births.

New HIV infections

Figure 3.2.12. Trends in new HIV infections (per 1000 uninfected population) in the WHO regions, 2010–2018, WHO

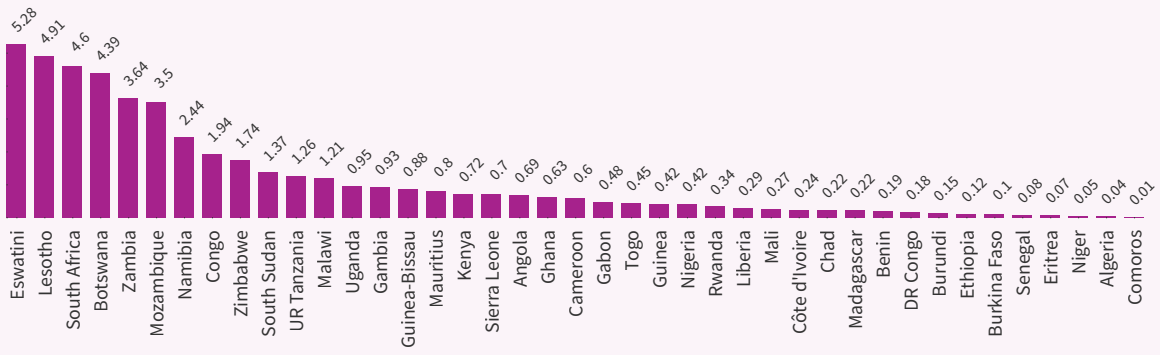


Since 2010, new HIV infections have declined by 31% in Africa and went from 2.1 million to reach 1.5 million in 2020. And since 2010, new HIV infections among children have declined by 53%, going from 320 000 in 2010 to 150 000 in 2020. East Africa and Southern Africa subregions bear a disproportionate burden of HIV infections, accounting for 54% of all the people living with HIV and 43% of all the new HIV infections globally in 2019.[6]

Although the number of new HIV infections in Africa decreased between 2010 and 2018, it is still much higher than in the other WHO regions, whose numbers are lower than the global average.

Sub-Saharan Africa contains two thirds (67%) of the people living with HIV, and 63% of the new infections are among women and girls. According to the Global Fund, based on data from 502 health facilities in 32 countries in Africa and Asia, HIV testing had declined by 41% and referrals for diagnosis and treatment had decreased by 37% during the initial confinements due to COVID-19 in 2020 compared with the same period in 2019.

Figure 3.2.13. HIV infections per 1000 uninfected population in the countries in the WHO African Region, 2010, 2015 and 2020, WHO

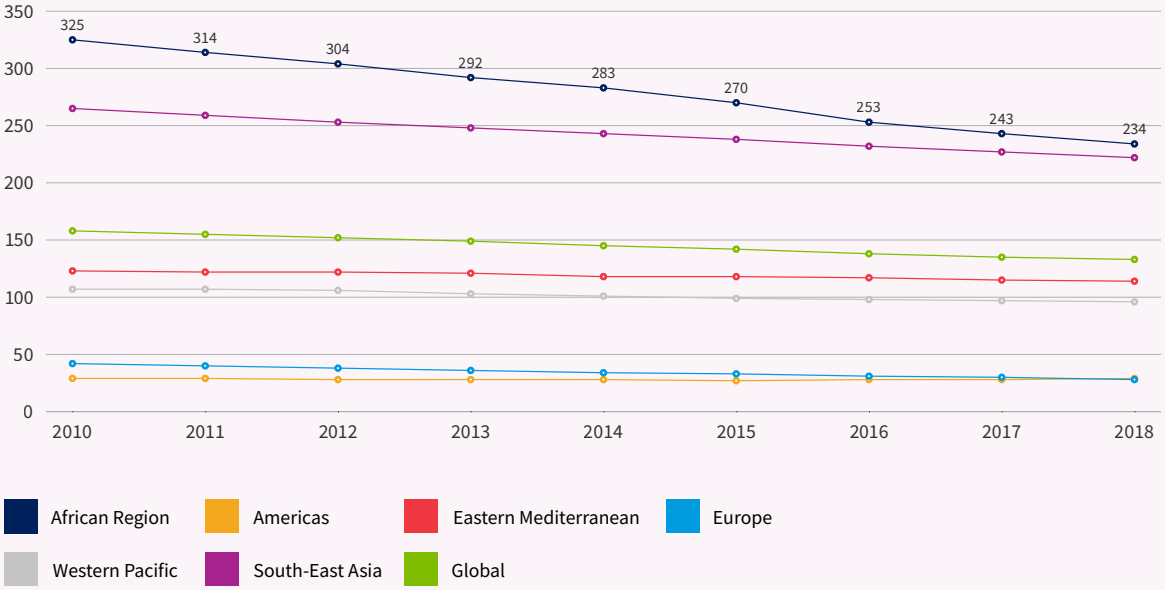


Almost all the countries in the Region had a decline in the new HIV infections. However, the declines in HIV incidence are still slower than expected.

6 Karim, S.S.A and Baxter, C.(2021), HIV incidence trends in Africa: young women at highest risk, The Lancet HIV, 8(7), e389-e390.

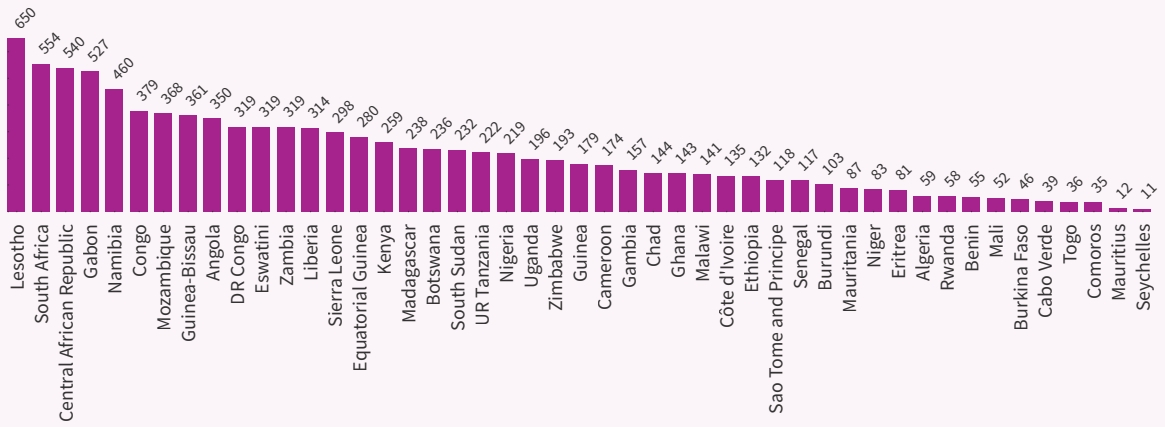
TB incidence

Figure 3.2.14. Trends in TB incidence (per 100 000 population) in the WHO regions, 2010–2018, WHO



TB is one of the 10 leading causes of death in the world. Although there was a general decrease in TB incidence between 2010 and 2018, the levels in Africa and South-East Asia remain above the global average. These regions have the highest numbers of TB cases.

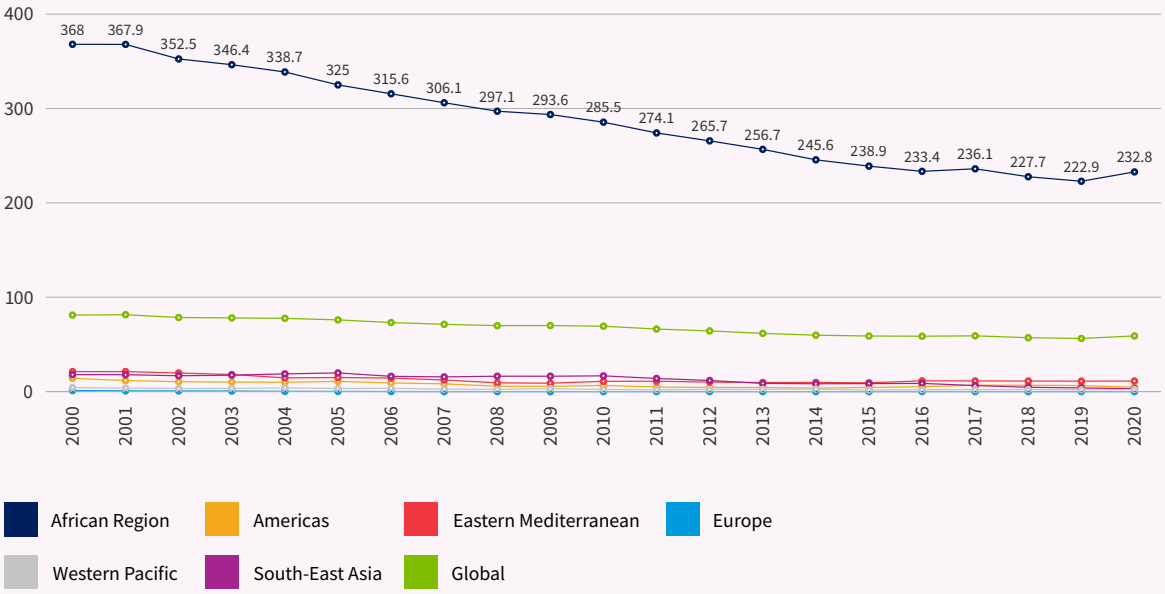
Figure 3.2.15. TB incidence (per 100 000 population) in the WHO African Region, 2010, 2015 and 2020, WHO



There was a general decrease in TB cases in all African countries from 2010 to 2020.

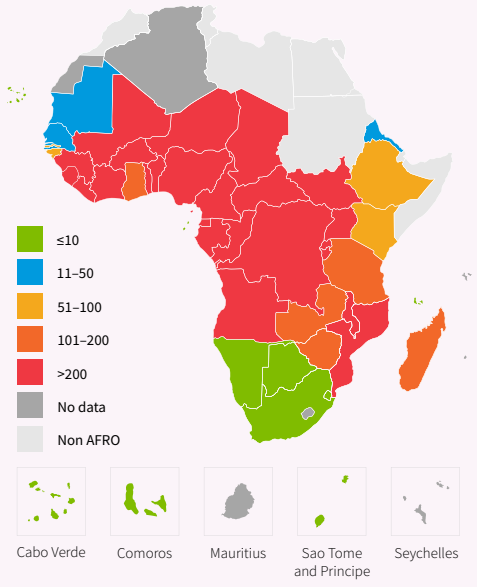
Malaria incidence

Figure 3.2.16. Trends in malaria incidence (per 1000 population at risk) in the WHO regions, 2000–2020, WHO



Malaria is endemic in Africa more than in any other region, which explains its high incidence in this region. Moreover, malaria numbers in the WHO African Region are still very high compared to the global average. The Region carries a disproportionately high share of the global malaria burden. In 2020, the WHO African Region was home to 95% of malaria cases and 96% of malaria deaths. Under-five children accounted for about 80% of all malaria deaths in the Region.[7] Researchers should strive to find a sustainable solution to reduce this burden.

Figure 3.2.17. Malaria incidence (per 1000 population at risk) in the WHO African Region in 2020, WHO



Malaria elimination has been officially certified by WHO in 10 countries over the past 20 years, and among these only Algeria is in the WHO African Region. According to the World malaria report,[8] the intermediate targets set for 2020 for malaria incidence (reduction by at least 40%) and mortality rates are not being met. The incidence remains at 56 cases of malaria per 1000 people who contract the disease against the target of 35 cases. The gap in this intermediate target is 37%. The same report indicates that four African countries accounted for just over half of all malaria deaths worldwide, that is Nigeria (31.9%), the Democratic Republic of the Congo (13.2%), the United Republic of Tanzania (4.1%) and Mozambique (3.8%). Central and West African subregions are the most affected areas.

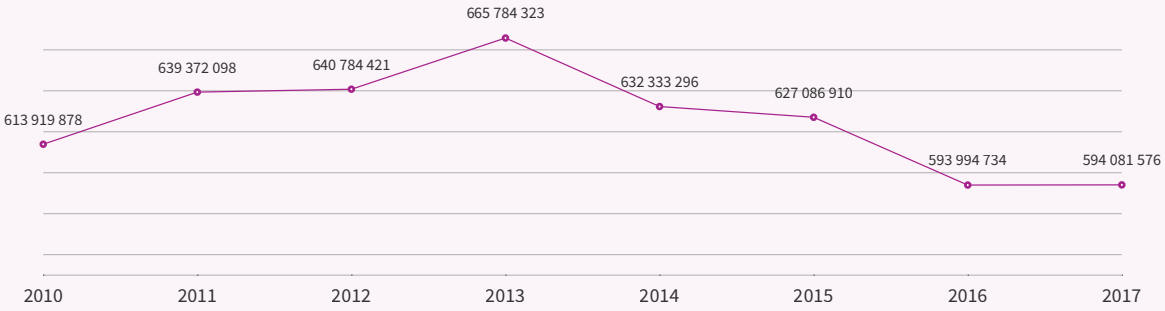
7 WHO (2022), Malaria Key fact. https://www.who.int/news-room/fact-sheets/detail/malaria (29/08/2022)
8 WHO (2021), World malaria report 2021. Geneva. Licence: CC BY-NC-SA 3.0 IGO.

Hepatitis B incidence

In 2019, 30.4 million individuals, or 10.5% of the people estimated to be living with hepatitis B, were aware of their infection, while 6.6 million of those diagnosed, or 22% of the people estimated to be living with hepatitis B, were on treatment.

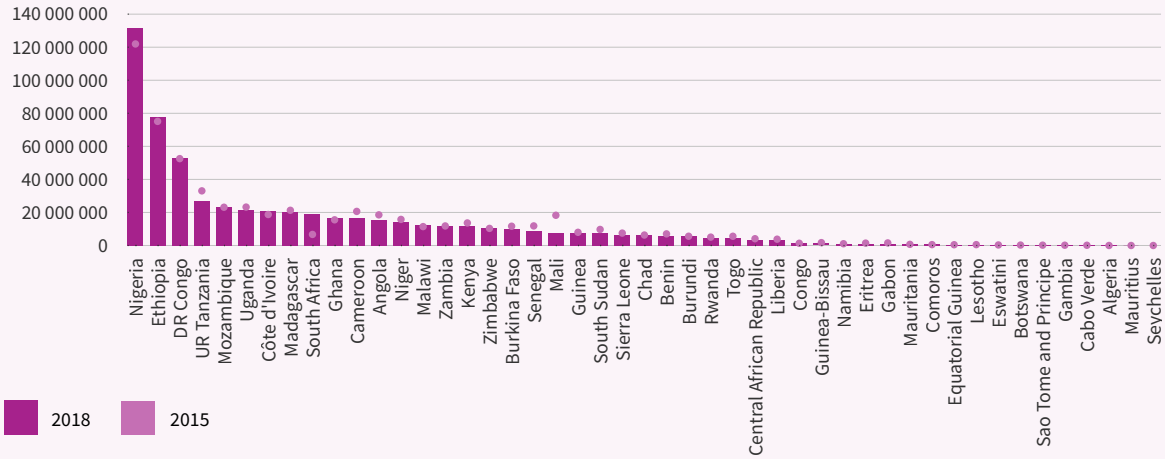
People requiring interventions against NTDs

Figure 3.2.18. Trends in people requiring interventions against NTDs in the WHO African Region, 2010–2017, UNSTAT



More than 600 million people required NTD interventions in the WHO African Region between 2010 and 2017. In 2020, 732 million people in 62 countries were treated for at least one NTD requiring chemoprevention, representing 42% of the global coverage, compared with 1.1 billion (66%) people in 81 countries in 2019. These reductions reflect the disruption caused by the COVID-19 pandemic in the health services.

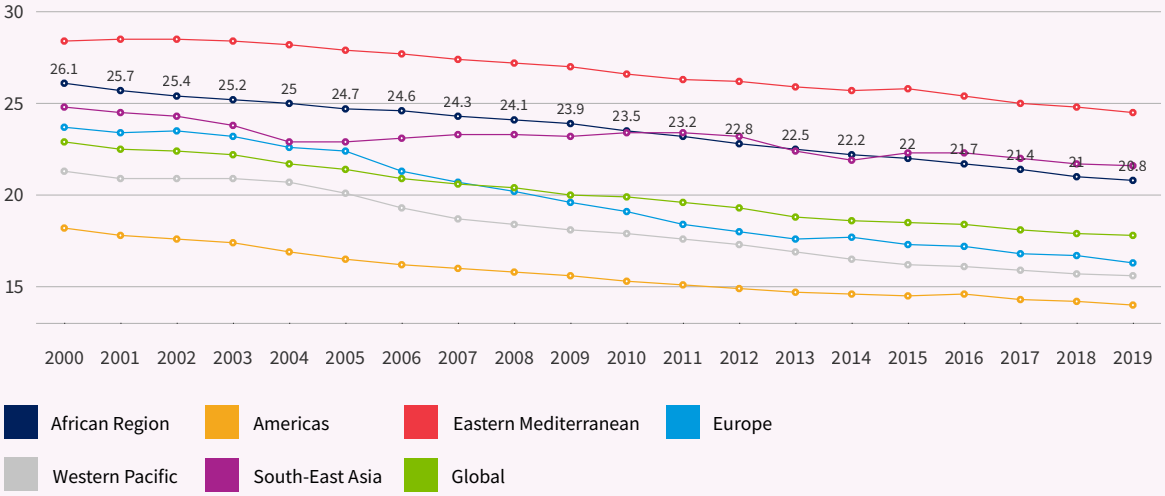
Figure 3.2.19. People requiring interventions against NTDs in the WHO African Region, 2015 and 2018, UNSTAT



Countries such as Nigeria, the Democratic Republic of the Congo, Côte d'Ivoire, Cameroon, Senegal and South Africa saw their numbers of people in need of NTD interventions increase from 2015 to 2018, with some of these coming from almost zero. Nigeria, with over 140 million people affected, is far ahead of all the countries.

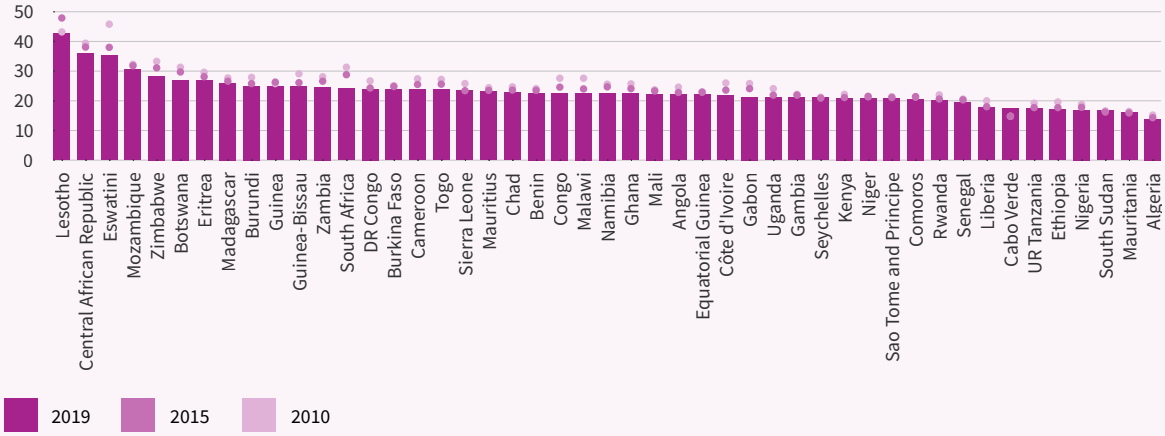
Mortality attributed to cardiovascular disease, cancer, diabetes or chronic respiratory

Figure 3.2.20. Trends in probability (%) of dying between age 30 and exact age 70 from any of cardiovascular disease, cancer, diabetes or chronic respiratory disease in the WHO regions, 2000–2019, WHO



Each year, 15 million people aged 30–69 years die from NCDs such as cardiovascular diseases, cancer, diabetes and chronic respiratory diseases. More than 85% of these premature deaths occur in low-income and middle-income countries. Among the WHO regions, the Africa Region had the third highest mortality rate from NCDs after the Eastern Mediterranean and the South-East Asia regions in 2019. Despite the decline in their levels in all the regions, NCDs still kill 41 million people each year, accounting for 71% of all deaths worldwide. Cardiovascular disease accounts for the largest number of deaths from NCDs with 17.9 million deaths per year, followed by cancers with 9 million deaths, respiratory diseases with 3.9 million deaths and diabetes with 1.9 million deaths.

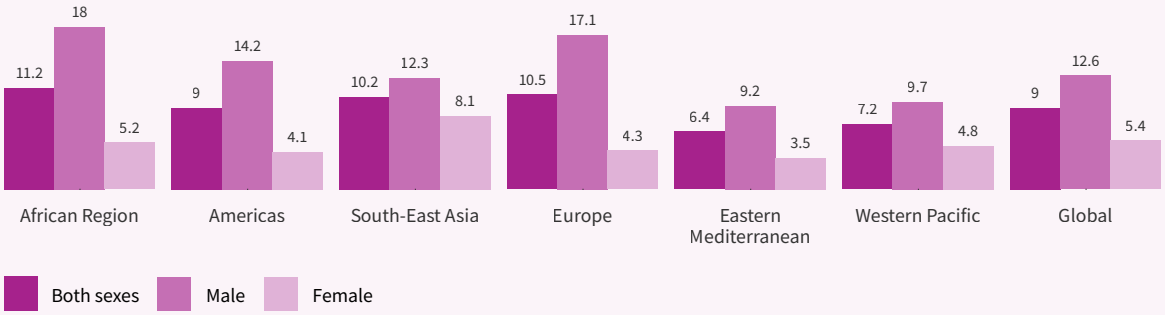
Figure 3.2.21. Trends in probability (%) of dying between age 30 and exact age 70 from any of cardiovascular disease, cancer, diabetes or chronic respiratory disease in the WHO African Region, 2010, 2015 and 2019, WHO



In 2019, more than three quarters of African countries had levels above the regional average for the probability of dying from NCDs between the ages of 30 years and 70 years. Countries in the Southern and West African subregions were the most affected, with a few countries from East Africa.

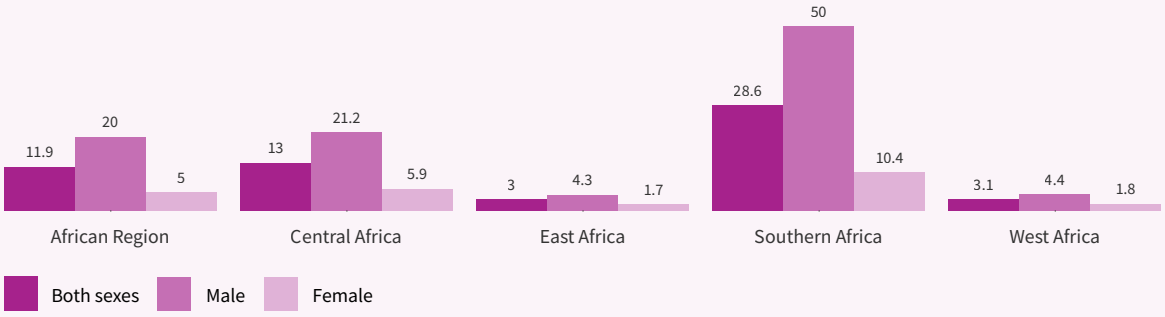
Suicide mortality

Figure 3.2.22. Age-standardised suicide rate (per 100 000 population) in the WHO regions, 2019, WHO



The suicide rate in the WHO African Region is the highest in the world. It was estimated to be 11.2 per 100 000 population in 2019. Globally, the suicide rate is higher for men (12.6 per 100 000) than for women (5.4 per 100 000). This trend is similar in all countries in the WHO African Region, where the suicide rate is consistently higher for men (18 per 100 000) than for women (5.2 per 100 000). The suicide rate for women in the WHO African Region is slightly lower than the global average.

Figure 3.2.23. Regional disaggregated data for age standardised suicide rates for all ages (per 100 000 population) in the WHO African Region subregions, 2019, WHO



Estimates in 2019 showed that 77% of suicides occurred in low-income and middle-income countries. Except for Seychelles, all countries in the WHO African Region fall into these categories. In addition, 88% of adolescent suicide deaths were from low-income and middle-income countries. In 2020, of the 18 African countries that responded to a regional survey on suicide, none had a national suicide prevention strategy, and only Algeria, Congo and Madagascar were in the process of developing one.[9] Efforts must be seriously accelerated to meet the SDG target of reducing the global suicide mortality rate in Africa by one-third by 2030. The Southern Africa and Central Africa subregions must be the priority targets.

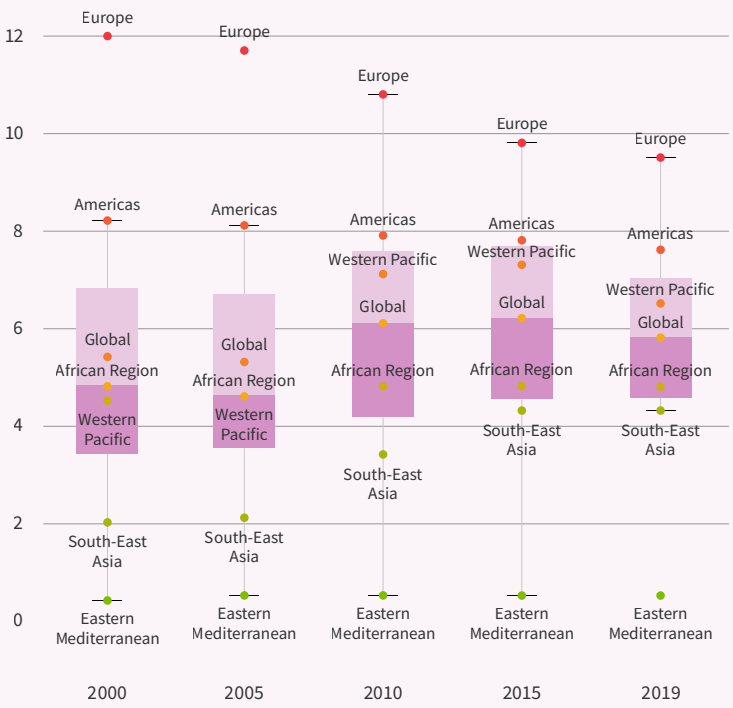
9 Osafo J and al (2020), Suicide Prevention in the WHO African Region. Crisis. 2020 Mar;41(Suppl 1):S53-S71. doi: 10.1027/0227–5910/a000668. PMID: 32208755

Coverage of treatment interventions for substance-use disorders

According to the 2010 WHO Atlas on drug abuse, an estimated 3.5% to 5.7% of people aged 15–64 years worldwide use illicit drugs and 10% to 15% become addicted to the drugs or to use them in a harmful way. Currently, there is a paucity of epidemiological data on the extent of drug use prevention worldwide and particularly in Africa, an issue that has been reputed to hinder effective global policy responses.[10,11] In Nigeria, 27% of the population with alcohol or drug dependence were in treatment in 2017. However, research evidence indicates that in general, there is no singular approach to the prevention of alcohol and substance abuse in Africa.[12] Moreover, evidence is limited on the value of integrating alcohol use disorder interventions in health Care Settings in sub-Saharan Africa.[13]

Alcohol consumption among people aged 15 years or older

Figure 3.2.24. Trends in per capita alcohol consumption for people aged 15 years or older (litres of pure alcohol in a calendar) in the WHO regions, 2000–2019, WHO



Target 3.5 of the SDGs seeks to strengthen the prevention and treatment of substance abuse, including drug abuse and harmful use of alcohol. In 2019, global alcohol consumption, measured in litres of pure alcohol per person aged 15 or older, was 5.8 litres, a relatively small decrease of 5% from 6.1 litres in 2010. Worldwide alcohol-related mortality is estimated to be 3 million deaths each year, which represents 5.3% of all deaths. Also, 5.1% of the yearly global burden of disease and injury is attributable to alcohol consumption. The WHO African Region is faced with a growing burden of harmful alcohol consumption and its disastrous effects. Over 2000–2019, the premature deaths per 100 000 people were highest in Eastern Europe (155.8 deaths per 100 000), followed by Central Europe (52.3 deaths per 100 000 people) and then western sub-Saharan Africa (48.7 deaths per 100 000). Cirrhosis-related deaths doubled in sub-Saharan Africa between 1980 and 2010.[14]

10 Degenhardt, L., Stockings, E., Patton, G., Hall, W. D., and Lynskey, M. (2016a). The increasing global health priority of substance use in young people. The Lancet Psychiatry, 3(3), 251–264. https://doi.org/10.1016/S2215–0366(15)00508–8

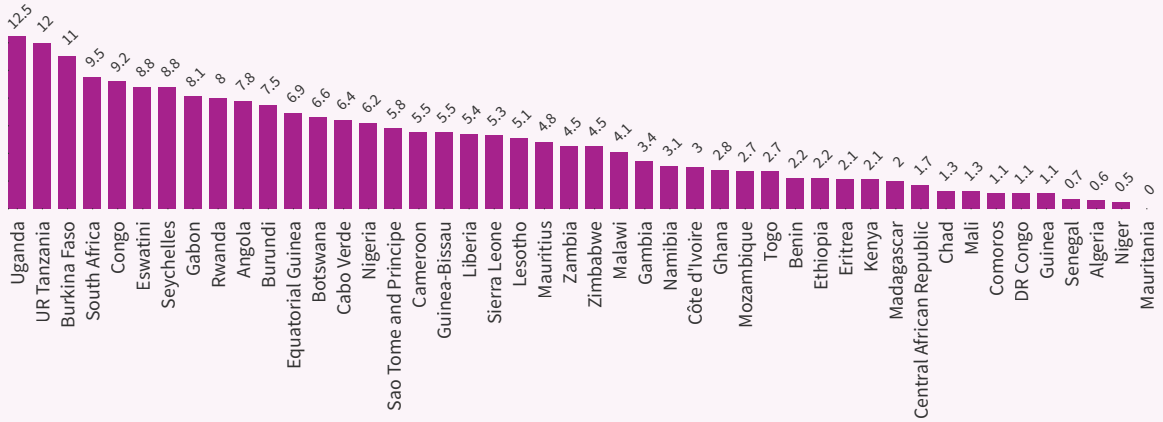
11 WHO. (2013). WHO Global strategy to reduce the harmful use of alcohol. WHO

12 Mupara, L. et al. (2022) Alcohol and substance use prevention in Africa: systematic scoping review, Journal of Substance Use, 27:4, 335–351, DOI: 10.1080/14659891.2021.1941356

13 Mushi, D., Francis, J. M., Moshiro, C., Hanlon, C. and Teferra, S. (2022). Integration of Alcohol Use Disorder Interventions in General Health Care Settings in sub-Saharan Africa: A Scoping Review. Frontiers in psychiatry, 13.

14 Sohi, I.; Franklin, A.; Chrystoja, B.; Wettlaufer, A.; Rehm, J. and Shield, K. (2021). The Global Impact of Alcohol Consumption on Premature Mortality and Health in 2016. Nutrients 2021, 13, 3145. https://doi.org/10.3390/nu13093145

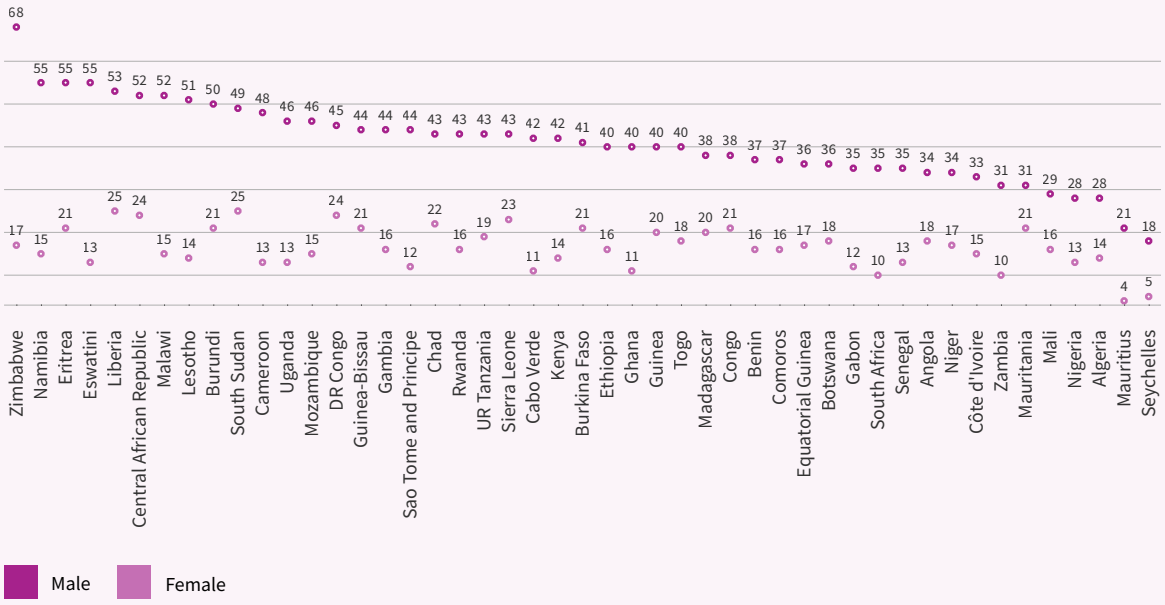
Figure 3.2.25. Alcohol consumption among people aged 15 years or older (litres of pure alcohol in a calendar year per capita) in the WHO African Region, 2019, WHO



Africa's alcohol consumption does not match the levels in the European, Americas or the Western Pacific regions, which were far above the world average consumption in 2019. Uganda had a consumption level of over 20 litres of alcohol per capita in 2019, making it the leading country in the Region that year. Almost half of African countries have levels higher than the regional average. In general, African men consume almost seven times more alcohol than women.

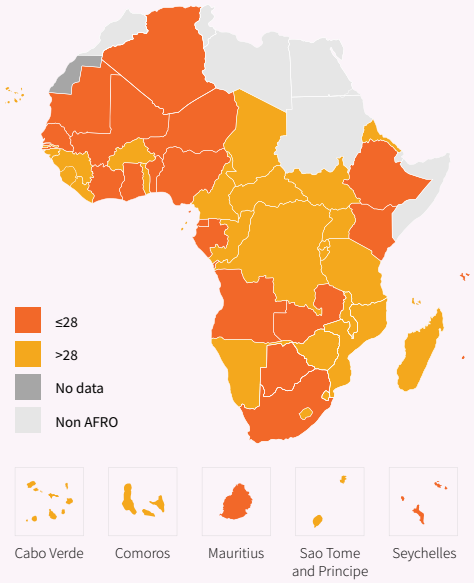
Deaths due to road traffic injuries

Figure 3.2.26. Road traffic death rate (per 100 000 population) in the WHO African Region, 2019, WHO



Goal 3.6 of the SDGs aims halve the number of road traffic deaths and injuries worldwide by 2020. This target has not been met, as the rate of road traffic deaths has increased worldwide including in the WHO African Region. The target will have to be revised and new strategies put in place considering the context of the road network development.

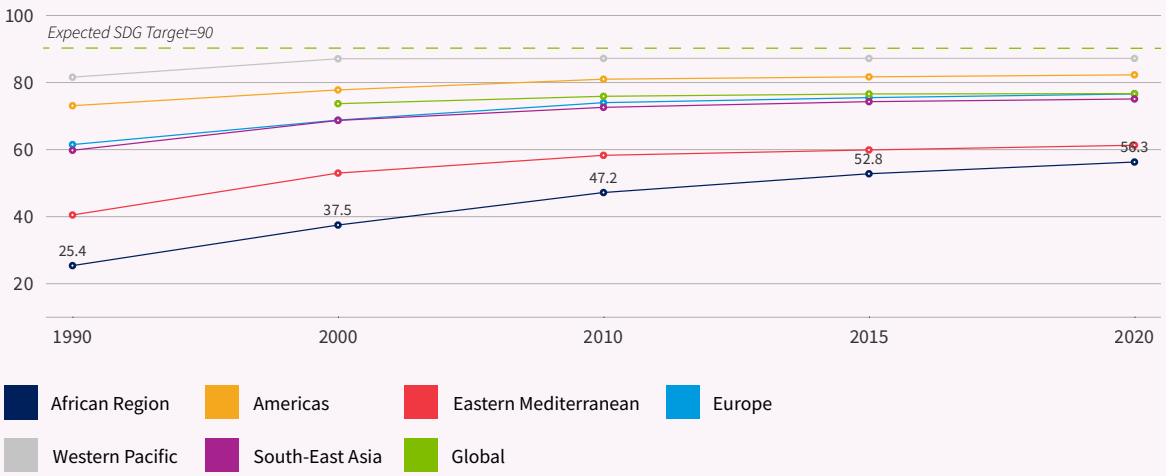
Figure 3.2.27. Road traffic death rate (per 100 000 population) in the WHO African Region, 2019, WHO



A WHO report indicates that Africa has the worst road death rate in the world. In addition, almost twice more men than women die from road accidents in the countries in the Region. The rate of road injury deaths in Africa is 26.6 per 100 000 population, nearly three times that of Europe. The worst figures are observed in Central Africa. The report states that many countries in Africa and South America do not have sufficient speed limit laws. But in Africa, most accidents and higher death rates seem to be associated with vehicle safety. It is estimated that Africa is far from meeting the United Nations' vehicle safety standards.

Women of reproductive age (15–49 years) whose family planning needs are satisfied with modern methods

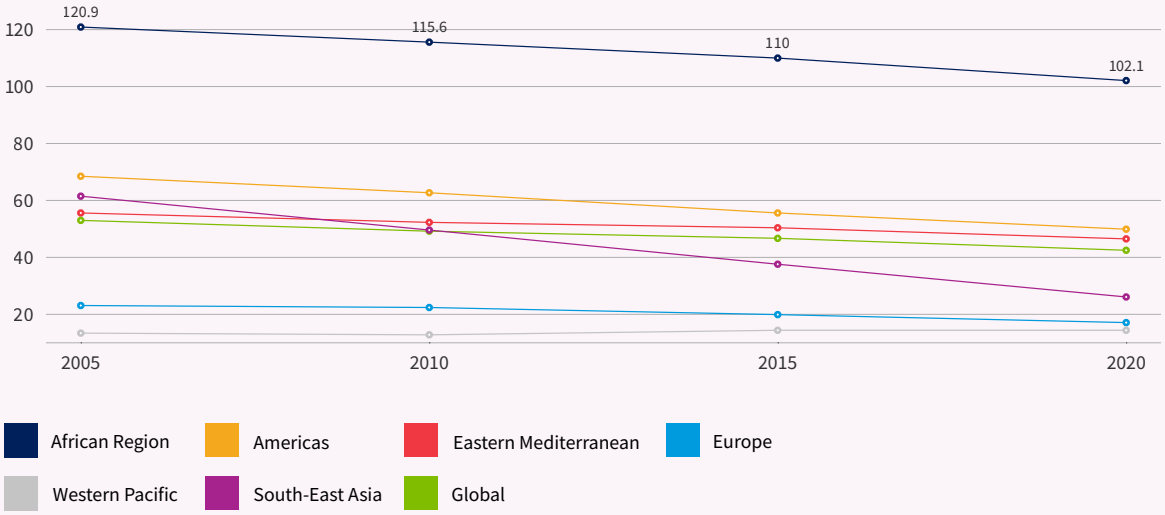
Figure 3.2.28. Women of reproductive age (15–49 years) whose need for family planning is satisfied with modern methods in the WHO regions, 1990–2020, WHO



Globally, the proportion of women of reproductive age (15–49 years) who have their need for family planning satisfied with modern contraceptive methods increased slightly from 74% in 2000 to 77% in 2020. Despite African Region's 30% increase in contraceptive use, it remains the worst performing among the WHO regions. The projected contraceptive use for the Region by 2030 that has a median value of 62% is still below the current global average. Most countries where less than half of the demand for family planning is met by modern methods are low-income and lower-middle-income countries. Rapid progress is possible, as has been seen in countries such as Rwanda, Ethiopia, Malawi and others. The common factors in these success stories include political commitment even outside the health sector, effective partnerships and collaboration, service provision at the community level, active engagement of communities and the establishment of effective strategies and systems for family planning service delivery.

Adolescent birth rate

Figure 3.2.29. Adolescent birth rate for girls aged 10–14 years (per 1000 girls in that age group) in the WHO regions, 2016, WHO



Africa is the Region with the highest adolescent birth rate in the world for girls aged 10 to 14 years. Its rate of 102 births per 1000 adolescents in this age group is twice as high as the global average. An estimated 21 million girls aged 15–19 years become pregnant each year in developing countries. At least 777 000 girls under the age of 15 and about 12 million girls between the ages of 15 and 19 years give birth each year in these countries. In addition, at least 10 million of the girls aged 15–19 years in developing countries have unwanted pregnancies each year.

The global adolescent fertility rate is estimated to have declined by 11.6% over the past 20 years, but the actual number of children born to teenage mothers has not declined owing to the large population of girls aged 15–19 years. There are, however, great disparities among the regions. The adolescent fertility rate in South-East Asia is 7.1, for example, while in Central Africa it is 129.5.

Coverage of essential health services

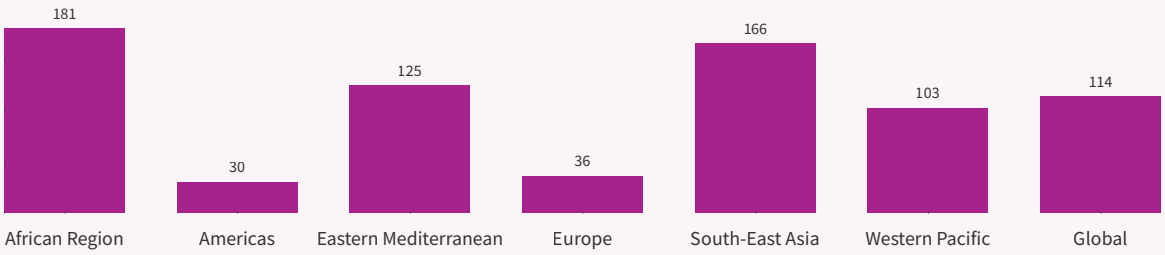
Refer to page N° 18

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

Refer to page N° 32

Mortality attributed to household and ambient air pollution

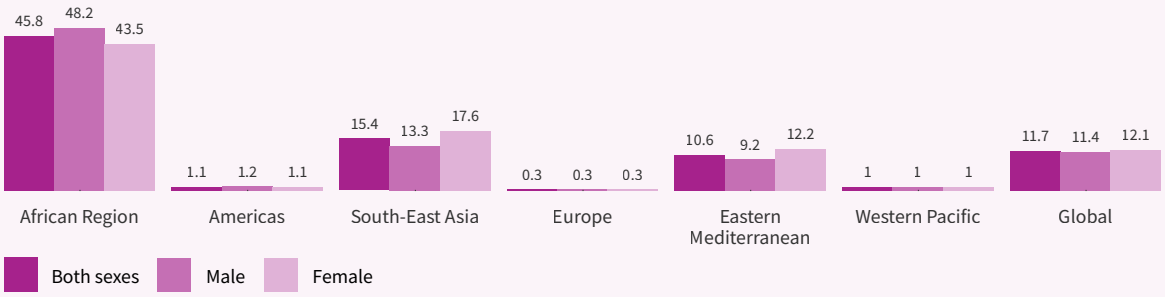
Figure 3.2.30. Ambient and household air pollution attributable death rate (per 100 000 population) in the WHO regions, 2016, WHO



Air pollution is one of the greatest environmental health risks. By reducing air pollution levels, countries can reduce the burden of disease from stroke, heart disease, stroke, lung cancer and respiratory diseases, including asthma. Estimates from 2016 indicated that 4.2 million premature deaths were caused by ambient air pollution in cities and rural areas around the world. In 2019, 99% of the world's population lived in places where the air quality thresholds recommended in the WHO guidelines were not met. The WHO African Region has the highest ambient and household air pollution attributable death rate per 100 000 population.

Mortality attributed to exposure to unsafe water, sanitation and hygiene (WASH) services

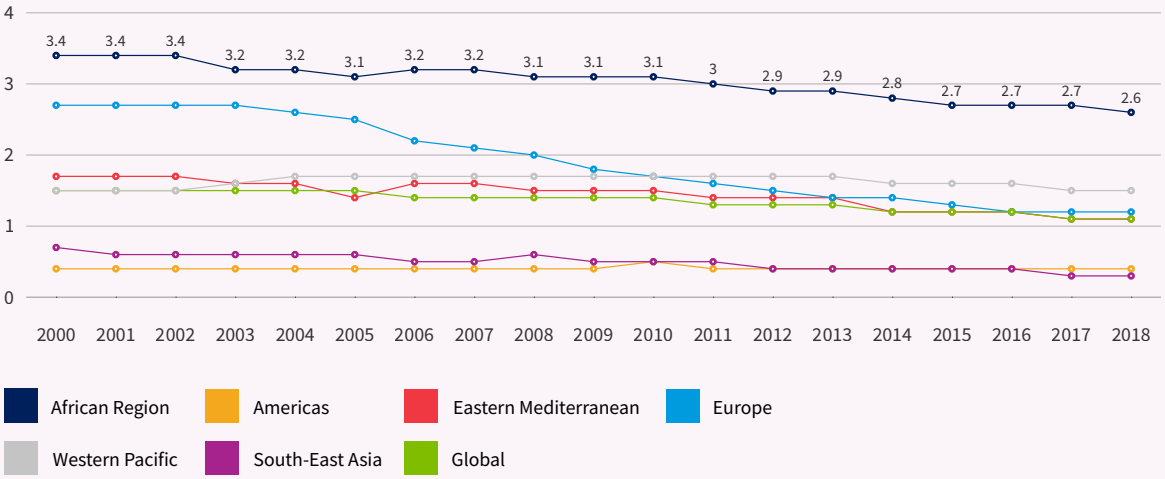
Figure 3.2.31. Mortality rate attributed to exposure to unsafe WASH services (per 100 000 population) in the WHO regions, 2016, WHO



SDG 6 aims to ensure access to sustainably managed water supply and sanitation services for all by 2030. In 2020, about one in four people did not have access to safe, managed drinking-water at home and nearly half of the world's population was without safely managed sanitation services. The COVID-19 pandemic underscored the urgent need to provide everyone the opportunity to get access to running water. At the start of the pandemic, three out of 10 people worldwide had no home facilities for handwashing with soap and water. Progress has been slowest in sub-Saharan Africa. Only 54% of the people in this Region use safe water, a level that drops to 25% in fragile contexts. The mortality rate due to the exposure to unsafe WASH services in the Region of 45.8 deaths per 100 000 population is four times higher than the global average of 11.7.

Mortality attributed to unintentional poisoning

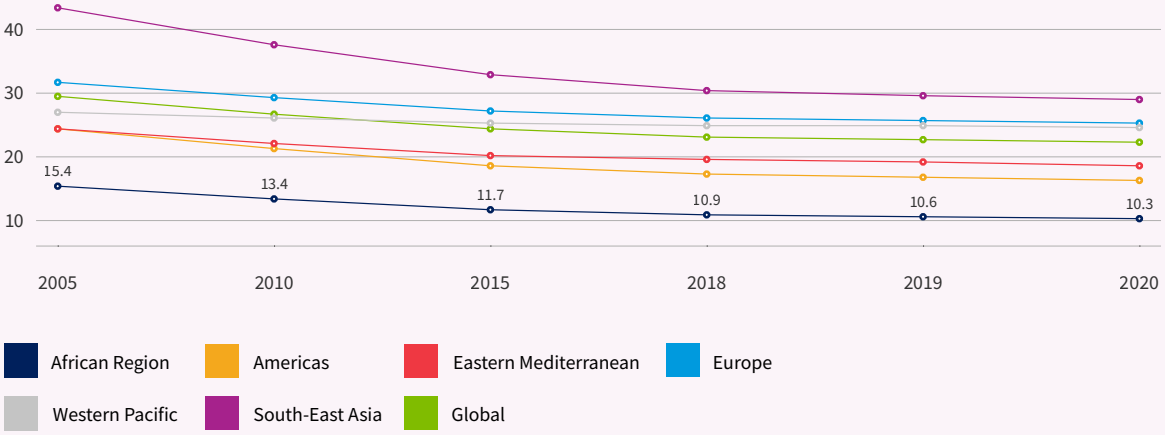
Figure 3.2.32. Mortality attributed to unintentional poisoning (per 100 000 population) in the WHO regions, 2016, WHO



WHO estimates indicate that in 2016, accidental poisonings resulted in 106 683 deaths and the loss of 6.3 million healthy life years (disability-adjusted life years). Despite the slight decline since 2007 in levels of accidental poisoning, the WHO African Region still has the highest death rate from this malady, with Lesotho and Somalia as the leading countries in 2019.[15]

Prevalence of current tobacco use among persons aged 15 years or older

Figure 3.2.33. Trends in tobacco use prevalence (age-standardised rate) in the WHO regions, 2005–2020, WHO

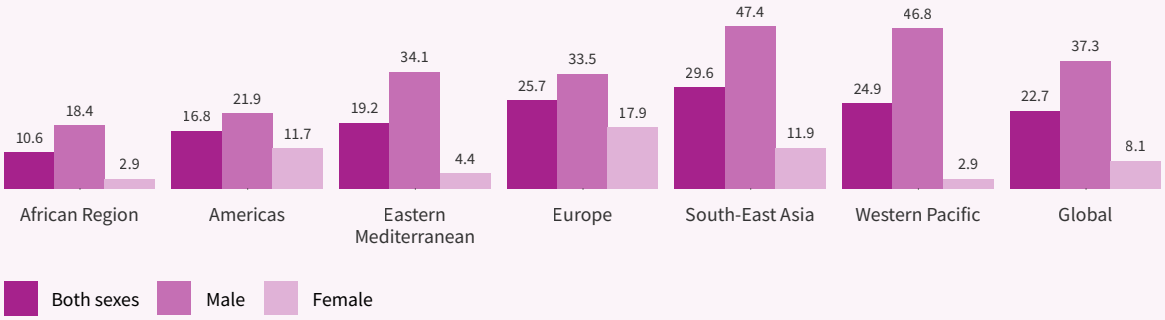


Tobacco use in the WHO African Region, which has the lowest average smoking rate among the regions, decreased from 15% in 2010 to about 10% in 2020. Europe still has the highest rates. Overall, men are far more affected by death from tobacco use than women.

15 World Bank estimates. https://data.worldbank.org/indicator/SH.STA.POIS.P5?locations=ZG (28–08–2022)

WHO's fourth global report on the evolution of tobacco consumption shows that there are currently 1.30 billion tobacco users in the world compared with 1.32 billion in 2015. The level is projected to drop to 1.27 billion by 2025. Sixty countries are now on track to meet the global voluntary target of a 30% reduction in tobacco consumption between 2010 and 2025. Nearly 80% of the world's more than 1 billion smokers live in low-income and middle-income countries. In Africa, recent trends show an increase in tobacco use among girls and now 13 million women use tobacco products and 22 000 women die every year from tobacco-related diseases. In fact, the prevalence of tobacco use among girls, which ranges from 4.6% to 36.6%, has become as high as that for boys, which ranges from 7.8% to 36.5%. Tobacco-attributable deaths are projected to double in low-income and middle-income countries, including in Africa, between 2002 and 2030.

Figure 3.2.34. Estimate of current tobacco use prevalence (age-standardised rate) in the WHO regions in 2019, WHO



The WHO African Region has the lowest prevalence of smoking among the WHO regions, with a significant difference of 15% between male and female levels.

Target population covered by all vaccines included in the national programmes

The global levels of vaccination coverage declined from 86% in 2019 to 83% in 2020. An estimated 22.7 million children did not receive basic vaccines in 2020, 3.7 million more than in 2019. In 2020, the number of completely unvaccinated children increased by 3.4 million. The COVID-19 pandemic and the disruption it caused strained health systems, and as a result, 23 million children did not receive the vaccines they should have received in 2020, 3.7 million more than in 2019 and the highest number since 2009.

Inequalities in access to vaccines and the disruptions caused by the COVID-19 pandemic, including its huge strain on health system capacity, have hampered routine immunisation services in many African countries and forced the suspension of vaccination campaigns. The result is that Africa has been dealing with a resurgence of vaccine-preventable disease outbreaks since 2021. Almost 17 500 cases of measles were recorded in the WHO African Region between January and March 2022, marking a 400% increase compared with the same period in 2021. A total of 20 African countries reported measles outbreaks in the first quarter of 2022, eight more than in the first three months of 2021.

Outbreaks of other vaccine-preventable diseases have also become more common. Twenty-four countries confirmed outbreaks of a variant of polio in 2021, which was four more countries than in 2020. In 2021, 13 countries in the WHO African Region reported new yellow fever outbreaks, compared with nine in 2020 and three in 2019.

The June 2022 data from 31 countries on COVID-19 vaccination of high-risk groups show a significant improvement from the levels at the end of December 2021, when only 33% of health care workers and 10% of older adults were fully vaccinated. WHO recommends 90% vaccination coverage for health care workers and 80% coverage for people over 60 years of age. Only Mauritius and Seychelles have reached the global target of having 70% of their total population fully immunised.

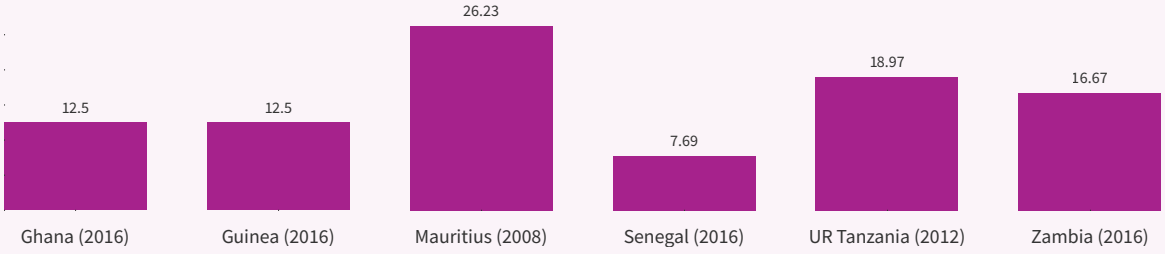
Total net official development assistance (ODA) to medical research and basic health sectors

Figure 3.2.35. Total ODA to medical research and basic health sectors per capita (US$) in the WHO African Region, 2016 and 2020, WHO

Information on health ODA per capita from 137 recipient countries shows that, as in previous years, African Region's weighted average of health ODA per capita was the highest among the regions. Sao Tome and Principe, a lower-middle-income country, received the highest ODA for health per capita (US$ 19.08) than other countries in the Region, which was about four times the weighted average level for the Region and about 11 times the average for its income group. The weighted average ODA for health for the WHO African Region was US$ 4.65 per capita. Guinea-Bissau received almost three times more ODA for health per capita (US$ 15.44) than the weighted average level for its income group (US$ 5.50).

Health facilities with a core set of relevant essential medicines that are available and affordable on a sustainable basis

Figure 3.2.36. Health facilities with a core set of relevant essential medicines that are available and affordable on a sustainable basis among countries with data (n=6) (most recent data for 2008–2016), WHO

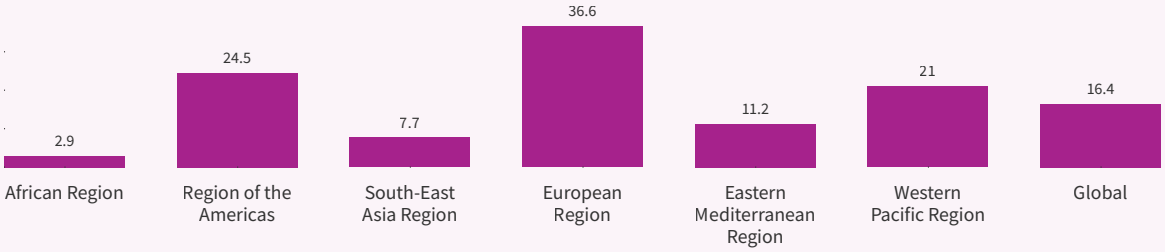


Objective 3.b of the SDGs addresses the inequalities in the development of national health systems and in access to the financial resources needed to acquire medicines. Despite the absence of global and reliable statistical data, WHO estimates that at least a third of the world's population does not have regular access to necessary medicines. The level is 50% in Africa. Access to medicines is also characterised by widespread inequalities and discrimination.

WHO surveys in more than 50 low-income and middle-income countries confirm the low availability of essential (generic) medicines, which are available in only 38% of public facilities and 63% of private facilities, where prices are almost three times higher than in public facilities.

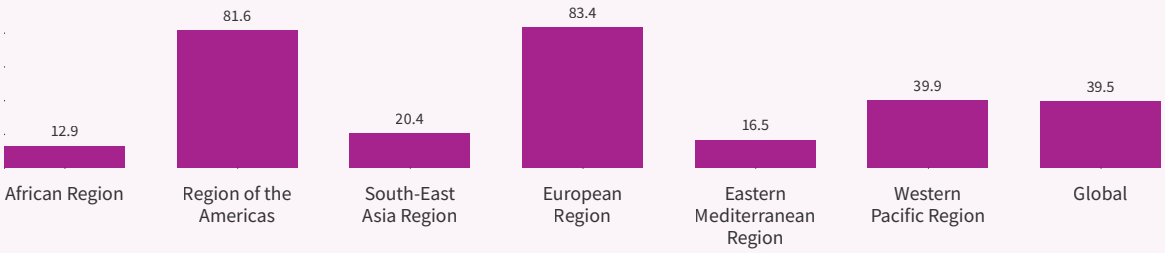
Health worker density and distribution

Figure 3.2.37. Density of medical doctors (per 10 000 population) in the WHO regions, 2012–2020, WHO



Statistics show that the European Region has the highest density of physicians, with about 36 physicians per 10 000 population, while the WHO African Region has only about four physicians per 10 000 population, four times lower than the world average. A severe shortage and maldistribution of health workers in Africa are compromising access to and delivery of health services, even though countries in the Region have made efforts to enhance staffing levels. A WHO study in 47 African countries found an uneven distribution of health workers within the WHO African Region, with 85% of them in the public sector. The regional density of physicians, nurses and midwives per 1000 population was 1.55, and only four countries had densities of more than 4.45. The Region has a ratio of 1.55 health workers per 1000 people and approximately 300 000 doctors and 1.2 million nurses.[16]

Figure 3.2.38. Density of nursing and midwifery personnel (per 10 000 population) in the WHO regions, 2012–2020, WHO

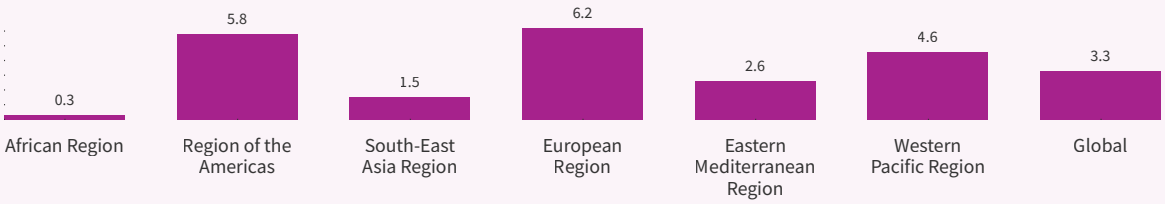


There were approximately 3.6 million health workers in the WHO African Region in 2018, of whom 37% (about 1.3 million) were nurses and midwives. This is lower than the WHO threshold density of 4.45 health workers per 1000 people needed to deliver essential health services and achieve UHC. Only Mauritius, Namibia, Seychelles and South Africa have surpassed the WHO health worker-to-population ratio.

Data for 2012–2020 show that the European Region had the highest density of nurses and midwives in the world, which was twice the world average and eight times that of the WHO African Region.

16 Ahmat A., Okoroafor S.C., Kazanga I, et al. (2022), The health workforce status in the WHO African Region: findings of a cross-sectional study. *BMJ Global Health* 2022;7:e008317

Figure 3.2.39. Density of dentists (per 10 000 population) in the WHO regions, 2012–2020, WHO



The density of dentists per 100 000 population in the WHO African Region was about 10 times lower than the global average between 2012 and 2020. According to WHO, the dentist-to-population ratio is about 1:150 000 in Africa, compared with about 1:2000 in high income countries.[17] In 2017, Nigeria had only 4125 registered dentists, or about one dentist per 40 000 people, compared with 197 734 dentists in India and 43 026 in France. Dentists constitute 14% of the 3.6 million health workers in the Region. Their low level is partly attributed to insufficiency in training and education in oral health care for health workers, who are the people responsible for educating the public on preventive health care. There are serious challenges in the pursuit of oral health in Africa.

Figure 3.2.40. Density of pharmacists (per 10 000 population) in the WHO regions, 2012–2020, WHO

The WHO African Region has the lowest density of pharmacists in the world. Pharmacist density correlates with the gross national income (GNI) and health expenditure. In general, African nations have significantly fewer pharmacists per capita than other regions.[18]

International Health Regulations (2005) capacity and health emergency preparedness

Refer to page N° 35

Bloodstream infections due to selected antimicrobial-resistant organisms

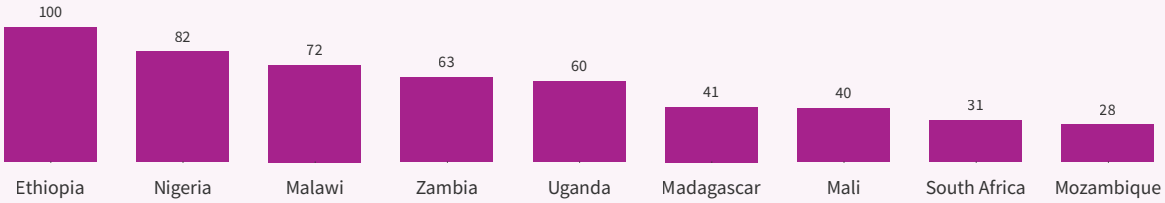
Among the people with suspected bloodstream infections, the proportion of those with bacteria resistant to at least one of the most common antibiotics varies greatly from country to country, ranging from 0% to 82%.

WHO monitors the use of approximately 34.8 billion doses of antibiotics each year, whose global consumption increased by 65% between 2000 and 2015. In Africa, in particular, antibiotic consumption is poorly controlled and resistance can lead to treatment impasses potentially responsible for excess mortality. More than 1.2 million people died in 2019 globally from infections caused by antibiotic-resistant bacteria. Antimicrobial resistance deaths were estimated to be highest in sub-Saharan Africa and South Asia with 24 deaths per 100 000 population, and lowest in high-income countries, with 13 deaths per 100 000 population.

17 Bhayat, A., and Chikte, U. (2018). The changing demographic profile of dentists and dental specialists in South Africa: 2002–2015. International dental journal, 68(2), 91–96.

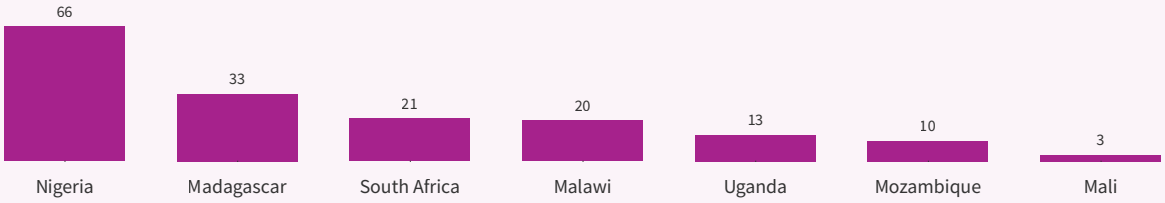
18 Bates, I., John, C., Bruno, A. et al. (2016), An analysis of the global pharmacy workforce capacity. Hum Resour Health 14, 61. https://doi.org/10.1186/s12960–016–0158-z.

Figure 3.2.41. Percentage of bloodstream infections due to Escherichia coli resistant to 3rd-generation cephalosporin (e.g. ESBL- E. coli) among patients seeking care whose blood was tested (%) in countries with data (n=10), (most recent of 2017–2019 data), WHO



The prevalence of bacterial bloodstream infections in sub-Saharan Africa is high, and, although the mortality burden is unknown, antimicrobial resistance likely increases mortality from these infections. Third-generation cephalosporin-resistant Enterobacteriaceae are of particular concern, given the widespread reliance on ceftriaxone for management of sepsis in Africa.[19] The lack of clinical outcome data from drug-resistant infections in Africa represents a major knowledge gap. WHO encourages all countries to set up good surveillance systems to detect drug resistance and feed data into the global system. Surveillance is still underdeveloped in Africa, but it is critical that it be strengthened as treatment resistance is one of the major threats to global public health.

Figure 3.2.42. Bloodstream infections due to methicillin-resistant Staphylococcus aureus (MRSA) among patients seeking care and whose blood was tested (%) in countries with data (n=7) most recent of 2017–2019 data), WHO



MRSA prevalence is poorly reported in many African nations. MRSA is documented to have exceeded 20% in all WHO regions and to be more than 80% in some regions.[20] Antimicrobial susceptibility data from 187 Staphylococcus aureus isolates revealed an overall MRSA prevalence of 53.4%. Intra-country and intercountry MRSA prevalence in Africa has been reported to be heterogenous.[21] National data from nine African countries show MRSA rates to be approximately between 12% and 80%, with some countries exceeding 82%. For example, in East Africa, high MRSA prevalence rates of between 31.5 and 42% have been recorded among patients and healthcare workers in Uganda, between 31% and 82% in Rwanda and between 10% and 50% in the United Republic of Tanzania.[22]

19 Lester R. et al. (2020), Prevalence and outcome of bloodstream infections due to third-generation cephalosporin-resistant Enterobacteriaceae in sub-Saharan Africa: a systematic review. J Antimicrob Chemother. Mar 1;75(3):492–507. doi: 10.1093/jac/dkz464. PMID: 31742611; PMCID: PMC7021093.

20 WHO (2014). Antimicrobial resistance: global report on surveillance. Geneva

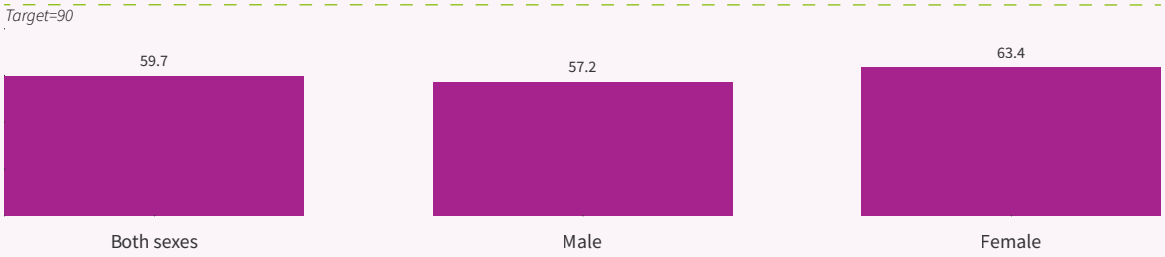
21 Garoy EY, Gebreab YB, Achila OO, Tekeste DG, Kesete R, Ghirmay R, et al. (2019), Methicillin-resistant Staphylococcus aureus (MRSA): prevalence and antimicrobial sensitivity pattern among patients—a multicenter study in Asmara, Eritrea. Can J Infect Dis Med Microbiol, 2019:1–9 [cited 2019 Jun 5]. Available from: https://www.hindawi.com/journals/cjidmm/2019/8321834/.

22 Wangai, F.K., Masika, M.M., Maritim, M.C. et al. (219), Methicillin-resistant Staphylococcus aureus (MRSA) in East Africa: red alert or red herring? BMC Infect Dis 19, 596. https://doi.org/10.1186/s12879–019–4245–3

3.3 SDG 4 – Quality education

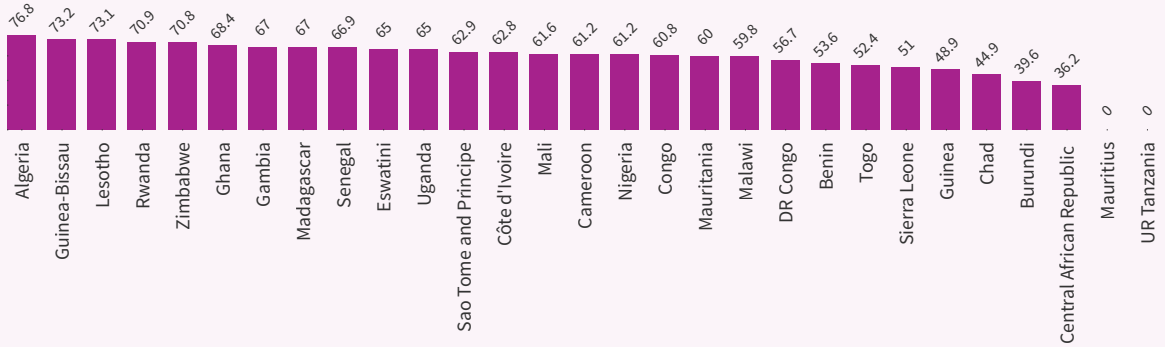
Under-five children who are developmentally on track

Figure 3.3.1. Under-five children who are developmentally on track in health, learning and psychosocial well-being in the WHO African Region, 2020, UNICEF



According to WHO, the proportion of children who are developmentally on track is measured by the percentage of children aged 36–59 months who are developmentally on track in at least three of the four domains of literacy-numeracy, physical development, social-emotional development, and learning.[23] The development status of children varies widely among countries. In 2016, The Lancet estimated that 43% of under-five children in low-income and middle-income countries were at risk of not developing to their full potential.[24] Measuring and monitoring early child development (ECD) is critical in understanding what young children need and identifying those at risk of being left behind and not achieving their full developmental potential. In the WHO African Region as a whole, boys (57%) are lagging behind girls (62%). The numbers of countries with national multisectoral ECD policies increased from seven in 2000 to 68 in 2014, 45% of which were low-income and middle-income countries.

Figure 3.3.2. Under-five children who are developmentally on track in health, learning and psychosocial well-being in the WHO African Region, 2020, UNICEF 2022



Algeria has the most children whose development is on track (77%) and the Central African Republic the least (36%). In 2020, about 85% of the 27 countries in the WHO African Region where data were available had more than 50% of their under-five children as developmentally on track in health, learning and psychosocial well-being.

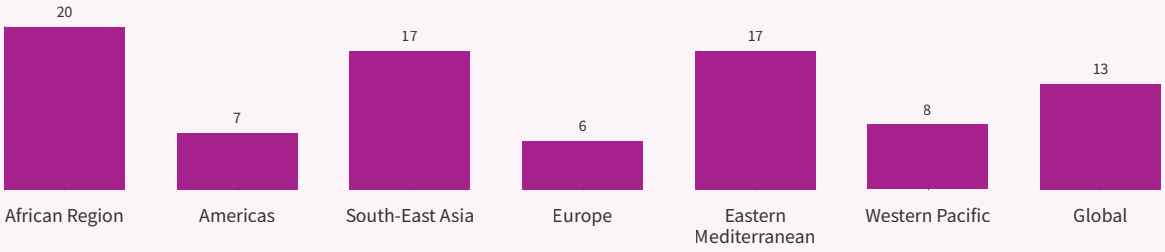
23 WHO (2022), The Global Health Observatory: Explore a world of health data. https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4748 (29/08/2022)

24 The Lancet Series (2016), Advancing Early Childhood Development: from Science to Scale. https://www.thelancet.com/series/ECD2016 (30–08–2022)

3.4 SDG 5 – Gender equality

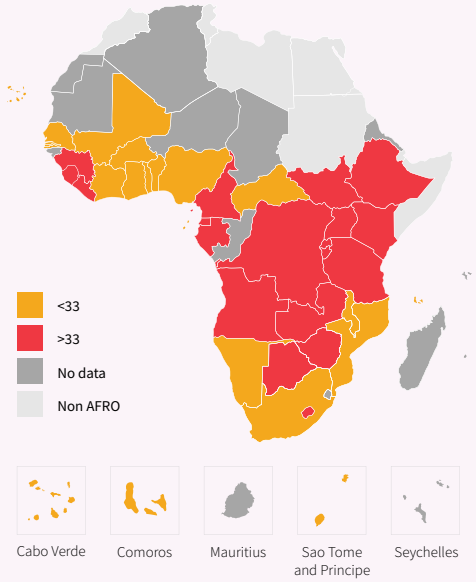
Intimate partner violence

Figure 3.4.1. Women and girls aged 15–49 years subjected to physical or sexual violence by an intimate partner in the previous 12 months in the WHO regions, 2018, WHO



A WHO study[25] found that among the women in the WHO regions who had ever had an intimate partner, 13% to 61% had experienced physical violence by a partner, including 4% to 49% who reported severe physical violence, 6% to 59% who had experienced sexual violence, and 20% to75% who had experienced one or more acts of psychological violence. In the African and South-East Asia regions, 33% of the women had experienced some form of physical or sexual violence from their intimate partner.

Figure 3.4.2. Women and girls aged 15–49 years subjected to physical or sexual violence by an intimate partner in the previous 12 months in the WHO African Region, 2018, WHO



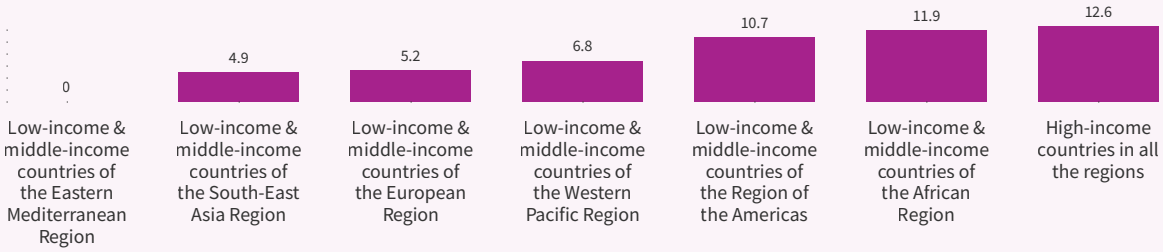
In more than half of the 19 countries in the WHO African Region where data were available, more than 33% of the women who have been in a relationship had experienced some form of physical or sexual violence from their intimate partner.

Media-based strategies to change social norms and bring about communitywide change need to be carried out in the African countries with high levels of violence against women following the Soul City model from South Africa. The interventions should include involving men and boys, changing legislation and working to empower women.

25 WHO Multi-country Study on Women's Health and Domestic Violence against Women, which collected data on IPV from over 24 000 women in 10 countries including United Republic of Tanzania in Africa, representing diverse cultural, geographical and urban/rural settings.

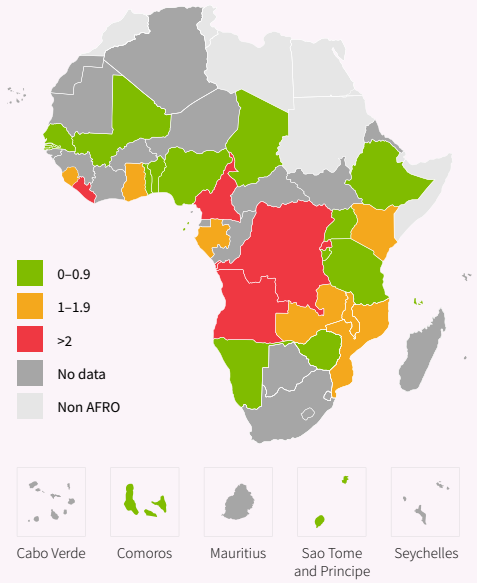
Non-partner sexual violence prevalence

Figure 3.4.3. Non-partner sexual violence prevalence among WHO countries in different income groups, 2015, WHO



According to WHO and its partners,[26] around 7% of women worldwide report having been sexually assaulted by someone other than their husband or partner. The highest prevalence of such violence in 2015 was in the low-income and middle-income countries in Africa (12.6%). In Africa, the risk of a woman being sexually assaulted by a non-partner is almost twice the global average. Given the high levels of stigma and underreporting associated with sexual abuse, the true levels are likely to be much higher. Taking strong and decisive action to address this violence is a positive direction, but only if women themselves are involved in the process.

Figure 3.4.4. Prevalence of non-partner sexual violence in the WHO African Region, 2018, WHO

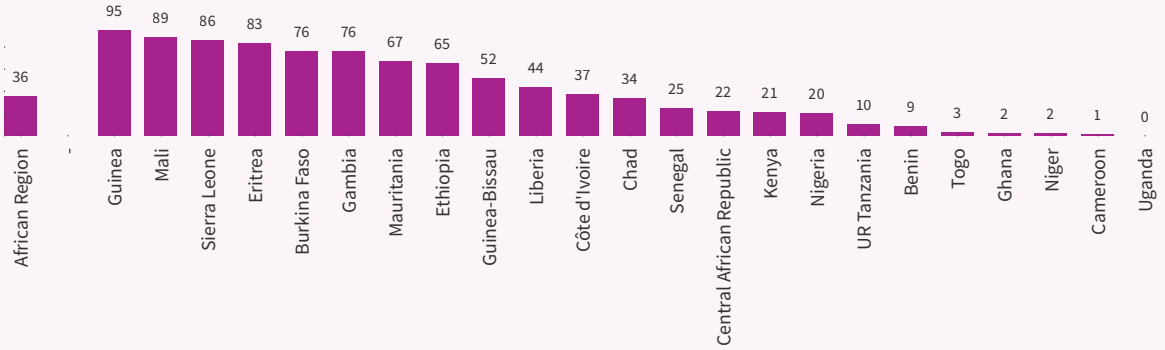


The Democratic Republic of the Congo, Liberia, Cameroon, Rwanda and Angola have the highest risk of non-partner sexual violence against women with a prevalence above 2%. In the Central Africa subregion, a woman is more than twice at risk of being a victim of non-partner sexual violence than in West Africa.

26 Singh R.et al, (2022), Non-partner sexual violence victimisation among female medical undergraduates, In Journal of Family Medicine and Primary Care, March 2022

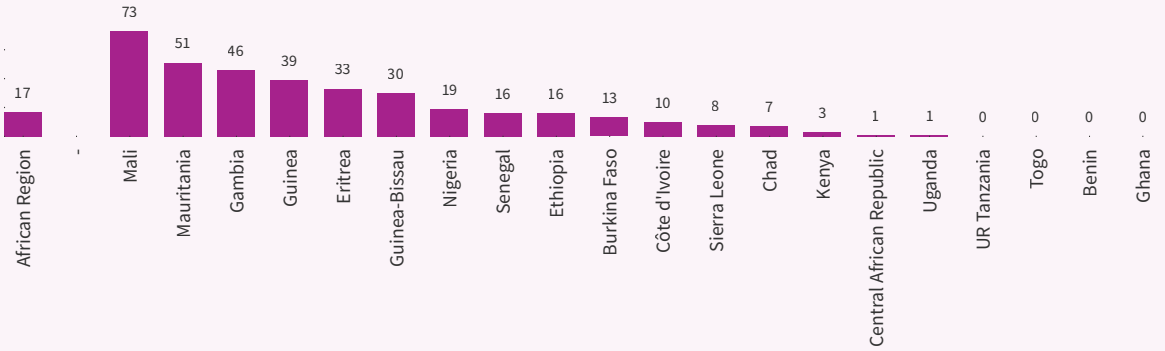
Female genital mutilation or cutting

Figure 3.4.5. Prevalence of female genital mutilation or cutting among women aged 15–49 years (%) in countries with data (n=24) in the WHO African Region, 2020, UNICEF



Rates for female genital mutilation among girls and women aged 15–49 years in the 31 countries where the practice is concentrated decreased from one in two girls in 2000 to one in three girls in 2017. In Africa, 36% of women aged 15–49 years are victims of female genital mutilation or cutting. At least 200 million women and girls have undergone female genital mutilation. Half of these are in countries in West Africa. There are still countries where female genital mutilation is almost universal and where more than nine out of 10 girls and women aged 15–49 years have undergone female genital mutilation.[27]

Figure 3.4.6. Prevalence of female genital mutilation or cutting among girls aged 0–14 years in countries with data in the WHO African Region, 2020, UNICEF

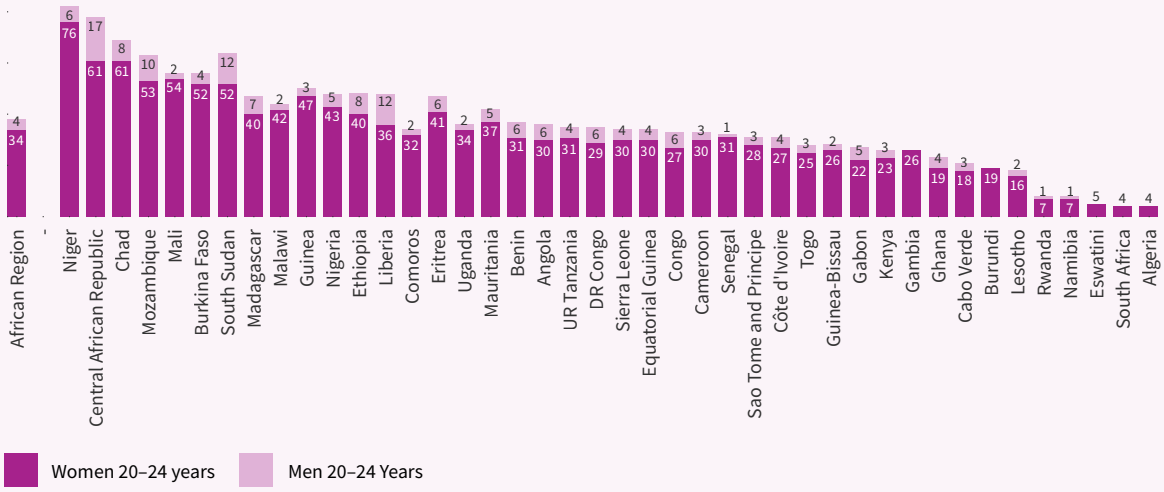


In Africa, 17% of girls aged 0–14 years are victims of female of genital mutilation or cutting. In some countries where the prevalence is very high such as Mali, Guinea, Gambia, Mauritania, Eritrea, Sierra Leone, Burkina Faso, Guinea Bissau and Ethiopia, this practice appears to be a sociocultural and traditional habit. In 2020 and 2022, the COVID-19 pandemic compounded the vulnerability of girls and women, especially those at the risk of female of genital mutilation or cutting. The pandemic has further entrenched gender inequalities, economic disparities and health risks faced by women and girls and disrupted prevention programmes for the elimination of female of genital mutilation and other harmful practices. The United Nations Population Fund (UNFPA) estimates that there may be as many as 2 million additional cases of female of genital mutilation by 2030 that otherwise would have been averted.[28]

27 United Nations (2020), Achieve gender equality and empower all women and girls
28 UNICEF (2021), Annual report to the US department of States – Eliminating female genital mutilation

Early marriage

Figure 3.4.7. Proportion of young women aged 20–24 years who were married or in a union before age 18 in the WHO African Region, 2020, UNICEF

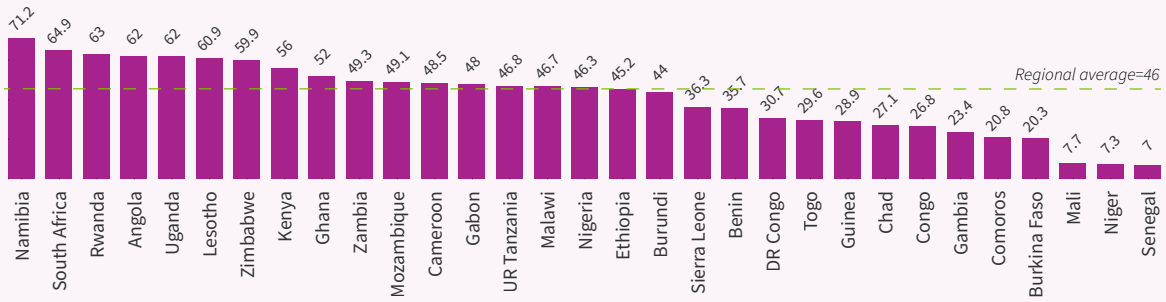


The occurrence of early marriage and forced marriage is highest in sub-Saharan Africa, where 34% of girls become child brides and 4% of boys become young grooms. Over the past decade, the incidence of child marriage has declined, with the proportion of young women aged 20–24 years who got married before the age of 18 years falling by 15% from nearly one in four in 2010 to one in five in 2020. This means that early marriage has been prevented for some 25 million girls.[29] However, the profound effects of the COVID-19 pandemic threaten this progress in many regions, and up to 10 million more girls are at risk of child marriage over the next decade if nothing is done.

29 UNICEF (2018), Child Marriage: Latest trends and future prospects

Women aged 15–49 years who make their own decisions regarding sexual relations, contraceptive use and reproductive health care

Figure 3.4.8. Proportion of women aged 15–49 years who make their own decisions regarding sexual relations, contraceptive use and reproductive health care in countries with data (n=29) in the WHO African Region, 2020, WHO



Only 52% of the women in a marriage or cohabiting with a partner freely make their own decisions about sex, contraceptive use or health care. Mali, Niger and Senegal are among the countries with the lowest levels of women who make such decisions, who make up less than 10% of the women who are married or are in a union.

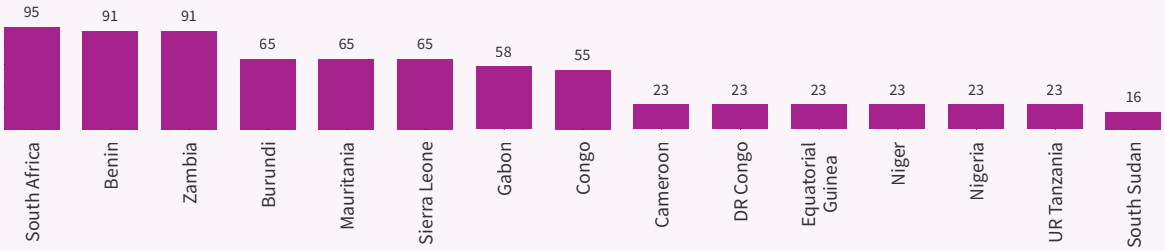
Until sexual and reproductive rights are fully realised, people will not have the autonomy to make decisions about their bodies and their future. Countries must work towards changing this as outlined in the Programme of Action of the International Conference on Population and Development, the Beijing Platform for Action and the outcome documents of subsequent review conferences.

Based on data from 57 countries, 92% of married or women in a union in the Southern Africa subregion make decisions on their health care and 75% can say no to sex, while these levels are 50% and 80%, respectively, for the Central Africa subregion.[30]

30 UNFPA (2020), Tracking women's decision-making for sexual and reproductive health and reproductive rights, Sustainable development goal indicator 5.6.1, 30 February 2020

Countries with laws and regulations that guarantee women aged 15–49 years access to sexual and reproductive health care, information and education

Figure 3.4.9. Dashboard on countries with laws and regulations that guarantee women aged 15–49 years access to sexual and reproductive health care, information and education among countries with data (n=12) in the WHO African Region, 2019, UNStat



The right to sexual and reproductive health is an integral part of the right to health enshrined in article 12 of the International Covenant on Economic, Social and Cultural Rights.[31] It is also reflected in other international human rights instruments. Parliaments have a responsibility through their roles in legislation, oversight and budgeting to advance gender equality and sexual and reproductive justice. In 2020, for example, the parliament of Djibouti passed a law that strengthened the comprehensive care for survivors of violence against women and girls.

In 2019, 72% of sub-Saharan African countries had laws and regulations to ensure full and equal access of women and men aged 15 years or older to sexual and reproductive health care, information and education. The countries with such regulations and laws are estimated to be 70% for maternal health care, 77% for contraceptive care services, 49% for sex education and 81% for HIV and HPV.

South Sudan is the country with the lowest value for this indicator (16%). The six countries with the highest values are Namibia (96%), South Africa (95%), Mozambique (94%), Zambia (91%), Benin (91%) and Gambia (83%).[32]

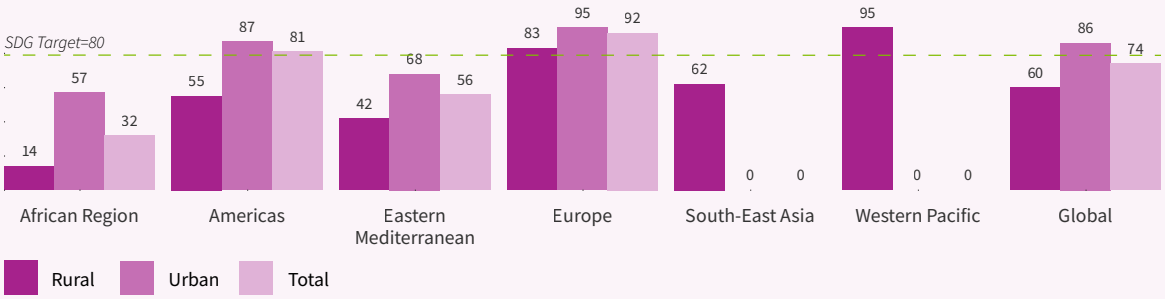
31 General comment No. 22 (2016) on the right to sexual and reproductive health (article 12 of the International Covenant on Economic, Social and Cultural Rights), Committee on Economic, Social and Cultural Rights, United nations

32 UNFPA (2020), Legal Commitments for Sexual and Reproductive Health and Reproductive Rights for All, SUSTAINABLE DEVELOPMENT GOAL INDICATOR 5.6.2

3.5 SDG 6 – Clean water and sanitation

Population using safely managed drinking-water services

Figure 3.5.1. Population using at least basic drinking-water services (%) in the WHO regions, 2020, WHO



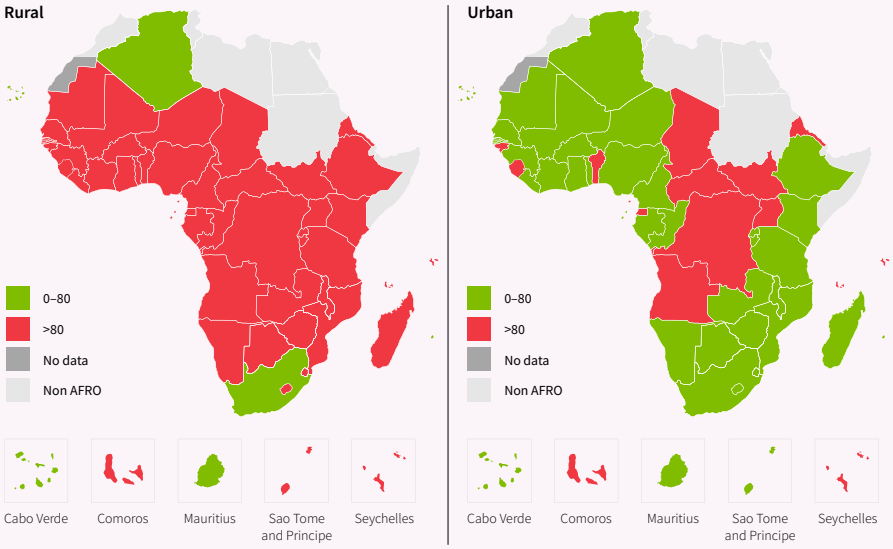
By 2030, 80% of the world's population will be using basic drinking-water services, going up from 74% of the population that did this in 2020. The European (82%) and Americas (81%) regions have already reached the target, although their rural areas are still lagging behind. The WHO African Region has the lowest access to basic drinking-water services with only 32% of its population with such access. This is half of the global average. Some 14% of this population is in rural areas and 57% in urban areas.

Despite having an average of 32% for the continent, 11 countries out of 47 have 80% access to basic drinking-water services for their population and some of those countries have low-income or lower-middle-income levels. In all African regional economic communities, only urban areas have real access to basic drinking-water services for at least 80% of the population that has access to the services. Rural areas have very little access to these services. West Africa is the part of the continent where the population has the highest coverage of basic drinking-water services (72%).

Figure 3.5.2. Trends in the population using at least basic drinking-water services (%) in the WHO African Region, 2000–2020, WHO

Between 2010 and 2020, there was a 7% increase in access to basic drinking-water services in both rural and urban settings in Africa. If the context remains unchanged, projections for 2030 suggest that the SDG target for drinking-water accessibility may not be achieved.

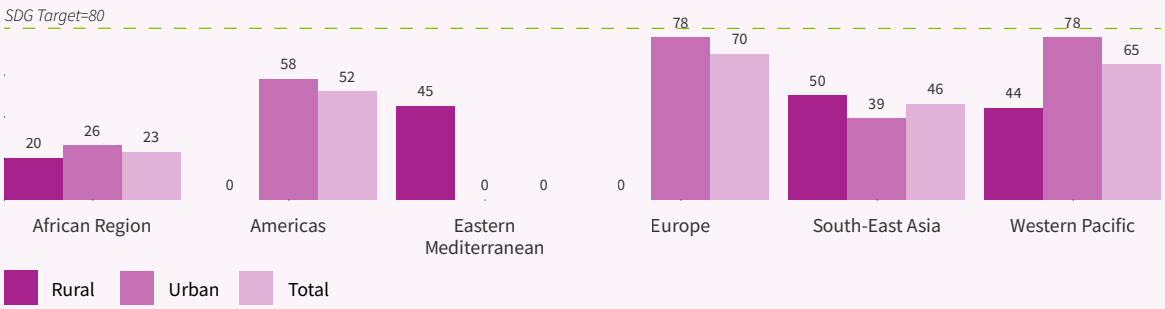
Figure 3.5.3. Population using at least basic drinking-water services in the WHO African Region, 2020, WHO



In the WHO African Region, only four countries have at least 80% of their rural population using basic water supply services. These are Algeria, Cabo Verde, Mauritius and South Africa. For urban areas, only low-income and some middle-income countries have lower than 80% of their population using basic drinking-water services. It is important to upgrade the access to basic drinking-water services to reduce outbreaks of diseases such as cholera, typhoid and diarrhoeal diseases. Improvement of drinking-water is a crucial element in the reduction of under-five mortality and morbidity.[33]

Population using safely managed sanitation services, including a hand-washing facilities with soap and water

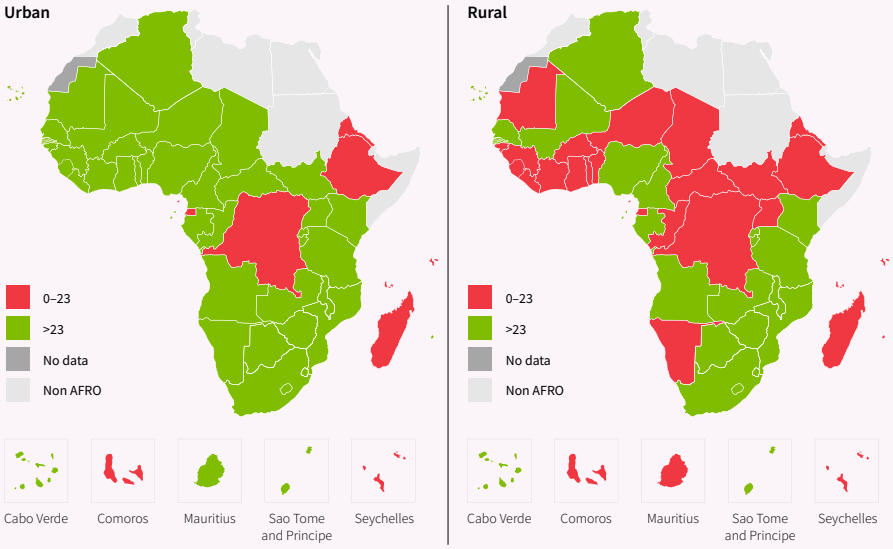
Figure 3.5.4. Population using at least basic sanitation services (%) in the WHO Regions, 2020, WHO



The WHO African Region has only 23% of its population using safely managed sanitation services (with 20% for rural areas and 26% for the urban areas), which is the lowest among the WHO regions. By 2020 none of the WHO regions had reached the 80% target, although the European Region was close, with 70% as a whole and 78% in the urban areas.

33 WHO Global health observatory, indicator metadata registry list, https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4818

Figure 3.5.5. Population using at least the basic sanitation services in the WHO African Region, 2020, WHO



For urban settings, only seven countries had met the target for basic sanitation by 2020. For rural settings, access to basic sanitation services was much better with almost half of the countries in the Region having a utilisation rate of at least 80%. A large proportion of the rural areas did not reach the regional average of 32%.

Overall, in both rural and urban settings, only three countries in the WHO African Region were able to reach the 80% target. These were Seychelles with 100%, Algeria with 86% and Botswana with 80%.

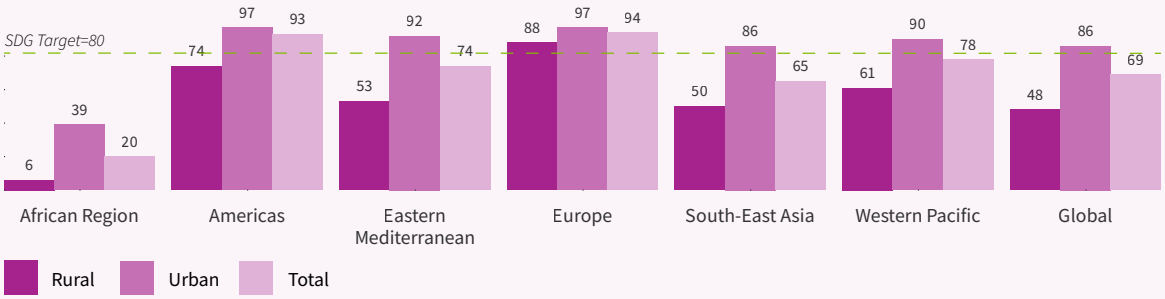
Figure 3.5.6. Trends in population using at least basic sanitation services (%) in the WHO African Region, 2000–2020, WHO

The proportion of the WHO African Region's population using basic health services has not increased significantly since 2010. Between 2010 and 2020, the change was only 7%. There is still a 57% gap left to reach the SDG target by 2030, which suggests that this goal will not be achieved.

3.6 SDG 7 – Affordable and clean energy

Population with primary reliance on clean fuels and technologies

Figure 3.6.1. Population with primary reliance on clean fuels and technologies (%) in the WHO regions, WHO 2022



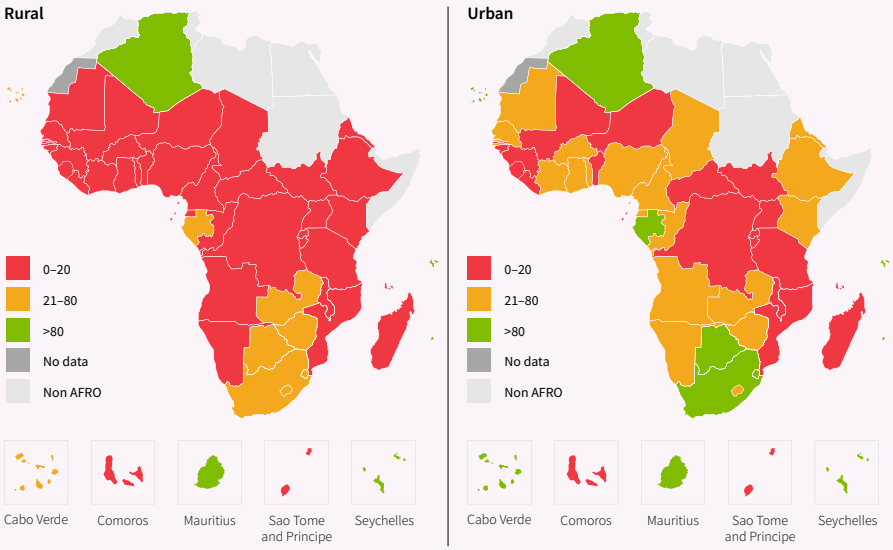
In 2022, 69% of the world's population uses clean fuels and technologies. Europe is the region that has the highest levels of use of clean fuels and technologies (at 94%), followed by America (at 93%). The WHO African Region has a usage rate that is 49% lower than the world average.

Figure 3.6.2. Trends in the population with primary reliance on clean fuels and technologies (%) in the WHO African Region 2000–2020, WHO

The number of people without electricity in sub-Saharan Africa has increased. The world will not be able to ensure access to affordable, reliable, sustainable and modern energy for all by 2030 unless countries significantly scale up their efforts in this area.[34] The consumption of energy from clean fuels and technologies in urban areas rose by 21.8% between 2000 and 2020 but fell by 50% in rural areas.

34 WHO (2022) "Tracking SDG 7: The Energy Progress" Report published by the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations (UNDESA), the World Bank and the WHO

Figure 3.6.3. Population with primary reliance on clean fuels and technologies (%) in the WHO African Region, 2022, WHO



Nineteen of the 20 countries in Africa with the lowest levels of access to clean cooking fuels are also the least developed.

In sub-Saharan Africa more than 93% of the rural population lacks access to clean cooking fuels and technologies, compared with 71% for the population living in urban areas.

Some low-income and high-middle-income countries have populations in urban areas that use at least 80% of clean energy sources. These are Seychelles, Algeria, Mauritania, Gabon, South Africa and Cabo Verde.

3.7 SDG 8 – Decent work and economic growth

Occupational injuries

Table 3.7.1. Fatal occupational injuries (per 100 000 workers) in countries with data for 2011–2018, ILO

Country	Sex	Year	Value
Mauritius	Total	2018	0.53
	Male		0.45
	Female		0.63
	Total	2020	0.00
	Male		0.00
	Female		0.00
Seychelles	Total	2018	4.79
Zimbabwe	Total	2011	8.48
	Male		9.79
	Female		3.1
	Total	2012	9.53
	Male		11.51
	Female		1.57

Work accidents are much more non-fatal than fatal. But they can be fatal, with this risk depending on the type of occupation. The greater the risk of an accident in a job, the greater the risk of a fatal accident. Globally, the annual number of fatal occupational injuries is 380 000. Asia has the largest share of this burden with 250 000 these deaths, followed by Africa with 65 000 deaths. Only 10 760 deaths take place in the high-income regions.[35] The risk of fatal occupational injuries is very low in Mauritius but high in countries such as Seychelles and Zimbabwe.

Table 3.7.2. Non-fatal occupational injuries (per 100 000 workers) in countries with data for 2011–2018, ILO

Country	Sex	Year	Value
Mauritius	Total	2018	269
	Male		415
	Female		64
	Total	2020	216
	Male		325
	Female		65
Seychelles	Total	2018	165.24
Zimbabwe	Total	2011	391.10
	Male		444.33
	Female		171.99
	Total	2012	480.08
	Male		537.29
	Female		250.70

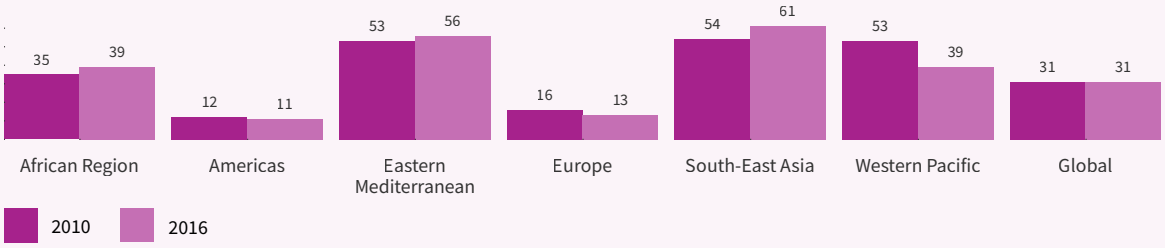
Mauritania saw a decrease in the number of non-fatal work-related injuries between 2018 and 2020, while Zimbabwe had an increase of such injuries in between 2022 and 2012. Men were more likely to have a work-related injury than were women.

35 Takala, J. (2019), burden of injury due to occupational exposures

3.8 SDG 11 – Sustainable cities and communities

Annual mean concentrations of fine particulate matter (PM2.5) in urban areas

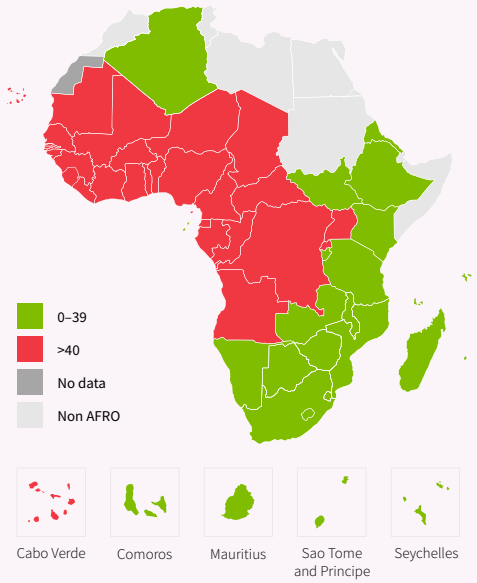
Figure 3.8.1. Annual mean concentrations of fine particulate matter (PM2.5) in urban areas (µg/m3) in the WHO regions, 2010 and 2016, WHO



Africa, Eastern Mediterranean and South-East Asia regions saw an increase in the concentration of fine particulate matter observed between 2010 and 2016. The WHO African Region had more countries with concentrations of fine particulate matter of over 40%. Sub-Saharan Africa's urban population is the fastest urbanising population in the world. This urbanisation phenomenon has led to an increase in infrastructure, technology and services to improve the quality of life. Environmental protection policies have not kept pace with urban growth, making air quality in the cities a growing public health concern.

Cities in sub-Saharan Africa lack ground-level air quality-monitoring systems that exist in North America and Europe. There is an urgent need for detailed air-monitoring data in cities to inform the interventions to protect the health and well-being of the population.[36]

Figure 3.8.2. Annual mean concentrations of fine particulate matter (PM2.5) in urban areas (µg/m3) in the WHO African Region, 2016, WHO



The countries with an annual mean concentration level of fine particulate matter below the regional average (39µg/m3) in urban areas in 2016 were mainly in East Africa and Southern Africa subregions. The countries in West and Central Africa subregions all had levels above the regional average, except Algeria.

Air pollution was responsible for 1.1 million deaths across Africa in 2019. Ambient air pollution-related deaths increased from 361 000 in 2015 to 383 000 in 2019, with the greatest increases in the most highly developed countries.[37] The mortality due to ambient air pollution is caused by NCDs such as cardiovascular and respiratory diseases and cancers. A study in Africa found significant associations between fine particulate matter and its constituents with infant mortality.[38] The pollutant was estimated to be responsible for 1.96 billion lost intelligence quotient points in African children in 2019.

Because most African countries are still in the early development stages, they have opportunities to transition rapidly to wind and solar energy, avoiding a reliance on fossil fuel-based economies and minimising pollution.

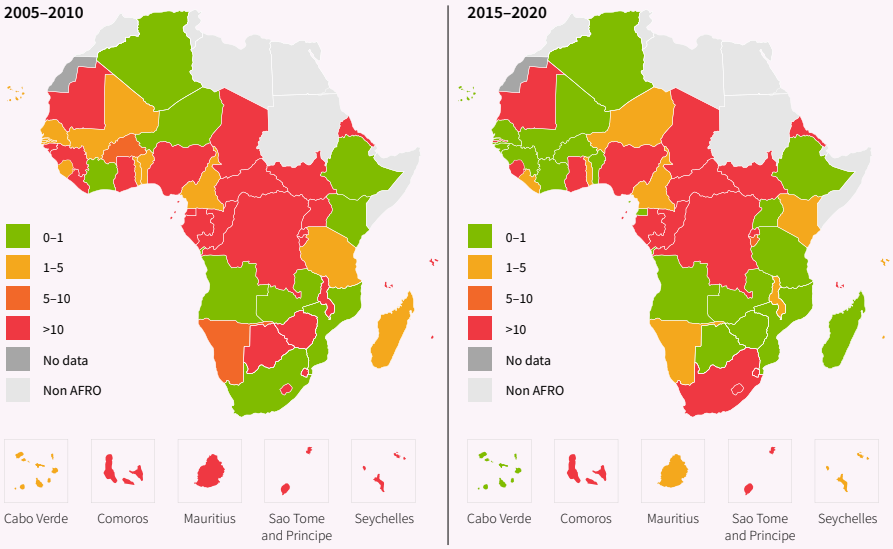
36 Abosede, S. et al. (2021), Spatial-temporal patterns of ambient fine particulate matter (PM2.5) and black carbon (BC) pollution in Accra, Environmental Research Letters
37 Fisher, S. et al. (2021), Air pollution and development in Africa: impacts on health, the economy, and human capital, The Lancet Planetary Health, October 2021,
38 Bachwenkizi, J. et al (2021), Fine particulate matter constituents and infant mortality in Africa: A multicountry study

3.9 SDG 13 – Climate action

Direct effects on people attributed to climatic disasters

The rugged terrain of the WHO African Region is prone to natural disasters, and 622 disasters affected Africa from 2010 to 2020. Africa is the second most affected region after South-Asia, which had 305 disasters. In Africa, 11 133 people per 100 000 died, disappeared or were directly affected by of a disaster in 2021. Ghana in the West Africa subregion alone had 3156 people per 100 000 inhabitants affected that year.

Figure 3.9.1. Deaths and people disappearance attributed to disasters (per 100 000 population) in the WHO African Region, 2005–2010 and 2015–2020, UNEP

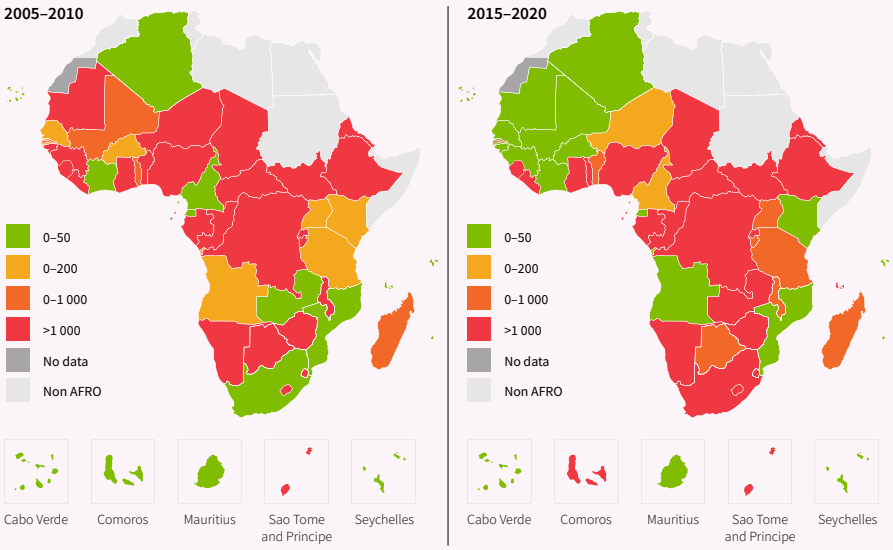


Between the periods of 2005–2010 and 2015–2020, there was a decrease in the number of people who died or went missing as a result of disasters in several countries in the Region.

The vast majority of the disasters in the last 10 years (83%) triggered by a natural hazard were caused by extreme weather and climate events such as floods, storms, and heat waves. In 2019, 20 million people were affected by disasters in Africa. Cyclone Idai in Mozambique, Zimbabwe and Malawi affected 2.8 million people; drought in 12 countries in East Africa and Southern Africa subregions affected 9.3 million people, and Cyclone Kenneth in Mozambique and Comoros affected 2.7 million people.

Natural disasters have spiked dramatically since 2010, with 70% of all them occurring between 2017 and 2021. Floods were the most frequent events, accounting for 33% of the disasters. They caused 1080 deaths. Heat waves caused 3738 deaths, storms 2806 deaths and floods 1586 deaths. By 2022, up to 22 countries in the Region had developed national health adaptation plans for climate change.

Figure 3.9.2. People directly affected by disasters (per 100 000 population) in the WHO African Region, 2005–2010 and 2020, UNEP



Over the periods of 2005–2010 and 2015–2020, the number of persons directly affected by disasters increased in several countries of the Region. The economic and psychological repercussions for such groups are significant. It would be important to implement a system for psychological, economic or other support for such cases.

In many African countries where national disaster strategies have been reoriented from intervention to risk reduction, their rate of implementation has been very low and only 5% of the countries are on track in implementing their national strategies.[39] COVID-19 has disrupted the progress in reducing disaster mortality worldwide, underscoring the importance of multi-hazard and multisectoral approaches to disaster risk reduction.[40]

39 African Union (2020), Biennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030 in Africa 2015–2018–2020

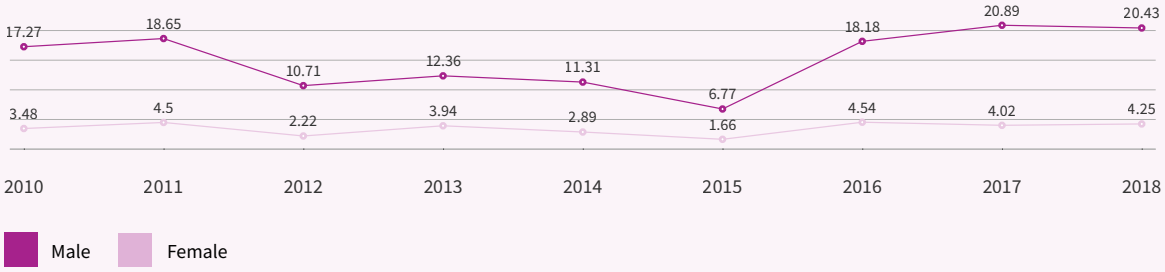
40 The Sustainable Development Goals Report 2021, Extended Report - Goal 13

3.10 SDG 16 – Peace, justice and strong institutions

Victims of intentional homicide

The United Nations Office on Drugs and Crime (UNODC)[41] estimates that a total of 464 000 deaths worldwide in 2017 were caused by intentional homicide. The largest share of 37% of the deaths was in the Americas, closely followed by Africa, which accounted for 35% of the total.

Figure 3.10.1. Trends in numbers of victims of intentional homicide (per 100 000 population) in the WHO African Region, 2010–2018, UNstat

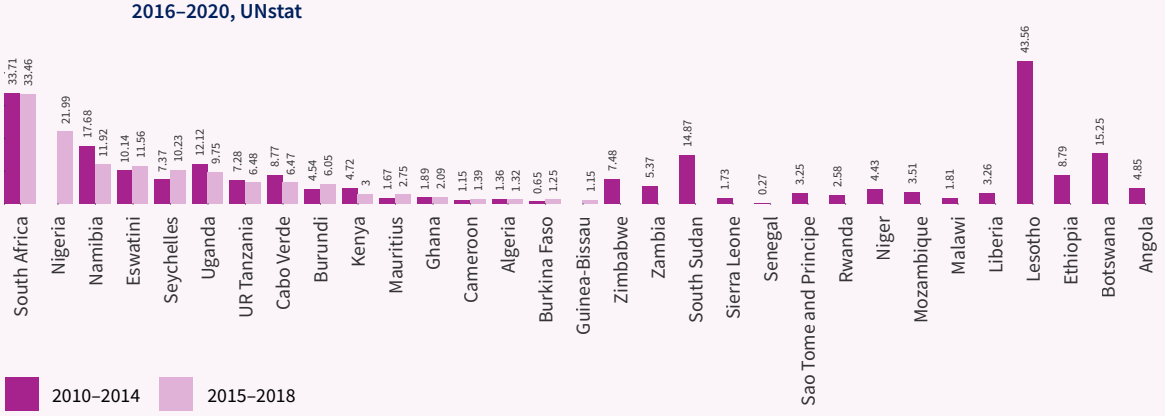


The African countries with the highest rates of intentional homicide during 2020–2018 were Lesotho with 43.6 homicides per 100 000 inhabitants, Nigeria with 34.5, South Africa with 33.5 and the Central African Republic with 20.1.

At the global level, the homicide rate has been decreasing slowly over two decades, going from a peak of 7.4 per 100 000 in 1993 to 6.1 in 2017. Of the victims, 81% are male, and the male global homicide rate of 9.1 per 100 000 males is roughly four times that of females of 2.

The largest number of all women killed worldwide by intimate partners or other family members in 2017 was in Asia with 20 000, followed by Africa with 19 000, the Americas with 8000, Europe with 3000 and Oceania with 300. Intimate partners or family are responsible for 3.1 female homicides per 100 000 female population, accounting for more than two thirds of all women killed in the Region. This indicates that Africa is the region where women run the greatest risk of being killed by an intimate partner or a family member.

Figure 3.10.2. Number of victims of intentional homicide (per 100 000 population) in the WHO African Region, 2010–2015 and 2016–2020, UNstat



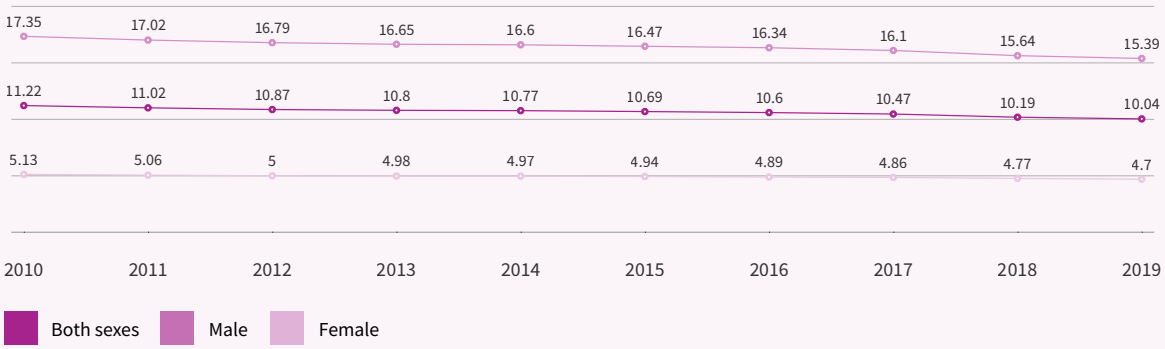
Young men aged 15–29 years face the highest risk of homicide, with a rate of 16.6 per 100 000 males in that age group, followed by men aged 30–44 years with a rate 14.7. The homicide risk for men decreases with age, with those aged 45–59 years having a rate of 10.7 and those aged 60 years or more a rate of 5.6. Boys under 15 years of age have the lowest homicide rate, which is 1.2. Women face a much lower homicide risk across all age groups.

41 United Nations Office on Drugs and Crime (2019), Global Study on homicide: Homicide trends, patterns and criminal justice response

Conflict-related deaths

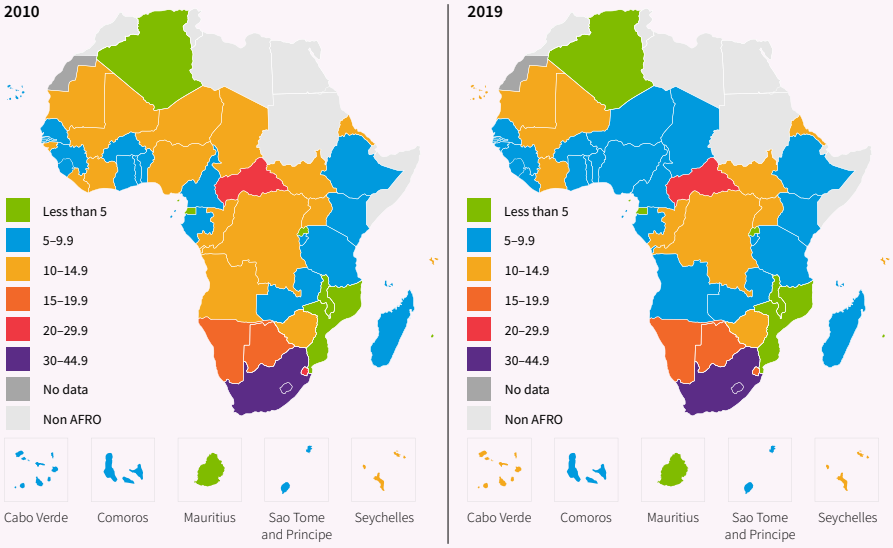
In the framework of the United Nations 2030 Agenda for Sustainable Development, states have pledged to track the number of people who are killed in armed conflict. However, there is no international consensus on the definitions, methods or standards to be used in generating the data. Moreover, monitoring systems run by international organisations and civil society differ in terms of their thematic coverage, geographical focus and level of disaggregation[42].

Figure 3.10.3. Estimated direct deaths from major conflicts (per 100 000 population), sex in the WHO African Region, 2010–2019, WHO



Between 2015 and 2020, 17 095 civilians died in the 12 deathliest armed conflicts, that is the conflicts in Afghanistan, the Central African Republic, the Democratic Republic of the Congo, Iraq, Israel and the occupied Palestinian territory, Libya, Mali, Somalia, South Sudan, Syria, Ukraine and Yemen.[43]

Figure 3.10.4. Estimated direct deaths from major conflicts (per 100 000 population) in the WHO African Region, 2010 and 2019, WHO



In 2020, around 7500 people died in sub-Saharan Africa from the armed conflicts in the Central African Republic, the Democratic Republic of the Congo, Mali, Somalia and South Sudan. That year, one in seven of the people killed was a woman or a child. Five civilians per 100 000 population are killed each year.

42 Irene Pavesi (2017), Tracking Conflict-Related Deaths: A Preliminary Overview of Monitoring Systems; Briefing Paper March 2017, Swiss agency for Development and Cooperation (SDC)

43 United Nations Human Rights (2022), SDG Indicator 16.1.2 Conflict-related deaths of civilians

Population subjected to physical violence

Every year, more than 1.6 million people lose their lives as a result of violence. Bullying is a form of interpersonal violence that affects young people. It can be a physical assault. Corporal punishment is the most common form of violence against children. Uganda, Cameroon and Burundi with 30%, 29% and 24%, respectively, of their population being victims of an attack or theft within the past year, stand out for their high violence levels.[44] Women are more subjected to all forms of violence.

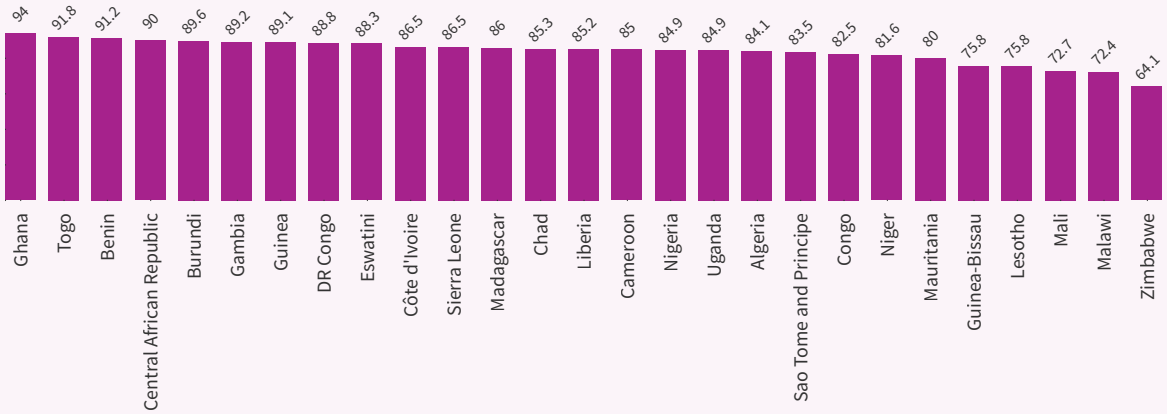
Population subjected to sexual violence

In 2017, gender-based violence against girls and women was higher in sub-Saharan Africa than in Northern Africa. Over one fifth of girls and women were subjected to physical or sexual violence by their current or former partners in sub-Saharan Africa. Around 6% to 59% of the women had experienced sexual violence from a partner in the 12 previous months. One in three women worldwide had experienced physical or sexual violence in their relationship or sexual violence by someone other than their partner or had experienced both. The WHO African Region estimates at 20% the prevalence of physical or sexual violence against women aged 15–49 years from their current or former male partner in past 12 months.

Physical and psychological aggression against children aged 1–17 years from caregivers

Corporal or physical punishment is highly prevalent globally, both in homes and at schools. UNICEF data from nationally representative surveys in 56 countries during 2005–2013 show that on average, 17% of children experienced severe physical punishment, but in some countries the level exceeded 40%.

Figure 3.10.5. Proportion of children aged 1–14 years who experienced physical punishment or psychological aggression by caregivers in the past month, in the WHO African Region, most recent of 2010–2020, UNstat



Apart from some countries where the rates for boys are higher, results from comparable surveys show that the prevalence of corporal punishment is similar for girls and boys. Young children aged 2–4 years are as likely to be exposed to physical punishment, including its harsh forms. One in two children aged 6–17 years (732 million) live in countries where corporal punishment at school is not fully prohibited. Studies have shown that lifetime prevalence of school corporal punishment was above 70% in Africa and Central America.

44 Dauphine Université (2018), Developpement Institutions& Mondialisation, Institut de Recherche pour le Développement, SDG 16 on Governance and its measurement: Africa in the lead, Paris

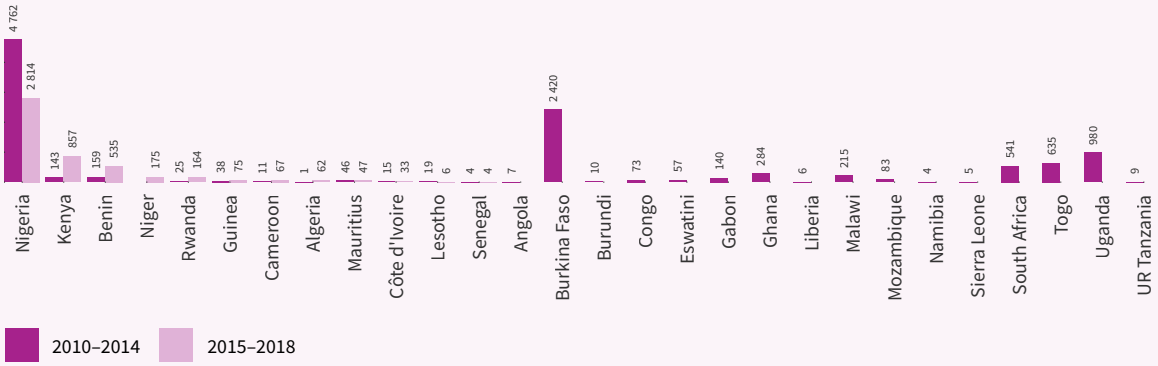
New studies find that more than half of all children in Africa experience physical abuse, and in some parts of the continent, four in 10 girls suffer sexual violence before the age of 15 years. Africa has the highest rates of child neglect in the world with 41.8% of girls and 39.1% of boys being neglected by their caregivers. In Nigeria, 66% of girls and 58% of boys under 16 witness violence at home.[45]

Kenya was one of the first countries to complete a violence against children and youth surveys in 2010 and 2019. Since 2020, Kenya has worked to address the risk factors for violence across multiple sectors, which resulted in a significant decrease in sexual, physical and emotional violence against children between 2010 and 2019. In 2021, End Violence supported Kenya's progress by scaling up parenting programmes, tackling online child sexual exploitation and abuse, equipping the criminal justice system, generating evidence of online child sexual exploitation and abuse, and monitoring progress on elimination of corporal punishment, essentially helping turn government commitment into progress.[46]

Human trafficking

Human trafficking is a serious problem in Africa. Many of those victimised in sub-Saharan Africa are women and children. It has been estimated that 3.7 million people in Africa are in slavery and forced labour at any given time, and the annual profits generated from these activities amount to US$ 13.1 billion in Africa alone.[47]

Figure 3.10.6. Number of detected victims of human trafficking in the WHO African Region, 2010–2014 and 2015–2018, UNstat



In 2018, 77% of the victims of trafficking detected in sub-Saharan Africa were exploited for forced labour, 20% for sexual purposes and 3% for other purposes. Most of them were from West Africa. For 4799 of the victims detected in 26 countries in sub-Saharan Africa, 32% were girls, 27% were boys, 27% were women and 14% were men.[48]

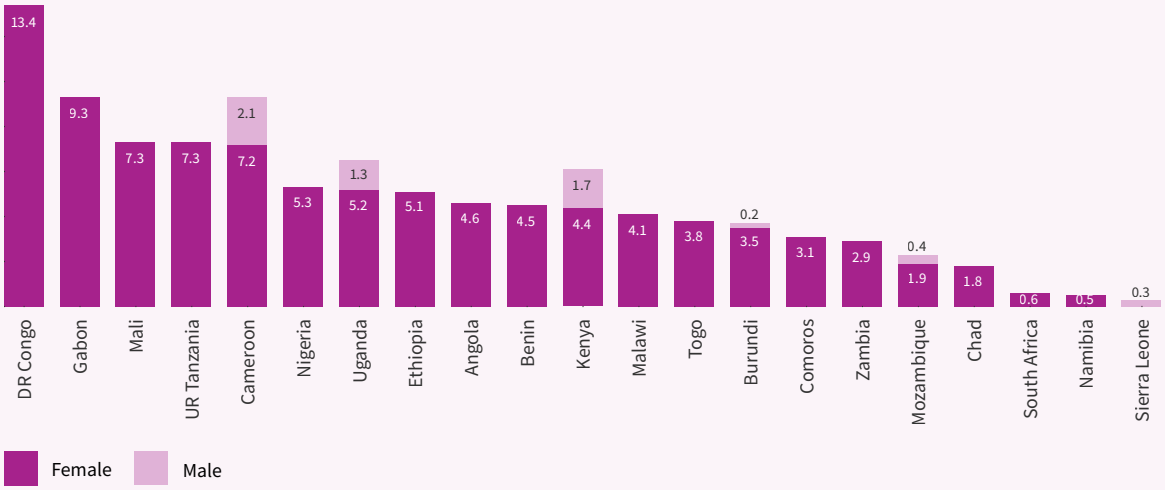
In 2019, 173 states acceded to the Trafficking in Persons Protocol (2003), which complements the UN Convention against Transnational Organised Crime, to combat an increasingly complex phenomenon in a more coordinated manner.[49] The number of victims detected in sub-Saharan African countries has increased since the protocol entered into force. The number of detections, however, remains among the lowest among the WHO regions.

Within the Region, the countries with the highest prevalence of modern slavery were Eritrea with 93 victims per 100 000 population, Burundi with 40, Central African Republic with 22, Mauritania with 21 and South Sudan with 21.[50]

45 End Violence Against Children (2021), New data shows violence against children is rising across the African continent, 29 July 2021
46 End Violence Against Children (2021) Annual Report
47 Obokata, T. (2019), Human trafficking in Africa: Opportunities and challenges for the African Court of justice and Human rights, 2 May 2019, Cambridge University Press
48 UNODC (2020), Global Report on trafficking in persons
49 UNODC (2020), Crime Research; The Global Report on Trafficking in Persons
50 African Sisters Education Collaborative, Human trafficking trends in sub-Saharan Africa (infographic)

Young women and men aged 18–29 years who experienced sexual violence by age 18

Figure 3.10.7. Population aged 18–29 years who experienced sexual violence by age 18 (% of population aged 18–29) in the WHO African Region, most recent of 2012–2018, UNstat



In more than one third of the countries, at least 5% of young women had experienced sexual violence in childhood. The levels reported were lower among men in the countries with data.[51] In Rwanda, 12% of women had experienced sexual violence by age 18 and 3% of the men. In Cameroon, this was 7% of the women and 2% of men, and in Kenya, the levels were 4% of the women and 2% of the men.[52]

Civil registration of births

Of the 36 countries supported by the Global Finance Facility, 16 African countries had less than two thirds of their under-five children registered with the respective civil registration authorities.[53] Of the 168 million unregistered under-five children worldwide, 57% (around 96 million) live in Africa, 30% in South Asia and 13% in the rest of the world. East Africa is home to the largest number of unregistered children in Africa (38 million), followed by West Africa (27 million).[54]

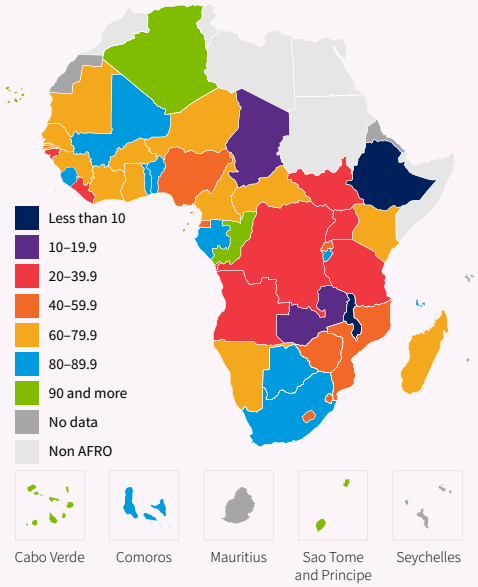
Birth registration goes beyond the legal recognition of people's existence. The failure to register a birth could be a result of many barriers, including long distance to the nearest registration facility, lack of knowledge on the registration process or lack of fees for registering the birth or obtaining a birth certificate for a child, which can be prohibitively expensive for some families. Around 370 million children (roughly three in four on the continent) live in sub-Saharan African countries where there are fees to register births.[55]

Completeness of birth registration

Birth registration is the continuous, permanent and universal recording of the occurrence and characteristics of births in the national civil register, in accordance with the legal requirements of the country. The completeness of birth registration in sub-Saharan Africa in 2017 was at 45%.[56]

51 UNICEF (2022), Sexual Violence
52 UNICEF (2022) Global databases based on Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national surveys, 2005–2020
53 Tuane-Nkhasi, M. (2019) Global Financing Facility- Tackling Low Birth Registration in Africa: Birth Certificates Are Key to Ensuring Health, Education, Safety, and Equal Opportunities
54 UNICEF (2020), A statistical profile of birth registration in Africa
55 United Nations Children's Fund (2017), A snapshot of civil registration in sub-Saharan Africa, UNICEF, New York
56 World Bank Data base

Figure 3.10.8. Under-five children whose births have been registered with a civil authority in the WHO African Region, 2010–2019, WHO



There was an increase of 2% in the proportion of under-five children whose births were registered in Africa from 49% in 2008 to 51% 2020. Projection scenarios built on existing trend show that, unless progress is accelerated, the number of unregistered children in Africa will continue to rise and will exceed 100 million by 2030.[57] As countries employ both technological and non-technological solutions to improve their civil registration and vital statistics systems, three approaches, namely, decentralisation, digitisation and interoperability, emerge as proven solutions for increasing coverage while promoting cost-efficient service delivery. Governments need to demonstrate political commitment through sufficient financing and revamping of systems to make them sustainable and inclusive for marginalised population groups, including migrants and displaced people, with the goal of universality.

57 UNICEF (2020), A statistical profile of birth registration in Africa

3.11 SDG 17 – Partnerships for the goals

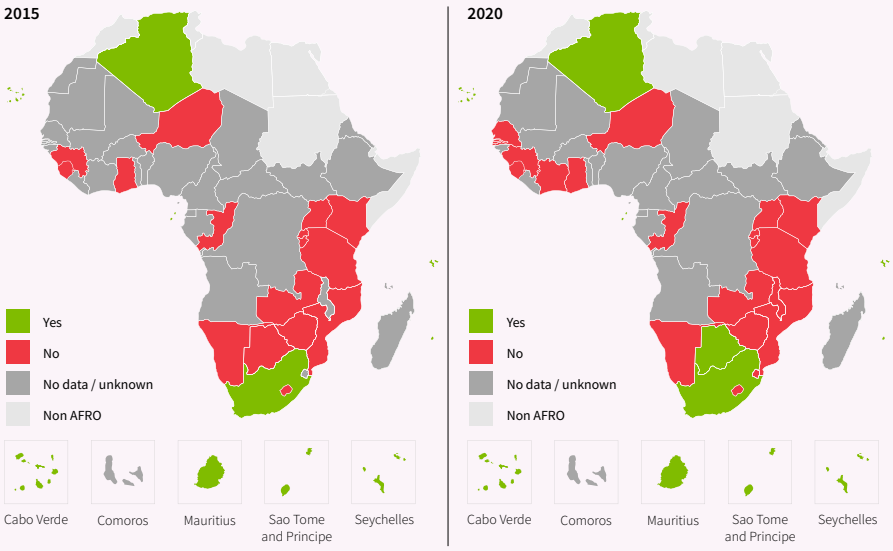
Birth and death registration with the countries

Table 3.11.1. Countries with birth and death registration data that are at least 90% complete in the WHO African Region, 2015 and 2020, WHO

2015	2020
Algeria	Algeria
Cabo Verde	Botswana
Mauritius	Cabo Verde
Sao Tome and Principe	Mauritius
Seychelles	Sao Tome and Principe
South Africa	Seychelles
	South Africa

From the data available in 2020, the countries that had their birth and death registration at least 90% complete were Algeria and Cabo Verde in West Africa, Sao Tome and Principe in Central Africa, Botswana and South Africa in Southern Africa and Seychelles in East Africa. Some of these are high-income or upper-middle-income countries.

Figure 3.11.2. Countries in the WHO African Region with birth and death registration data that were at least 90% complete in 2015 and 2020, WHO

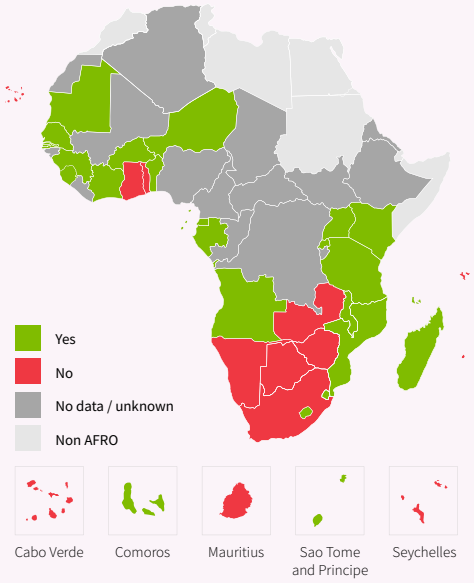


According to the monitoring survey results from the "State of civil registration and vital statistics in Africa report, 2017," the average levels of completeness for births in 11 out of 21 countries and deaths in 12 out of 18 countries were estimated to be 56% and 35%, respectively.

The situation had not changed much by 2020. For both births and deaths, only seven countries had reached 90% completeness, which is a satisfactory level.

Countries that have conducted at least one population and housing census in the last 10 years

Figure 3.11.3. Countries that have conducted at least one population and housing census in the last 10 years in the WHO African Region, 2021, WHO



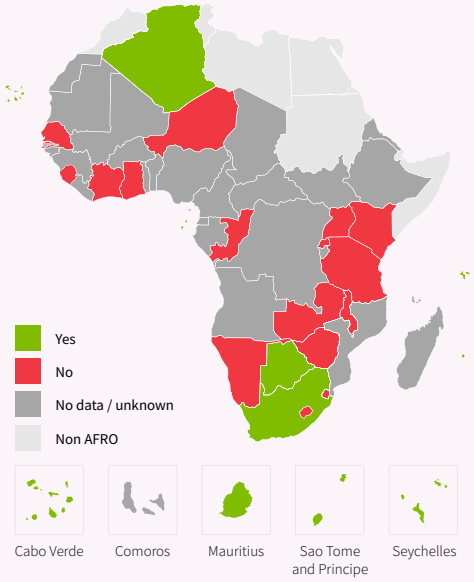
The information generated by population and housing censuses is essential for development policy-making. Without accurate data, governments are not able to identify areas for investment such as schools, hospitals, roads, water and electricity needs etc. or the most deprived populations.

The population data of many countries is obsolete or inaccurate. Over the past 10 years, only 20 countries have been able to conduct population censuses.

A successful census is a source of national pride. It helps tracking of the progress that has been made and captures the needs of different segments of the population. Independent, reliable and accurate data derived from a census form a foundation for evidence-based policy-making and decision-making, which are essential for a country's socioeconomic growth.

Countries with death registration data that are at least 75% complete

Figure 3.11.4. Countries with death registration data that are at least 75% complete in the WHO African Region, 2020, WHO



Many countries are underperforming in terms of the completeness of their death registration and medical certification of the causes of death. Only seven countries have death registration data that are at least 75% complete in the WHO African Region.

Legislation in some countries is outdated and not in line with the recommended international standards. Efforts should be made to clarify the definitions and registration deadlines for comprehensive, accurate and timely statistics, essential for monitoring progress towards the development goals of the 2030 Agenda for Sustainable Development and to implement Agenda 2063 of the African Union.

References

1 FAO (2020), The State of food security and nutrition in the world 2020. Transforming food systems for healthy and affordable food. Rome

2 FAO, IFAD, UNICEF, WFP and WHO. (2021), The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

3 UN (2022), Report on the Sustainable Development Goals

4 FAO (2021b)

5 WHO; 2014. Global nutrition targets 2025. Anaemia Policy Brief (https://thousanddays.org/wp-content/uploads/Anameia-Policy-Brief.pdf, accessed 24 August 2022).

6 Karim, S.S.A and Baxter, C.(2021), HIV incidence trends in Africa: young women at highest risk, The Lancet HIV, 8(7), e389-e390.

7 WHO (2022), Malaria Key fact. https://www.who.int/news-room/fact-sheets/detail/malaria (29/08/2022)

8 WHO (2021), World malaria report 2021. Geneva. Licence: CC BY-NC-SA 3.0 IGO.

9 Osafo J and al (2020), Suicide Prevention in the WHO African Region. Crisis. 2020 Mar;41(Suppl 1):S53-S71. doi: 10.1027/0227–5910/a000668. PMID: 32208755

10 Degenhardt, L., Stockings, E., Patton, G., Hall, W. D., and Lynskey, M. (2016a). The increasing global health priority of substance use in young people. The Lancet Psychiatry, 3(3), 251–264. https://doi.org/10.1016/S2215–0366(15)00508–8

11 WHO. (2013). WHO Global strategy to reduce the harmful use of alcohol. WHO

12 Mupara, L. et al. (2022) Alcohol and substance use prevention in Africa: systematic scoping review, Journal of Substance Use, 27:4, 335–351, DOI: 10.1080/14659891.2021.1941356

13 Mushi, D., Francis, J. M., Moshiro, C., Hanlon, C. and Teferra S. (2022). Integration of Alcohol Use Disorder Interventions in General Health Care Settings in sub-Saharan Africa: A Scoping Review. Frontiers in psychiatry, 13.

14 Sohi, I.; Franklin, A.; Chrystoja, B.; Wettlaufer, A.; Rehm, J. and Shield, K. (2021). The Global Impact of Alcohol Consumption on Premature Mortality and Health in 2016. Nutrients 2021, 13, 3145. https://doi.org/10.3390/nu13093145

15 World Bank estimates. https://data.worldbank.org/indicator/SH.STA.POIS.P5?locations=ZG (28–08–2022)

16 Ahmat A., Okoroafor S.C., Kazanga I, et al. (2022), The health workforce status in the WHO African Region: findings of a cross-sectional study. *BMJ Global Health* 2022;7:e008317

17 Bhayat, A., and Chikte, U. (2018). The changing demographic profile of dentists and dental specialists in South Africa: 2002–2015. International dental journal, 68(2), 91–96.

18 Bates, I., John, C., Bruno, A. et al. (2016), An analysis of the global pharmacy workforce capacity. Hum Resour Health 14, 61. https://doi.org/10.1186/s12960–016–0158-z.

19 Lester R. et al. (2020), Prevalence and outcome of bloodstream infections due to third-generation cephalosporin-resistant Enterobacteriaceae in sub-Saharan Africa: a systematic review. J Antimicrob Chemother. Mar 1;75(3):492–507. doi: 10.1093/jac/dkz464. PMID: 31742611; PMCID: PMC7021093.

20 WHO (2014). Antimicrobial resistance: global report on surveillance. Geneva

21 Garoy EY, Gebreab YB, Achila OO, Tekeste DG, Kesete R, Ghirmay R, et al. (2019), Methicillin-resistant Staphylococcus aureus (MRSA): prevalence and antimicrobial sensitivity pattern among patients—a multicenter study in Asmara, Eritrea. Can J Infect Dis Med Microbiol, 2019:1–9 [cited 2019 Jun 5]. Available from: https://www.hindawi.com/journals/cjidmm/2019/8321834/.

22 Wangai, F.K., Masika, M.M., Maritim, M.C. et al. (219), Methicillin-resistant Staphylococcus aureus (MRSA) in East Africa: red alert or red herring? BMC Infect Dis 19, 596. https://doi.org/10.1186/s12879–019–4245–3

23 WHO (2022), The Global Health Observatory: Explore a world of health data. https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4748 (29/08/2022)

24 The Lancet Series (2016), Advancing Early Childhood Development: from Science to Scale. https://www.thelancet.com/series/ECD2016 (30–08–2022)

25 WHO Multi-country Study on Women's Health and Domestic Violence against Women, which collected data on IPV from over 24 000 women in 10 countries including United Republic of Tanzania in Africa, representing diverse cultural, geographical and urban/rural settings.

26 Singh R.et al, (2022), Non-partner sexual violence victimisation among female medical undergraduates, In Journal of Family Medicine and Primary Care, March 2022

27 United Nations (2020), Achieve gender equality and empower all women and girls

28 UNICEF (2021), Annual report to the US department of States – Eliminating female genital mutilation

29 UNICEF (2018), Child Marriage: Latest trends and future prospects

30 UNFPA (2020), Tracking women's decision-making for sexual and reproductive health and reproductive rights, Sustainable development goal indicator 5.6.1, 30 February 2020

31 General comment No. 22 (2016) on the right to sexual and reproductive health (article 12 of the International Covenant on Economic, Social and Cultural Rights), Committee on Economic, Social and Cultural Rights, United nations

32 UNFPA (2020), Legal Commitments for Sexual and Reproductive Health and Reproductive Rights for All, SUSTAINABLE DEVELOPMENT GOAL INDICATOR 5.6.2

33 WHO Global health observatory, indicator metadata registry list, https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4818

34 WHO (2022) "Tracking SDG 7: The Energy Progress" Report published by the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations (UNDESA), the World Bank and the WHO

35 Takala, J. (2019), burden of injury due to occupational exposures

36 Abosede, S. et al. (2021), Spatial-temporal patterns of ambient fine particulate matter (PM2.5) and black carbon (BC) pollution in Accra, Environmental Research Letters

37 Fisher, S. et al. (2021), Air pollution and development in Africa: impacts on health, the economy, and human capital, The Lancet Planetary Health, October 2021,

38 Bachwenkizi, J. et al (2021), Fine particulate matter constituents and infant mortality in Africa: A multicountry study

39 African Union (2020), Biennial Report on the Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030 in Africa 2015–2018–2020

40 The Sustainable Development Goals Report 2021, Extended Report- Goal 13

41 United Nations Office on Drugs and Crime (2019), Global Study on homicide: Homicide trends, patterns and criminal justice response

42 Irene Pavesi (2017), Tracking Conflict-Related Deaths: A Preliminary Overview of Monitoring Systems; Briefing Paper March 2017, Swiss agency for Development and Cooperation (SDC)

43 United Nations Human Rights (2022), SDG Indicator 16.1.2 Conflict-related deaths of civilians

44 Dauphine Université (2018), Developpement Institutions& Mondialisation, Institut de Recherche pour le Développement, SDG 16 on Governance and its measurement: Africa in the lead, Paris

45 End Violence Against Children (2021), New data shows violence against children is rising across the African continent, 29 July 2021

46 End Violence Against Children (2021) Annual Report

47 Obokata, T. (2019), Human trafficking in Africa: Opportunities and challenges for the African Court of justice and Human rights, 2 May 2019, Cambridge University Press

48 UNODC (2020), Global Report on trafficking in persons

49 UNODC (2020), Crime Research; The Global Report on Trafficking in Persons

50 African Sisters Education Collaborative, Human trafficking trends in sub-Saharan Africa (infographic)

51 UNICEF (2022), Sexual Violence

52 UNICEF (2022) Global databases based on Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national surveys, 2005–2020

53 Tuane-Nkhasi, M. (2019) Global Financing Facility- Tackling Low Birth Registration in Africa: Birth Certificates Are Key to Ensuring Health, Education, Safety, and Equal Opportunities

54 UNICEF (2020), A statistical profile of birth registration in Africa

55 United Nations Children's Fund (2017), A snapshot of civil registration in sub-Saharan Africa, UNICEF, New York

56 World Bank Data base

57 UNICEF (2020), A statistical profile of birth registration in Africa

SECTION IV

HEALTH INPUTS AND PROCESSES

Section summary

The current expenditure on health in a nation corresponds to the real final consumption of health services and medical goods, whether this consumption is individual or collective. The part of the public expenditure allocated to health reflects the priority given to the health sector. The WHO African Region ranks fifth out of the six WHO regions with spending of 5.3% of its GDP on health. To facilitate access to affordable, quality health services for low-income Africans, public and private sectors need to initiate partnerships in the areas of education, employment, mobility, access to rights and gender equality to improve the lives of people in both urban and remote areas.

The average per capita expenditure on health in sub-Saharan Africa tripled over the period 2002–2011, rising from US$ 27 to US$ 90 before falling between 2014 and 2016. Debt servicing costs have a significant impact on country budgets and can be a problem that is more acute for some countries facing a security threat. In the Sahel region, some countries had had to quadruple their security spending between 2013–2018. In 2019, the average debt level in sub-Saharan Africa was around 57% of the region's GDP.

The African continent has made progress in improving some health indicators, but this progress needs to be sustained. Health equity, value for money and accessibility of health services for all are among the issues that still need to be addressed. It is not about spending more but about spending more equitably. Weak budget execution and reduction of the resources available for health result in high expenditure and an inequitable health system that guarantees access to only those who can pay. African Union Member States pledged to allocate 15% of their government expenditure to health in the Abuja Declaration of 2001.

Leadership and governance involve ensuring strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to the system design, and accountability. In the framework of the SDG agenda, WHO works to support countries to exercise effective health systems governance, focused on strengthening the capacity of governments to develop and implement strategies towards achieving UHC by 2030.

In almost half of sub-Saharan African countries, the legal time to register a birth is more than one month. Also, the legal time to register a death varies from 24 hours to one year. WHO is establishing standards and best practices for the collection, processing and synthesis of data by consolidating and improving the International Classification of Diseases (ICD–11) tool that facilitates reporting of accurate data on causes of death, so that countries regularly generate and use data that meet international standards. To improve health and reduce death and disability around the world and particularly in the WHO African Region, it is essential to regularly collect and analyse data of high quality on deaths and their causes and disability. Aspects of death and disability, which are part of public health, are still surrounded by many difficulties, as are ethical issues related to the preservation of anonymity. When dealing with individual patient data, it is important to identify specific information in the form of a unique identifier so that the patient can be uniquely and reliably referenced even without sophisticated means. There is need for countries to set up consolidated architecture to address data security and interoperability issues.

The health workforce is an essential part of health systems, and if it is insufficient, poorly qualified or poorly managed, reaching the level of performance necessary to achieve UHC and the SDGs might be compromised.

Health services can vary greatly depending on whether their location is urban or rural, if the patient is an outpatient or an inpatient, and what the nature of the patient's pathology, financial capacity or sociocultural background is. This state of affairs runs counter to the UHC objective but is the reality that countries still must face, because of the inequalities inherent in health systems, which have even been enhanced by the COVID-19 crisis, conflicts and other disasters. These differences in treatment can have enormous consequences in the provision of care and the consideration that health care workers may have for users. The distribution of health services is very sparse within the countries but there are stack differences between urban and rural areas. The density of the population goes hand in hand with the density of services, as does the density of the health services.

The results of a WHO multidisciplinary, multicountry cross-sectional survey in 13 urban, peri-urban and rural sites in 10 African countries provide people's perspectives on the components of the health system that need to be improved to better meet their expectations. The study showed that for service delivery, the public sector led in the number of health facilities, followed by the private sector and then traditional practitioners. In urban areas the private sector accounted for 55.9% of the health services, while in peri-urban areas traditional and spiritual healers accounted for 67.1% of the health services.

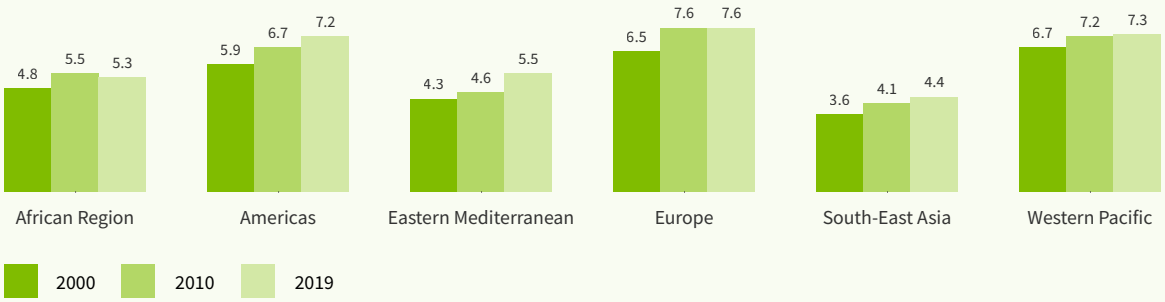
The distribution of health services is sparse within countries and differences exist between urban and rural areas. The density of the population goes hand in hand with the density of services, as does the density of health services. There is currently no global standard for inpatient bed density relative to the total population. The average in-patient bed density is 27 per 10 000 population globally and 10 in the WHO African Region. The Service Availability and Readiness Assessment Survey (SARA) suggests benchmarks of 18 and 39 inpatient beds per 10 000 people for lower-income and upper-income countries, respectively.

The number of beds available in intensive care units in public, private, general and specialised hospitals that are regularly maintained and staffed by qualified and easily mobilised personnel are more difficult to estimate for the countries of the WHO African Region as a whole. This fact makes it difficult to determine the capacity to mobilise in the event of a critical situation or crisis or such as that of COVID-19. Efforts to scale up the most common interventions and to achieve the SDGs through global health partnerships have drawn attention to the need for rigorous monitoring of health services in countries. The African Medicines Agency (AMA) also will play a major role in strengthening regulatory oversight and facilitating access to safe and affordable medicines across the continent.

4.1 Health financing

Total current expenditure on health as percentage of gross domestic product

Figure 4.1.1. Total current expenditure on health as a percentage of GDP in the WHO regions, 2000, 2010 and 2019, WHO



The portion of GDP spent on health[1] differs by region. Of the six WHO regions, in 2019 Africa was fifth in terms of the share of the GDP spent on health with 5.3%. The European Region led with 7.6%, while South-East Asia came last with 4.4%.

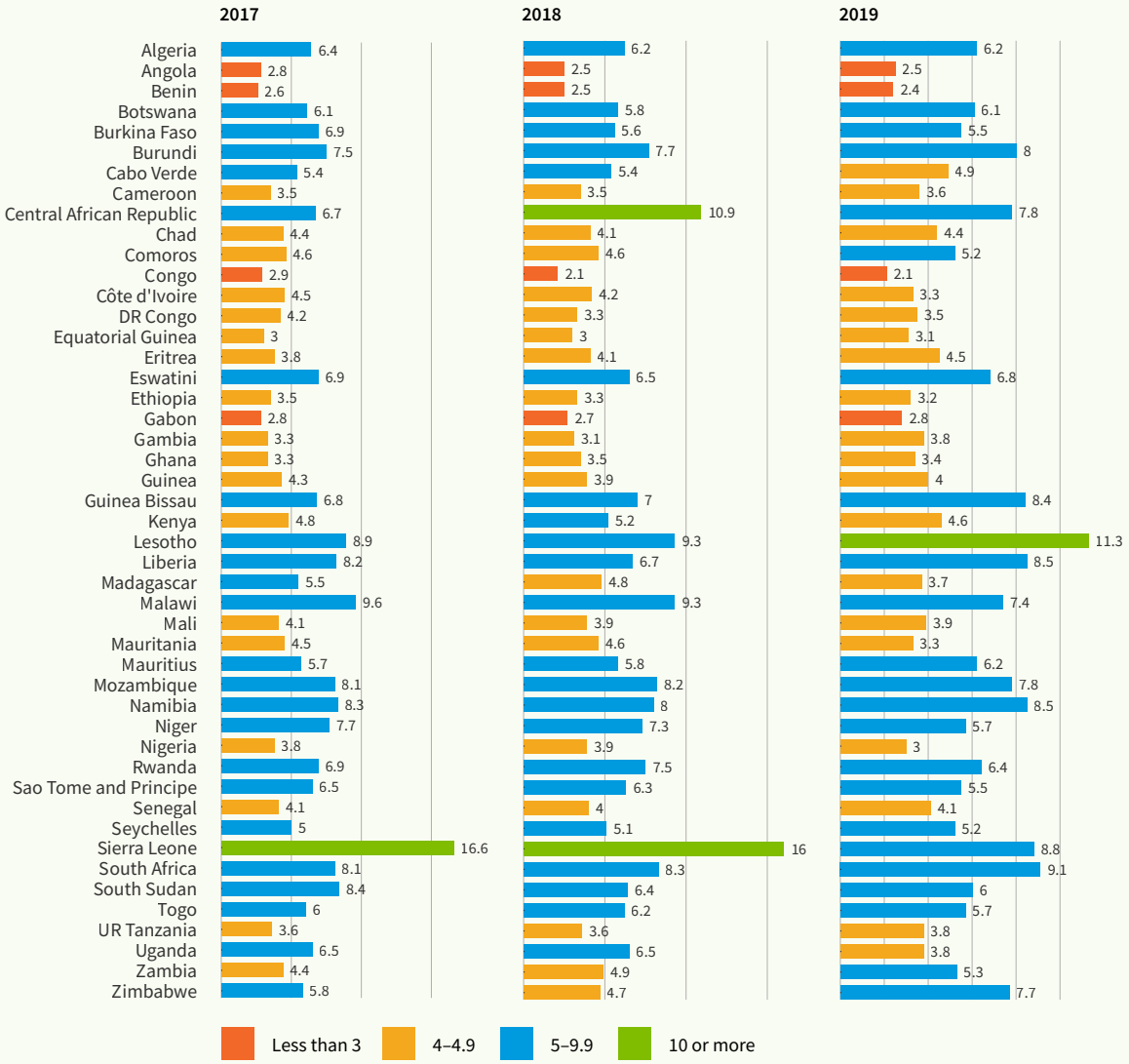
All the regions have seen improvement over the last 20 years, with the share of their GDP spent on health rising from 9% to 27%. Only in Africa was there a decline in the last decade.

The African continent has a population that represents 14.4% of the world's people, but it accounts for only 1% of the global health spending. It spends 5.3% of its GDP on health. The average health expenditure in sub-Saharan Africa tripled over 2002–2011, rising from US$ 27 to US$ 90 dollars per capita before falling between 2014–2016. Debt servicing costs have a significant impact on countries' budgets, a problem that is even more acute for countries that are facing a security threat. In the Sahel region, some countries had to quadruple their security spending between 2013 and 2018. In 2019, the average debt level in sub-Saharan Africa was around 57% of the region's GDP.

Through national reforms, regional and international initiatives, the continent has improved its capacity for fiscal mobilisation, efforts that increased the level of revenue collection to 19.3% of GDP in 2015. However, much remains to be done. The continent has a health sector financing gap. Redefining national resource mobilisation strategies and the dialogue with partners for health is an imperative.

1 As total current health expenditure, excluding equipment expenditure

Figure 4.1.2. Total current expenditure on health as percentage of GDP in the WHO African Region, 2017–2019, WHO

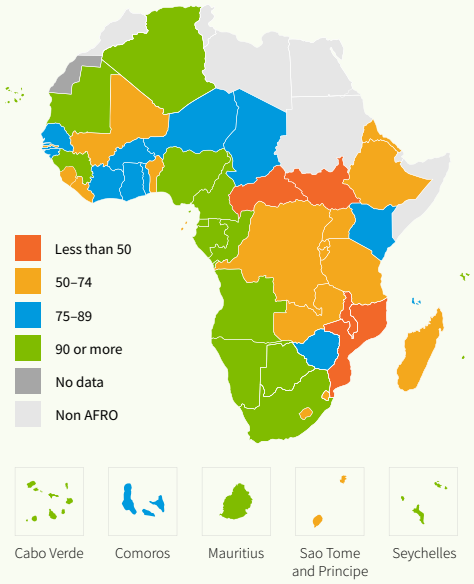


The median percentage of GDP spent on health changed more between 2000 and 2010 than between 2010 and 2019. The interquartile range (half of the countries with a GDP percentage around the average) is more balanced. Overall, between 2010 and 2019 countries narrowed the gap in terms of the percentage of GDP spent on health, with Lesotho standing out as having a higher portion of GDP spent on health. The top quartile (the 25% of countries with the highest percentage) is also more homogeneous than 10 years ago. The bottom quartile (the 25% of countries spending less on health as a percentage of GDP) is made up of countries that had increased their rate from 2010.

Public health expenditure has increased globally, but for some countries it has declined or remained stable. Despite the large disparities, overall, the percentage of GDP allocated to health is higher in upper-middle-income countries than in low-income countries. The priority given to health is lower in low-income countries and has declined, even though domestic spending on health is critical to achieve development goals related to health. In 2018, most low-income countries spent between 4% and 8% of their budgets on health and only Lesotho spent more than 10%. Four countries had health spending that was less than 3% of the national budget.

Public domestic sources of current spending on health as percentage of current health expenditure

Figure 4.1.3. Public domestic sources of current spending on health as percentage of current health expenditure in the WHO African Region, 2018, WHO

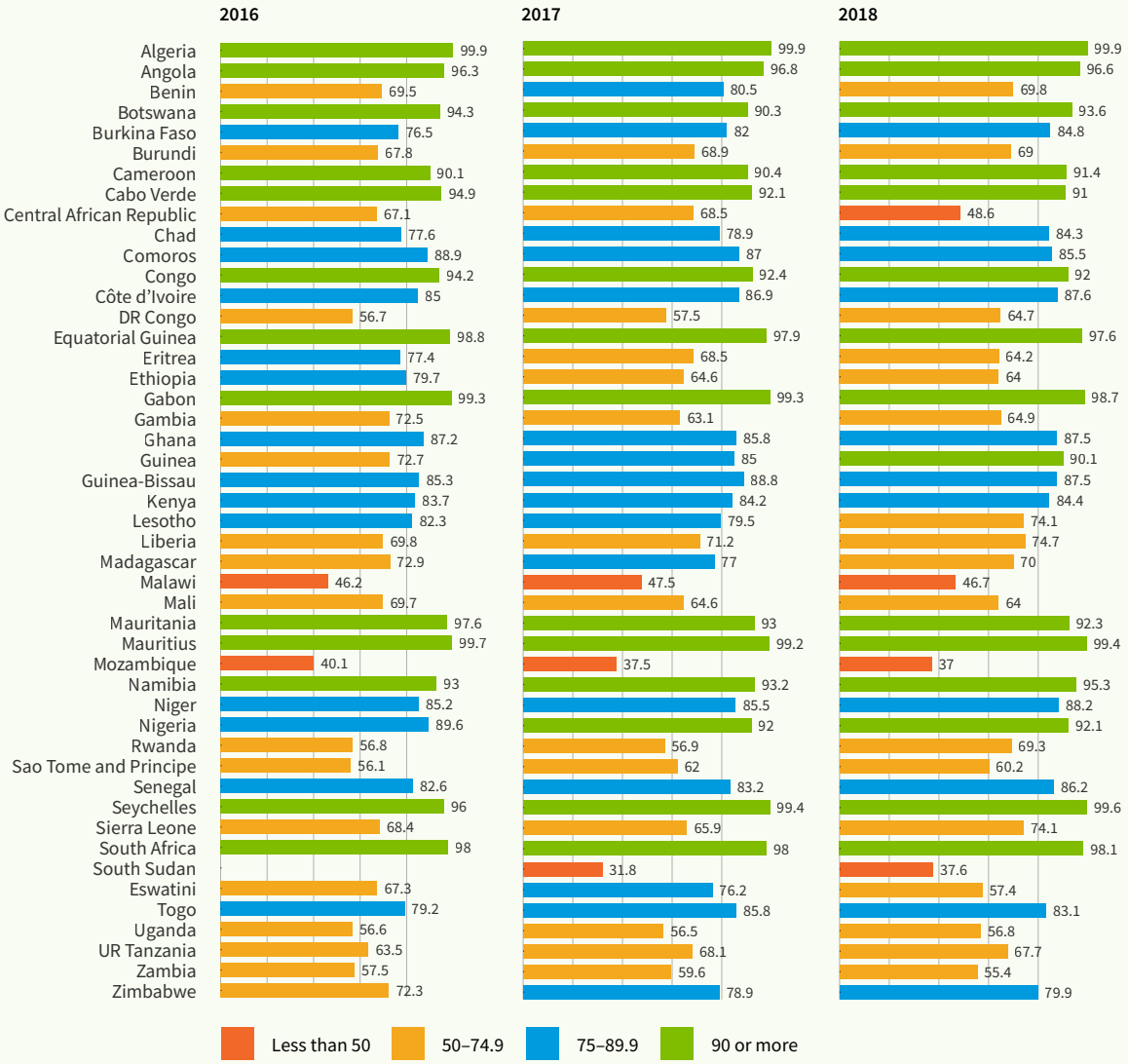


The transformation of health expenditure seen across countries is related to public financing. It is tax based and allows funds to be pooled for more equitable and efficient spending that meets the needs of the population. Currently, health expenditure varies greatly among countries. More than 75% of the global health spending occurs in the Americas and European regions. The WHO African Region accounts for 1%.[2]

The levels of domestic public financing in Africa in 2018 were between 37% and 100% of the health spending. These proportions were related to the countries' income levels, accentuating inequalities in health spending. The part of the public expenditure in the health budget reflects the priority given to the health sector.

2 WHO (2021), Global spending on health 2020: weathering the storm, Geneva

Figure 4.1.4. Public domestic sources of current spending on health as percentage of current health expenditure in the WHO African Region, 2016–2018, WHO

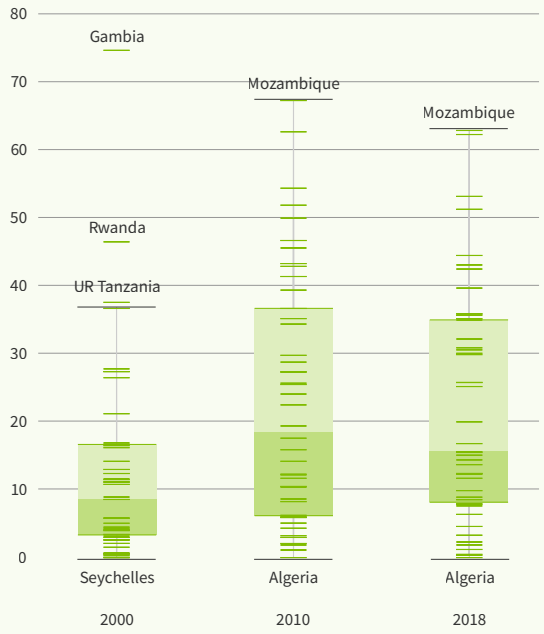


Public spending on health did not increase in most African countries between 2016 and 2018. The reasons varied by country or income group. While budgetary priorities are the main instrument of expenditure allocation in high-income countries, economic growth is the main driver of public spending on health in low-income and middle-income countries. Public spending on health is essential for the achievement of UHC, but governments' prioritisation of health is not a given. In the Region, government funds account for less than 40%[3] of the PHC expenditure, with huge variations among countries. More research is needed to determine the appropriate distribution of spending between PHC and other health care priorities and supplies to better understand the share borne by governments.

3 WHO (2018), Public spending on health: a closer look at global trends, Geneva

External sources of current spending on health

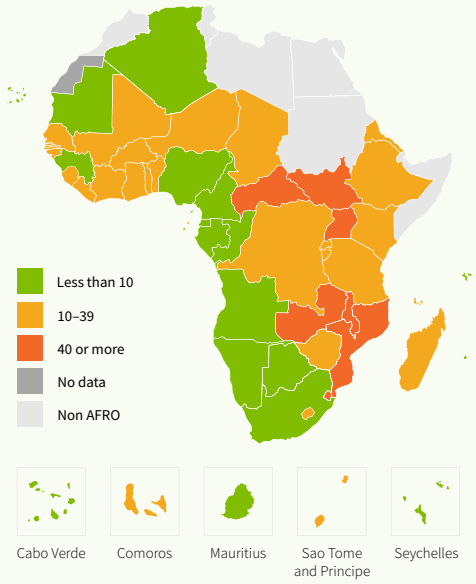
Figure 4.1.5. External health expenditure as a percentage of current health expenditure in the WHO African Region, 2000, 2010 and 2018, WHO



Expenditure on health care financed by external aid has decreased slightly since 2010 after a marked increase between 2000 and 2010. The proportion of health spending financed by external sources is around 30% in low-income countries and 10% in lower-middle-income countries. In 2018, external health expenditure accounted for more than half of the health spending in four low-income countries, including Mozambique and South Sudan.

The proportion of health expenditure financed by external aid has evolved in different ways from one country to another and according to their socioeconomic situation. The cases of South Sudan and the Central African Republic, countries that have increased their health expenditure in recent years, demonstrate that donors have upped the priority given to health in low-income countries.

Figure 4.1.6. External health expenditure as a percentage of current health expenditure in the WHO African Region, 2018, WHO



At the UN General Assembly special session on UHC in 2019, countries committed to strengthen PHC,[4] with the recommendation that each Member State reallocate an additional 1% of its GDP to PHC from public or external sources.

Thirty countries in the WHO African Region reported experiencing partial or total disruption of their essential health services from 2020 to the first quarter of 2021, and 38 countries indicated that the services were still disrupted in 2021.[5]

Development assistance[6] in the health sector today constitutes a very complex web where all forms of cooperation approaches intersect. International cooperation in the field of health is now regularly discussed in a multitude of forums such as G8 summits and the UN Security Council.

4 WHO and UNICEF (2018), A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals
5 Two WHO rapid global surveys on the continuity of essential health services were conducted during the COVID-19 pandemic, first between May and July 2020, then in the first quarter of 2021.
6 Gobbers, D. (2004), La coopération en santé dans les pays africains

A new avenue for trade negotiations has opened, particularly on medicines, with international bodies, bilateral partners and humanitarian associations as stakeholders. And since the COVID-19 crisis, vaccines have brought a new deal to health cooperation. The figures are difficult to produce because of the differences in the accounting mechanisms of each party and the difficulties in distinguishing between commitments and disbursements. Nevertheless, it can be estimated that the international community's aid to health problems in African countries amounts to more than US$ 20 billion dollars.[7]

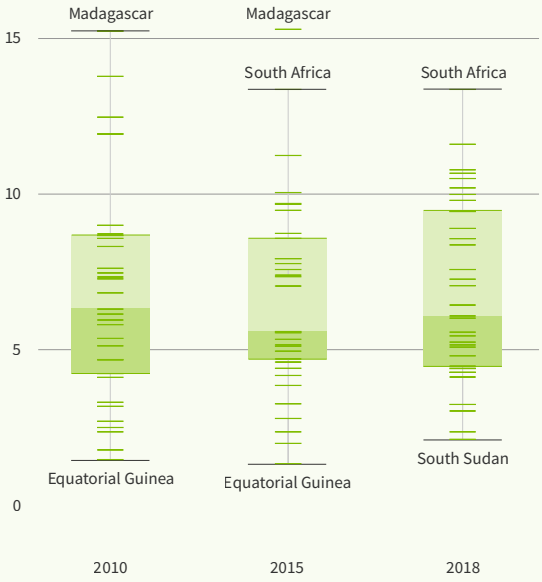
Today, several health initiatives newly launched by major donors and development agencies acknowledge the explicit need to invest in health systems, to better coordinate development assistance and to introduce a framework for mutual accountability that recognises the need for country-owned and country-led initiatives.

Total net official development assistance to medical research and basic health sectors

Refer to page N° 89

National budget allocated to health

Figure 4.1.7. National budget allocated to health in the WHO African Region, 2010, 2015 and 2018, WHO



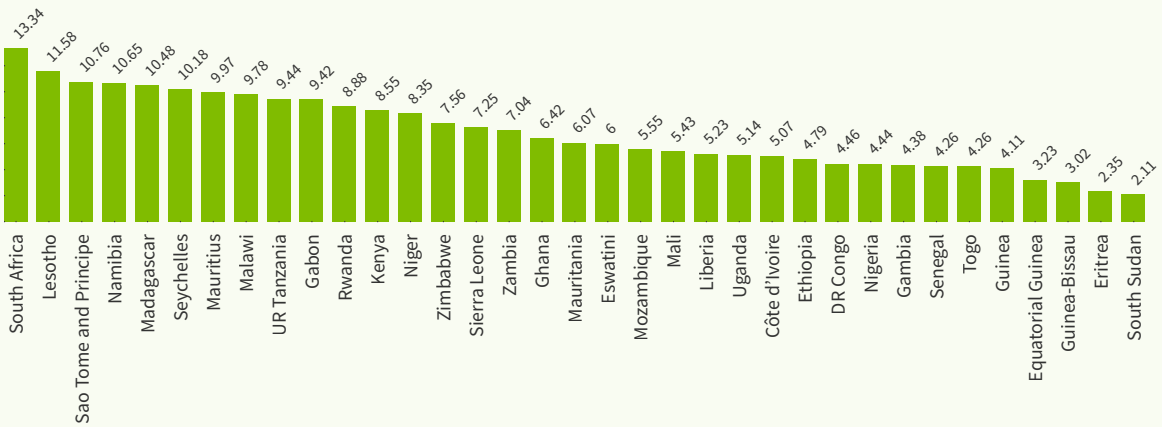
The Abuja Declaration of 2001 was a call for the mobilisation of more resources from public coffers for the health sector. African Union Member States pledged to allocate 15% of their government budget to health.

The African continent has made progress in improving some health indicators, but this progress needs to be sustained. Health equity, value for money, and accessibility of health services for all are among the issues that still need to be addressed. It is not about spending more but about spending more equitably.

All countries in the WHO African Region are seeking to expand their budgetary space to improve their response to the needs of the social sectors and the health sector. The implementation of better budget and resource prioritisation and efficiency, however, has rarely been studied or measured.

7 IDA source data for FY 2019–21, of which 70% of the 29 billion allocated is for Africa. The International Development Association (IDA) is the World Bank institution that helps the world's poorest countries. Founded in 1960, it provides grants and low interest or no interest loans to finance projects and programmes that stimulate economic growth, reduce poverty and improve the lives of the poorest.

Figure 4.1.8. National budget allocated to health (%) in the WHO African Region, 2018, WHO

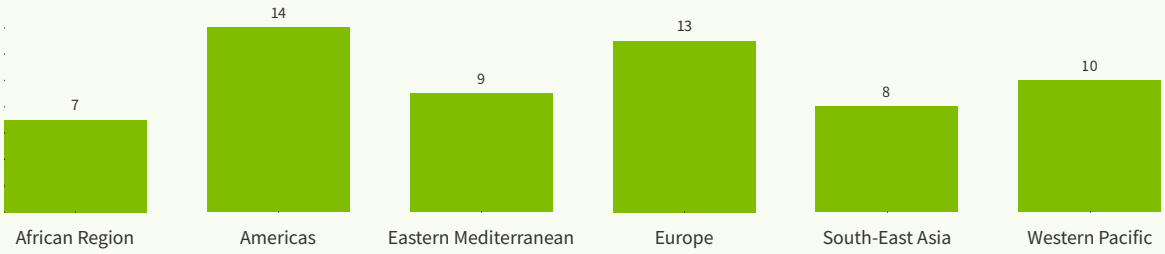


The strong GDP growth a few years ago increased the resources available. However, the share of the resources allocated to health has remained stable and relatively low. Their portion of the national budget the countries allocated to health in 2018 ranged between 2%, for South Sudan, and 13.3%, for South Africa, with the average for the Region being around 6% in 2018. The range between the countries spending the least on health, that is between 2% and 6% and the median value is narrower than for those spending between the average level for the Region, that is 6%, and the highest level, that is 13.3%. Except for Equatorial Guinea, countries with higher incomes spent a relatively larger share of their budget on health.

There are best practices from across the continent to learn from: (i) Gabon and Ghana have earmarked funds for the health sector from government revenues, (ii) the United Republic of Tanzania and Uganda have implemented reforms to improve resource flows to health facilities and have also improved resource utilisation, and (iii) Rwanda has achieved high levels of population coverage through social protection systems that respect access to health services.

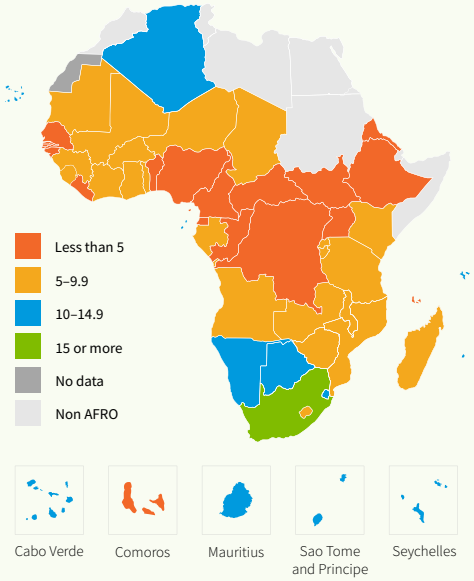
Domestic general government health expenditure as percentage of general government expenditure

Figure 4.1.9. Government health expenditure as percentage of total government expenditure in the WHO regions, 2019, WHO



Public spending reduces inequalities in health care access only if the allocations are carefully planned to ensure that the entire population has access to PHC. Government health expenditure in the WHO African Region in 2019 constituted 7% of the total government expenditure. The ranking of the WHO regions is topped by Europe and the Americas with their government health expenditure standing at 13% and 14% of public expenditure, respectively.

Figure 4.1.10. Government health expenditure as percentage of total government expenditure in the WHO African Region, 2019, WHO



The countries of the Southern and East Africa subregions had better scores than the West Africa and Central Africa subregions. Botswana and South Africa's scores were in range of the average proportions observed in the Americas and Europe. More than 15 countries did not invest at least 5% of their government expenditure in health. Cameroon ranked last in this list with less than 1% of expenditure devoted to health, which translated into less than US$ 10 per citizen.[8]

8 https://countryeconomy.com/government/expenditure/health/cameroon

4.2 Health governance

Existence of a national health sector policy, strategy or plan

Table 4.2.1. Countries with a health strategic plan or policy in the WHO African Region, 2020, WHO

Health policy / strategy period	Country
2010–2020	Namibia
2012–2020	Mauritania
2014–2017	Ghana
2014–2018	Eswatini
2014–2019	Mozambique
2014–2020	Gambia
2014–2023	Mali
2015–2019	Madagascar
2015–2020	Ethiopia
	Seychelles
	South Africa
	Uganda
	UR Tanzania

Health policy / strategy period	Country
2015–2021	Liberia
2015–2024	Guinea
2016–2020	DR Congo
	Zimbabwe
2016–2021	Eritrea
2016–2022	Togo
2016–2026	South Sudan
2016–2027	Cameroon
2017–2021	Gabon
	Mauritius
	Niger
	Sierra Leone
	Zambia

Health policy / strategy period	Country
2017–2022	Malawi
2018–2022	Guinea-Bissau
	Nigeria
2018–2023	Kenya
2018–2024	Rwanda
2019–2023	Lesotho
2019–2028	Senegal
2020–2024	Equatorial Guinea

Leadership and governance involve ensuring strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system design and accountability to deliver on envisaged objectives. At least 33 countries in the WHO African Region had an updated health strategic plan in 2020. National health policies, strategies and plans play a key role in defining a country's vision, policy directions and strategies for ensuring that its population is healthy.

The development of national health policies, strategies and plans is a complex and dynamic process, it varies from one country to another and it involves different stakeholders with the aim to:

- Strengthening health systems;
- Guide and steer the entire pluralist health sector;
- Consider social determinants and the interactions between health and non-health sectors.

Three main categories of stakeholders interact with each other to define the health system and its governance:

- The state structure, that is the government organisations and agencies at the central and subnational levels;
- Health service providers who include different public and private for-profit and not-for-profit clinical services, paramedical and non-clinical service providers, health care workers' unions, professional associations, and networks of caregivers and care service providers, etc.;
- Citizens, who include people representatives, patients' associations, civil society organisations, nongovernmental organisations, citizens' associations protecting the poor etc. who become service users when they interact with health service providers.

WHO supports Member States in the development of national health policies and strategies through technical cooperation, facilitation of national policy dialogue and country-to-country exchange, normative work and facilitation of Member States' participation in international policy frameworks. To improve the effectiveness of public health interventions, a systematic approach to their development is required, as is their rigorous evaluation.[9] "Good governance is the single most important factor in ending poverty and supporting development.[10]"

9 Wight, D., Wimbush, E., Jepson, R. and Do, L. (2016), Six steps in quality intervention development (6SQuID), In J Epidemiol Community Health, 70:520–525.
10 Kofi Annan

Leadership

The world is undergoing rapid economic, environmental, technological and demographic changes, all of which have an impact on health and well-being. Several trends pose significant challenges, some of which might generate reluctance of leaders to align their policies and funding to support change, for example in regard to the real ownership of the shift from hospital and curative care approach to community and preventive care.[11] In PHC, for example, issues of access and equity have sometimes reversed progress. The successful reorientation of health systems towards PHC depends on the recognition of the role of health facilities in this process. It is important at all levels of the health pyramid to equip the actors with the soft skills to bring the health system to produce the expected results.

Monitoring mechanisms

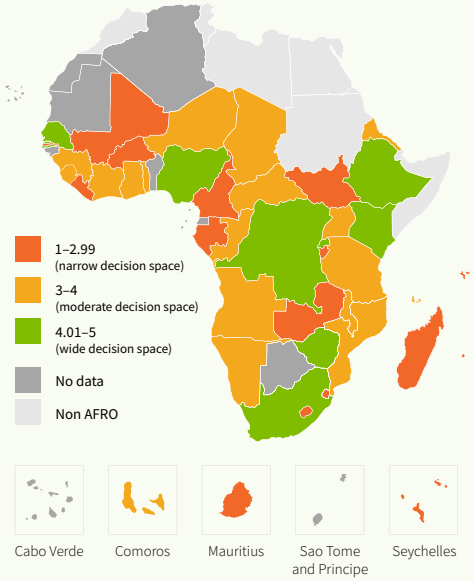
Governance is the implementation of a set of mechanisms such as rules, standards, protocols, conventions, contracts etc. to ensure coordination of stakeholders in an organisation, with each holding a piece of the power, in order to make consensual decisions and launch concerted actions. It calls for management autonomy in the organisation of care, in the management of people and in the management finances.

The legitimacy of governance will be recognised if it succeeds in making the strategic choices, operating methods and family support missions more legible and transparent in the care trajectory and in the follow-up results. In most countries in the Region, health plans and policies have a monitoring and evaluation framework that defines the objectives, associated indicators, baselines and targets to be achieved per period. These frameworks clearly indicate the plans' review periods, whether they are internal or external. While for most countries the review process is a major exercise, the changes expected as a result of it, whether they are structural or conjectural, are generally few or not implemented, except for the interventions linked to vertical programmes, which most often benefit from external or specific funding. In addition, detailed analyses of strategies developed for specific health problems generally suffer in monitoring and evaluation from a lack of strategic alignment with the national health strategy. In effect, parallel data collection systems are created that weaken the national system and in all cases fail to produce quality information for decision-making.

11 WHO and UNICEF (2018)

Subnational level decision-making space

Figure 4.2.2. Subnational level decision-making space in the WHO African Region, 2022, WHO/AFRO



Overall Regional Average = 2.93 (out of 5)

Area	Regional Average
Information systems	3.48
Government processes	3.29
Health products	3.22
Service delivery processes	2.69
Health workforce	2.64
Financial management systems	2.64
Health infrastructure	2.56

The Regional Office conducted a survey in March 2022 with an agreed understanding of the amount of decision space a manager has to carry out the different actions needed across the health system. This covered each of the seven elements of investment in a health system: (i) health workforce, (ii) health products, (iii) health infrastructure, (iv) governance processes, (v) service delivery processes, (vi) health information systems, and (vii) health financing systems. Participants were asked to rate the amount of decision space a subnational unit manager has for each of these actions on a scale of 1–5, where 1 was for narrow and 5 for wide. A narrow decision space indicated that decision-making about the action in question was primarily the responsibility of another institution, which could have been another government department, the ministry of health etc. A moderate decision space indicated that decision-making about the action in question was largely shared equally with another institution outside the subnational unit. A wide decision space was associated the decision-making about the action in question lying primarily with the sub-national unit. Decision space analysis reflects the amount of flexibility that a health manager has in deciding on management actions.

4.3 Health information

Civil registration coverage of births (%)

Refer to page N° 115

Completeness of birth registration (%)

Refer to page N° 115

Death registration

Refer to page N° 116

BOX 3. Civil registration and vital statistics in the Region

Many countries do not compile their annual data derived from civil registration and therefore cannot always measure the degree of completeness of registration in their system. The United Nations report estimates that in 2015 only half of the countries in the Region reported birth registrations on time. The rates of birth registration and their completeness in countries in the Africa Region vary widely and range from countries that register and complete 2% of their births to those that cover almost all births. Birth registration completeness level in the Region is below 60%, but it has been improving in recent years. Nearly 30% of the countries do not cover 50% of the births occurring during the year in their territory. Only four countries register more than 90% of their births. Few countries centralize their death register. Only four countries achieve a completeness of 80%, which is a satisfactory level.

The registration completeness of deaths is much lower than that for births and only one in three deaths is registered.

Civil registration is defined by the UN (2001) as "the continuous, permanent, compulsory and universal recording of events and their characteristics relating to the population, provided for by decrees or regulations, in accordance with the laws of a given country". This refers to births, deaths, marriages and divorces, but not just their facts but also their characteristics. It is a matter of defining these concepts and translating them into the legislation of the country, because a birth, for example, is the culmination of a pregnancy, which is assumed to have lasted 9 months on average and for which the cohabitation between the mother and her future child must be recognised. In the event of the death of the child and depending on the length of gestation, the identity of the mother, whose parity can have an important impact on her life and her community, should be recorded. It is also right to attribute a name or to grant a burial to the fetus or the baby and to allow the family to grieve.

The most important element is that these civil status records do not only open up rights for the child or his or her family but also strengthen the capacity of the countries to plan. In the WHO African Region it is imperative to act as close as possible to the location of the event. This is also about creating conditions and incentives for the community to make the declarations and it should involve all the local, community and traditional religious authorities in the process by using pedagogy and appealing to their sense of responsibility.

Percentage of facilities using patient records or unique patient ID numbers

Only Liberia and Ghana responded on this indicator on the functional facility/community/patient reporting system in place that fitted certain key criteria. But several countries in the Region are using or piloting various patient data collection solutions either specifically for certain diseases, for example HIV/AIDS, TB, etc., or in specific areas as part of the implementation of projects. What is lacking the most is the implementation of concerted action at the national level for greater impact, so health systems are limited to solutions with a small geographical or modular scope, which makes it difficult to have data that can be used for national planning. It is, therefore, important for the countries in the Region to not only have genuine digital health start-ups, but also to have realistic and pragmatic operational plans, including an interoperability framework that will enable the construction of a genuine national data architecture.

Patient information is sensitive data.[12] When dealing with an individual patient's data, it is important to identify specific information so that the patient can be uniquely and reliably referenced, even without sophisticated means. Clinically, without the ability of health professionals to properly link a patient to his or her medical record, lives will be lost and medical errors will continue to occur unnecessarily. There is a real need to build a follow-up system from the ground up that will be the most efficient for the professionals, who must be trained and made aware of the global vision of health. Patient records exist almost in all the countries but they are sometimes poorly standardised, incomplete and limited, but they need to be improved and used to evaluate and strengthen the health systems.

Effective surveillance system

Refer to page N° 42

Existence of national e-health strategy

Table 4.3.1. Countries with an e-Health strategic plan or policy in the WHO African Region, 2005–2019, WHO

Year	Country
2005	Lesotho
	Mauritania
2007	Congo
2009	Mozambique
2010	Angola
	Botswana
	Ghana
	Mauritius
	Namibia
2011	Burundi
2011	South Sudan
2012	Gambia
	Zimbabwe
2013	Chad
	Mali
	Togo
2014	DR Congo
2015	Guinea
	Madagascar
	Nigeria
2016	Burkina Faso
	Eswatini
	Kenya
	Liberia
2017	Comoros
	Gabon
	Malawi
	Uganda
	Zambia
2018	Benin
	Ethiopia
	Rwanda
	Senegal
	Sierra Leone
2019	Nigeria
	South Africa
	UR Tanzania
2020	Cameroon

To help the countries in developing their eHealth action plans, WHO developed a comprehensive and detailed guide[13] aimed primarily at administrations and governmental institutions.

In May 2005, the Fifty-eighth World Health Assembly adopted Resolution WHA58.28 establishing an eHealth strategy for WHO that specifically highlights the necessity of patient information systems, with interoperability, patient confidentiality and security assurance as essential characteristics. Even though several countries in the Region have already developed eHealth plans, their effective implementation is weak, particularly in terms of incorporating an effective governance framework or in defining a genuine interoperability framework. There has been a major boom in digital solutions but these suffer from a lack of standardization.

In 2020, WHO published the *Global strategy on digital health 2020–2025*, which was the result of work with all Member states. The purpose was to promote healthy lives and well-being for everyone, everywhere and at all ages. To deliver on this strategy's potential, national and regional digital health initiatives must be guided by a robust strategy that integrates aspects of financial, organisational, human and technological resources.

12 WHO (2012) Management of patient information: Trends and challenges in Member States, Based on the findings of the second global survey on eHealth, Global Observatory for eHealth series – Volume 6

13 WHO and International Telecommunication Union (2012), National eHealth Strategy Toolkit: Overview

Percentage of deaths with assigned ICD as the underlying cause of death

Table 4.3.2. Countries reporting causes of death with ICD as the underlying cause of death in the WHO African Region, 2005–2019, WHO

Year	Country	Coverage (%)
1992	Mauritius	100
	South Africa	0
	Zimbabwe	0
1997	Mauritius	99.7
	South Africa	0
2002	Mauritius	99.9

Year	Country	Coverage (%)
2002	Seychelles	98.8
	South Africa	70.4
2008	South Africa	92.3
2009	South Africa	91
2010	Mauritius	100
2011	Seychelles	100

Year	Country	Coverage (%)
2012	Cabo Verde	93
	Mauritius	100
2015	Seychelles	91
	South Africa	92
2017	Mauritius	100

It is important to understand the causes of people's deaths to improve their living conditions. Tracking the numbers of annual deaths makes it easier to assess the effectiveness of health systems and direct resources to where they are most needed. To improve health and reduce death and disability around the world, it is essential to regularly collect and analyse high quality data on deaths and their causes, as well as on disability. Very few countries in the Region have cause-of-death coding with ICD, so that is a major challenge that needs to be addressed to improve health statistics. In most countries, the solution to this problem is multisectoral and requires a great deal of collaboration among health services, civil registry, security and especially the community.

4.4 Service delivery

Patient referral and counter-referral system

Service delivery is the part of the health system at which patients receive the treatment and the supplies they are entitled to. A referral, in the most basic sense, is a written order from the treating physician for a patient to consult a specialist for a specific medical service. It is designed to ensure that the patient consults the right provider for the problem he or she is dealing with. Not getting the necessary referral before consulting a specialist can lead to inadequate illness management and subsequently to higher costs, which would exclude a significant part of the population from the specialist care pathway. The referral process is complex and requires participation of various entities.

Many countries in the Region have referral and counter-referral procedures but often they are not harmonised or updated with the evolution of the health map. And specialization of health facilities does not exclude them from offering basic health services, so a patient who does not benefit from the service offered by lower level health facilities has the choice to go elsewhere. However, some countries with the mutualisation of health risk through health insurance manage to require patients, and generally it is those who do not have the means, to respect a defined care pathway to take advantage of the benefits offered by the programme. Much remains to be done, but this requires a good definition of the health services to be delivered as a priority at each level of care.

Outpatient department utilisation

Outpatient services include medical or paramedical procedures, tests and services that can be provided in a hospital, a doctor's surgery or a health centre. They do not require overnight stay in hospital, special care or additional monitoring and are mostly of short duration. In Africa, ambulatory care is still very hospital centred, yet it is inaccessible to many. Within the objective of UHC, outpatient services must be strengthened and their use encouraged within the overall framework of health care decentralisation to bring services closer to their users, but also their affordability should be ensured. Better equipped, structurally funded and regularly evaluated health centres with trained staff can make the use of outpatient facilities optimal and efficient.

Patient safety

Between 5.7 million and 8.4 million deaths in low-income and middle-income countries each year, or about 15% of the total, are attributable to poor quality care. And 60% of the deaths in health care conditions are due to poor quality of care, while the remaining deaths are due to non-use of the health system. It is estimated that 1.8 billion people, or 24% of the world's population, live in contexts of fragility where it is difficult to provide quality essential health services. A significant proportion of maternal, child and newborn deaths occur in these settings.

The harm caused to patients during care is unacceptable. Patient safety and quality of care are both essential to deliver effective health services and achieve UHC. Investments in patient safety can yield substantial savings. Prevention costs far less than the treatment needed after an injury or a disease. Patient involvement is crucial in improving safety in care. This can reduce the burden of harm by 15%, saving billions of dollars each year.

Ethics

The health sector like other sectors in the WHO African Region is plagued with multiple forms of corruption. Corruption can take many forms in the delivery of health services. It has a negative impact on access to services, compromising the ability of governments to provide health care to citizens. Similarly, the quality of care may be diminished if patients receive unnecessary treatment.[14] Vulnerable populations would be the most affected as they struggle to cope with unofficial or unnecessary payments and may instead choose to forego treatment or seek care from unauthorised providers.

For some analysts, low wages and poor working conditions for health workers are the causes of this corruption, for others it is the broader governance failures in health systems, including the limited monitoring of worker performance and the minimal sanctions issued for misconduct. It may simply be the abuse of power to satisfy greed. While these behaviours exist in all countries, they have vital consequences in the WHO African Region and even more so in low-income countries.

4.5 Health workforce

Health worker density and distribution

Refer to page N° 90

Number of output training institutions

Table 4.5.1. Number and percentage of health training institutions by sector in 39 countries in the WHO African Region, 2018, WHO

	Public		Private for-profit		Private for-profit		Total	
Training institutions	Number (%)		Number (%)		Number (%)		Number (%)	
Medical training institutions	209	–59	111	–31	35	–10	355	–100
Health sciences schools	544	–55	363	–37	84	–8	991	–100
Nursing and midwifery schools/colleges	1 375	–54	877	–34	296	–12	2 548	–100
Total	**2 128**	**–55**	**1 351**	**–35**	**415**	**–11**	**3 894**	**–100**

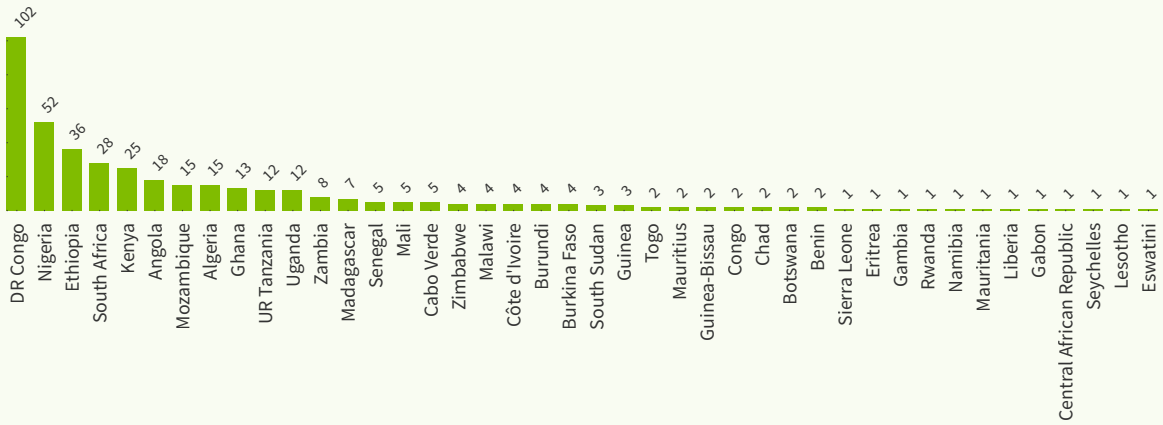
There were 3894 health training institutions in the Region in 2018, of which 2128 (55%) were owned by the public sector, 1351 (35%) by private for-profit sector entities and 415 (11%) by private not-for-profit entities. The public sector had the highest number of training institutions for medical practitioners, dentists and pharmacists, totaling 209 and accounting for 59% of all the medical institutions.

14 Reported by Transparency International Global Health

The private for-profit and private not-for-profit entities had 111 (31%) and 35 (10%) training institutions, respectively. The public sector had the highest number of both nursing and midwifery training institutions with a total of 1375 institutions (54%) and health sciences schools for other mid-level cadres, making a total of 544 (55%).

The global strategy called for all countries to set up accreditation mechanisms for health training institutions by 2020. The WHO African Regional Framework for the implementation of the Global Strategy on HRH targets 2022 as the year when at least 50% of the Member states will have such accreditation mechanisms in place.

Figure 4.5.2. Number of health training institutions in the WHO African Region (n=39), 2018, WHO/AFRO



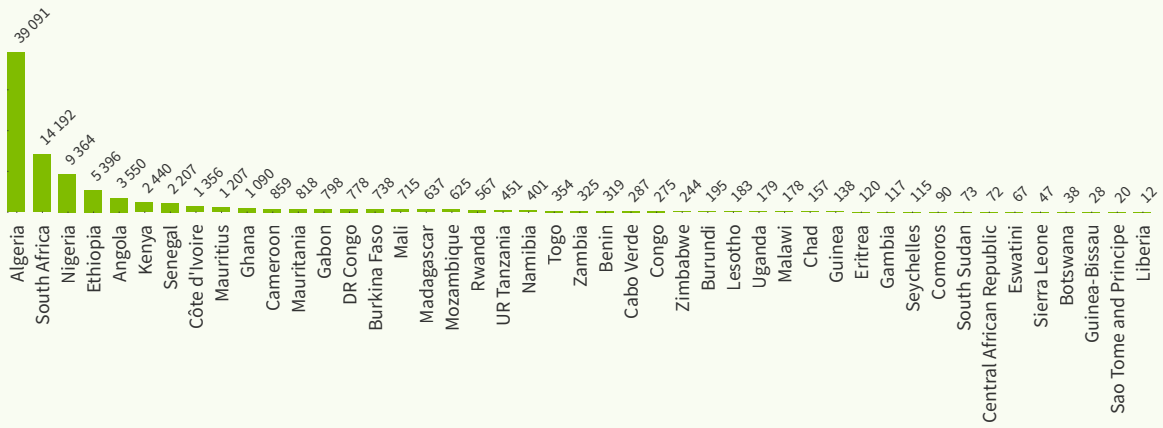
The results of the regional survey show that in 2018, some 31 countries (79%) had an accreditation body for health care training institutions, seven[15] (18%) had none and one country (Chad) was in the process of establishing one. Comoros, Gambia, Equatorial Guinea, Kenya, South Africa and South Sudan did not provide data. The Global Strategy on HRH and the WHO African Regional framework for its implementation emphasises the importance of strengthening the capacity and quality of educational institutions through accreditation of training schools and certification of diplomas awarded to health workers.

Factors relating to training, recruitment, leadership, governance, retention, finance, population growth, morbidity, information, wars, conflicts, insecurity etc. have contributed to the human resource crisis in the WHO African Region. The WHO African Regional framework for HRH highlights the low production of health workers that is due to the inadequate education and training capacity, low number of schools and HRH governance as the main obstacle in building an effective health workforce for achieving UHC in the Region. The regional framework highlights the need to improve working conditions, remuneration and protection of workers. Human resources are reported to consume about 57% of total health expenditure in the Region.

15 Algeria, Benin, Burkina Faso, Congo, Mali, Mauritania and Togo

Specialist doctors

Figure 4.5.3. Number of specialist doctors in the WHO African Region (n=39), 2018, WHO/AFRO

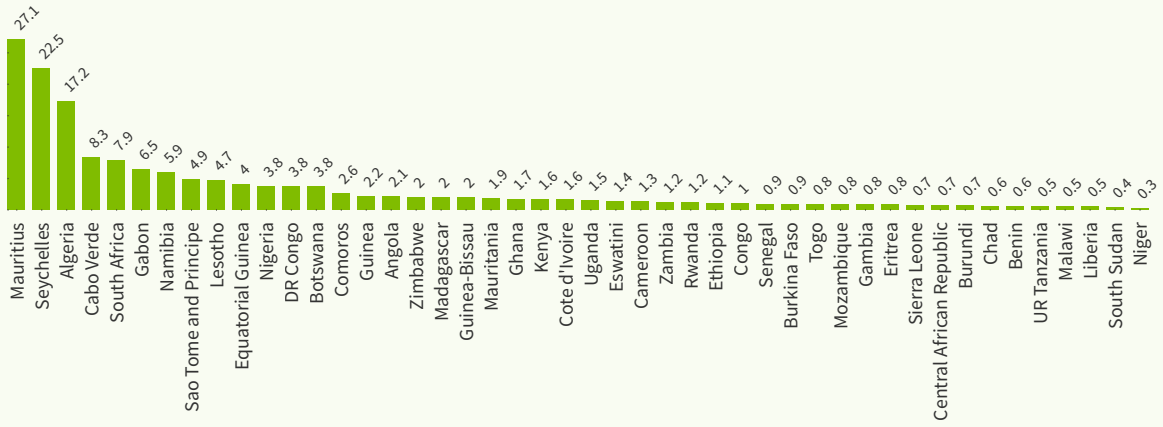


The number of specialist doctors varies greatly from one country to another. However, the important factors in their adequacy are the reference population and their distribution in the countries' territories, because the doctors are usually concentrated in the urban areas in almost all the countries of the Region.

The five countries with the highest numbers of medical specialists are to the 10 most populous countries in the WHO African Region.

Density specialist doctors (per 10 000 population)

Figure 4.5.4. Density of specialist doctors (per 10 000 population) in the WHO African Region, 2020, WHO

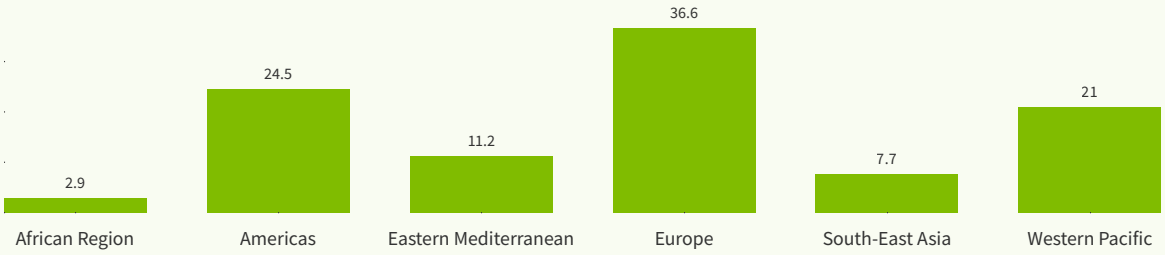


The countries with the highest densities of specialist doctors in 2020 in most cases also had high middle incomes or high incomes. That was the case for six out of the 10 countries with the highest specialist numbers. Among these were the island states of Mauritius, Seychelles, Cabo Verde and Sao Tome and Principe.

Mauritius, Seychelles and Algeria, the three countries with the highest densities of specialists, escape strongly from the following with the densities of 27.1, 22.5 and 17.2 specialist doctors respectively per 10 000 population. The four Member State was Cabo Verde with 8.3 specialist doctors per 10 000 inhabitants. There is a huge need in the Region for countries to train more doctors with the expertise to provide specialised care to patients and to reduce the financial burden of medical evacuations abroad.

Doctors (excluding specialists) per 1000 population

Figure 4.5.5. Density of doctors per 1000 population in the WHO regions, 2020, WHO



In 2020, with 2.9 non-specialist physicians per 1000 inhabitants, Africa had the lowest density of doctors compared with the other regions. Its density was more than 12 times lower than that of the Europe Region, which was 36.6, and two and half times lower than that of South-East Asia, which was 7.7.

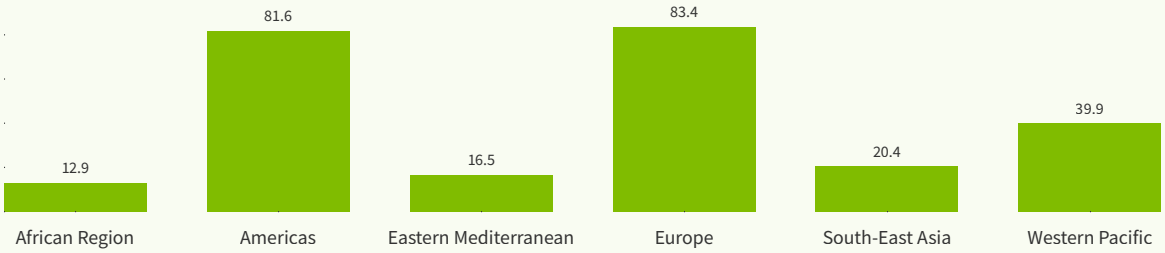
Only 28% of the countries had density levels for non-specialist doctors that were above the regional average, and all the countries with higher incomes were represented in that group. Heading these were Mauritius and the Seychelles, with densities in the range of those of the Americas Region.

The Mo Ibrahim Foundation has highlighted the brain drain of doctors trained in Africa, which is a factor in the rising levels of Africans in hospitals in developed countries in North America and Europe. It is estimated that one African doctor, most often trained in Egypt, Ghana, Nigeria or South Africa, moves to the United States per day. Some sub-Saharan African countries are particularly affected by this haemorrhage of health care workers.

A WHO regional survey that assessed health worker stock and densities found that nine countries, that is Algeria, Botswana, Cape-Verde, Gabon, Lesotho, Mauritius, Namibia, Seychelles and South Africa, had a density of doctors, nurses and midwives that had attained or exceeded the SDG minimum threshold of 2.28, but only four, that is Seychelles, Namibia, Mauritius, and South Africa, had reached or exceeded the SDG target of 4.45.

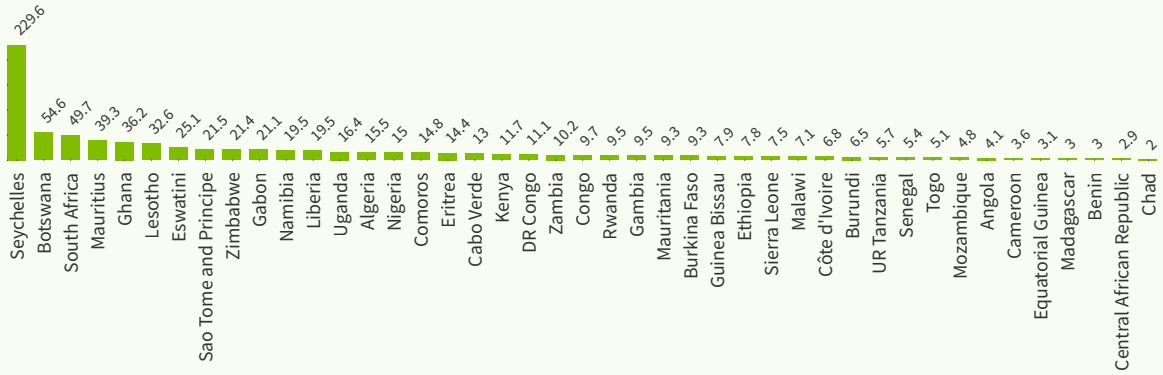
Nursing staff, including midwives and associate nurses

Figure 4.5.6. Nursing staff, including midwives and associate nurses (per 10 000 population) in the WHO regions, 2020, WHO



The situation described above regarding doctor migration is observed for nursing and midwifery professionals as well. Africa has 12.9 nurses per 10 000 inhabitants compared with more than 80 for Europe or North America. Eighteen countries out of the 47 in the Region have density levels for these cadres that are above the Regional average, which has been pulled up by Seychelles' number.

Figure 4.5.7. Nursing staff, including midwives and associate nurses, (per 10 000 population) in the WHO African Region, 2012–2020, WHO



There is one nurse for every 50 people in Seychelles, while in Chad one nurse serves 5000 inhabitants, a level that is 100 times lower than that of Seychelles. In the WHO African Region there is a link between the level of resources the countries have and their number of nurses. Seychelles, an archipelago of around a hundred islands in the Indian Ocean with 100 000 inhabitants once had a shortage of health professionals, but by increasing their pay in 2017[16] it made it possible to maintain nurses at the required levels, who are an important link in the work plan for UHC supported by WHO.

16 Seychelles News Agency (2017).

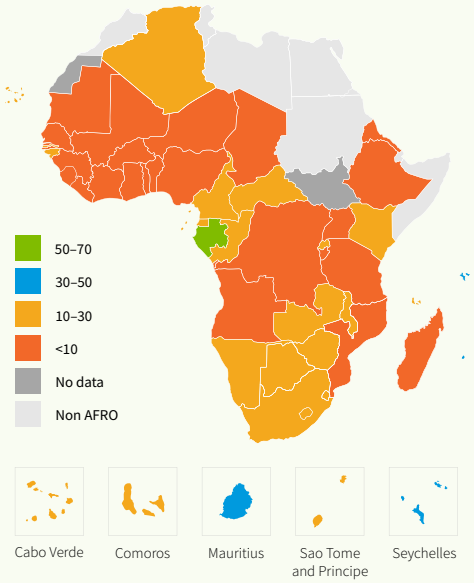
4.6 Health infrastructure

Health facility density and distribution

The differences in the distribution of health services are wide among the countries and within the countries, with higher concentrations of services in urban than rural areas. The density of the population goes hand in hand with the density of the services, as does the density of health services. But the use of the services and the needs of the population for health care services sometimes do not align with these considerations. A WHO multidisciplinary, multicountry, cross-sectional survey in 13 urban, peri-urban and rural sites in 10 African countries[17] representing more than 52% of the Region's population provided people's perspectives on the components of the health system that need to improvement to better meet their expectations. The private sector accounts for 55.9% of the services in urban areas, while in peri-urban areas 67.1% of the services are provided by traditional and spiritual healers. This picture shows that countries need new plans and frameworks to generate more creative and appropriate models for providing quality health care. Also, they need to involve the private sector and civil society and nongovernmental organisations to improve health facility coverage.

Hospital bed density

Figure 4.6.1. Hospital bed density (per 10 000 population) in the WHO African Region, 2004–2017, WHO



Mali and Madagascar have very low rates of 1 and 2 beds per 10 000 inhabitants, respectively, while Mauritius and Seychelles have densities of 30 and 36 beds, respectively. Gabon, with 63 beds per 10 000 inhabitants, leads in the Region. The range in these levels shows the great diversity in the situation among the counties. This difference is also marked within the same country.

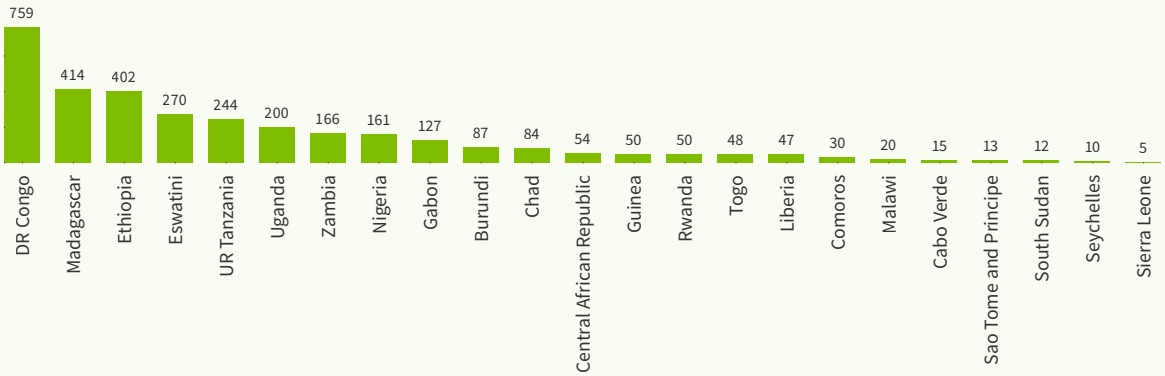
Health services are sometimes very far from rural and poorer communities, making it difficult, if not impossible, for them to access care. The availability of medical tools and devices in their facilities, even the most basic care instruments, is not guaranteed.

The number of medical beds available for a population affects the efficiency of service provision and the quality of services. A per capita bed rate may be sufficient for one country and grossly inadequate in another owing to the numbers of people needing hospitalisation due to illness. No global standard currently exists for inpatient bed density relative to the total population. The global average for inpatient bed density is 27 per 10 000 population and the average for the WHO African Region is 10 beds per 10 000 population. The SARA survey suggests benchmarks of 18 and 39 beds for lower-income and upper-income countries, respectively.

17 Algeria, Cameroon, Kenya, Niger, South Africa, Nigeria, Central African Republic, Uganda, Democratic Republic of Congo and Senegal.

Critical care beds

Figure 4.6.2. Number of ICU beds in the WHO African Region, 2020–2021, WHO/AFRO



A high number of hospital beds does not guarantee good standard of care. The experience during the COVID-19 pandemic showed that curative care bed levels offer a vision that does not allow the prediction of the level of preparedness required by different countries for health emergencies. The imperative is to guarantee the availability of hospital beds, in general, and in the intensive care units, in particular, to deal with an influx of cases in the event of an epidemic. It will remain the responsibility of Africa to define the effective protocols to respond to different emergency situations.

Data are lacking for half of the countries. The importance of data collection for this indicator needs to be highlighted for the countries. Some low-income countries are better prepared to deal with emergencies than are others.

When analysing bed density by population size, bed number in general and for each specialty can vary considerably, making comparisons difficult. Furthermore, when looking at smaller administrative units such as districts, it is important to note that the people living there might not use local hospitals for various reasons such as logistics, sociocultural preferences, quality issues etc. In the event of a crisis such as that of COVID-19, it is necessary to keep a dashboard of the absorption capacity of each hospital structure and for each country to facilitate dealing with crises.

Health infrastructure readiness

There are seven areas for investment in the health systems to achieve UHC, which are classified into two categories:

- The tangible inputs that provide essential services, such as the health workforce, health infrastructure and medical products, and technologies.
- The intangible processes needed to support the tangible inputs, including service delivery, governance, information and health financing.

A review of public funding levels for these elements in 18 countries in the WHO African Region shows that an average of 60% of the spending goes to the tangible inputs and 40% to intangible processes. Among the tangible inputs the highest expenditure, that is 39%, goes to medical products, followed by health personnel with 14% of the expenditure, and then infrastructure, including equipment, transport and ICT, with 7%.

The mechanisms for coordinating infrastructure investments are not obvious and many countries have a variety of types of infrastructure with quality and functionality differences, making it difficult to ensure its efficiency and equity. Infrastructure, which includes buildings, equipment, transport and ICT, needs to be planned, maintained and used in a coordinated manner to achieve UHC and the SDGs.

Table 4.6.3. Health infrastructure readiness score in the WHO African Region, latest available year, WHO/AFRO

Year	Country	Value	Year	Country	Value	Year	Country	Value
2010	Tanzania	9.8	2016	Sierra Leone	7.27	2019	Burkina Faso	5.98
2015	Chad	2.02	2017	Mali	5		Kenya	9.77
2016	Côte d'Ivoire	10.73	2018	Mozambique	3.35		Malawi	6.67
	Liberia	6.23		South Sudan	3.74		Namibia	13.3

The overall infrastructure score is extremely low, meaning that infrastructure investments are not adequate to facilitate the achievement of the required system performance. The investment level cannot be explained entirely by the countries' income level. It does not vary significantly between the countries' income groups. Low-income countries appear to have higher per capita levels for hospitals, including rural hospitals, than do countries in other groups. The countries with higher health spending appear to have better infrastructure, as do the less populous countries, although this pattern does not hold true among the Small Island Developing States in the Region.

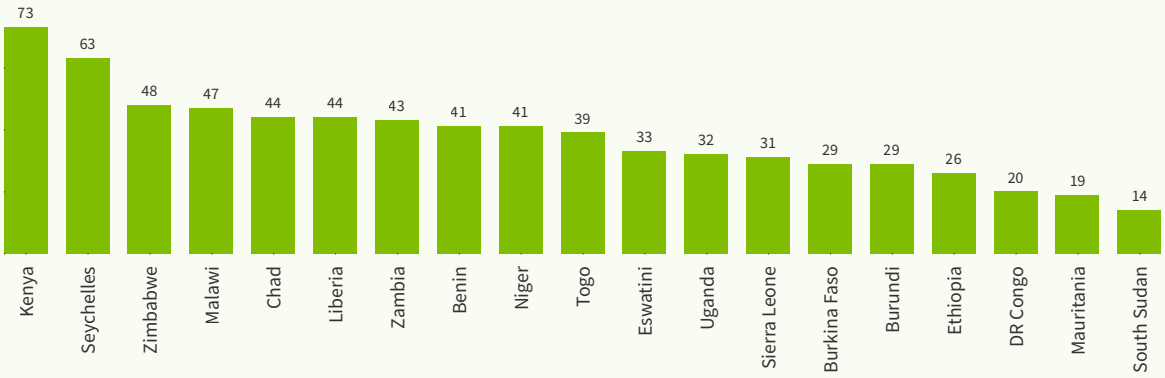
4.7 Health products

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

Refer to page N° 89

Essential medicines readiness

Figure 4.7.1. Essential medicines readiness in the WHO African Region, latest available year, WHO/AFRO

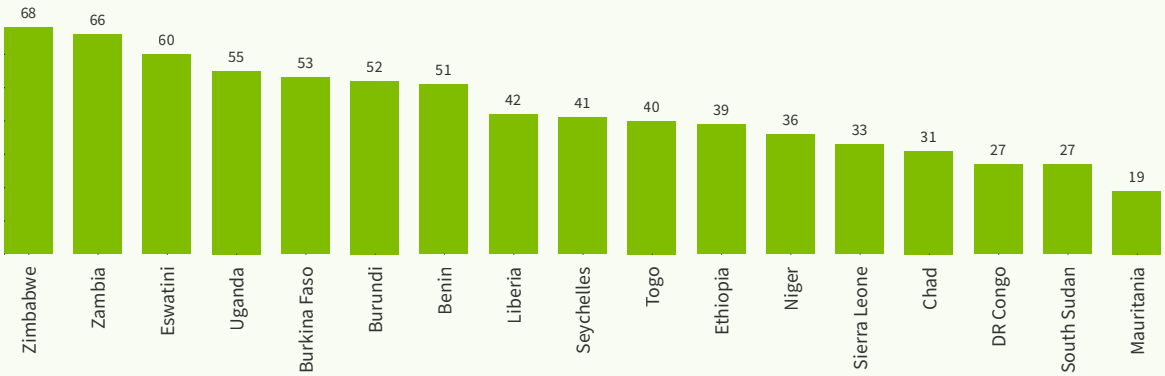


Changes in the economic, sociopolitical and demographic environment, globalisation of trade, especially for of pharmaceutical products, the worsening of poverty, currency fluctuations, emergence of new diseases and the re-emergence of old diseases, resistance to existing therapeutic agents, and irrational use of medicines are placing the already limited pharmaceutical budgets under heavy strain. In this situation, greater importance should be given to the development and implementation of national pharmaceutical policies to guarantee effective improvement of access to essential medicines of recognised quality. WHO is concerned about the equity of access to essential medicines and estimates that more than half of the population in the Region does not have full access to essential medicines. For most countries, production scores for essential medicines remain low, except for Ghana and the Seychelles. In the case of Ghana, innovations in the traditional medicine sector that have improved the quality and effectiveness of traditional medicines and the practice of this discipline, have contributed to good scores on production of essential medicines.

AMA can play an important role in strengthening regulatory oversight and facilitating access to safe and affordable medicines across the continent. It will work towards harmonisation across the continent and will benefit from the lessons learned during the pandemic and the rapid implementation of modern and innovative solutions to tackle the pervasiveness of counterfeit medications offered through dubious channels. The supply and safety of medicines will be ensured with AMA.

Availability of tracer diagnostics

Figure 4.7.2. Availability of tracer diagnostics (% facilities) in the WHO African Region, 2013–2018, WHO/AFRO



Access to diagnostic services is essential. Improving access to health technologies by advancing regulatory convergence across the continent, supporting technology transfer and capacity building is a necessity. Countries with low incomes are at the bottom of the ranking for diagnostic services. Seychelles, which often repatriates patients for certain health procedures, is among the countries in the middle of the ranking despite its high income.

Stock-out of essential products

Drug stock-outs are common in hospitals and pharmacies in many sub-Saharan African countries. These shortages affect populations differently, depending on where they live and how far they are from the hospital or pharmacy, or whether the product is available at the distribution centre.

Innovative methods are needed to improve supply chains, demand and ordering of medicines, communication between facilities and districts, and forecasting of needs. Increased investment in public sector human resources for health could potentially reduce the occurrence of stock-outs. This is also one of the challenges for AMA to tackle.

The SDGs highlight the lack of progress in improving access to and availability of essential health products such as medicines, supplies and equipment in developing countries. Stock-outs can have a significant impact on the delivery of quality health services.

References

1 As total current health expenditure, excluding equipment expenditure

2 WHO (2021), Global spending on health 2020: weathering the storm, Geneva

3 WHO (2018), Public spending on health: a closer look at global trends, Geneva

4 WHO and UNICEF (2018), A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals

5 Two WHO rapid global surveys on the continuity of essential health services were conducted during the COVID-19 pandemic, first between May and July 2020, then in the first quarter of 2021.

6 Gobbers, D. (2004), La coopération en santé dans les pays africains

7 IDA source data for FY 2019–21, of which 70% of the 29 billion allocated is for Africa. The International Development Association (IDA) is the World Bank institution that helps the world's poorest countries. Founded in 1960, it provides grants and low interest or no interest loans to finance projects and programmes that stimulate economic growth, reduce poverty and improve the lives of the poorest.

8 https://countryeconomy.com/government/expenditure/health/cameroon

9 Wight, D., Wimbush, E., Jepson, R. and Do, L. (2016), Six steps in quality intervention development (6SQuID), In J Epidemiol Community Health, 70:520–525.

10 Kofi Annan

11 WHO and UNICEF (2018)

12 WHO (2012) Management of patient information: Trends and challenges in Member States, Based on the findings of the second global survey on eHealth, Global Observatory for eHealth series – Volume 6

13 WHO and International Telecommunication Union (2012), National eHealth Strategy Toolkit: Overview

14 Reported by Transparency International Global Health

15 Algeria, Benin, Burkina Faso, Congo, Mali, Mauritania and Togo

16 Seychelles News Agency (2017).

17 Algeria, Cameroon, Kenya, Niger, South Africa, Nigeria, Central African Republic, Uganda, Democratic Republic of Congo and Senegal.

SECTION V

HEALTH OUTPUTS

Section summary

An effective health system is one that provides the population with quality essential health and related services as needed. The assessment of a health systems' performance uses the four dimensions of access, quality and demand for essential services, and the resilience of the health system to the shocks that interrupt service delivery.

The overall health systems' performance score for the WHO African Region is 52.9 out of 100. This implies that on average the health systems are performing at a level that is 52.9% of what they can feasibly do. The range among the countries is 34.4% to 75.8%. The current performance level represents a marginal improvement from 49% reflected in the 2018 *State of health in the WHO African Region* report. The best performing health system has an index of 70%. Moreover, when assessed against the four dimensions of health systems' performance, all the countries in the Region are underperforming. Quality of care is at only 61.6% of what is feasible, demand for services is performing at 51.4%, resilience of the systems is at 48.4% and access to services is at 46.3%.

The performance of the Member States against these dimensions differs, but 36 out of the 47 of them underperform in either access to essential services or the health system's resilience.

The question of supply and demand in the health sector does not follow the same rules as in economics, since health is not a good that can be consumed and exchanged. In fact, the right to demand for health is distant from the consumption of health care. A demand for a health service is not always followed by its consumption or its use. A high demand for health services indicates that the health systems are providing the services that people need for their health and well-being. For many countries in the Region, the demand for health services is still low. Indeed, the likelihood of engageing in care seeking depends on one's psychosocial aspects of affect, expectations and values about the outcomes, habits and norms, plus living conditions. Affect refers to feelings such as anxiety about a serious diagnosis or embarrassment about an examination (Schoemaker, 1982).

Scores for the quality-of-care index vary significantly from one country to another and range from 39.7% to 84.7%. Namibia, Mauritius and Seychelles have reached the 80% target. These countries have a very high coverage of quality of health care services. The quality-of-care score did not seem to be influenced by the income level of a country.

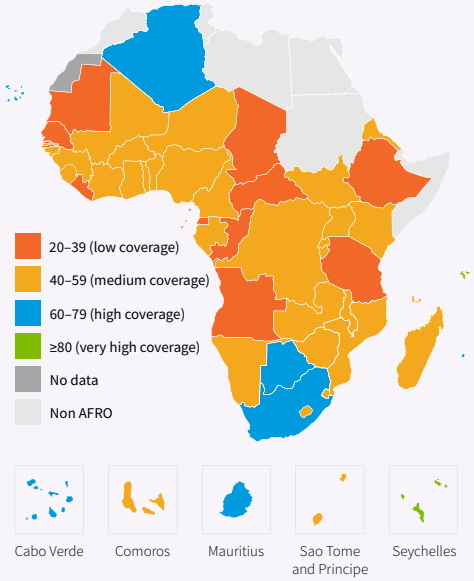
The number of people on HIV treatment in the WHO African Region increased by 1.47 million in 2021 from over 2 million the previous years. The largest increase was in Central Africa and West Africa subregions, while the increase in the East and Southern Africa subregion was lower than in previous years. Efforts must continue to eradicate TB. The proportion of patients reported as having the disease with a conclusive HIV test result was 69% in 2019, an increase from 64% in 2018. Overall, among TB patients with known HIV infection, 88% were on ART in 2020. Member States were well on their way to achieving the goal of eliminating TB in Africa by 2030 if resources were properly allocated and the organisation of the related processes well structured. Two of the main determinants of TB incidence identified in the *Global TB report 2020* that could affect its eradication are GDP per capita and undernutrition, and the situation could be exacerbated by the economic impact of the COVID-19 pandemic.

Health systems' resilience refers to the capacity of a health care system to anticipate, absorb, adapt or transform when exposed to a shock such as a pandemic, a natural disaster or armed conflict, while maintaining the ability to deliver its services and having the same control over its structure and functions. It is interesting to note the countries affected the most by Ebola, for example Guinea, Liberia and Sierra Leone had resilience scores higher than the regional average, suggesting that lessons have been learnt and appropriate investments have been made.

5.1 Access

Access to health services

Figure 5.1.1. Access to health services index in the WHO African Region, 2020, WHO/AFRO



The level of access that people have to health services is a major determinant of whether essential health and health-related services can be provided to support the attainment of their health and well-being goals. Investments in the health workforce, infrastructure, equipment and supplies remain low in the Region.

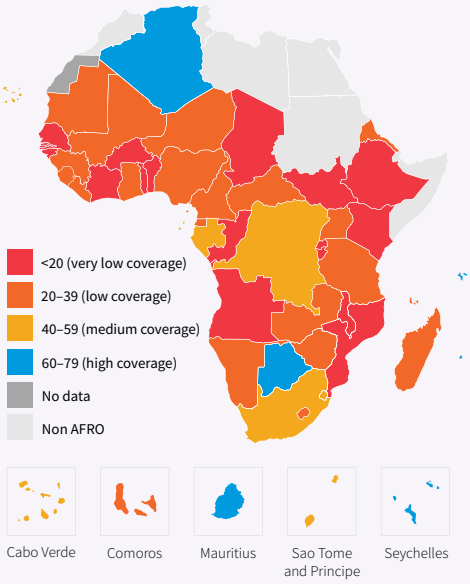
On average, health systems in the Region are only able to assure accessibility of 47.4% of the potentially available essential services.[1] The monitoring of health in the WHO African Region, focusing specifically on the performance of health systems, shows that only Seychelles has reached the target for access, with its more than 80% score on that criterion. The health systems' coverage is rated as very good, but about 10 countries have not reached a 40% coverage. High-income countries have up to three times the level of access to services as do the low-income countries in the Region.

Access to essential services is monitored through three vital signs, and the lowest score regionally is for the vital sign of physical access, which has a score of 29.6%, compared with financial access with 55.2% and sociocultural access with 57.4%. People have difficulties getting to facilities providing essential services. The Region needs to invest relatively more in interventions that will overcome physical barriers to the services to have the greatest impact on access to services. These include investments to scale up the numbers of the health workforce, infrastructure and medical supplies, targeting the populations without or with inadequate service provision points.

1 WHO (2020), Regional Committee for Africa, Report on the performance of health systems in the WHO African Region, Seventieth session (virtual), 25 August 2020

Physical access

Figure 5.1.2. Physical access index in the WHO African Region, 2020, WHO/AFRO

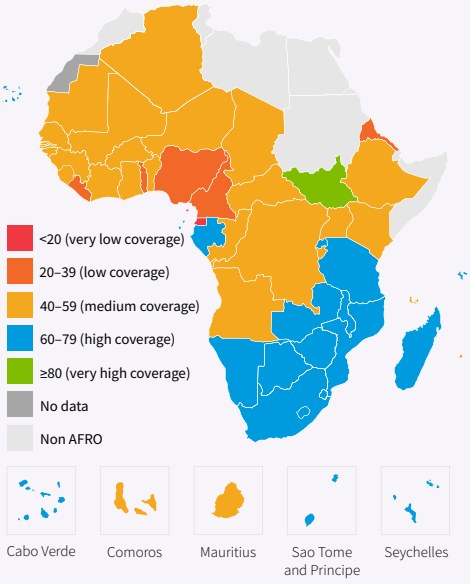


The inequalities in access to health care and the many other constraints in the regional health systems call for better planning of all health structures. Long journeys to health facilities characterise the African health care reality outside major cities and compromise accessibility to basic health care for millions of people. But the notion of distance has more than a geometric dimension, which does not say much about choice in physical accessibility, as it integrates the notion of use of this service to which one has access. Indeed, we cannot discuss accessibility of health services in any place without associating the terms access, accessibility, availability, distance, region, mobility, seasonality, sociopolitical context, etc.

Physical access of health services is essential. Its score is lower than 30% for the Region, while its target index score is 80%. It is, therefore, rated as low. Only 10 of the 47 countries in the Region have the average or a higher index for physical access, and only four have a high physical access index with a score between 62% and 72%.

Financial access

Figure 5.1.3. Financial access index in the WHO African Region, 2020, WHO/AFRO

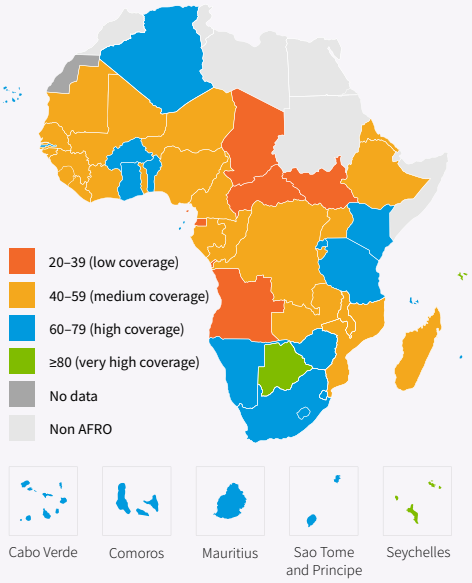


Financial accessibility highlights the disparity factors such as the difficulties of paying for care, the nature of health insurance and the use of charitable and other social services. These are elements of a health system based on the market where any individual living above the poverty line must pay for care. New medicines, diagnostic tools and vaccines continue to be inaccessible.

The financial access index for the WHO African Region is 55.2%, which qualifies it as medium in performance ranking. Two countries stand out for this indicator. Southern Sudan, which, owing to its high level of reliance on external aid, has a very high score and is the only one exceeding the target of 80, and Equatorial Guinea with an affordability index of 13.7%, which is considered as very low. The geographical distribution of the countries based on their financial access index shows clusters with a large number of the countries in West and Central Africa subregions with average financial access index scores and majority of the countries in East and Southern Africa subregion with high financial index scores.

Socio cultural access

Figure 5.1.4. Sociocultural access index in the WHO African Region, 2020, WHO/AFRO



The regional score for sociocultural access to health care is 57.4%. Seychelles and Botswana have very good coverage based on this index and four countries have scores close to the 80% target. Five countries have scores that are lower than 40%.

The scores under this index indicate that the participation of the communities in decision-making is weak and their sociocultural values are not taken into consideration in health service provision. But also it should be recognised that some traditions foster resistance to health promotion messages or traditional practices may form the basis for polarisation of consultations with communities or even resentment of health service users. Four of the five countries with the lowest scores on sociocultural access index are in the Central Africa subregion, while the highest scores are found among countries in the and East and Southern Africa subregions.

Outpatient service utilisation

Outpatient care is the health service provided for non-hospitalised patients, which may include diagnostic, observation, consultation, treatment, intervention and rehabilitation services. These interventions can include state-of-the-art medical technology and procedures, even when delivered outside of hospitals. Given its growth, ambulatory medicine has become an important component in training, focusing on the care of patients through multidisciplinary teamwork. Sites where ambulatory care could be provided include medical practice clinics and polyclinics; hospitals; non-medical establishments such as schools and prisons; eye care, dental and pharmaceutical facilities; and open spaces outside institutions, particularly in the countryside. Telemedicine would fit among these.

In sub-Saharan Africa,[2] 35% of outpatient care is provided by the private for-profit sector and 17% by private providers. The use of these services improves access to care and health coverage and could develop with the improvement of digitalisation, but also for financial reasons.

Access to a core set of relevant essential medicines

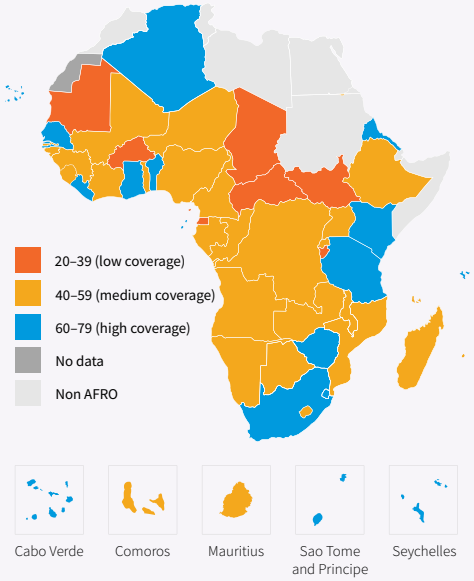
Refer to page N° 89

2 WHO (2022), Towards better engagement of the private sector in health service delivery: a review of approaches to private sector engagement in Africa, Geneva

5.2 Demand

Demand for health services

Figure 5.2.1. Demand for health services index in the WHO African Region, 2020, WHO/AFRO



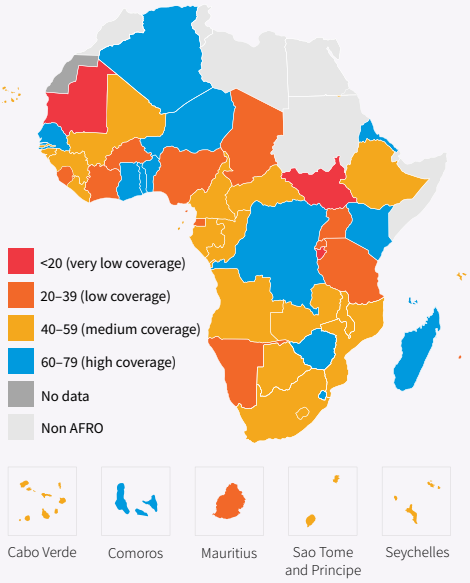
The demand for health services reflects the ability of households and communities to use the essential preventive and curative services they need. The demand index score is relatively high in the WHO African Region compared with the other performance measures. However, there is room for improvement, as the 52.8% score for effective demand, which is still low, would not be adequate to achieve effective performance.[3]

The demand for essential services is monitored through two vital signs: monitoring individuals' healthy actions, the vital sign with the lowest score regionally at 47.9%, and individuals' health-seeking behaviours, at 57.7%. Many community-based interventions are primarily focused on taking the services to the communities as opposed to building community engagement and knowledge, which are needed to generate strong service demand. The Region needs to invest relatively more in interventions that will improve individuals' healthy actions to generate the greatest impact on the demand for essential health services. Seven countries have a low demand index for health services. The Central Africa subregion is marked by low or medium demand indexes for all its countries. Not a single country with high coverage of health service demand.

3 WHO (2018), The state of health in the WHO African Region: an analysis of the status of health, health services and health systems in the context of the Sustainable Development Goals, Brazzaville

Healthy actions

Figure 5.2.2. Healthy actions index in the WHO African Region, 2020, WHO/AFRO



The regional healthy actions index was 47.9% in 2020. Three countries had very low scores for this indicator, that is South Sudan, Burundi and Mauritania, all of which had scores below 20%. No country had a score of 80%, the recommended performance level for the Region.

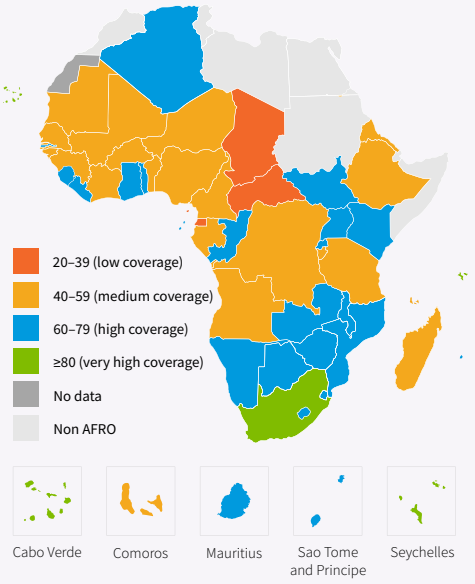
Progress towards UHC is dependent on health care service integration, preparedness and adaptability at the operational levels, that is in the districts and at the facilities, and in the wider national, regional and global political contexts, taking into account the economic, social and political, cultural and environmental factors.

Healthy actions are not homogeneous in terms of their application. Those related to disease prevention include both primary and secondary disease prevention actions. Indeed, people engage in primary disease prevention behaviour in the absence of symptoms through actions such as exercising or consuming healthy diets, which have positive consequences such as feeling good.

Secondary disease prevention aims to diagnose diseases, detect disabilities early and treat diseases to prevent sequelae. In Africa, these aspects are much more complex than primary disease prevention owing to the weight of culture and environment.

Health seeking

Figure 5.2.3. Health seeking index in the WHO African Region, 2020, WHO/AFRO



The likelihood of engageing in health care seeking depends on an individual's psychosocial aspects such as the affect, expectations and values about outcomes, habits and norms, and living conditions. The health seeking behaviour score for the Region was 57.7%. While South Africa, Seychelles and Cabo Verde exceeded the 80% mark for the care-seeking index indicator, Chad, the Central African Republic and Equatorial Guinea had scores lower that 30%. These three are all in the Central Africa subregion.

The East and Southern Africa subregions had the highest scores, followed by the West Africa subregion, where the scores were in the average range, and then the Central Africa subregion.

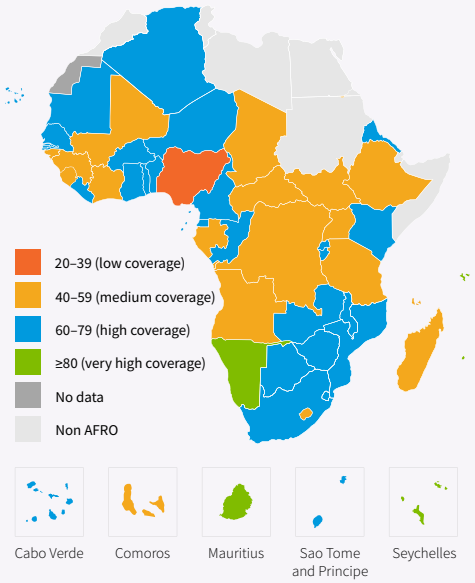
ANC Coverage

Refer to page N° 21

5.3 Quality

Service quality

Figure 5.3.1. Quality of care index in the WHO African Region, 2020, WHO/AFRO

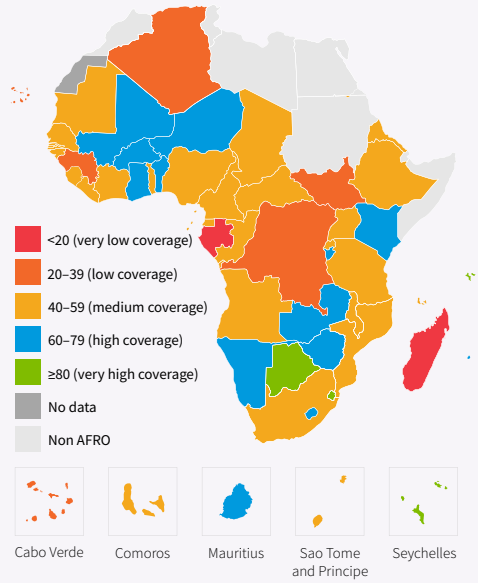


The quality of care index shows that in terms of the quality of the health care service the Region delivers only 62.3% of what is possible. This index scores varied significantly from one country to another, ranging from 39.7% to 84.7%. Namibia, Mauritius and Seychelles reached the 80% target, indicating that they had a very high coverage of quality of care. Nigeria is the only country in the WHO African Region in the category of countries with very low scores. The quality of care score does not seem to be influenced by the income level of a country.

Quality of care is monitored through three vital signs. Among these monitoring user experience has the lowest score regionally with 54.9%, next is patient safety with 61% and then effectiveness of interventions provided with 70.8%. The Region needs to invest more in interventions such as person-centred care initiatives that will improve overall user experience during the care process, to have the greatest impact on quality of care.

User experience

Figure 5.3.2. User experience index in the WHO African Region, 2020, WHO/AFRO



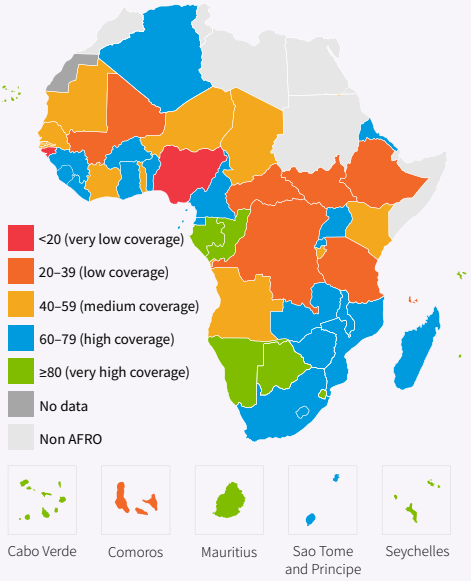
Experiences in using health services, the safety of health care products and the effectiveness of services provided, when they meet the legitimate needs of patients, they allow for the assessment of the quality of care from the user's perspective, and thus its performance. The user experience index score at the Regional level was 54.9%. Three countries exceeded the 80% score in this index and two were far from this target with scores below 10%.

Health professionals should no longer be the sole decision-makers on care and treatment plans. Besides the engagement of patients, there should be a move towards individuals' involvement in their care or that of their loved ones. All efforts to improve service delivery should focus on improving clinical outcomes and the patient experience of the care. All care-related activities should be based on efficiency and the need to care for patients and their community. Changes to systems and processes of service delivery should aim to put people at the centre of care.[4]

4 WHO (2021), Quality health services: a planning guide

Safety

Figure 5.3.3. Patient safety index in the WHO African Region, 2020, WHO/AFRO

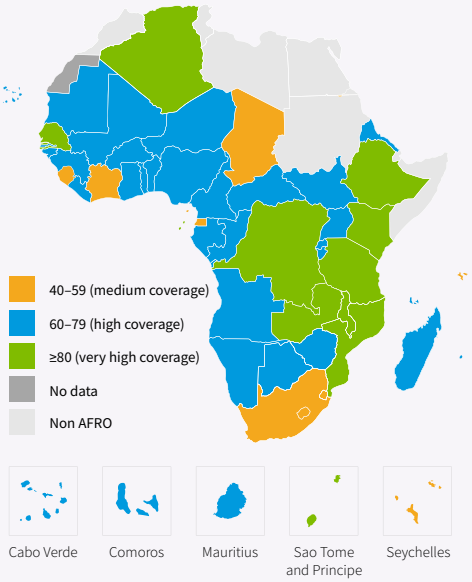


The safety score is a coherent and integrated set of individual and organisational behaviours, based on shared values, that continuously seek to reduce harm to patients that may be related to care. The assumption is that developing a culture of safety helps to control risks in care. A decrease in the safety score can thus be significantly associated with higher mortality.[5]

The patient safety score for the Region is 61%. Eight countries are above the 80% target for the safety score and three others are almost on track to achieve it. A highly populated country like Nigeria still has a score of less than 10%, which may be surprising given the needs of the population and the need for quality care. There is a concentration of countries with low scores in the Central Africa subregion, that is Congo and the Central Africa Republic, as well as in the Horn of Africa, and also to a lesser extent in the Sahel region, notably Mali. These are mostly countries with low sociopolitical stability and are subject to unrest, and therefore, insecurity.

Care effectiveness

Figure 5.3.4. Care effectiveness index in the WHO African Region, 2020, WHO/AFRO



Effective health care concerns the population that consumes that health care and addresses issues of comorbidity, behavioural and physical conditions, heterogeneity, different settings etc. The effectiveness care index for the Region was 70.8%. This score is high, but there is still room for improvement in person-centred care initiatives to enhance the overall user experience along the care pathway in order to have the greatest possible impact on the quality of care. Countries in the East Africa and Southern Africa subregions scored better on this indicator than the countries in the other two subregions, with the score being very high for most countries. Only a few of the countries had a score of an average level for this indicator.

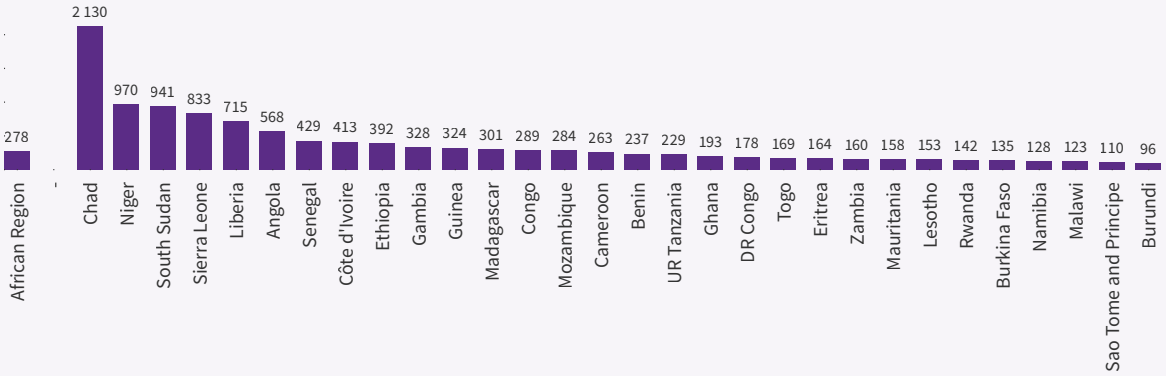
5 Bonner, AF. Castle, NG. Men, A. and Handler, SM. (2009), Certified nursing assistants' perceptions of nursing home patient safety culture: is there a relationship to clinical outcomes? J Am Med Dir Assoc 2009 Jan;10(1):11–20.

Perioperative mortality

Surgical patients in Africa are twice as likely to die in hospital after surgery than is average globally. In a randomised study,[6] 332 hospitals in 28 African countries participated in a trial comparing enhanced postoperative monitoring on the one hand and standard care on the other. Although the intervention provided better understanding of what was needed to implement interventions to reduce postoperative deaths in resource-limited settings, it did not generate improved in-hospital survival levels.

Institutional maternal mortality

Figure 5.3.5. Institutional maternal mortality ratio (per 100 000 live births) in the WHO African Region, 2010–2015, WHO



Coverage by skilled attendants at the time of delivery has increased significantly and with it, access to care for more women. A study covering 40 countries whose reports provided data on the number of maternal deaths in health facilities, 31 of which were from sub-Saharan Africa and nine from Latin America, the Caribbean and Asia, found the overall ratio of maternal deaths to be 266 per 100 000 deliveries. The rates varied widely by country but were high for African countries. The institutional maternal mortality ratio for the WHO African Region is 278 per 100 000 live births.

ART retention

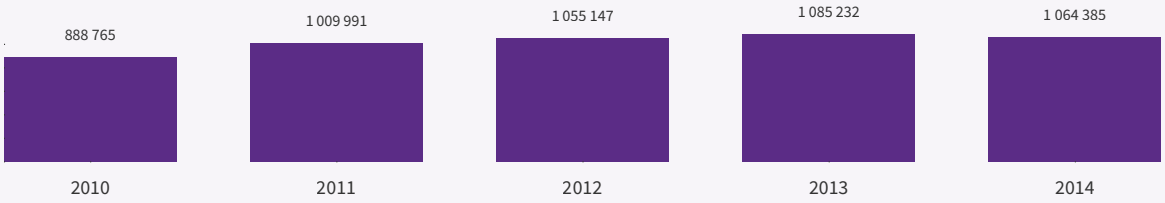
The ART retention rate for people living with HIV after the initiation of treatment varies by country. In the United Republic of Tanzania, for example, which is among the sub-Saharan African countries with a high HIV burden, the in-care population that enrolled for more than 3 years increased from 9.9% in 2008 to 54.5% in 2016.[7] The overall rates of retention in care were 80.9% at 12 months, 57.3% at 24 months and 45.4% at 36 months. The ART retention rates after treatment initiation were 83.9% at 12 months, 64% at 24 months and 53.5% at 36 months. The number of people on HIV treatment in the WHO African Region rose by 1.47 million in 2021 from over 2 million in previous years. The largest increase was in the Central and West Africa subregions, while in the East and Southern Africa subregion the increase was lower than in previous years. The ART treatment coverage level in 2021 was 78% of the people living with HIV, which was similar to the previous year. By 2019, 14 countries mostly in Africa had achieved the UNAIDS target for 2020 where 90% of people living with HIV knew their status, 90% of people who knew they had HIV had access to treatment and 90% of people on treatment had an undetectable viral load.

6 Biccard, BM. and al. (2021), Enhanced postoperative surveillance versus standard of care to reduce mortality among adult surgical patients in Africa (ASOS–2): a cluster-randomised controlled trial, Lancet Glob Health 2021; 9: e1391–401 Published Online and accessed on August 18 https://doi.org/10.1016/S2214–109X(21)00291–6

7 Mee, P. et al. (2020), Changes in patterns of retention in HIV care and antiretroviral treatment in Tanzania between 2008 and 2016: an analysis of routinely collected national programme data, J Glob Health. 2019 Jun; 9(1): 010424, Published online 30 March 2019.

HIV test results for TB patients

Figure 5.3.6. Number of HIV test results for TB patients in the WHO African Region, 2010–2014, WHO



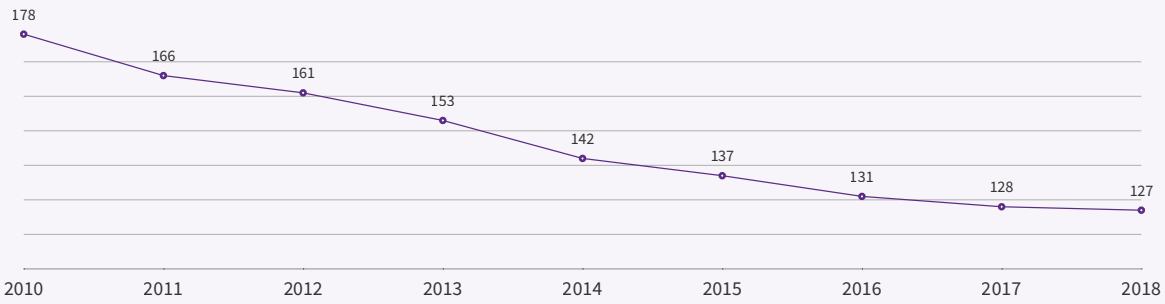
Of the total cases of TB patients in 2020, 8.2% were people living with HIV.[8] The percentage of patients reported as having TB with a conclusive HIV test result was 69% in 2019, an increase from 64% in 2018. In the WHO African Region, where the burden of HIV-associated TB is high, 86% of TB patients had been tested for HIV. Among the TB patients with known HIV infection, 88% were on ART in 2020.

The countries in the WHO African Region with the highest number of HIV test results related to TB patients were South Africa, Ethiopia, Kenya, Nigeria and the United Republic of Tanzania. South Africa's test results were almost equivalent to the total of the test results of the rest of the countries.

Some 34% of the people living with HIV in the WHO African Region in 2016 were infected with the TB bacteria. People living with HIV are 20 to 30 times more likely than people without HIV to develop active TB disease. Of the people in the Region living with HIV who were newly enrolled in care, 42% were on preventive treatment against TB. About 35% of the deaths among people with HIV in 2015 were due to TB. In 2015 there were an estimated 1.2 million new cases of TB amongst people who were living with HIV globally, 71% of whom were living in Africa.

TB notification

Figure 5.3.7. TB notification rate (per 100 000 population) in the WHO African Region, 2010–2018, WHO



Globally, 7.1 million people were newly diagnosed with TB in 2019. Despite the increase in the cases, there is still a large gap of 2.9 million between those newly diagnosed with HIV and notified and estimates on the people who would be infected with TB in 2019 (10 million). Geographically, most TB cases in 2019 were in the WHO regions of South-East Asia with 44% of the cases, Africa with 25% of the cases and the Western Pacific with 18% of the cases. Low levels were observed in the WHO Eastern Mediterranean Region with 8.2% of the cases, the Americas with 2.9% of the cases and Europe with 2.5% of the cases. Eight countries, including Nigeria with, 4.4% of the cases, and South Africa, with 3.6% of the cases, accounted for two thirds of the global total.

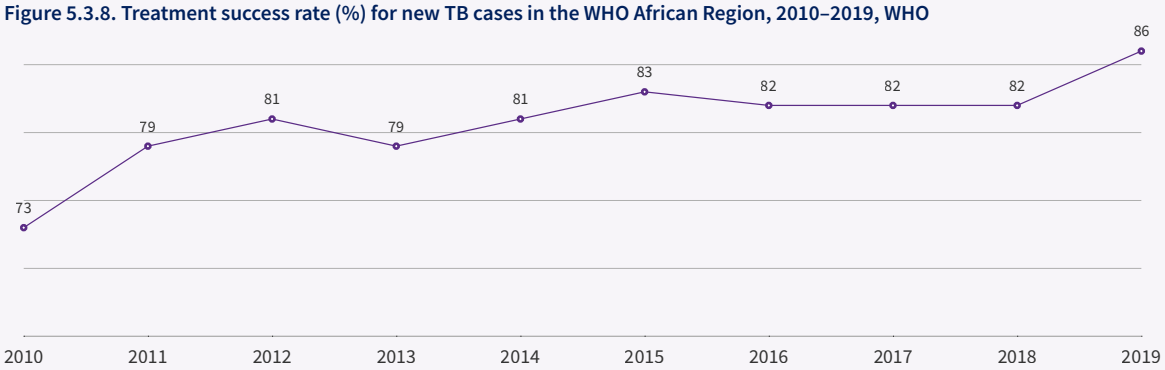
8 WHO (2020), Global tuberculosis report 2020: Executive summary, Geneva

For TB, the 2020 milestone was a 20% reduction in incidence between 2015 and 2020. For the WHO African Region, progress is visible, but the 16% reduction in the TB incidence is below the world average. The TB notification rate decreased from 178 per 100 000 to 127 per 100 000 between 2010 and 2018 in the WHO African Region.

To accelerate progress towards ending TB, a four part framework was defined for 2019, encompassing commitments, actions, monitoring and reporting, and review as the components. The annual data collection cycles and the TB report are key channels for notification under the multisectoral accountability framework. In many countries, staff shortages and reassignments, which have been exacerbated by COVID-19 are distracting the realisation of the reporting objectives.

TB treatment success for new cases

Figure 5.3.8. Treatment success rate (%) for new TB cases in the WHO African Region, 2010–2019, WHO



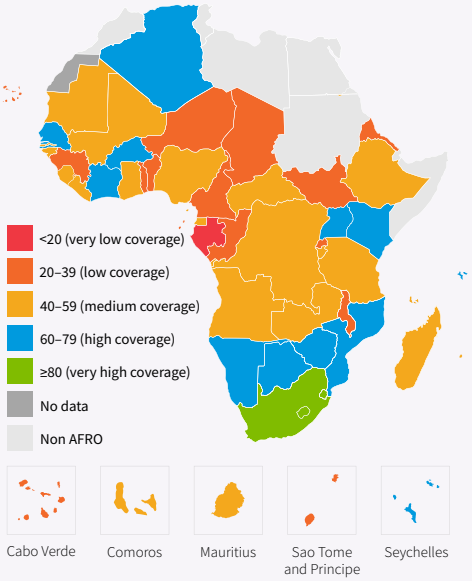
The TB treatment success rate for people starting treatment in 2019 in the WHO African Region was 86%, which was equivalent to the average rate for all the six WHO regions. Treatment success rates for new TB cases in the WHO African Region have increased almost uninterruptedly over the past 10 years, with the rate going from 73% in 2010 to 86% in 2019, with very little fluctuation.

Despite these improvements, the people enrolled in TB treatment programmes in 2019 constituted only 38% of those estimated to have developed TB that year. To close this large gap, one or more of the following conditions must be met: improve TB case detection, increase bacteriological confirmation of diagnosed cases, expand coverage of drug-resistance testing, and ensure that all patients diagnosed with TB start treatment. Except for Gabon, whose treatment success stands at 57%, all the other countries have TB success rates ranging between 67% and 94%. WHO Member States in the WHO African Region are well on their way to achieving the goal of eliminating TB in Africa by 2030, that is if the required resources are properly allocated and the organisation of relevant institutions is well structured.

5.4 Resilience

Health system resilience

Figure 5.4.1. Health system resilience index in the WHO African Region, 2020, WHO/AFRO



A health system's resilience refers to its capacity to anticipate, absorb, adapt to or transform when exposed to a shock such as a pandemic, natural disaster or armed conflict, while maintaining both its ability to deliver services and unchanged control over its structure and functions.

The resilience index is derived from the analysis of responses of key informants related to the different resilience characteristics of their systems, that is (i) awareness, (ii) diversity, (iii) versatility and self-regulation, and (iv) mobilisation, adaptation and integration.

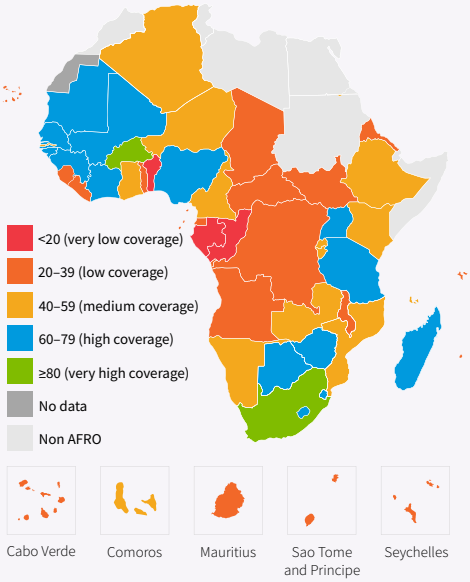
Resilience describes a systemic approach that links emergency and development. Even though most countries have experienced various crises and shocks, some do not systemically equip themselves for this. Countries that experience shocks generally experience a significant decline in their health services, as their resilience is low. The ranking of the countries most affected by Ebola such as Guinea, Liberia, Sierra Leone, whose scores are above the regional average, suggests that they have learned lessons and made appropriate investments in enhancing the resilience of their health systems.

Resilience is monitored through two vital signs: inherent resilience captures the inbuilt capacity to anticipate, absorb and transform functionality even in the face of a shock, and epidemic preparedness and response core capacity captures the complementary capacity to respond to a shock event. The health system resilience index score for the Region in 2020 was 51.9%.[9] The lowest score regionally was on inherent resilience at 49.1%, which is close to 47.6 for the IHR core capacity.

9 WHO (2020), Comité régional de l'Afrique, Rapport sur la performance des systèmes de santé dans la Région africaine de l'OMS, Soixante-dixième session, October 2020

Inherent system resilience

Figure 5.4.2. Inherent system resilience index in the WHO African Region, 2020, WHO/AFRO



The inherent system resilience level in the Region in 2020 was only 49.1%. Gabon, Congo and Benin lagged behind in this indicator with scores of 5.8%, 6.3% and 13.4%, respectively. Only Burkina Faso with 100% and South Africa with 87.6%, had very high scores.

An inherently resilient system is a structurally integrated and interdisciplinary system built on long-term sustainable financing; that is accessible to all, including women, rural people, the destitute; etc.; that has community participation; that is capable of reacting to any emergency or influx; and that anticipates possible shocks. All this cannot work without leadership and the strengthening of the coordination and regulation mechanisms. The system must integrate humanitarian and life-saving emergency components into its programmes.

References

1 WHO (2020), Regional Committee for Africa, Report on the performance of health systems in the WHO African Region, Seventieth session (virtual), 25 August 2020

2 WHO (2022), Towards better engagement of the private sector in health service delivery: a review of approaches to private sector engagement in Africa, Geneva

3 WHO (2018), The state of health in the WHO African Region: an analysis of the status of health, health services and health systems in the context of the Sustainable Development Goals, Brazzaville

4 WHO (2021), Quality health services: a planning guide

5 Bonner, AF. Castle, NG. Men, A. and Handler, SM. (2009), Certified nursing assistants' perceptions of nursing home patient safety culture: is there a relationship to clinical outcomes? J Am Med Dir Assoc 2009 Jan;10(1):11–20.

6 Biccard, BM. and al. (2021), Enhanced postoperative surveillance versus standard of care to reduce mortality among adult surgical patients in Africa (ASOS–2): a cluster-randomised controlled trial, Lancet Glob Health 2021; 9: e1391–401 Published Online and accessed on August 18 https://doi.org/10.1016/S2214–109X(21)00291–6

7 Mee, P. et al. (2020), Changes in patterns of retention in HIV care and antiretroviral treatment in Tanzania between 2008 and 2016: an analysis of routinely collected national programme data, J Glob Health. 2019 Jun; 9(1): 010424, Published online 30 March 2019.

8 WHO (2020), Global tuberculosis report 2020: Executive summary, Geneva

9 WHO (2020), Comité régional de l'Afrique, Rapport sur la performance des systèmes de santé dans la Région africaine de l'OMS, Soixante-dixième session, October 2020

SECTION VI

HEALTH OUTCOMES

Section summary

Determination of outcomes in health takes into account the availability of health services for the populations, the coverage of the needs of the populations and the risk factors relating to the different environments and realities. Any action in public health has a significant economic and social cost, the risks of which must also be measured. The availability of essential health services throughout the life course is one of the pillars of the objective of universal health coverage (UHC). These services cover family planning, which addresses the goals of reducing child mortality, improving maternal health and promoting women's empowerment and gender equality by enabling greater participation in school, work and political life. In the WHO African Region, 79% of the facilities offer family planning services. The services related to pregnancy are critical for the future of child and mother. But there remains high variability among the countries in meeting the goal for pregnant women to have four or more antenatal care visits, with the levels in the countries ranging from 32% to 91%. It is essential to improve access to antenatal care services for pregnant women by raising awareness and improving community involvement in maternal, newborn, child and women's health programmes.

Particular attention must be paid to early childhood services such as vaccination, growth and development monitoring and curative care. In the Region, 68% of the health facilities have comprehensive emergency obstetric and neonatal care services. On average, fewer than one in two pregnant women in Africa give birth in the presence of skilled health personnel, and only 12% of those who need emergency care for themselves and their newborns actually receive it. In terms of availability of services in Africa, eight out of 10 facilities offer the three essential preventive and curative care services for children. Adolescents and youth, that is those aged 10 to 24 years, represent one third of the population in the Region, but the availability of adolescents' services is at 65% of their needs.

Services for adults prone to noncommunicable diseases (NCDs) must be accessible and adapted. The COVID-19 crisis disrupted the management of hypertension in 59% of the countries and management of diabetic complications in 56% of the countries. Closing or slowing down services for such groups is likely to worsen their underlying conditions, making the cases of NCDs more severe. It also exacerbates the susceptibility of people living with chronic diseases to COVID-19. Countries need to plan for more comprehensive essential health packages to ensure the availability of services for all.

Assessment of the coverage of interventions is concerned with the levels of utilisation for traditional health services including health promotion, communicable and noncommunicable disease prevention, and curative and rehabilitative services. The coverage is lowest for NCDs and health promotion services and highest for communicable disease control interventions.

It is undeniable that progress has been made in Africa in recent decades in the area of contraception. However, contraceptive use remains low in sub-Saharan Africa. Across the countries, the median contraceptive prevalence rate among women of reproductive age was just 28% in 2017. Recent evidence indicates that increasing the frequency of antenatal visits in the health system for women and adolescents is associated with a lower likelihood of stillbirths occurring, as these visits provide opportunities to detect and take care of any problems.

Only 57% of under-five children with symptoms of pneumonia were taken to a health facility for treatment in 2019 in the Region, an improvement from 47% four years before. And those taken to a health facility for treatment for any complaint increased from 57.2% to 60% in that period. The proportion of people living with HIV in the Region who knew their status in 2019 was 67%, with a large variation across the countries. Efforts are still needed to stop maternal transmission of HIV, in particular to reduce even more drastically the level of contamination through breastfeeding. The coverage of mother-to-child transmission in the Region is 87%.

In the prevention of malaria, 38 African countries have adopted intermittent preventive treatment during pregnancy (IPTp) to reduce the burden of malaria during pregnancy. Coverage with three doses of IPTp rose from 1% in 2010 to 16% in 2015 and to 32% in 2020, but it remains far below the target of at least 80%. In the Region, 31 countries had planned campaigns on insecticide-treated nets (ITNs) and indoor residual spraying (IRS). The coverage of these stood at 5.3% of the entire population at risk of malaria in the WHO African Region in 2020.

A risk factor is an element that values the probability of developing a disease or suffering a trauma. It can be innate or reversible by removing, decreasing or stopping exposure to this factor. Risk factors induce health-promoting behaviours and lifestyle changes in terms of diet, physical activity, etc.

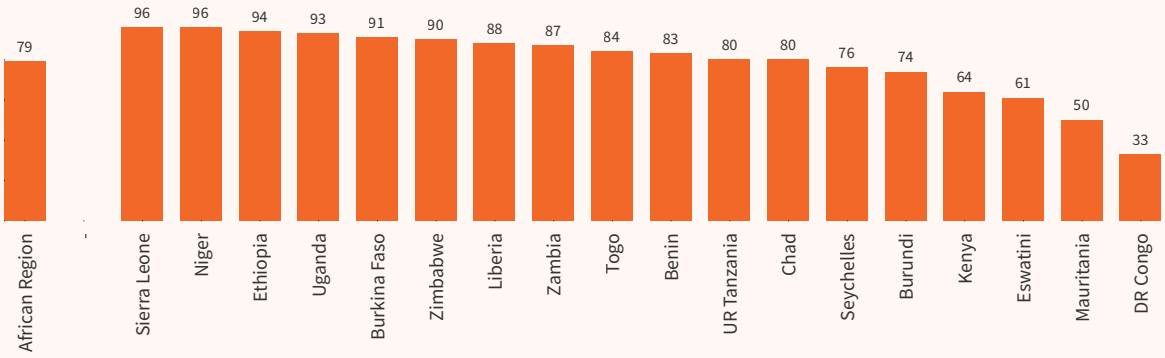
The prevalence of exclusive breastfeeding of children up to 6 months for the Region was 45.7%. This means that fewer than one in two children was exclusively breastfed in Africa between 2010 and 2018. Early breastfeeding, that is putting the newborn to the breast within the first hour of life, is essential for the survival of the newborn and for the establishment of long-term breastfeeding. Three out of five newborns are not breastfed within an hour of birth.

The prevalence of insufficient physical activity in adults aged 18 years or older has an overall average of 22.1%.

6.1 Availability of essential services

Percentage of facilities offering family planning services

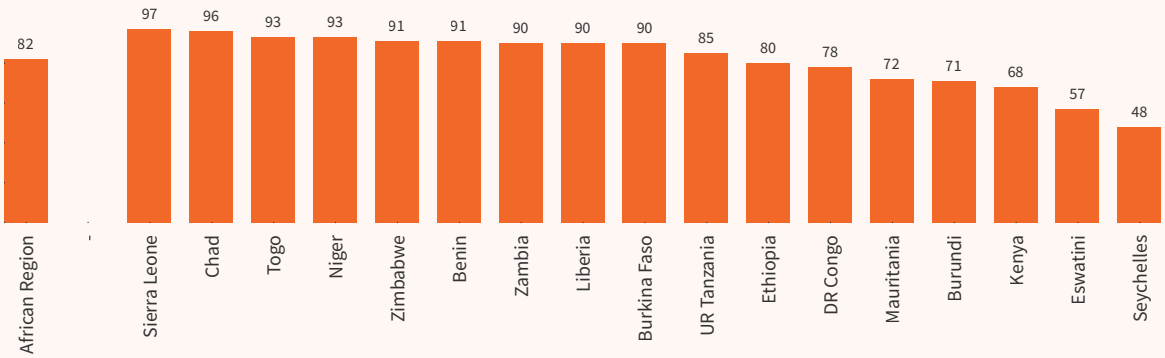
Figure 6.1.1. Percentage of health facilities offering family planning services in the WHO African Region, 2012–2019, WHO/AFRO



Of the health facilities in the Region, 79% offer family planning services. The availability of services are very disparate among the countries and range from 33% to 96%. Family planning directly addresses the goals of reducing child mortality, improving maternal health and promoting women's empowerment and gender equality by enabling women's greater participation in school, work and political life. The particularly high level of fertility in the WHO African Region calls for an improvement in the services dedicated to family planning. The low use of modern contraceptives partly explains the high rate of unplanned or too closely spaced pregnancies, with possible serious consequences.

Percentage of facilities offering antenatal care service

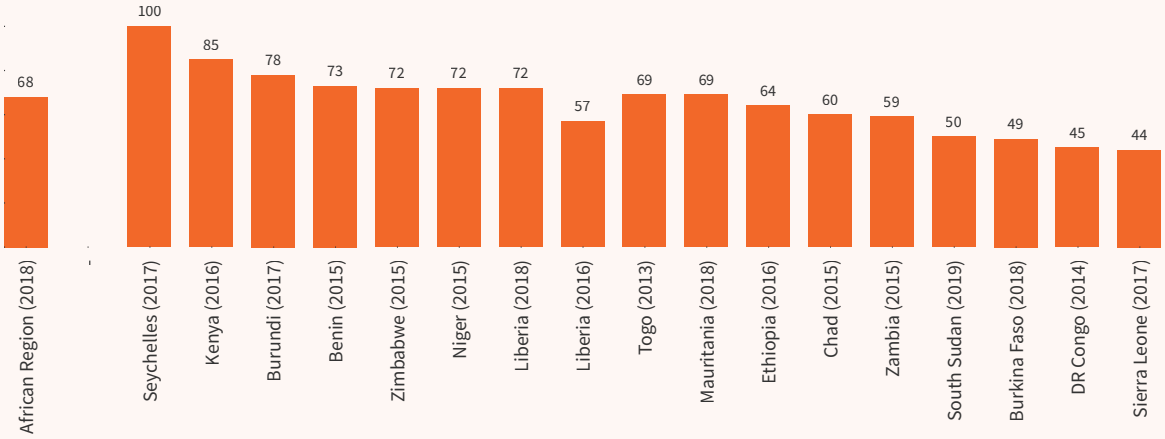
Figure 6.1.2. Percentage of health facilities offering antenatal care services in the WHO African Region, 2012–2019, WHO/AFRO



The services offered to pregnant women are in insufficient supply in African countries. For ANC, to save the lives of women and babies, WHO recommends a minimum of four visits at which essential evidence-based interventions, a package often referred to as targeted ANC, are provided. This includes identification and management of obstetric complications such as pre-eclampsia, immunisation at least against tetanus, preventive treatment of malaria in pregnancy, and identification and management of infections such HIV, Syphilis and other STIs. Despite the available evidence on the key role of ANC in reducing maternal and neonatal mortality, millions of women in the WHO African Region countries do not participate in it, and there remains a high variability of 32%–91% among the countries for the proportion of pregnant women who make four or more ANC visits. It is essential to improve access to antenatal care services for pregnant women by raising awareness and improving community involvement in maternal, newborn, child and women's health programmes.

Percentage of facilities providing CEmONC

Figure 6.1.3. Percentage of health facilities with capacity to provide CEmONC services in the WHO African Region, 2012–2019, WHO/AFRO



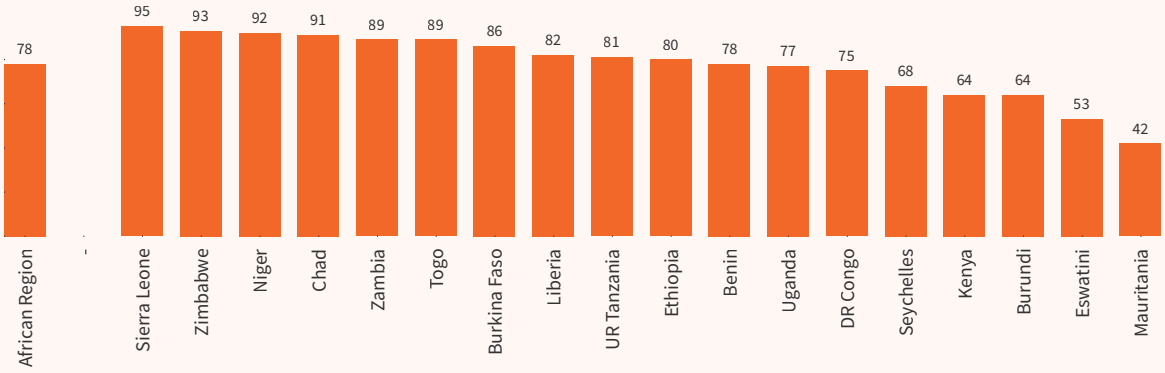
The comprehensive emergency obstetric and newborn care services, more commonly known as CEmONC, are interventions provided to pregnant women and newborns with life-threatening complications, including severe haemorrhage, infection, prolonged or obstructed labour, eclampsia and newborn asphyxia. Only 34% of the countries in the Region have information on their CEmONC services. Among these countries, an average of 68% of the health facilities offer CEmONC services. However, there is wide range of differences in the numbers of CEmONC facilities in the countries, with Sierra Leone having the lowest level at 44% and Seychelles has CEmONC services in all its health facilities.

On average, fewer than one in two pregnant women in Africa give birth in the presence of skilled health personnel and only 12% of those who need emergency care for themselves or their newborns actually receive it.[1] The emergency interventions include safe blood transfusion, oxytocin and antibiotics, caesarean section, manual removal of the placenta, assisted vaginal delivery, abortion and newborn resuscitation. These services could save the lives of the 75% of women who die during pregnancy and delivery and the 25% who die after birth.[2] To address this very serious situation, the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), WHO and the Averting Maternal Death and Disability (AMDD) programme have committed themselves to supporting countries in planning, financing and conducting emergency obstetric and neonatal care needs assessments and using the results to guide health policy decisions and reforms in the WHO African Region.

1 ONFPA (2016), Soins obstétricaux et néonataux d'urgence : Guide pour la réalisation des Enquêtes rapides
2 May, R. (2016), Comprehensive Emergency Obstetric and Newborn Care: The Proven Approach in Tanzania, White ribbon alliance for safe motherhood in Tanzania, Published October 28, 2016 https://wraglobal.medium.com/comprehensive-emergency-obstetric-and-newborn-care-the-proven-approach-in-tanzania–4d7bb4542e3b accessed 1 September, 2022

Percentage of facilities offering routine immunisation services

Figure 6.1.4. Percentage of health facilities offering routine immunisation services in the WHO African Region, 2012–2019, WHO/AFRO



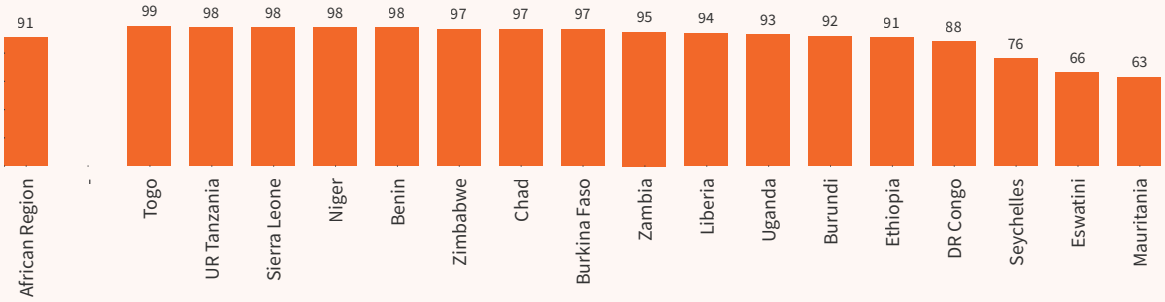
Immunisation is one of the important public health interventions and it prevents more than 4 million deaths in Africa each year. In addition to providing protection against preventable diseases, immunisation facilitates linkages with health systems that provide other basic services to populations to achieve UHC through PHC. Despite the many achievements in immunisation, about one in five African children do not receive all the necessary vaccines and more than 30 million under-five children still suffer from vaccine-preventable diseases in Africa each year. More than half a million of those children die each year from the diseases, accounting for about 58% of all vaccine-preventable deaths worldwide.

Percentage of facilities offering vitamin A supplementation

Vitamin A deficiency (VAD) remains a pervasive problem in much of sub-Saharan Africa. Estimates suggest that 48% of the children in the Region suffer from this deficiency, which puts them at great risk of mortality. Vitamin A contributes to the normal metabolism of iron and has a role in the maintenance of normal vision, immune system function, etc. VAD issues are not homogeneous across the countries, which masks the areas with high mortality. Many countries have achieved more than 80% coverage in vitamin A supplementation and this has contributed to the recent reductions in the level of under-5 mortality, with vitamin A supplementation being responsible for lowering infant mortality by 12%–24% when given every 4 to 6 months to children aged 6–59 months in areas where vitamin A deficiency is a public health problem.

Percentage of facilities offering preventive and curative care for under-five children

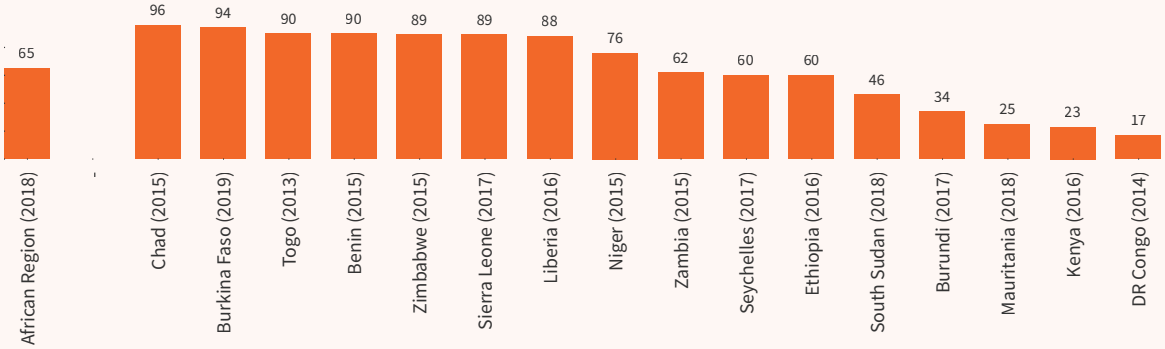
Figure 6.1.5. Percentage of health facilities offering preventive and curative care for under-five children in the WHO African Region, 2012–2019, WHO/AFRO



The integrated management of childhood illness strategy recommends that a comprehensive assessment of a child's health status be undertaken and latent problems be detected, if possible, plus preventive interventions be provided such as vaccination and growth monitoring, and prevention or reduction of progression of diseases. In the Region, eight out of 10 facilities offer the three essential preventive and curative care services for children.

Percentage of facilities providing adolescent health services

Figure 6.1.6. Percentage of health facilities providing adolescent health services in the WHO African Region, 2012–2019, WHO/AFRO



Adolescents face a range of health and societal problems including dealing with STIs such as HIV, sexual violence, early and unwanted pregnancies and early marriage. About two thirds of the health facilities in the Region have services for adolescents. According to the Strategic plan for health and wellbeing for adolescents and youth (2021–2025), a third of the regional population is aged between 10 and 24 years. Many countries have up to 90% of their facilities offering specific and adapted health services for adolescents. However, there are some large countries that are lagging behind with less than 20% of their facilities offering services for adolescents.

Percentage of facilities providing screening for major NCDs (hypertension, diabetes, cancer, cardiovascular diseases)

A WHO survey of 41 sub-Saharan African countries found only 22% of them to have emergency inpatient care for major NCDs, while for 37% of the countries' outpatient care was limited. The COVID-19 crisis disrupted the management of hypertension in 59% of the countries and management of diabetic complications in 56% of the countries. Closing or slowing down services is likely to worsen patients' underlying conditions, leading to more severe cases of the NCDs. It also exacerbates the susceptibility of people living with chronic diseases to COVID-19.

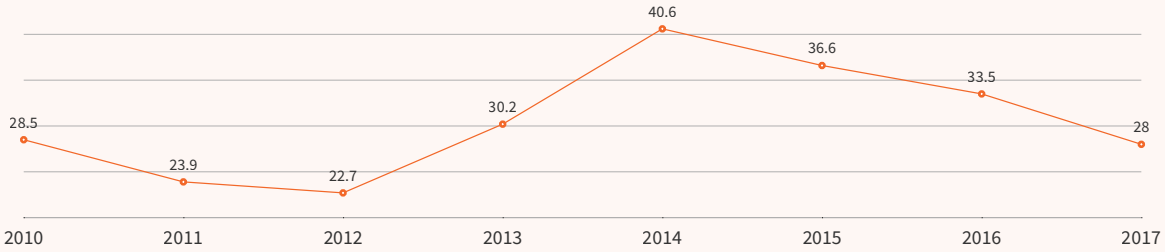
6.2 Coverage of interventions

Demand for family planning satisfied with modern methods

Refer to page N° 84

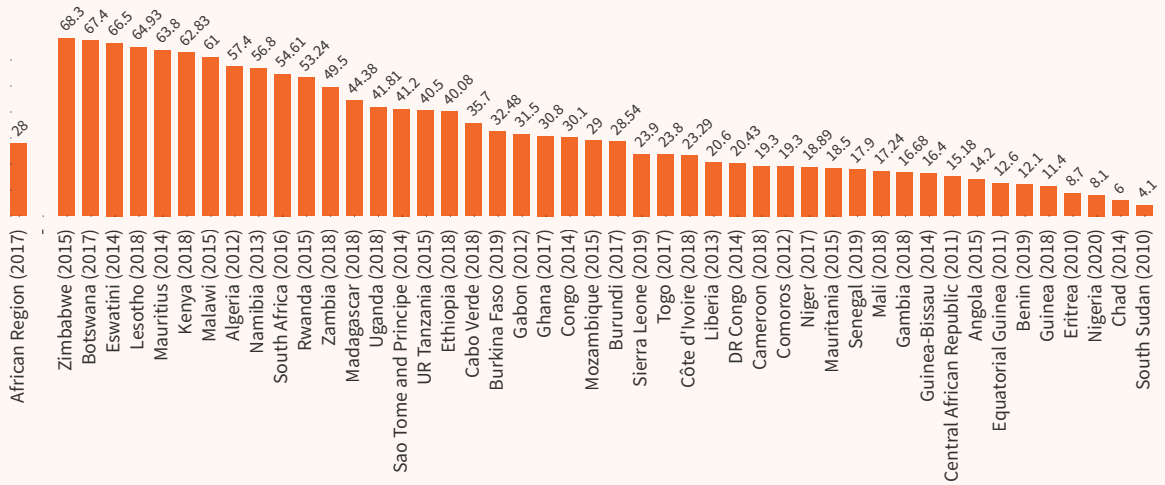
Contraceptive prevalence rate

Figure 6.2.1. Contraceptive prevalence rate in the WHO African Region, 2010–2017, WHO



It is undeniable that progress has been made in Africa in recent decades in contraception. However, contraceptive use remains low in sub-Saharan Africa. Across the countries, the median contraceptive prevalence rate among women of reproductive age was just 28% in 2017. This rate has been falling after exceeding 40% in 2014. Family planning benefits maternal and child health, socioeconomic development and environmental sustainability.

Figure 6.2.2. Contraceptive prevalence in the WHO African Region, latest available year, WHO



Contraceptive prevalence varies widely across the countries. For example, in 2015 the prevalence was 64% in the Southern Africa subregion but only 17% in West Africa subregion.[3] These inequalities are frequently observed between regions, between rural and urban areas and between different socioeconomic groups. Three categories of factors contribute to inequalities in contraceptive practice.[4] The first one concerns women's fertility preferences, knowledge and behaviour. The second category includes factors related to the health care system such as access to family planning services, which may be hampered by poverty and geographical distance. The third category relates to providers, whose role may be seen in their unequal treatment of women or the pressure they exert on women.

3 Ndaruhuye, M.D. and Mulindabigwi, R.C. (2019), Réduire l'écart de la pratique contraceptive entre pauvres et riches au Rwanda: en comprendre les mécanismes sous-jacents, In Perspectives Internationales sur la Santé Sexuelle et Génésique, numéro spécial de 2020, pp. 1–10

4 Kilbourne AM et al. (2006), Advancing health disparities research within the health care system: a conceptual framework, American Journal of Public Health, 96(12):2113–2121

ANC coverage

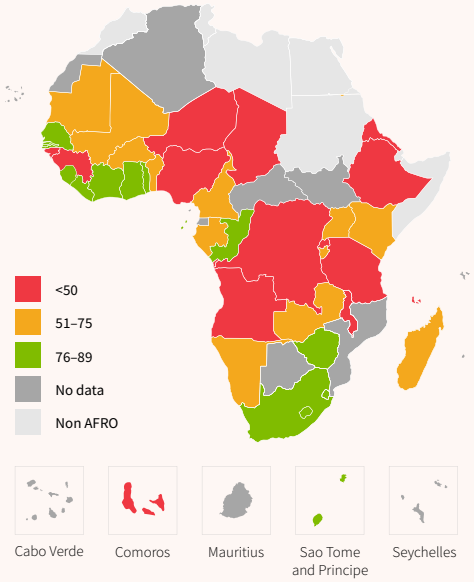
Refer to page N° 21

Births attended by skilled health personnel

Refer to page N° 21

Postpartum care coverage – women

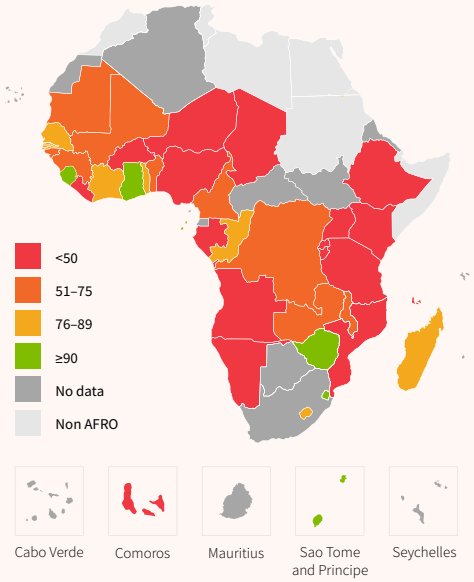
Figure 6.2.3. Percentage of women who received postnatal (postpartum care) within 2 days of childbirth in the WHO African Region, 2015–2020, WHO/UNICEF



The main postnatal complications that account for 75% of all maternal deaths are severe hemorrhage; infections; hypertension, that is pre-eclampsia or eclampsia; and complications of childbirth. To avoid these, prompt and professional postnatal follow-up in a safe environment is essential. The map shows great disparity between countries and within the regional economic communities. A striking feature is that the larger countries have less favourable coverage of women's postnatal follow-up within 2 days of delivery. The early support should include essential care for physical and mental health for the woman and helping her to thrive by providing appropriate care for their child.

Postnatal care coverage for the newborn

Figure 6.2.4. Percentage of newborn babies who have postnatal care contact within 2 days of birth in the WHO African Region, 2015–2020, WHO/UNICEF

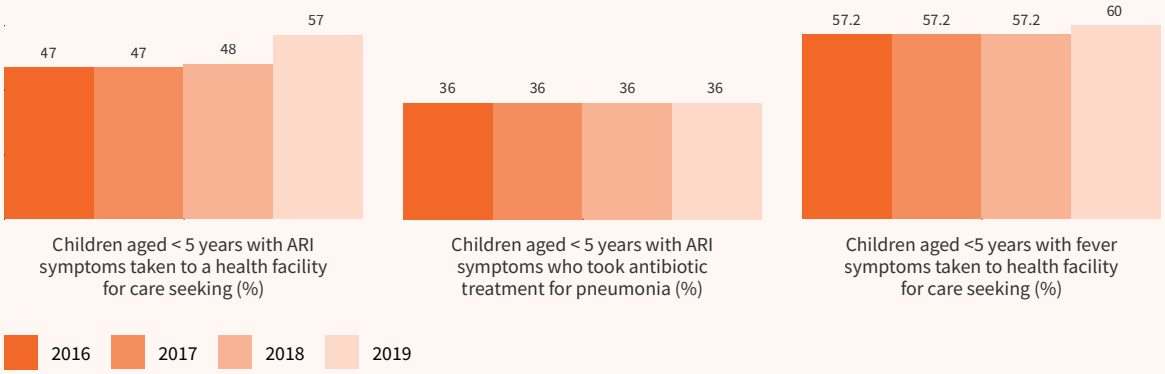


It is essential that all births be attended by skilled health professionals, as prompt care and treatment can save the lives of the mother and the child. After an uncomplicated delivery, the mother and her healthy baby must be cared for in the maternity ward for at least 24 hours.[5] Coverage of care for newborns within 2 days of birth is better in some West African countries than in the countries in the other two subregions. It is low in the countries in eastern part of Africa.

5 WHO (2017), Premiers soins essentiels au nouveau-né: Guide de poche de pratique clinique

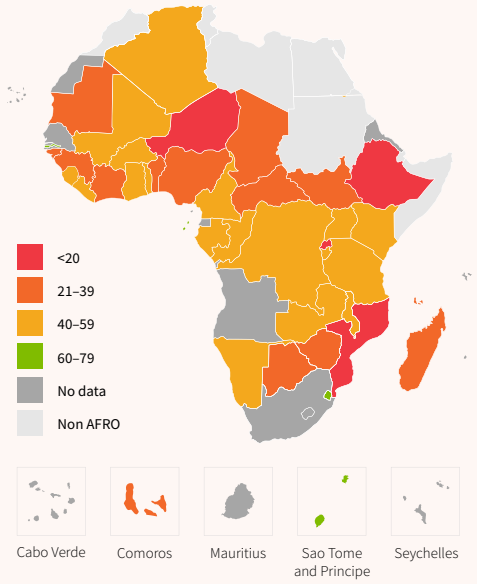
Care seeking for symptoms of pneumonia

Figure 6.2.5. Care seeking for symptoms of acute respiratory infections (ARI) in the WHO African Region (%), 2016–2019, WHO/UNICEF



The graph shows different proportions of under-five children with symptoms of pneumonia and their level of change over 4 years. The proportion of this group of children with symptoms of acute respiratory infection who were taken to a health facility for treatment rose between 2016 and 2019 from 47% to 57%. This change was particularly marked between 2018 and 2019, when the proportion increased by 9 percentage points. The proportion of the children in this age group who presented with symptoms of acute respiratory infection and to an antibiotic as treatment for pneumonia remained stable at 36% over 2016–2019. The percentage of under-five children with fever symptoms taken to a health facility for treatment increased from 57.2% to 60%.

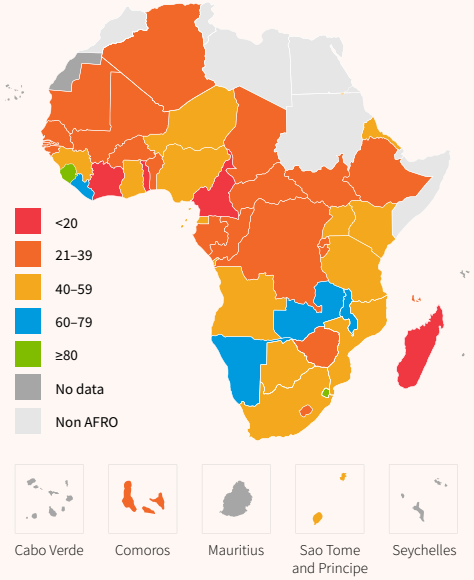
Figure 6.2.6. Percentage of under-five children with ARI symptoms who took antibiotic treatment for pneumonia in the WHO African Region, 2019, WHO/UNICEF



The country distribution of the proportion of under-five children with symptoms of acute respiratory infection who received antibiotic treatment for pneumonia showed levels lower than 20% in Niger, Ethiopia, Rwanda and Mozambique. There is a wide variation between countries as well, with their differences 2019 ranging from 21% to 70%. The regional average was 36%. None of the countries in the Region had reached the target of having 80% of the children with ARI symptoms receive antibiotic treatment for pneumonia.

Care seeking for children with symptoms of diarrhoea

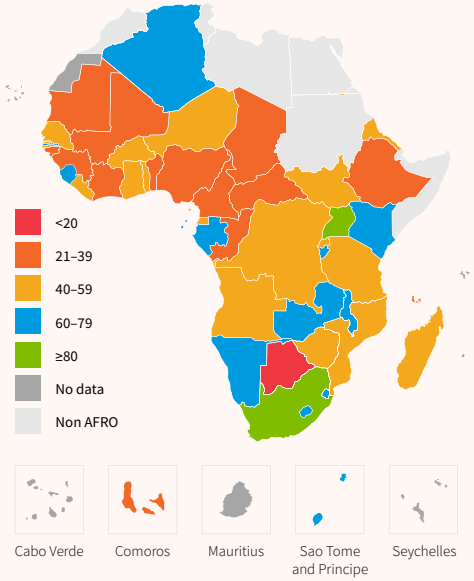
Figure 6.2.7. Under-five children with symptoms of diarrhoea taken to a health facility for care seeking (%) in the WHO African Region, 2015–2020, WHO/UNICEF



Diarrhoea is the second leading cause of death in under-five children. It is estimated to have killed 437 000 children in this age group in 2018, almost three times fewer than the 1.2 million killed in 2000.[6] Some of the main reasons for this improvement are access to safe water and adequate sanitation and hygiene. Treatment for diarrhoea consists of rehydration of the child with oral rehydration salts in cases of moderate dehydration or in the absence of signs of dehydration. This treatment is affordable. Intravenous rehydration is preferred for severe dehydration or shock. Zinc supplementation reduces the symptoms by 25% to 30%. A nutrient-rich diet such as breast milk can prevent diarrhoea. In 2017, 37% of under-five children in sub-Saharan Africa received diarrhoea treatment consisting of oral rehydration salts and continuous feeding (World Bank).

Care seeking for children with fever symptoms taken to a health facility

Figure 6.2.8. Under-five children with fever symptoms taken to a health facility for care seeking (%) in the WHO African Region, 2019, WHO/UNICEF

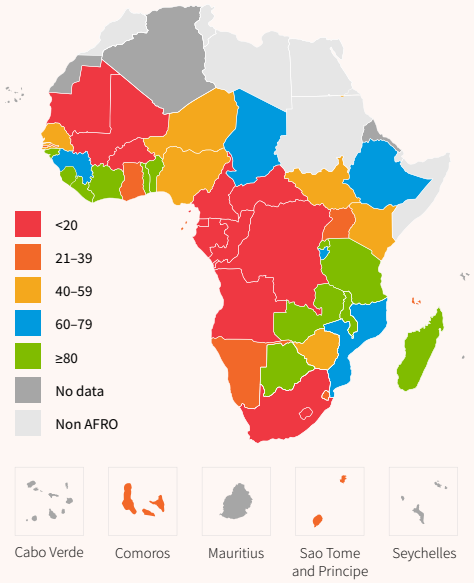


The percentage of under-five children with fever symptoms who are taken to a health facility for care is lower in West and Central Africa than in the East and Southern Africa subregion. There are large differences between countries in terms of the proportion of under-five children with fever who were taken to a health facility for care. From the available data, only Botswana did not reach the 20% level for febrile children receiving care in a health facility. Two countries, Uganda and South Africa, surpassed the 80% coverage mark for care for under-five children with fever symptom. The average for the Region was 57% for the under-five children with fever symptoms who were taken to a health facility for care.

6 UNICEF (2020), Fighting for Breath: Call to action – End childhood pneumonia, Global Forum on Childhood Pneumonia, Save the Children, London, and UNICEF, New York.

Vitamin A supplementation coverage

Figure 6.2.9. Vitamin A supplementation coverage (%) in the WHO African Region, 2017, WHO/UNICEF



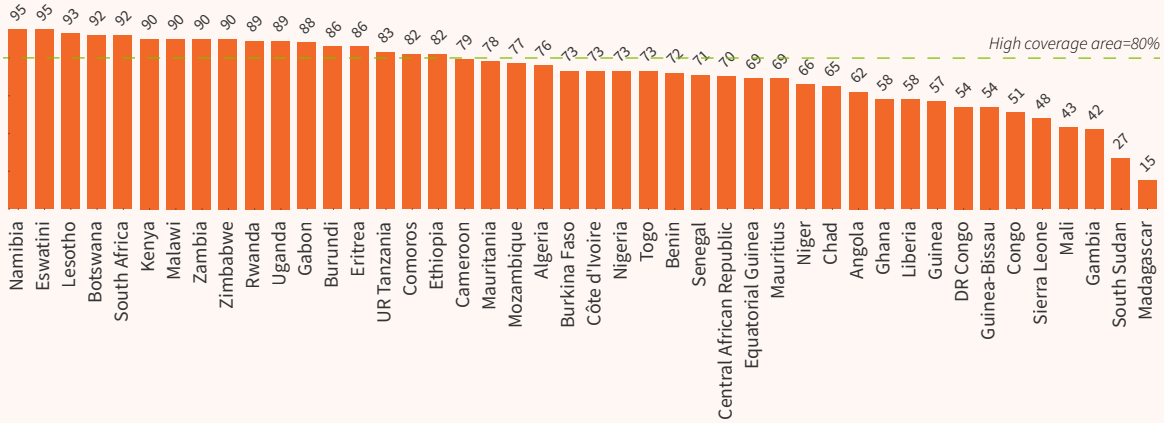
Vitamin A deficiency affects an estimated 19 million pregnant women and 190 million preschool children globally, but mainly in the African and the South-East Asia regions. Countries from Central Africa have the lowest coverage of vitamin A supplementation, which is below 20%. Most of the countries in East and Southern Africa subregions have very good coverage, and the coverage level among West African countries falls between these two. The average vitamin A supplementation coverage level for the Africa Region was 67.4% in 2017. Country coverage scores ranged from 0 to 99%. As noted above, apart from Chad, whose vitamin A supplementation coverage was average, there was high coverage in several countries, with seven in the West Africa subregion and six in the East and Southern Africa subregion achieving the target of 80% or higher.

Immunisation coverage rate by vaccine for each vaccine in the national schedule

Refer to page N° 47

People living with HIV who know their status

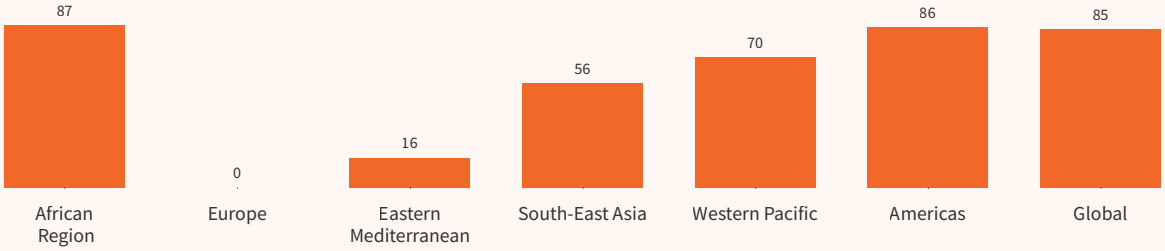
Figure 6.2.10. People living with HIV who know their status (%) in the WHO African Region, 2019, UNAIDS



The proportion of people living with HIV who know their status varies among the countries in the WHO African Region and goes from 15% in Madagascar to 95% in Namibia and Eswatini. Just under 40% of the countries in the Region had reached the target 80% by 2019. The average proportion of the people living with HIV in the Region and know their status was 67% in 2019. The earlier a person is diagnosed with HIV, the sooner he or she can start the life-saving treatment. And the earlier HIV treatment starts after infection, the better are the results.

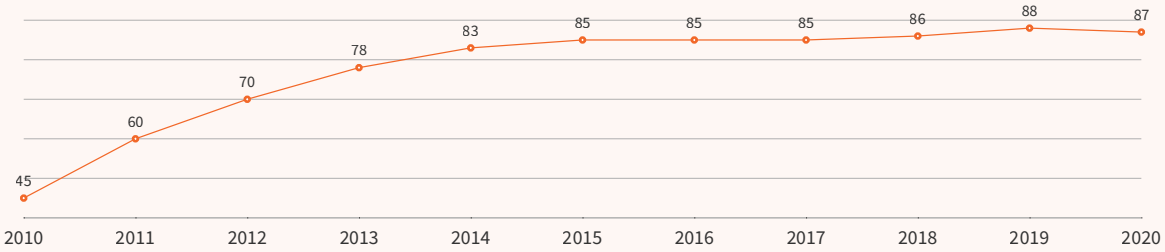
Prevention of mother-to-child transmission

Figure 6.2.11. Coverage of prevention of mother-to-child transmission, in the WHO regions, 2020, UNAIDS



Measures to prevent mother-to-child transmission of HIV averted 1.4 million infections between 2000 and 2015. Nevertheless, 160 000 paediatric HIV cases were reported in 2018 (UNAIDS). To stop maternal transmission of HIV, efforts are needed to reduce even more drastically the transmission of the disease through breastfeeding.[7] The WHO African Region's coverage levels of interventions for prevention of mother-to-child transmission of HIV are the highest among the WHO the regions, and with its coverage of 87% in 2020, it outperformed even the Americas Region.

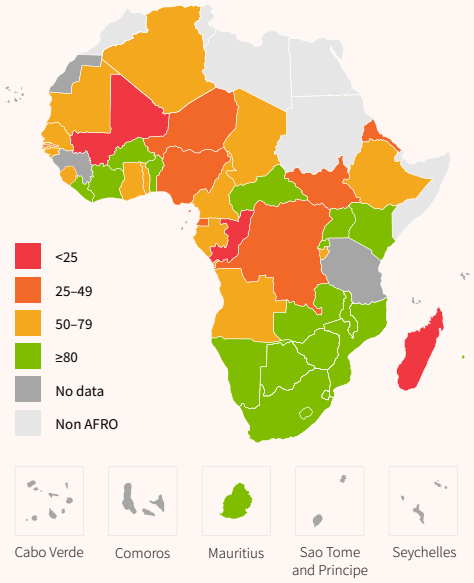
Figure 6.2.12. Coverage of prevention of mother-to-child transmission, in the WHO African Region, 2010–2020, WHO



The WHO African Region accounted for more than one third of new HIV infections among children worldwide in 2020 (UNAIDS, 2021), reflecting the persistent gaps in the efforts to prevent vertical transmission, including the low coverage of maternal and newborn health services. After a steady increase in coverage levels for prevention of mother-to-child of transmission of HIV, there was a flattening of the coverage from 2015. The slight coverage fluctuations of between 85% and 88% in recent years reflect the persistence of mother-to-child transmission in the Region, as women continue to acquire HIV during pregnancy and breastfeeding owing to the lack of appropriate combination of HIV prevention approaches.

7 Van de Perre, P. et al. (2021), Eliminating postnatal HIV transmission in high incidence areas: need for complementary biomedical interventions, The Lancet, Health policy, vol. 397, Issue 10281, P1316–1324, 3 April, 2021

Figure 6.2.13. Coverage of prevention of mother-to-child transmission of HIV in the WHO African Region, 2019, UNAIDS



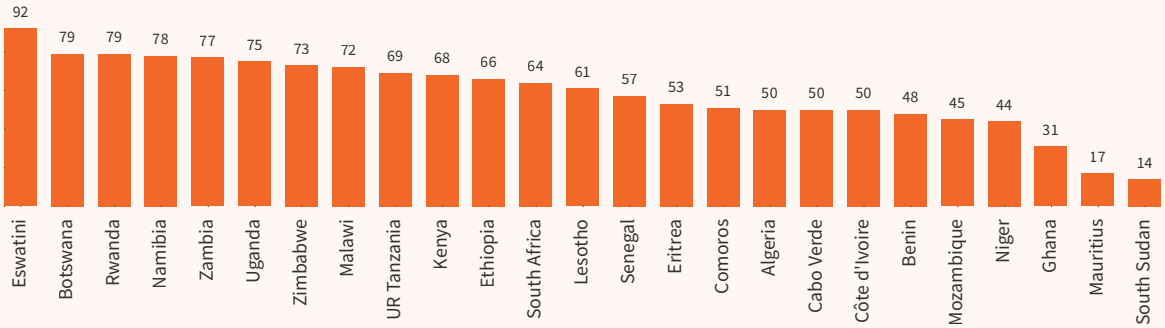
The prevention of mother-to-child transmission coverage is higher in the East and Southern Africa than in the other parts of the Region and lowest in Mali, Congo and Madagascar, whose levels are lower than 25%. With a few exceptions, all countries in the East and Southern African subregion exceeded 80% coverage of the prevention of mother-to-child transmission of HIV.

Antiretroviral therapy (ART) coverage

Refer to page N° 26

HIV viral load suppression

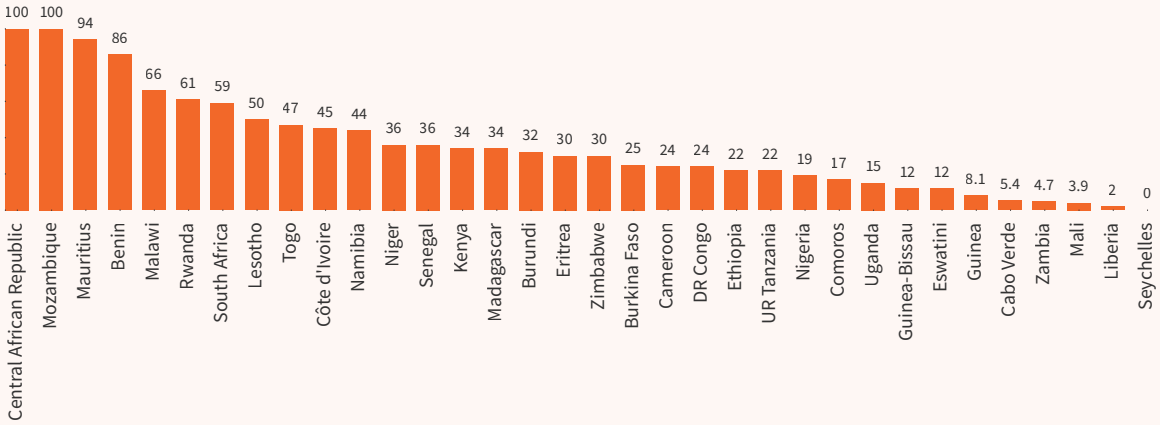
Figure 6.2.14. HIV viral load suppression (%) in the WHO African Region, 2019, UNAIDS



The higher the viral load of a person living with HIV, the higher his or her risk of transmitting the disease is. Taking an anti-HIV treatment that prevents HIV from multiplying blocks its evolution and thus lowers the viral load. The viral load can even become undetectable with current laboratory equipment. Among the countries for which information was available in 2019, South Sudan and Mauritius had viral load suppression levels below 20%, Ghana had a level between 30% and 40%, and Eswatini stood out from all the countries with its high score of 92%. The other countries had HIV viral load suppression levels ranging from 44% to 79%.

Coverage of treatment for latent TB infection

Figure 6.2.15. Coverage of treatment for latent TB infection (%) in the WHO African Region, 2018, WHO



TB infection is said to be latent when a person infected with it is not ill, has no symptoms and is not contagious, but somehow harbours its mycobacteria. Treatment coverage for latent TB infections in 2019 was low for a third of the countries, which had a level of less than 20%. Another third had treatment coverage levels of between 20% and 40%. Among the rest of the countries, four had very high treatment coverage scores, that is Benin with 86%, Mauritius with 94% and the Central African Republic and Mozambique with 100%.

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

Figure 6.2.16. Number of HIV-positive new and relapse TB patients on ART during TB treatment, 2018, WHO

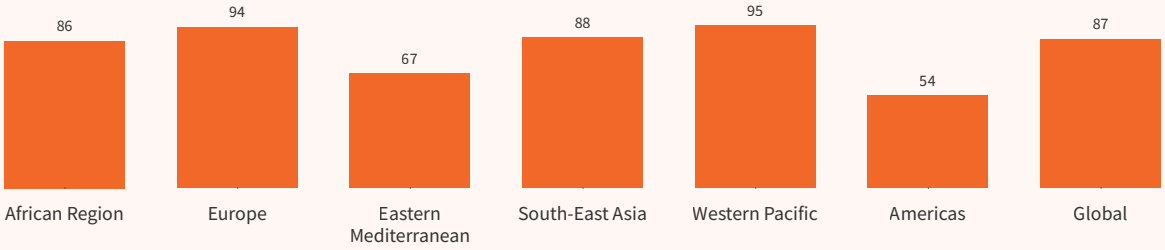
The number of new people with new HIV diagnosis and relapsed HIV patients with TB who are on ART during TB treatment is an indicator that the measures, whether or not they are country programmes, are effectively linking TB patients with HIV to the appropriate HIV treatment. The HIV status of TB patients is determined in TB hospitals, and often ART for TB cases is provided by the HIV programme. The number of TB patients on ART in the countries of the WHO Africa Region varies from country to country, and in 2018 it ranged from zero in Mauritania to over 100 000 in South Africa. Clearly, the links between the two programmes might not be effective enough in most countries.

TB treatment coverage

Refer to page N° 24

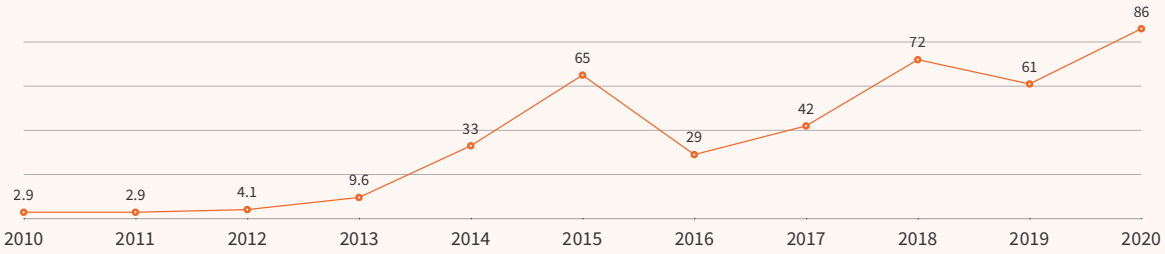
Treatment coverage for drug-resistant TB

Figure 6.2.17. Treatment coverage (%) for drug-resistant TB in the WHO regions, 2020, WHO



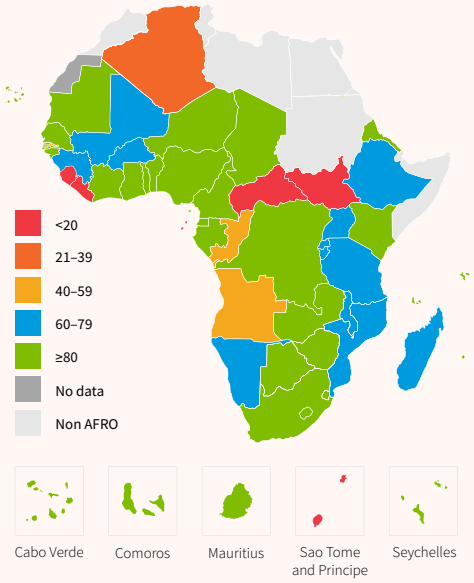
The treatment coverage for drug-resistant TB in the Region was almost equal to the global average of 87% in 2020. However, there is space for improvement to cover the gap and reach the performance of the leading regions.

Figure 6.2.18. Treatment coverage (%) for drug-resistant TB in the WHO African Region, 2010–2020, WHO



In 2020, WHO recommended that patients with multidrug-resistant TB (MDR-TB) should be treated with a new and shorter oral regimen that would take 9–11 months. Studies have shown that patients are more successful in following this treatment than the 20-month type. By the end of 2020, 65 countries had started using the shorter regimen to treat MDR-TB and 109 had started using bedaquiline to improve the effectiveness of the new treatment.

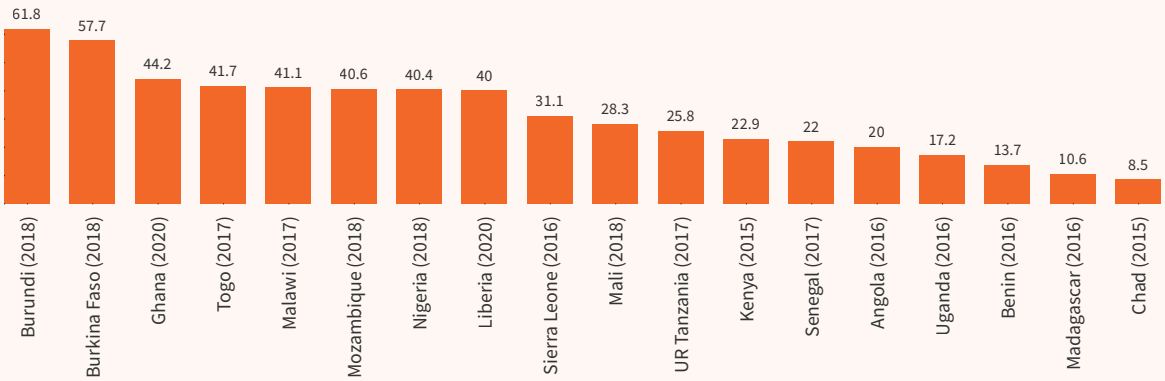
Figure 6.2.19. Treatment coverage (%) for drug-resistant TB in the WHO African Region, 2020, WHO



The situation in African countries in regard to drug-resistant TB is improving and more than half of the countries have coverage scores of above 80%. The lack of resources or the context of instability of some countries such as the Central African Republic and South Sudan could explain the low coverage in some of the countries.

Intermittent preventive therapy for malaria during pregnancy

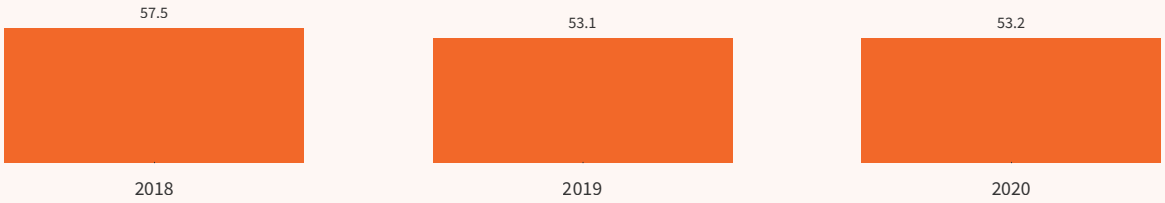
Figure 6.2.20. Percentage of pregnant women receiving intermittent preventive therapy for malaria (N=18), latest available year, DHS/MIS/NHMIS



WHO recommends three or more doses of the intermittent preventive treatment during pregnancy (IPTp) for malaria for women living in Africa in areas with moderate to high malaria transmission. To date, 38 African countries have adopted IPTp to reduce the burden of malaria during pregnancy. Coverage with three doses of IPTp rose from 1% in 2010 to 16% in 2015 and 32% in 2020, but it remains far below the target of at least 80%. The coverage level decreased slightly from 35% in 2019 to 32% in 2020.

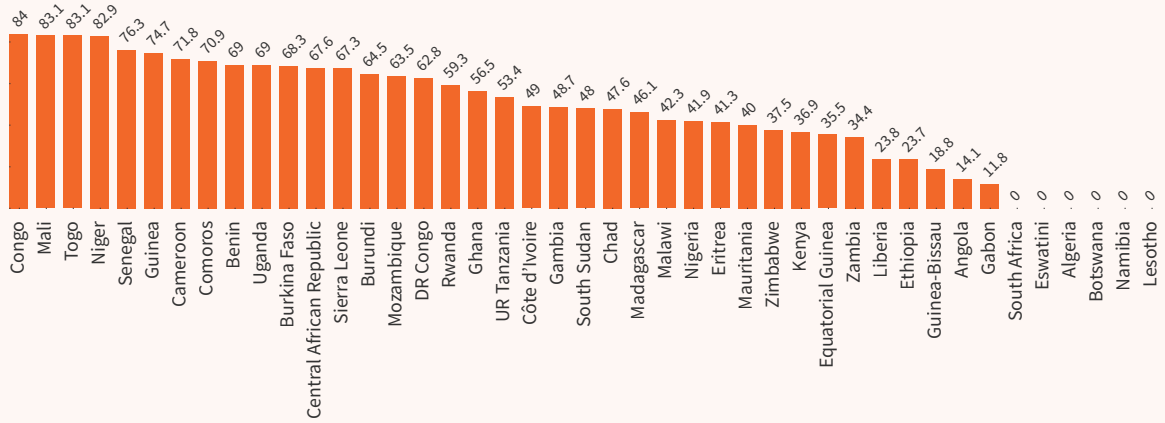
Use of insecticide-treated nets

Figure 6.2.21. Population with access to an ITN for malaria protection (%) in the WHO African Region, 2018–2020, WHO



By 2020, 31 countries had planned ITN campaigns and 18 of them had completed their campaigns in 2020, most of which were significantly behind schedule. Thirteen countries saw their campaigns spill over into 2021. Globally, 72% of all the ITNs scheduled for distribution in 2020 were distributed by the end of that year.

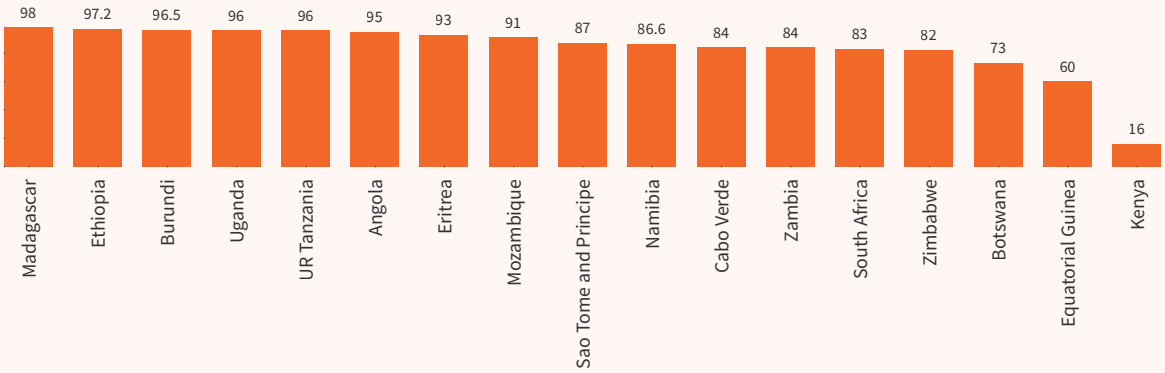
Figure 6.2.22. Population with access to an ITN for malaria protection (%) in the WHO African Region, 2020, WHO



The average for the Region of the population with access to an ITN for malaria protection in 2020 was 53.2%. Among the countries, the coverage levels varied from 11.8% in Gabon to 84% in Congo, two of the countries in the Central African subregion. Four countries had achieved the target of 80% for the population with access to an ITN. These were Congo, Togo, Mali and Niger. The countries with the very low coverage levels of less than 20% for access to an ITN were Gabon and Angola with 14.1% and Guinea-Bissau with 8.8%. Ten countries had coverage levels lower than 40%.

Indoor residual spraying coverage

Figure 6.2.23. Indoor residual spraying coverage (N=17) in the WHO African Region, 2006–2007, National Malaria Control Programme



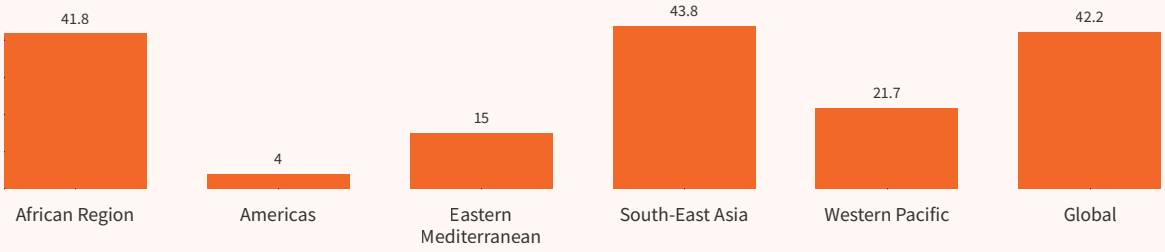
Indoor residual spraying coverage stood at 5.3% in the entire population at risk of malaria in the Africa Region in 2020. It fluctuated from 2014 but showed a downward trend from 2010. Among the 36% of the countries in the Region with reported data, 80% had high indoor residual spraying coverage rates and had reached the 80% target. They need to ensure that these rates are maintained or improved. There were still countries like Kenya where coverage remained very low at 16%.

Number of people requiring interventions against neglected tropical diseases

Refer to page N° 79

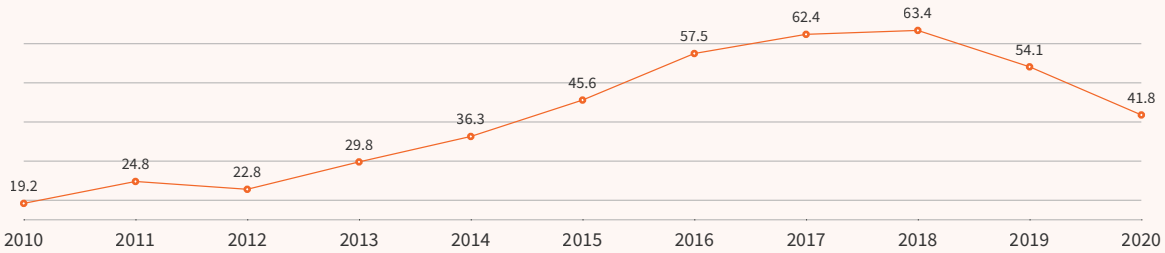
Coverage of preventive chemotherapy for selected NTDs

Figure 6.2.24. Coverage of preventive chemotherapy for lymphatic filariasis in the WHO regions, 2020, WHO



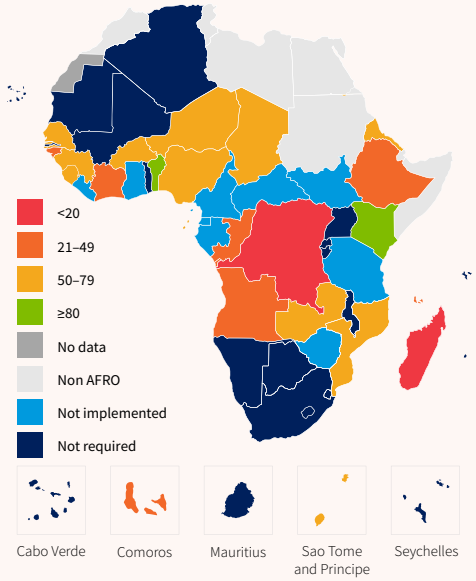
Integrated chemoprevention is an innovative WHO approach to combat and eliminate NTDs, which affect more than one billion people worldwide. Treatment of these infections is based on the use of drugs in varying combinations. In 2019, 67 countries reported implementing chemoprevention for at least one of the five major diseases, and 1.048 billion people received treatment for at least one disease. More than 1.562 billion treatments were distributed. The results from chemoprevention use are reflected in the WHO African Region in the elimination of lymphatic filariasis as a public health problem in Malawi and Togo.

Figure 6.2.25. Coverage of preventive chemotherapy for lymphatic filariasis in the WHO African Region, 2010–2020, WHO



Lymphatic filariasis poses a serious threat to approximately 406 million people in the WHO African Region. It is caused by a thread-like parasitic worm that is transmitted by mosquitoes. It is endemic in 13 countries and areas, two of which are African.[8] The coverage level for preventive chemotherapy for lymphatic filariasis in the Region was 41.8% in 2020, which was a decline from 63.4% in 2018. The decline was associated with the delayed supply of medicines, which was also accentuated by the COVID-19 crisis and its consequences. There are still challenges that must be overcome to see Africa free of lymphatic filariasis. Many countries, including those that are free of the disease, remain vulnerable.

Figure 6.2.26. Coverage of preventive chemotherapy for lymphatic filariasis in the WHO African Region, 2020, WHO

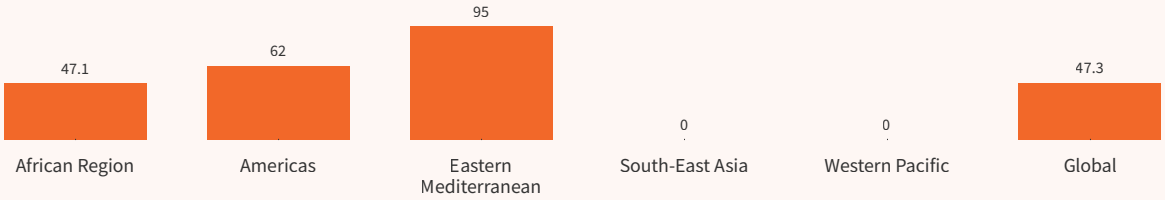


The coverage of preventive chemotherapy for lymphatic filariasis is at different levels among the countries. Lymphedema and of hydrocele, the symptoms related to the disease, and their adapted treatments were reported by the countries. The control of these symptoms and their effects depends on the ability of the countries to control the disease.

Geographically, the disease is found in the intertropical zone, and the lowest coverage of its treatment in 2020 was in the Democratic Republic of the Congo and Madagascar, with levels below 20%.

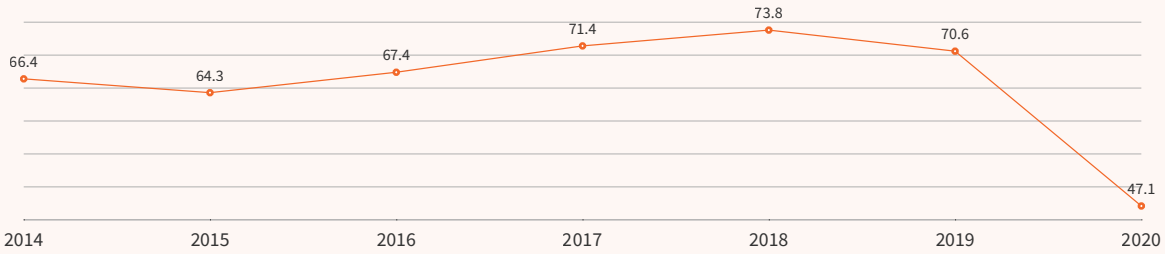
8 Deribe, K. et al. (2021), African Regional progress and status of the programme to eliminate lymphatic filariasis: 2000–2020, International Health 2021; 13, Suppl.1: S22–S27

Figure 6.2.27. Coverage of preventive chemotherapy for onchocerciasis in the WHO regions, 2020, WHO



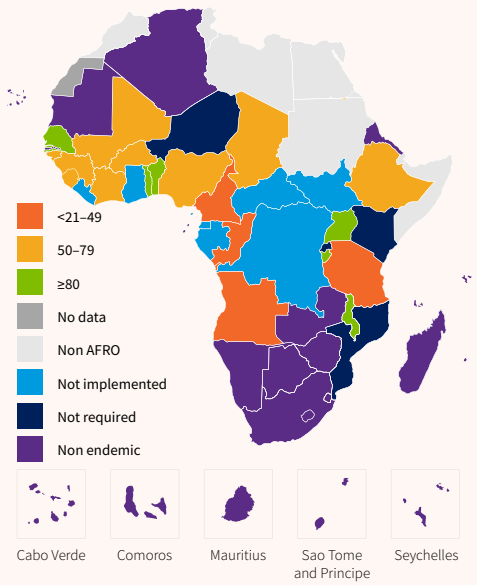
Onchocerciasis is a tropical parasitic disease that affects the eyes and the skin. It is transmitted by the repeated biting from infected blackflies. It is mainly found in remote rural areas. Eye infection associated with onchocerciasis can lead to blurred vision and even blindness. The global coverage of preventive chemotherapy for onchocerciasis is 47.13%. The coverage levels among the regions are 47.1% for the African, 62% for the Americas and 95% for Eastern Mediterranean regions.

Figure 6.2.28. Coverage of preventive chemotherapy for onchocerciasis in the WHO African Region, 2014–2020, WHO



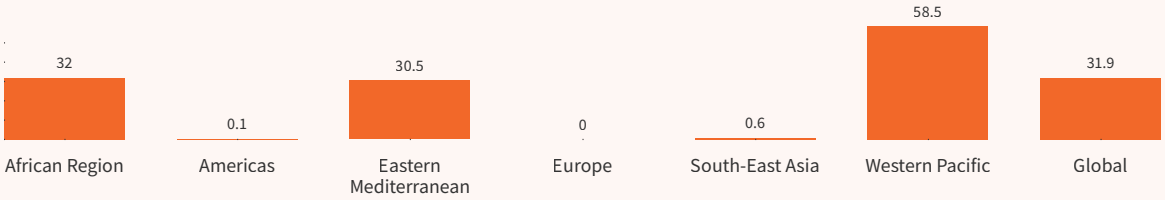
The coverage of preventive chemotherapy for onchocerciasis stood at 47.1% in 2020. It was on a climbing path between 2015 and 2018, going from 64.3% to 73.8%. It declined from then. The COVID-19 crisis and the associated diversion and prioritisation of resources for its tackling pushed this type of disease into the background.

Figure 6.2.29. Coverage of preventive chemotherapy for onchocerciasis in the WHO African Region, 2020, WHO



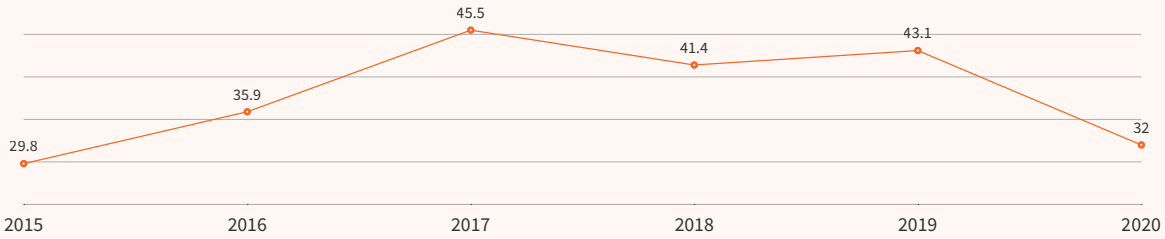
In the countries where the onchocerciasis programme is implemented, those in West Africa have better preventive chemotherapy coverage for the disease than the Central African countries. Coverage rates are low for most countries where the programme operates in Central Africa.

Figure 6.2.30. Coverage of preventive chemotherapy for schistosomiasis in the WHO regions, 2020, WHO



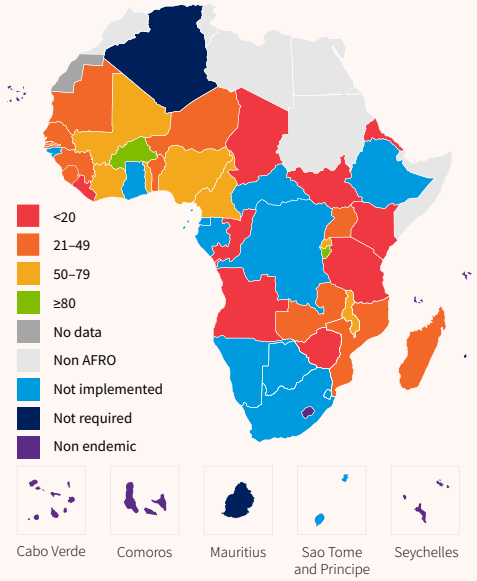
Schistosomiasis is an acute or chronic disease caused by parasites and is found in tropical and subtropical regions. The victims are infected with worms through activities that expose them to contaminated water. The coverage of preventive chemotherapy for schistosomiasis in 2020 was 31.9% globally, 32% in Africa, 30.5% in the Eastern Mediterranean and 58.5% in the Western Pacific. South-East Asia and the Americas had minimal coverage.

Figure 6.2.31. Coverage of preventive chemotherapy for schistosomiasis in the WHO African Region, 2015–2020, WHO



The coverage rates for chemotherapy for schistosomiasis in the WHO African Region have fluctuated in recent years and declined during 2019 to 2020 but they went back to their level of about 5 years before.

Figure 6.2.32. Coverage of preventive chemotherapy for schistosomiasis in the WHO African Region, 2020, WHO

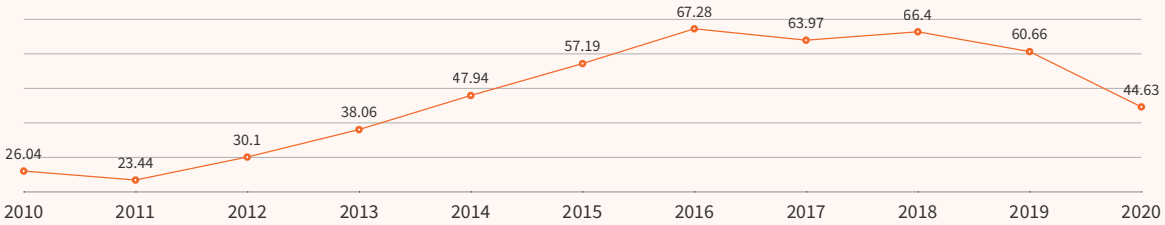


Countries in the West African subregion had better rates of prevention coverage against schistosomiasis in 2020 than did those in the other two parts of the Region.

Figure 6.2.33. Coverage of preventive chemotherapy for soil-transmitted helminthiases in the WHO regions, 2020, WHO

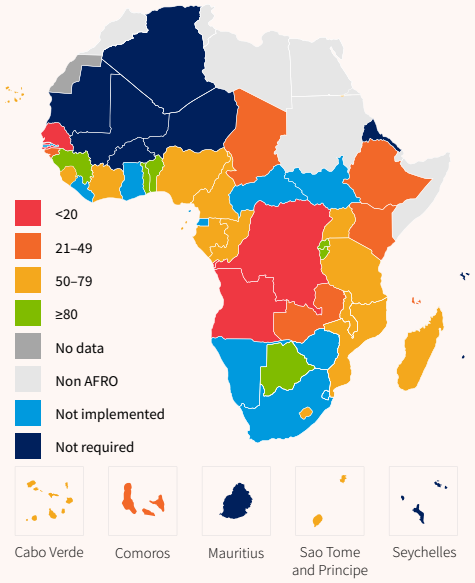
Soil-transmitted helminthiases constitute a group of parasitosis (hookworms, roundworms and whipworms) transmitted by oral or tactile contact with contaminated human faeces. They are especially frequent in hot and humid climates where sanitary conditions are insufficient. In rare cases, symptoms may occur such as abdominal pain, diarrhoea and rectal prolapse. The coverage of preventive chemotherapy for soil-transmitted helminthiases varies by region, but the overall average was 46.94% in 2020. Apart from the Americas and the Eastern Mediterranean regions, which had low coverage of 3.34% and 24.49%, respectively, the other regions had better prevention levels than the WHO African Region with its 44.63%. Europe had 49.63%, South-East Asia 53.1% and Western Pacific 53.24%.

Figure 6.2.34. Coverage of preventive chemotherapy for soil-transmitted helminthiases in the WHO African Region, 2020, WHO



The coverage of prevention chemotherapy for helminthiases in the Region increased from 26% to 44.6% over the 10 years between 2011 and 2020. The major and continuous progression was from 2011 to 2016, when the coverage grew from 23.4% to 67.3%. Between 2018 and 2020 it declined from 66.4% to 44.6%.

Figure 6.2.35. Coverage of preventive chemotherapy for soil-transmitted helminthiases in the WHO African Region, 2020, WHO

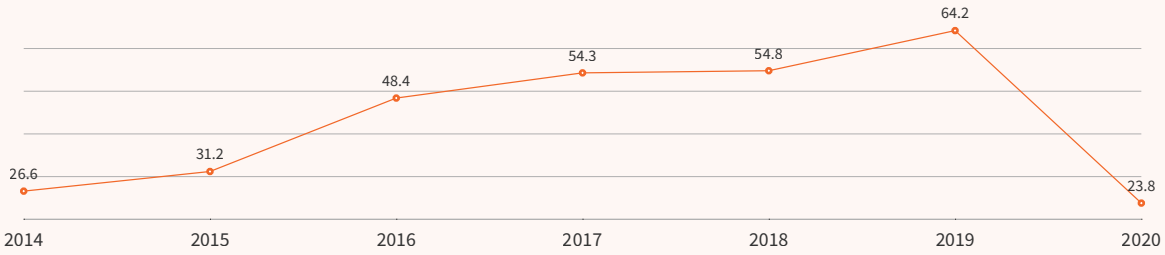


There are geographical or even territorial variations among the subregions in the coverage levels for preventive chemotherapy for helminthiases. Relative humidity mixing with poor hygiene conditions provide a good environment for helminthiases to thrive. The coverage variations of preventive chemotherapy are also influenced by the socioeconomic levels of the countries. In 2020, coverage levels for preventive chemotherapy helminthiases were lower than 40% in most countries, with 5% in Senegal, 19.5% in Angola and 39.5% in Chad. They were better in Guinea, with 80.8%, and Benin, with 86.2%.

Figure 6.2.36. Coverage of preventive chemotherapy for trachoma in the WHO regions, 2020, WHO

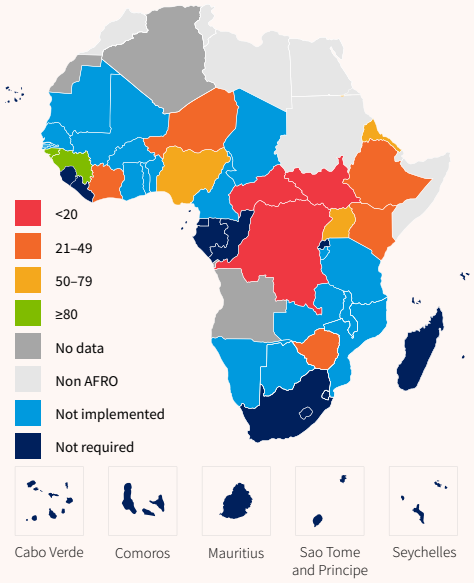
Trachoma is a highly contagious disease that affects the eyes and may require surgery. Access to clean water and adequate sanitary conditions are essential to prevent the disease. The coverage of preventive chemotherapy for its treatment was 21.2% globally in 2020, a level that was influenced by the WHO African Region, which had a coverage of 23.8%.

Figure 6.2.37. Coverage of preventive chemotherapy for trachoma in the WHO African Region, 2014–2020, WHO



Trachoma prevention coverage took a dizzying fall from 64.4% in 2019 to 23.8% in 2020. This followed a continuous rise between 2014, when the level was 26.6%, and 2019. In addition to the difficulties in accessing services at the height of the COVID-19 pandemic from 2020, the issue of water was crucial for a significant number of African countries. Water and hygiene conditions must remain priorities for Member States in their implementation of health policies.

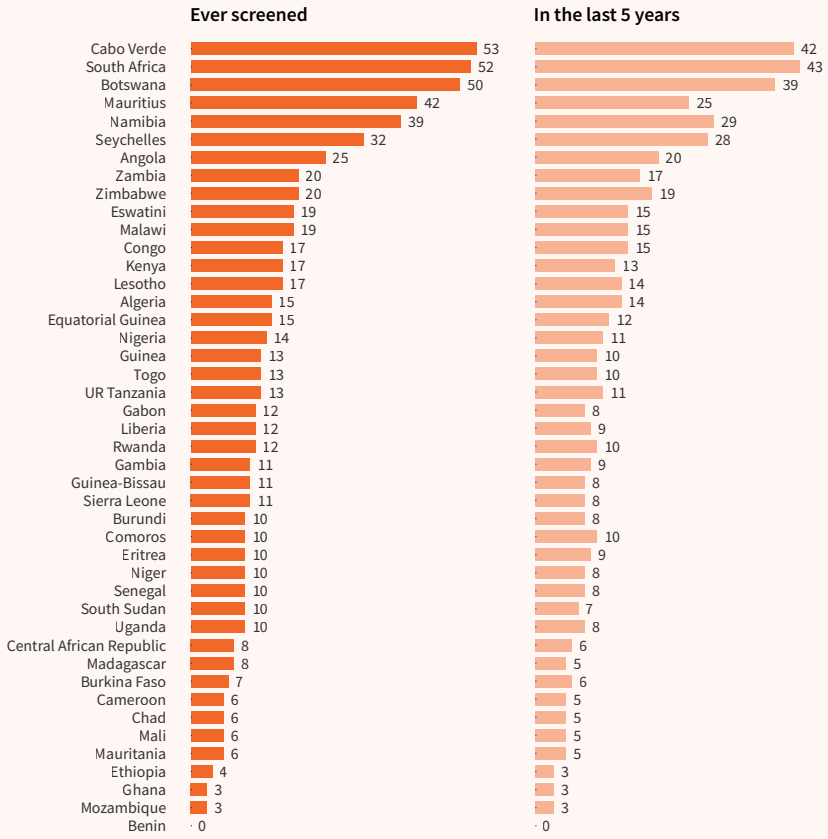
Figure 6.2.38. Coverage of preventive chemotherapy for trachoma in the WHO African Region, 2020, WHO



The lowest trachoma prevention rates in 2020 were observed in three countries in the heart of Africa, that is the Democratic Republic of the Congo, the Central African Republic and South Sudan, whose coverage levels were lower than 20%. These countries are marked by displacement of people fleeing insecurity in some of their areas through dusty roads that lack water.

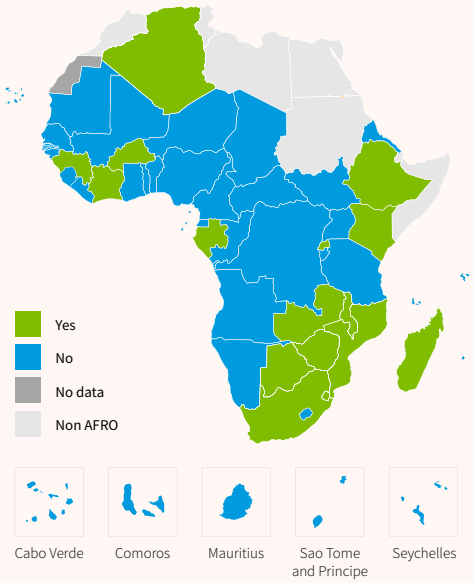
Cervical cancer screening

Figure 6.2.39. Screening for cervical cancer (% of women aged 30–49 years) in the WHO African Region, 2019, WHO



Several factors hinder screening for cervical cancer, especially in sub-Saharan Africa, including the level of education, the sociofamilial situation, etc. An analysis of the risk factors in the sub-Saharan African population in 2019 showed that among the countries screening for cervical cancer, coverage among women aged 30–49 years ranged from zero to 50%. Only 12.5% of the women aged 30–49 years were screened the previous 5 years in the Region and only 15.7% had ever been screened.

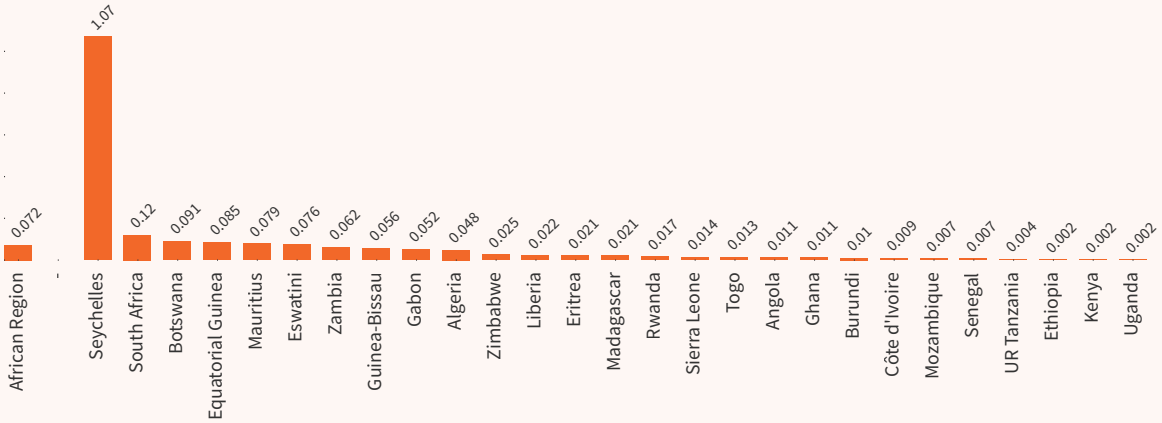
Figure 6.2.40. Existence of a national screening programme for cervical cancer in the WHO African Region, 2021, WHO



Cervical cancer screening programmes do not exist in every country or not at the national level. The countries with a national programme are mainly concentrated in the East and Southern Africa, apart from the island states. In fact, in this subregion, only Lesotho, Namibia, United Republic of Tanzania, Burundi and Eritrea do not have such a programme. In the Central African subregion, only Gabon has a screening programme for cervical cancer, and in the West Africa, only Guinea, Côte d'Ivoire and Burkina Faso have national cervical cancer screening programmes. Clearly, more attention to cervical cancer is needed from the countries in this subregion.

Coverage of services for severe mental health disorders

Figure 6.2.41. Coverage of services for severe mental health disorders (per 100 000 population) in the WHO African Region, 2015–2017, WHO



The coverage of the services for severe mental health disorders per 100 000 population in the African was 0.072 per 100 000 population between 2015 and 2017. Also, less than 10% of the population had access to mental health care. This problem is exacerbated by the lack of adequate human resources. The countries in the Region have one psychiatrist for every 500 000 inhabitants, which is 100 times less than WHO's recommended level.

The issue of mental health should have a prominent place in public health in Africa today more than ever before. The coronavirus pandemic has increased the isolation of some people and exposed others to violence. Approximately one in four people will be affected by a psychological disorder in their lifetime. The WHO African Region is not an exception, 10% of its population is affected by a mental disorder currently. The prevalence is even higher in conflict zones, where one in five people is said to suffer from disorders such as depression, anxiety, post-traumatic stress disorder, bipolar disorder and schizophrenia. Increasing suicide rates are markers, as is alcohol consumption, etc.

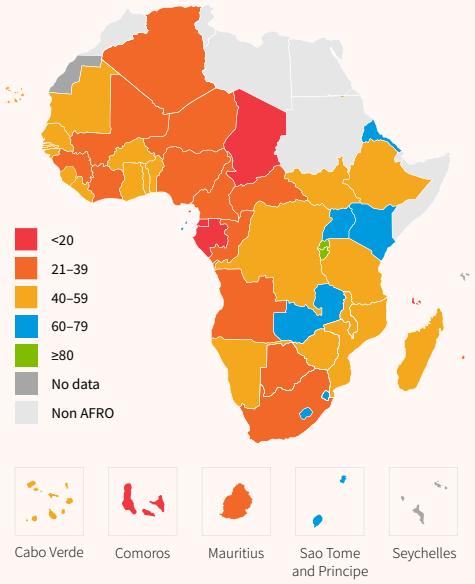
Coverage of essential health services

Refer to page N° 18

6.3 Risk factors and behaviours

Exclusive breastfeeding rate for infants for 0–5 months of age

Figure 6.3.1. Prevalence of exclusive breastfeeding among infants aged 6 months or less in the WHO African Region, 2010–2018, WHO/UNICEF

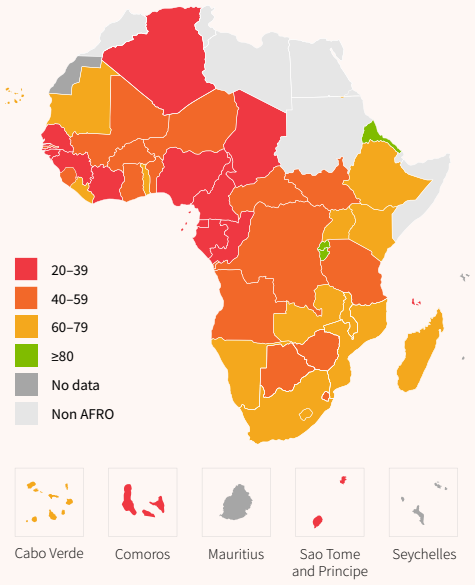


WHO and UNICEF recommend that children should start breastfeeding within 1 hour of birth and be exclusively breastfed for the first 6 months of life. Breastfeeding is crucial to a child's nutrition, health and well-being throughout his or her life. It reduces costs for families and governments' health facilities, it protects children from infection and saves lives. In addition to providing other mental health benefits for the child, it stimulates bonding between a mother and baby. Despite the recognition of the benefits of exclusive breastfeeding, very few children in the WHO African Region are breastfed until their 6th month. The countries in the East and Southern African subregion had the highest rates of exclusive breastfeeding between 2010 and 2018, the countries in the Central African subregion had the lowest rates.

The regional prevalence of exclusive breastfeeding of children up to 6 months is 45.7%. This means that fewer than one in two children are exclusively breastfed. Four countries had the extremely low rates ranging from 0.1 to 11.4%. Only Burundi and Rwanda have reached the target of 80% for exclusive breastfeeding in the first 6 months of life.

Early initiation of breastfeeding

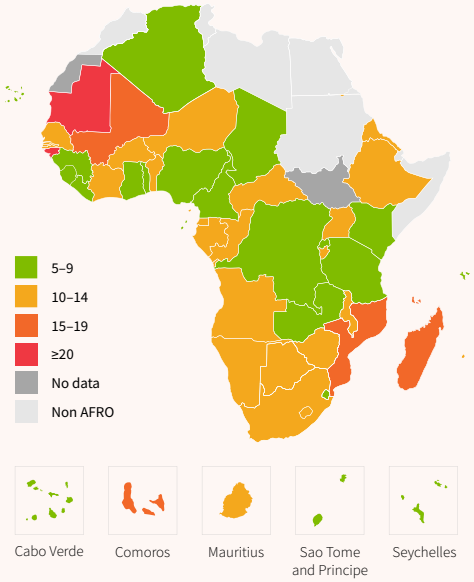
Figure 6.3.2. Percentage of children benefiting from early initiation of breastfeeding (%) in the WHO African Region, 2010–2018, UNICEF



Three out of five newborns are not breastfed within an hour of birth in the Region. Early breastfeeding, that is putting the newborn to the breast within the first hour of life, is essential for the survival of the newborn and for the establishment of long-term breastfeeding. Early breastfeeding also creates mother–infant bonding and contributes to the security of the relationship. In Africa, early initiation prevalence is similar to that of exclusive breastfeeding, and the highest levels for 2010–2018 were in the countries in the East and Southern Africa subregion, followed by the West African subregion and then, the Central Africa subregion. Eritrea, Burundi and Rwanda had exceeded the early initiation of breastfeeding target of 80% with levels higher than that. Thirteen countries did not reach the 40% level.

Incidence of low birth weight among newborns

Figure 6.3.3. Incidence of low birth weight among newborns (%) in the WHO African Region, 2010–2018, UNICEF



The incidence of low birth weight in countries in the WHO African Region is likely to lie between 5% and 14%. Countries with high or extreme rates are rare. Mauritania and Guinea Bissau had incidence rates that exceeded 20% for newborns under 2500g.

Mauritania, with an incidence of 34.7% for low birth weight among newborns and Guinea Bissau with a 21.3% incidence, have peculiar situations and it is likely that the quality of their data and transcription errors are the primary explanations for their outlier incidence levels. In Mauritania,[9] for example, weight is known for only 16% of newborns, a reflection of fact there are various delivery channels and that rurality is an issue. The socio-demographic characteristics of the family, the rank of birth, etc. all affect whether the weight of the newborn is taken or known. No country meets the highly ambitious target of less than 5% for the incidence of low birth weight. A few countries do come close such as Cabo Verde, Rwanda and Algeria, which have low birth weight rates of less than 7%.

Children under 5 years who are stunted

Refer to page N° 64

Children under 5 years who are wasted

Refer to page N° 65

Children aged under 5 years who are overweight

Refer to page N° 67

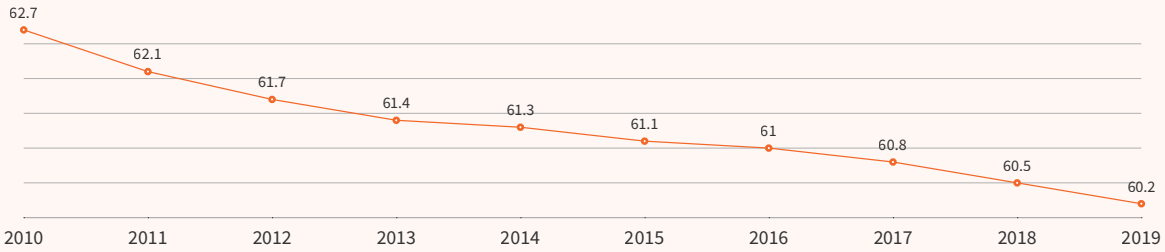
9 République Islamique de Mauritanie (2022), Enquête Démographique et de Santé de la Mauritanie (EDSM) 2019-2021

Anaemia prevalence in children

Figure 6.3.4. Prevalence of anaemia in children aged 6–59 months (%) in the WHO regions, 2019 UNICEF

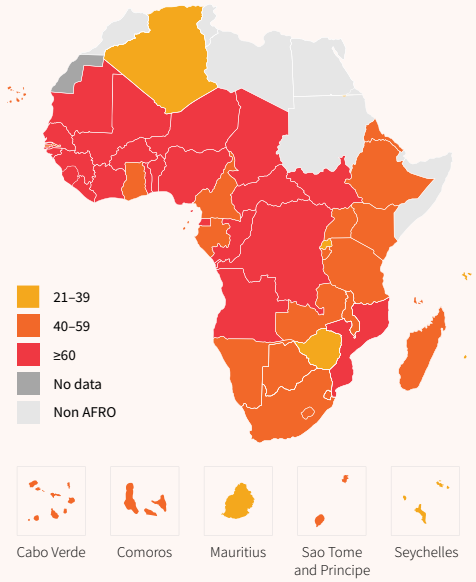
The prevalence of anaemia in children aged 6 months to 5 years varies widely among the countries. The Regional average is 60.2%, reflecting the fact that six out of 10 African children under the age of 5 years have abnormally low levels of haemoglobin, which plays the role of transporting oxygen in the blood. Compared with other WHO regions, the WHO African Region has the highest rates of anaemia in young children.

Figure 6.3.5. Prevalence of anaemia in children aged 6–59 months (%) in the WHO African Region, 2010–2019, UNICEF



The anaemia rate fell from 62.7% to 60.2% over the 10 years from 2010–2019. The decline was continuous. The iron status at birth, dietary intake, breast milk or foods consumed during the period of diversification help to reduce these deficiencies over time through awareness and health promotion.

Figure 6.3.6. Prevalence of anaemia in children aged 6–59 months (%) in the WHO African Region, 2019, WHO/UNICEF



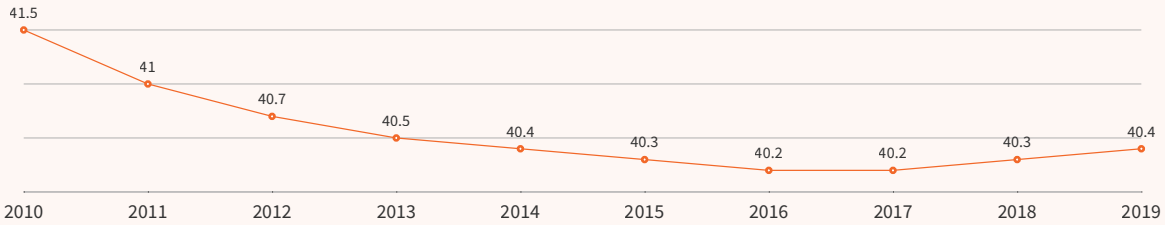
The prevalence of anaemia in children aged 6 months to 5 years was 60% or higher in 2019 for the majority in the West and Central African countries. The prevalence for the Region was 62%, three times higher than the less than 20% target set by the countries. With the exception of Seychelles, Mauritius, Algeria, Zimbabwe and Rwanda, all the other countries in the Region had prevalence levels that were more than double the target. Furthermore, 20 countries out of the 47 had levels that were triple the target.

Anaemia prevalence in women of reproductive age

Figure 6.3.7. Prevalence of anaemia in women of reproductive age (15–49 years) (%) in the WHO regions, 2019, WHO

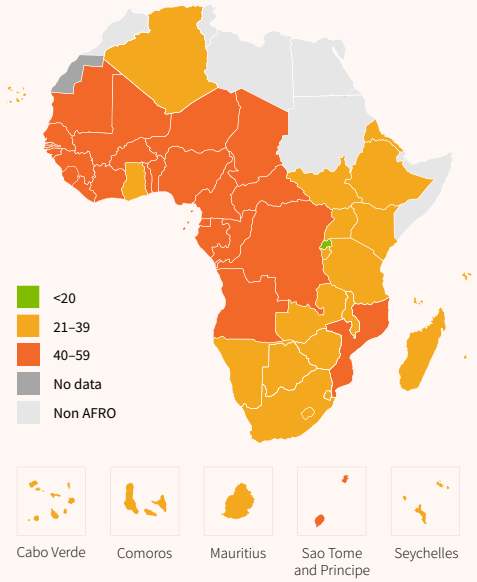
Among women of childbearing age, the prevalence of anaemia in the WHO African Region was 40.4% in 2019. This was the second highest rate in the world after the South-East Asian Region with 46.6%. Third was the Eastern Mediterranean Region with a prevalence of 29.9%. The European, Western Pacific and Americas regions all had prevalence levels for anaemia among women of childbearing age lower than 20% in 2019. The global average rate was 29.9%.

Figure 6.3.8. Prevalence of anaemia in women of reproductive age (15–49 years) (%) in the WHO African Region, 2010–2019, WHO



Over the decade of 2010–2019, after declining slightly but steadily from 2010 to 2016, the level of the proportion of women with anaemia stabilised, and it appears be on an upward trend again, though a slight one, since 2018.

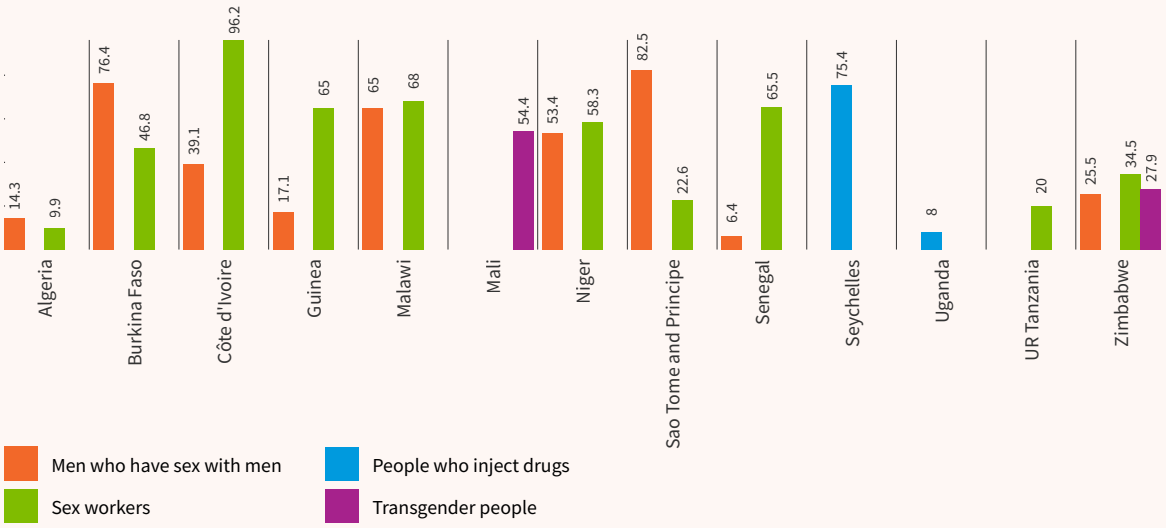
Figure 6.3.9. Prevalence of anaemia in women of reproductive age (15–49 years) (%) in the WHO African Region, 2019, WHO



Geographically, the West African and Central African subregions have higher prevalence of anaemia in women of reproductive age than the East and Southern Africa subregion.

Prevention of HIV in key populations

Figure 6.3.10. Percentage of prevention of HIV in key populations, 2020, UNAIDS



HIV prevention measures should focus on the youth, women, girls and other vulnerable groups. Protecting and promoting human rights of all people, especially vulnerable groups and women and girls, is also a challenge to be tackled in HIV/AIDS prevention. Africa must take steps to break the taboos that foster the spread of HIV in the face of human losses such as those caused by HIV/AIDS in 2022. Data collection efforts still need to be enhanced in most countries.

Population using safely managed drinking-water services

Refer to page N° 100

Population using safely managed sanitation services

Refer to page N° 101

Population with primary reliance on clean fuels and technologies

Refer to page N° 103

Total alcohol per capita (age 15+ years) consumption

Refer to page N° 82

Tobacco use among persons aged 15+ years

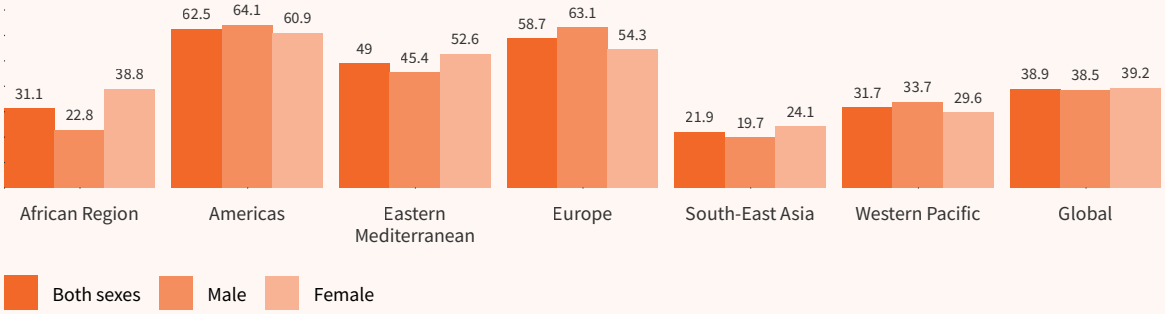
Refer to page N° 88

Raised blood pressure among adults

Refer to page N° 28

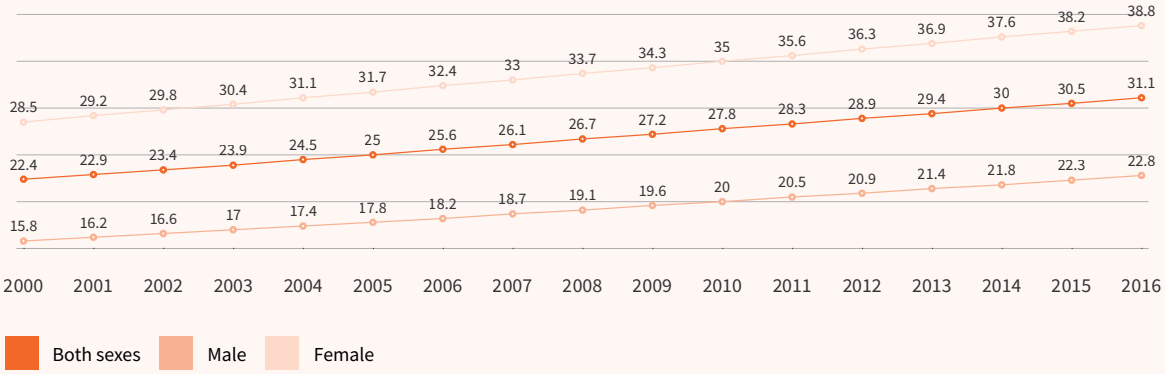
Overweight and obesity in adults

Figure 6.3.11. Prevalence of overweight and obesity among adults (%) in the WHO regions, 2016, WHO



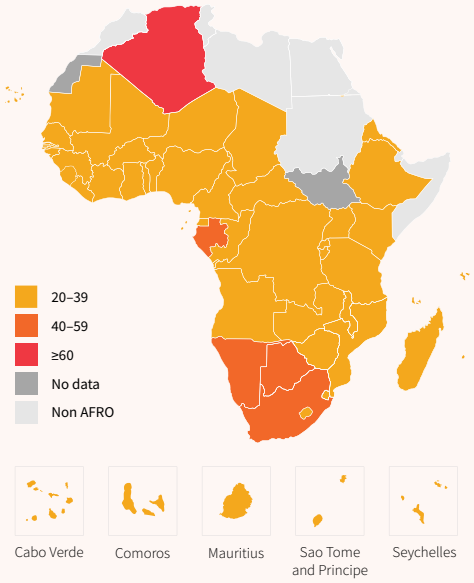
The prevalence of overweight and obesity in adults is higher in the Americas Region, at 62.5%, and the European Region, at 58.7%, than anywhere else. The South-East Asian Region has the lowest prevalence with 21.9% followed by Africa with 31.1% and then the Western Pacific Region with 31.7%. The global prevalence of overweight and obesity is 38.9%. There is a gender difference in overweight and obesity with a female predominance in general, but also in the regions of Africa, South-East Asia and Eastern Mediterranean.

Figure 6.3.12. Prevalence of overweight and obesity among adults (%) in the WHO African Region, by sex, 2010–2016, WHO



The average prevalence of overweight and obesity increased from 22.4% to 31.1% between 2000 and 2016, with the levels being higher among women, who had 10.3 percentage points more over time, compared to 7 percentage points for men. The prevalence of overweight and obesity is raising in the WHO African Region and is a major public issue. The economic and health consequences are likely to impact development if strong and holistic interventions are not developed today.

Figure 6.3.13. Prevalence of overweight and obesity among adults (%) in the WHO African Region, 2016, WHO



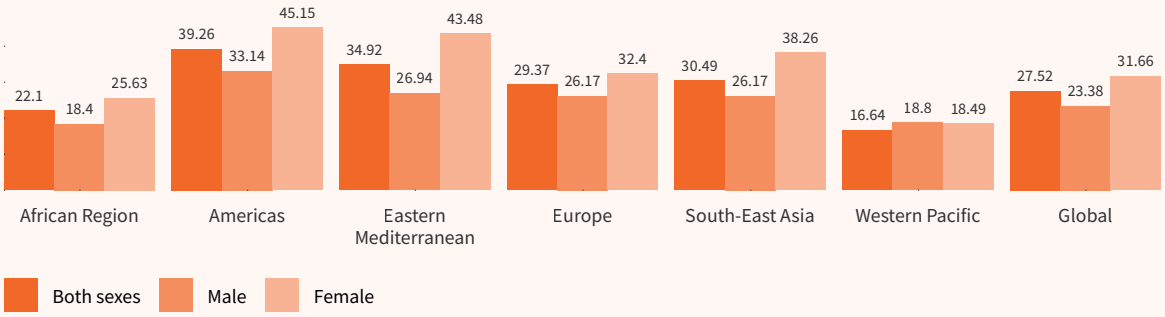
The distribution of overweight and obesity among the countries shows high rates in Algeria, Gabon, South Africa, Namibia and Botswana. The diet in Gabon is low in fruits, vegetables, fish and dairy products and high in alcohol, which is present in the diet from a relatively young age (FAO, 2021). Fifteen countries rank above the average for overweight and obesity in the Region. The countries with lower prevalence of overweight and obesity are mostly located in the east part of the continent.

Raised blood glucose/diabetes among adults

Refer to page N° 29

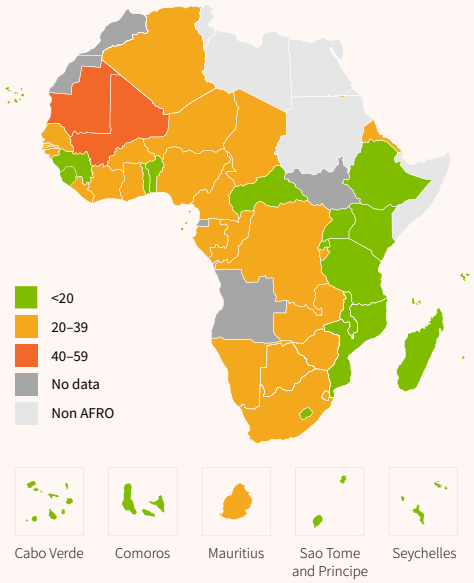
Insufficient physical activity in adults

Figure 6.3.14. Prevalence of insufficient physical activity among adults aged 18 years and older (%) in the WHO regions, 2016, WHO



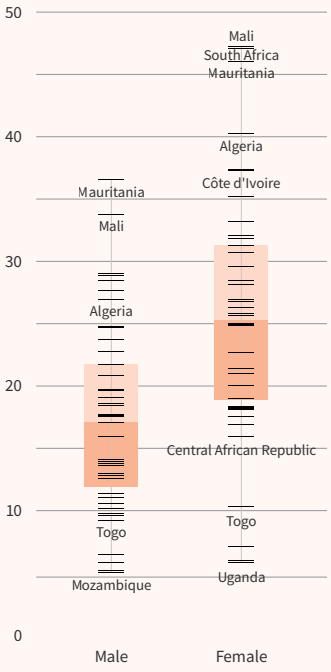
The prevalence of insufficient physical activity in adults over 18 years is 27.52% globally and is 22.10% in the WHO African Region. The Region is the second least active after the Western Pacific region. Other than in the Western Pacific where inactivity is relatively balanced between men and women, everywhere else women are more physically active than men.

Figure 6.3.15. Prevalence of insufficient physical activity among adults aged 18 years and over (%) in the WHO African Region, 2016, WHO



The prevalence of adults with insufficient physical activity is highest in Mali and Mauritania, countries in the West African sub-region. East Africa adults are more physically active in general. Mauritania and Mali stand out for this indicator, followed by South Africa, where also insufficient physical activity is significant. Fifteen countries seem to have ways of fostering regular physical activity.

Figure 6.3.16. Prevalence of insufficient physical activity among adults aged 18 years and over (%), in the WHO African Region, 2016, WHO



Gender comparisons show differences but these are lower than these were than for obesity (see Figure 6.3.12). The interquartile differences are smaller and the groups are much more homogeneous. The medians divide 50% of the population, both female and male, into two practically identical groups. There is more homogeneity, and the differences are not excessive.

Intimate partner violence prevalence

Refer to page N° 94

Non-partner sexual violence prevalence

Refer to page N° 95

Prevalence of female genital mutilation/cutting

Refer to page N° 96

Early marriage

Refer to page N° 97

6.4 Health security

International Health Regulations (IHR) core capacity index

Refer to page N° 35

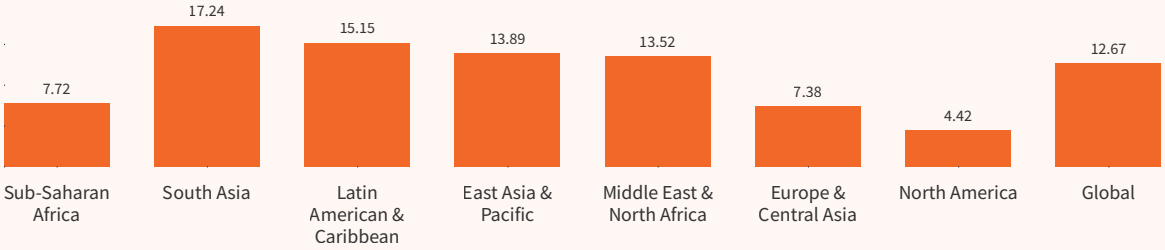
Resilient health systems

Although IHR capacities are necessary, they are insufficient on their own to prevent, detect and respond to public health events. In many settings, health systems have not been at the centre of national efforts to implement IHR. The effectiveness of a mechanism such as IHR must be based on strong, resilient and responsive systems capable of implementing preventive measures, absorbing shocks, adapting to disturbances and of responding to changing needs and contexts of public health events, while ensuring the continuity of essential health services. For most countries in the Region, this is an almost insurmountable challenge, especially if governments do not work to develop a health system capable of providing a set of essential services and integrate it with other sectors. This requires going beyond looking at the return on investment to make significant investments that would ensure that trained human resources are deployed appropriately and quality equipment and adequate supplies are available. These investments may be made in sectors other than health but should be in support of it. This new dynamic will then bring about interactions between systems with a view to better prepare for emergency situations.

6.5 Financial risk protection

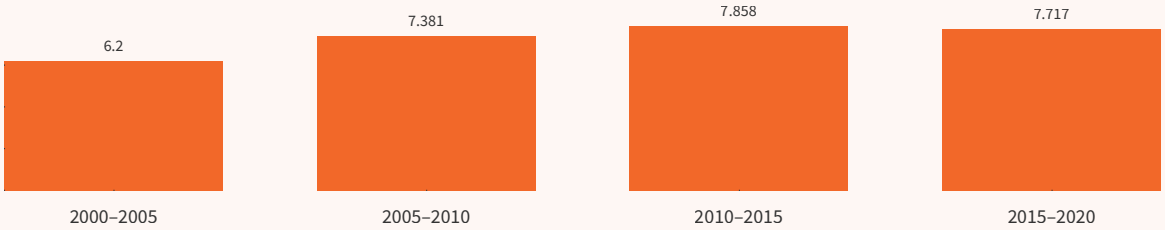
Population with large or impoverishing household expenditure on health

Figure 6.5.1. Proportion of population spending more than 10% of household consumption or income on out-of-pocket health care expenditure (%), 2015–2020, by WHO regions, World Bank



In sub-Saharan Africa 7.72% of the population spends more than 10% of the household income on out-of-pocket health care expenditure. This level ranks the Region after North America and Europe and Central Asia. The global average is 12.67%.

Figure 6.5.2. Proportion of the population spending more than 10% of household consumption or income on out-of-pocket health care expenditure (%) in sub-Saharan Africa, 2000–2020, World Bank



The share of the population spending more than 10% of its consumption or household income on out-of-pocket health expenditure in sub-Saharan Africa has changed in recent years. It has progressed significantly since 2000 and tended to have stabilised with very little variation from 2015. Some countries have seen an increase in the population with high health care spending while others have seen a decline.

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

Refer to page N° 32

References

1 ONFPA (2016), Soins obstétricaux et néonataux d'urgence : Guide pour la réalisation des Enquêtes rapides

2 May, R. (2016), Comprehensive Emergency Obstetric and Newborn Care: The Proven Approach in Tanzania, White ribbon alliance for safe motherhood in Tanzania, Published October 28, 2016 https://wraglobal.medium.com/comprehensive-emergency-obstetric-and-newborn-care-the-proven-approach-in-tanzania–4d7bb4542e3b accessed 1 September, 2022

3 Ndaruhuye, M.D. and Mulindabigwi, R.C. (2019), Réduire l'écart de la pratique contraceptive entre pauvres et riches au Rwanda: en comprendre les mécanismes sous-jacents, In Perspectives Internationales sur la Santé Sexuelle et Génésique, numéro spécial de 2020, pp. 1–10

4 Kilbourne AM et al. (2006), Advancing health disparities research within the health care system: a conceptual framework, American Journal of Public Health, 96(12):2113–2121

5 WHO (2017), Premiers soins essentiels au nouveau-né:Guide de poche de pratique clinique

6 UNICEF (2020), Fighting for Breath: Call to action – End childhood pneumonia, Global Forum on Childhood Pneumonia, Save the Children, London, and UNICEF, New York.

7 Van de Perre, P. et al. (2021), Eliminating postnatal HIV transmission in high incidence areas: need for complementary biomedical interventions, The Lancet, Health policy, vol. 397, Issue 10281, P1316–1324, 3 April, 2021

8 Deribe, K. et al. (2021), African Regional progress and status of the programme to eliminate lymphatic filariasis: 2000–2020, International Health 2021; 13, Suppl.1: S22–S27

9 République Islamique de Mauritanie (2022), Enquête Démographique et de Santé de la Mauritanie (EDSM) 2019-2021

SECTION VII

HEALTH IMPACT

Section summary

Life expectancy at birth has risen significantly since the turn of the millennium and its pace is fastest in the WHO African Region, where in 2019 it 64.5 years. There are major challenges for health and social systems to make the most of demographic change among people aged 60, a group that is seeing growth in both the number and proportion in the population. By 2030 one in six people in the world will be 60 years of age or older. Overall, the trend in average adjusted life expectancy in good health is rising in the WHO African Region, and went from 46.7 years to 56.5 years over 2010–2021. This evolution shows a clear improvement in the health and well-being of the Region's population. Women have a longer healthy life expectancy than men, with their 2019 numbers at 57.1 years and 55 years, respectively.

Early childbearing or pregnancy and delivery during adolescence can derail girls' otherwise healthy development into adulthood and have negative impacts on their education, livelihoods and health. Many girls who get pregnant are pressured or forced to drop out of school, which can impact their educational and employment prospects and opportunities. Complications of pregnancy and childbirth are the leading cause of death for girls aged 15–19 years worldwide, and the low-income and middle-income countries account for 99% of the worldwide maternal deaths among women aged 15–49 years.

Africa regularly faces an upsurge in outbreaks of vaccine-preventable diseases. The nearly 17 500 measles cases reported in the WHO African Region between January and March 2022 represent a 400% increase over the same period the previous year. Two doses of measles vaccine, given on time, provide long-lasting protection against this potentially fatal disease. Countries need to achieve and maintain 95% measles immunisation coverage to eliminate the disease. The number of countries using the rubella vaccine in their national programmes continues to rise steadily. As of December 2018, 168 out of the 194 countries in the world had introduced rubella vaccine, and global coverage was estimated at 69%. Mobility of people in the Region, including their displacement due to conflict and natural disasters, coupled with climate change, is changing the ecology and spread of infectious disease vectors, increasing the risk of outbreaks of yellow fever, cholera and malaria.

In 2021, an estimated 1.5 million people were newly diagnosed with HIV. The incidence of HIV infections globally declined by 39% between 2010 and 2020, which was far lower than the 75% target agreed on by the WHO General Assembly in 2016. Measures to slow the spread of COVID-19, along with the added pressures on health systems, have disrupted HIV services. Some 1.1 million people were newly infected with chronic hepatitis B in 2017. Now 28 African countries have a national hepatitis programme. Strategic plans for hepatitis have been developed in 21 countries and 17 countries have hepatitis treatment and testing guidelines that are aligned with WHO guidelines. Every day, more than 1 million people worldwide contract an STI. In 2020, WHO estimated that 374 million people had contracted one of the four STIs of chlamydia, with an estimated 129 million infections; gonorrhoea, with 82 million infections; syphilis, with 7.1 million infections; and trichomoniasis, with 156 million infections. The WHO African Region is particularly affected by the high prevalence of these infections, with impact on the health and quality of life of its people.

The WHO African Region continues to pay the highest price for malaria. In 2020, the Region recorded 228 million cases of malaria, or 95% of all cases, and 602 000 deaths due to malaria, or 96% of all malaria deaths. Some 80% of all malaria deaths in the Region are among under-five children.

For a sub-Saharan African woman, the risk of developing cancer by the age of 75 is 14.1%, with breast cancer – with a risk of 4.1% – and cervical cancer – with a risk of 3.5% – together accounting for half of this risk. For men, the corresponding cumulative incidence of cancer at age 75 is at 12.2%, with prostate cancer, at 4.2%, accounting for a third of this risk. The growth and ageing of the population, urbanisation and lifestyle changes will lead to a rapid increase in the cancer incidence. The absence of preventive measures, the delay in diagnosis, the lack of health workers trained in cancerology and the lack of dedicated facilities and equipment all point to the need for measures for cancer control, which if not taken quickly, will leave cancer mortality to continue to rise at the same rate as its incidence.

Birth anomalies are among the leading causes of child mortality, chronic morbidity and disability. Such diseases and abnormalities may be present at birth or be acquired later. The prevalence in sub-Saharan Africa of low birth weight among newborns measured at birth was 9.76% (95% CI: 9.63% to 9.89%). Among the 10 countries with the highest rates of preterm births in 2016 worldwide, eight were African. Some 84% of stillbirths occur in low-income and lower middle-income countries. In 2019, three out of four stillbirths occurred in sub-Saharan Africa or South Asia. Most stillbirths occur as a result of poor care during pregnancy and childbirth. The lack of investment in antenatal and prepartum services and in strengthening the capacity of nurses and midwives are major challenges. Thus, despite progress in health services to prevent or treat the causes of child deaths, progress in reducing the stillbirth rate has been slow, with a 2.3% decrease per year over the last 20 years.

The WHO African Region's maternal mortality ratio (MMR) remains very high, with more than 525 deaths per 100 000 births in 2017. But sub-Saharan Africa has seen a substantial reduction in MMR of about 38% since 2000, probably associated with improved data collection, changes in life expectancy or changes in disparities between sub-populations.

Over 157 million people in Africa were directly or indirectly affected by disasters during the decade of 2008–2018. In most cases, these were with natural hazards. The most common disasters in Africa are triggered by hydro- meteorological or climatological hazards, mainly droughts, floods, storms and cyclones. Between 2010 and 2018, natural hazard-related disasters resulted in 47 543 deaths.

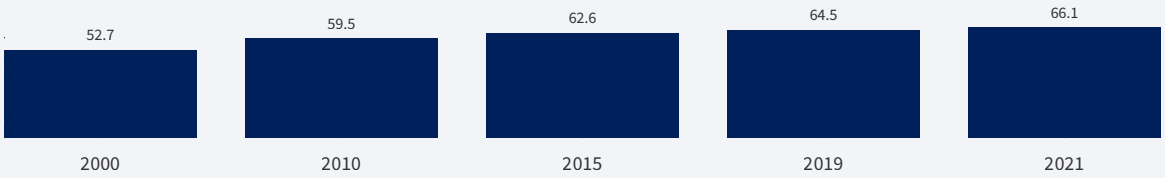
The estimated number of homicide victims in 2017 gives 6.1 per 100 000 population as the average global homicide rate. In most cases, the disparity between the regions in terms of the homicide rate is greater than when considering the absolute numbers of the homicide victims.

Adult mortality in sub-Saharan Africa is poorly studied. In the absence of efficient vital registration systems, adult mortality often must be estimated from imperfect data. Information provided by individuals can also constitute an important statistical heritage that deserves to be more fully exploited.

7.1 Life expectancy and fecundity

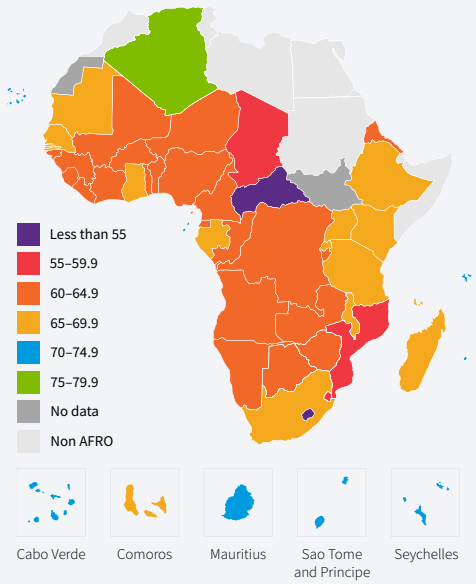
Life expectancy at birth

Figure 7.1.1. Trends in life expectancy in the WHO African Region, 2010–2019, WHO



Life expectancy at birth in 2021was 66.1 years in the Region, with 71.8 years for women and 65.5 years for men. Between 2015 and 2021 it rose faster for women, with an average of 4.9 years than for men, with an increase of 2.9 years. There were special cases of Mozambique, where women's life expectancy went up by 12.2 years, and Niger, where men's life expectancy rose by 6.7 years. On average, the life expectancy rise in the WHO African Region in recent years has been more than 13 years.

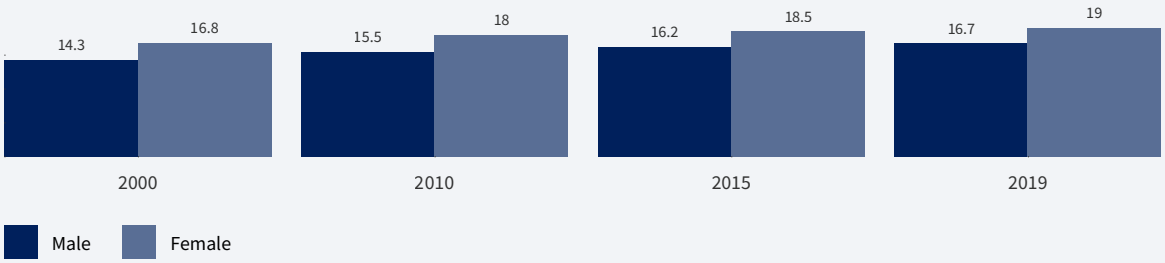
Figure 7.1.2. Life expectancy at birth (years) in the WHO African Region, 2019, WHO



More than half of the countries in the Region have a life expectancy at birth of between 60 and 65 years. However, there are a few countries on the margins of this, notably Lesotho has 50.7 years and the Central African Republic has 53.1 years. The latest data on life expectancy at birth and income group classification indicate that income does not seem to significantly influence life expectancy at birth.

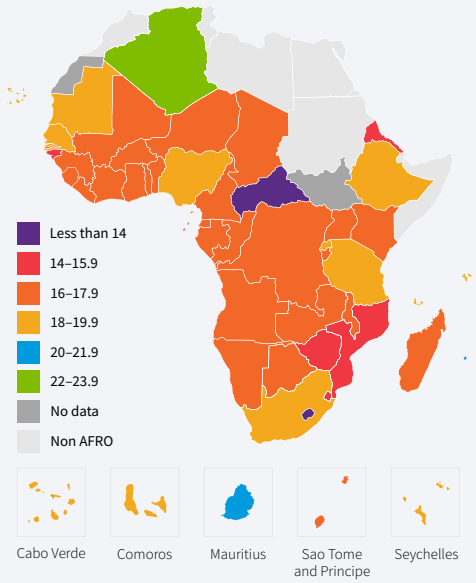
Life expectancy at age 60

Figure 7.1.3. Life expectancy at age 60 in the WHO African Region, 2000–2019, WHO



Life expectancy at age 60 is the average number of years remaining to live beyond the age of 60 under the age-specific mortality conditions of the year. Countries around the world are experiencing a growth in both the number and proportion of older people in the population. By 2030, one in six people in the world will be 60 years of age or older. Between 2020 and 2030, the population aged 60 years and over will increase from 1 billion to 1.4 billion. This population will have doubled to 2.1 billion with 426 million people aged 80 and over, triple the number in 2020.

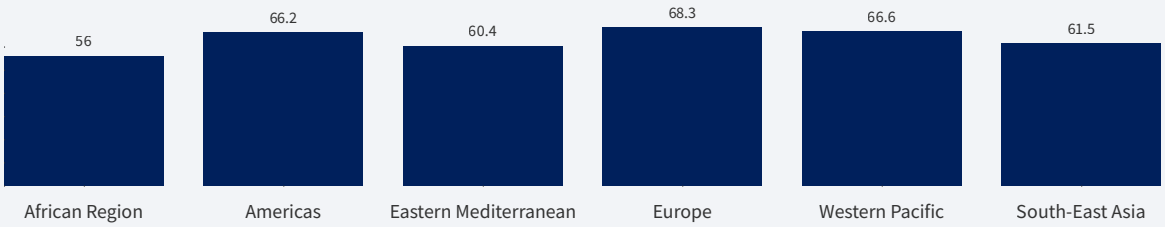
Figure 7.1.4. Life expectancy at age 60 in the WHO African Region, 2019, WHO



In Africa, as elsewhere, the rise in life expectancy is driven by a mosaic of situations. Improvement in living conditions is necessary, but so is the creation of an enabling environment. Life expectancy at 60 in the countries of the WHO African Region is concentrated between 15 and 17.7 years. Algeria and Mauritius are above this range on the one hand and Lesotho and the Central African Republic are below it on the other with 13.4 and 13.2 years of life expectancy at age 60, respectively. Lower middle-income and low-income countries are more often at the bottom of the ranking, and upper middle-income and high-income countries at the top.

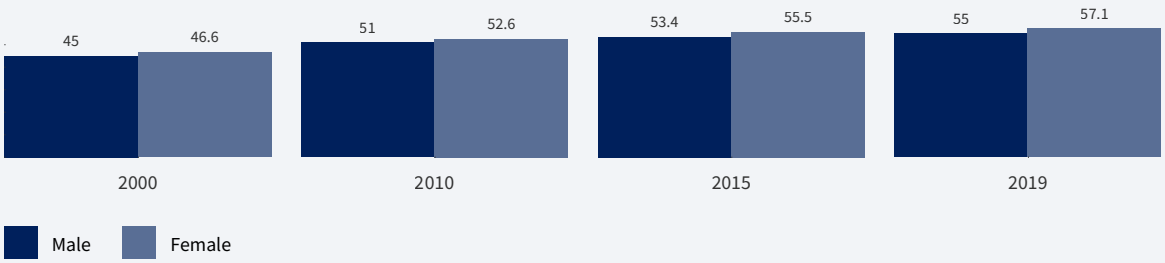
Healthy life expectancy

Figure 7.1.5. Healthy life expectancy at birth in the WHO regions, 2019, WHS



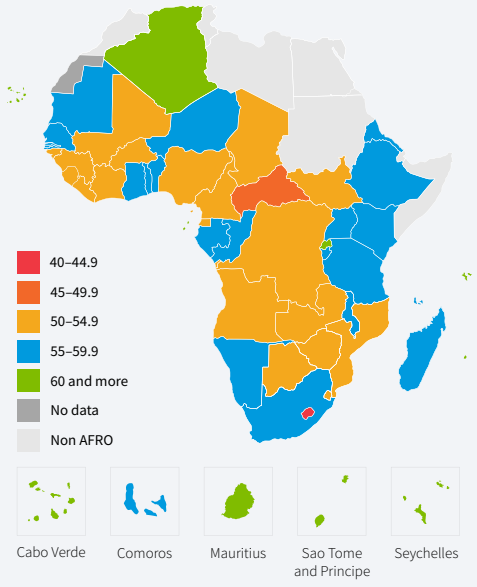
Health expectancy is defined as the number of years one can expect to live in good health. In the context of the SDGs, the analysis of health expectancy is more useful than that of simple life expectancy because it distinguishes between simply living and living in good or poor health.

Figure 7.1.6. Healthy life expectancy at birth in the WHO African Region, 2000–2019, WHO



Overall the average adjusted life expectancy in good health in the WHO African Region is showing a rising trend, and it went from 56.7 to 61.5 years over the period 2015–2021. This evolution is more favourable for women than for men over time.

Figure 7.1.7. Healthy life expectancy at birth in the WHO African Region, 2019, WHO



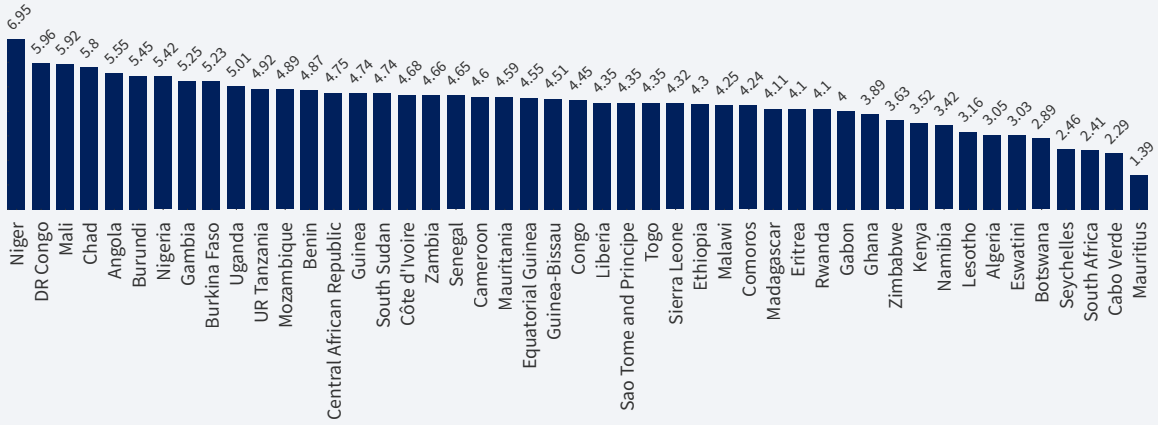
The countries with the highest healthy life expectancy levels in 2019 were Algeria with 66.4 years, Cabo Verde with 64.8 years, Seychelles with 64 years and Mauritius with 63.9 years. The income level of the countries does not explain the differences. The Decade of Healthy Ageing (2021–2030) seeks to reduce health inequities and improve the lives of older people, their families and communities through collective action in the four areas of changing how we think, feel and act towards age and ageism; developing communities in ways that foster the abilities of older people; delivering person-centred integrated care and primary health services responsive to older people; and providing older people who need it with access to quality long-term care.

Adolescent birth rate

Refer to page N° 85

Total fertility rate

Figure 7.1.8. Total fertility rate in the WHO African Region, 2015–2020, UN Population



The fertility rate is declining in all regions, although in Africa it remains high, where it was 4.5 children per woman in 2017, the highest rate of any continent. It has declined over the past 30 years from an average of 6.6 children between 1980.

Fertility levels between 2015 and 2020 showed great variability. For most countries the rate was between 3 and 6 children per woman of childbearing age. Niger stands out with almost a rate of 7 children. Eight of the 10 countries with the highest rates are low-income countries and the other two are lower middle-income countries. At the other end of the scale is Mauritius whose fertility rate is 1.39. With a few exceptions, the countries in the WHO East and Southern subregion have low fertility rates, which is a demonstrating of the demographic transition discussed in the first section of this Atlas.

7.2 Morbidity

New cases of vaccine-preventable diseases

New outbreaks of polio, yellow fever and measles were reported in many countries in the WHO African Region in 2021. For some diseases, the effects are worsening. Inequalities in access to vaccines and the disruption caused by the COVID-19 pandemic, including the severe strain on health systems capacity, have disrupted routine immunisation services in many African countries and led to suspension of immunisation campaigns. The resurgence of outbreaks of vaccine-preventable diseases is a wake-up call. Health systems could be stretched to the limit in epidemic situations with many diseases.

Table 7.2.1. New cases of vaccine-preventable diseases by WHO regions, 2020, WHO

	Congenital Rubella syndrome	Diphtheria	Japanese encephalitis	Measles	Mumps	Neonatal tetanus	Polio	Rubella	Yellow fever
African Region	28	5 387	0	115 364	94 491	1 218	65	48 83	1 110
Eastern Mediterranean	309	295	0	6 119	2 908	634	12	732	0
Europe	2	6	0	10 532	11 487	1	0	92	0
South-East Asia	248	4 002	906	9 389	390	229	1	1 514	0
Western Pacific	14	338	619	6 601	137 932	135	26	2 966	0
Global	603	10 107	1 525	148 005	247 208	2 217	104	10 187	1 110

Diseases such as diphtheria, measles, neonatal tetanus, polio, rubella and yellow fever are more pronounced in the WHO African Region.

Table 7.2.2. New cases of vaccine-preventable diseases in the WHO African Region, 2010–2020, WHO

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Congenital Rubella syndrome	16	0	69	3	14	78	14	24	18	9	28
Diphtheria	50	13	27	128	1	1 654	2 870	118	1 971	1 140	5 387
Japanese encephalitis	0	0	0	0	0	0	0	0	0	0	0
Measles	199 174	195 620	108 004	171 178	73 914	52 758	36 269	72 603	125 426	618 595	115 364
Mumps	13 836	10 808	2 401	8 147	7	28 492	100 576	41 490	54 482	38 795	94 491
Neonatal tetanus	1 937	1 908	2 049	1 449	835	1 289	1 183	979	1 130	1 151	1 218
Polio	709	398	168	93	51	18	5	22	65	318	65
Rubella	2 754	16 190	10 850	13 739	7 402	5 302	4 157	6 166	11 787	6 027	4 883
Yellow fever	714	2574	246	268	31	35	1040	53	734	360	1110

A number of the vaccine-preventable diseases can be described as having been on the rise in 2020. The WHO African Region accounts for almost all new cases of yellow fever and has had the most cases since 2011. Measles declined globally in 2020 after hitting record numbers in 2019. It is still a real concern for many countries and regions other than Africa.

Twenty countries in the WHO African Region reported measles outbreaks in the first quarter of 2022, eight more than in the first quarter of 2021. The nearly 17 500 measles cases reported in the Region between January and March 2022 represented a 400% increase over the same period the previous year. Two doses of measles vaccine, given on time, provide long-lasting protection against this potentially fatal disease. Countries need to achieve and maintain 95% immunisation coverage to eliminate measles. Among the seven countries in the Region reporting new mumps cases in 2020, Kenya accounted for 56%, Ethiopia and Ghana about 15% each, Burkina Faso almost 12% and Rwanda, Senegal and Comoros the rest.

The elimination of maternal and neonatal tetanus objective, meaning having a prevalence of less than 1 neonatal tetanus case per 1000 live births in every district each year, is based on four strategies: (i) vaccination of pregnant women and women of reproductive age with three doses of tetanus toxoid-containing vaccine; (ii) conducting supplementary immunisation in selected high risk areas; (iii) promoting clean births and cord care; and (iv) conducting surveillance, including case investigation and response.[1] By the end of 2019, six Member States[2] had validated their elimination of maternal and neonatal tetanus at the national level. Of the cases of neonatal tetanus newly reported in 2020 in the WHO African Region, more than 60% were from Chad, the Central African Republic, Angola and Mozambique. More than half of the countries reported at least one case in 2020.

Rates of congenital rubella syndrome are highest in the WHO regions of Africa and South-East Asia, where vaccination coverage is the lowest. Of the 35 countries reporting new cases, Mozambique stood out with 28% of the cases, followed by the Democratic Republic of the Congo and Nigeria with 18% of the cases each, and then Burkina Faso, Zambia and South Africa each with 16%. The rest of the cases were distributed among the other countries.

Thirteen countries in the WHO African Region reported new outbreaks of yellow fever in 2021 compared with nine countries in 2020 and three countries in 2019. By the end of 2019, except for Ethiopia, Uganda and South Sudan, all countries at high risk of yellow fever had introduced routine national yellow fever vaccination.

New cases of IHR-notifiable diseases and other notifiable diseases – meningitis

Some 5–10% of the population carry the meningococcal germ in their throat at any one time. The disease mainly affects babies, preschool children and young people. An outbreak can easily be started by the presence of a sick person in a crowded place or within a family in a confined space. Preparedness and response to a meningitis epidemic require comprehensive planning, which is also essential for progress towards the control and elimination of the disease in Africa. With its goal to eliminate meningitis by 2030, WHO recommends epidemic prevention and control, diagnosis and treatment; disease surveillance; advocacy and information; and aftercare for survivors. Currently, meningitis A vaccine has been introduced into routine immunisation programmes in 11 Member States[3] that lie in the African meningitis belt.

New cases of IHR-notifiable diseases and other notifiable diseases – cholera

The cholera cases reported to WHO have remained high in recent years. In 2020, 323 369 cases and 857 deaths were reported in 24 countries.[4] The discrepancy between these figures and the estimated disease burden arises from the fact that many cases are not recorded because of limitations in the surveillance systems and concerns about the negative impacts on trade and tourism. A multifaceted approach is key to control cholera and to reduce its deaths. The approach used is a combination of surveillance; provision of clean water, sanitation and hygiene; social mobilisation; treatment of those affected; and administration of oral cholera vaccines. Cholera surveillance should be part of an integrated disease surveillance system that should include feedback at the local level and information sharing at the global level.

New cases of IHR-notifiable diseases and other notifiable diseases – lassa fever

An estimated 5000 people die from Lassa fever in West Africa each year and 58 million people are at risk of contracting the virus. In particular, the disease can be serious in pregnant women, with a fetal mortality rate of around 85% and a 30% increase in maternal mortality in the third trimester. It is also an important cause of paediatric hospitalisations in infants up to 2 years old, with high case fatality.

1 WHO (2019), WHO guide to using lot quality assurance-cluster sampling surveys to assess neonatal tetanus mortality. Geneva.
2 Angola, Guinea, Mali, Nigeria, Central African Republic and South Sudan.
3 Burkina Faso, Central African Republic, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Mali, Niger and Nigeria.
4 WHO (2021) Cholera Annual Report 2020, Weekly Epidemiological Record 37 September 2021, 96:445–460.

HIV prevalence rate (%)

Some 38.4 million[5] people were living with HIV in 2021 globally and 1.5 million people became newly infected with the virus. In Africa, 25.6 million people were living with HIV that year. These estimates indicate that the HIV prevalence in the African population was about 2.3% in 2021.

World Bank data, also available from UNAIDS sources but covering people aged 15–49 years living with AIDS, report a HIV prevalence of 3.6% for 2020. In 2021 Africa accounted for two thirds of the people living with HIV worldwide.

HIV incidence rate

Refer to page N° 76

Hepatitis B surface antigen prevalence

Hepatitis B surface antigen (HBsAg) is the most important input in the estimation of hepatitis B incidence, which is defined as number of new hepatitis B infections per 100 000 population in a country. A positive or reactive HBsAg test result means that the person is infected with hepatitis B. The estimated overall seroprevalence of HBV surface antigen remains high in African Region at 6.1%[6] and the Western Pacific Region at 6.2%. According to the WHO, HBV infection affects more than 5% of the local population in sub-Saharan Africa, with levels in West Africa at more than 8% in and reaching 15% in some areas. A Rwandan study[7] found the overall prevalence of HBsAg in the country to be 3.9% (12 865/326 652). HBsAg positivity was most prevalent in the over-35 years age group, at 4.2%, and in men, at 4.3%. Most of the studies in East African countries have focused on specific subpopulations, for example people living with HIV, and data for the general populations are mostly unavailable.

Hepatitis B incidence

Almost 1.1 million people were newly infected with chronic hepatitis B in 2017. In 2020, the WHO African Region accounted for 26% of the global burden of hepatitis B and C, with 125 000 associated deaths. About 70% of the world's hepatitis B cases are concentrated in Africa. In the WHO African Region, hepatitis B is highly endemic and probably affects 5% to 8% of the population, especially in West and Central Africa. Twenty-eight African countries now have a national hepatitis programme. Hepatitis strategic plans have been developed in 21 countries, while 17 countries have treatment and testing guidelines aligned with WHO guidelines. The first African hepatitis summit was held in Kampala, Uganda, in 2019 under the theme "Eliminating viral hepatitis in Africa: implementing a viral hepatitis strategy" with the objectives of developing or working towards the implementation of action plans, sharing lessons learnt in the fight against viral hepatitis and building a community of practice for African countries. Sixty million people are living with chronic hepatitis B in the Region, 4.8 million of whom are under-five children.

Sexually transmitted infections (STIs) incidence rate

Every day, more than 1 million people contract an STI worldwide. In 2020 WHO estimated that 374 million people had contracted one of chlamydia, with 129 million cases; gonorrhoea, with 82 million cases; syphilis, with 7.1 million cases, or trichomoniasis, with 156 million cases. The people contracting these four types of curable STIs in the Region was estimated at 63 million in 2012, accounting for 18% of the global incidence. An estimated 490 million people are living with uncomplicated herpes and 300 million women are estimated to be carriers of the human papillomavirus. The WHO African Region is particularly affected by the high prevalence of these infections. STIs have a profound impact on the health and quality of life of a population, including from the high risks of fetal and neonatal morbidity and mortality from syphilis during pregnancy, cervical cancer from human papillomavirus infection, infertility mainly from gonorrhoea and chlamydia, and sexual transmission of HIV infection.

5 UNAIDS (2022), Epidemiological estimates 2022.
6 Spearman C.W. et al. (2017), Hepatitis B in sub-Saharan Africa: strategies to achieve the 2030 elimination targets. Lancet Gastroenterol Hepatol. 2017;2(12):900.
7 Makuza, JD. et al. (2019), Prevalence of hepatitis B surface antigen (HBsAg) positivity and its associated factors in Rwanda, BMC Infectious Diseases, 2019 19:381

TB incidence rate

An estimated 9.9 million people worldwide will have developed TB by 2020 of whom 5.5 million will be men, 3.3 million will be women and 1.1 million will be children. TB is present in all countries and all age groups. Of all new TB cases in 2020, 86% occurred in the 30 countries with the highest burden of the disease. Two thirds of the cases are concentrated in eight countries led by India, then China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh and South Africa. The incidence of TB globally is declining by about 2% per year. The cumulative decline between 2015 and 2020 was 11%, just over half of the target set in the Strategy to End TB, which aimed for a 20% reduction during that period. An estimated 66 million lives were saved by TB diagnosis and treatment between 2000 and 2020.

Malaria parasite prevalence among children aged 6–59 months

The WHO African Region continues to pay the highest price for malaria. In 2020, the Region recorded 228 million malaria cases, which was 95% of all cases, and 602 000 malaria deaths, which was 96% of all malaria deaths. Of all the malaria deaths in the Region 80% are among under-five children. Several new vector control tools and technologies have been submitted to the WHO in 2022 for approval, calling for new recommendations if they are found to be effective. These include new types of insecticide-treated nets, space-based mosquito spraying, genetic forcing techniques, and sweet baits designed to attract and kill Anopheles mosquitoes. WHO welcomes the recent approval of new medicines. For children, there has been a scientific breakthrough in the form of a malaria vaccine, which is an additional tool to reduce malaria cases and deaths in children in countries with moderate to high transmission. WHO estimates that the vaccine, if deployed on a large scale, could save the lives of an additional 40 000 to 80 000 African children each year.

Malaria incidence rate

From 2000 to 2019, the Region made considerable progress in reducing its malaria burden. Disease incidence, that is cases per 1000 population at risk of malaria, had fallen from 368 to 222.9. From 2019 to 2020, malaria cases increased from 213 million to 228 million, the malaria incidence rate rose from 222.9 to 232.8 cases per 1000 population at risk of malaria, malaria deaths increased from 534 000 to 602 000, and the mortality rate rose from 56 to 61.5 deaths per 100 000 population at risk of malaria. Progress has stagnated in countries with moderate or high malaria transmission. COVID-related consequences are also having an impact on this disease.

Nigeria and Congo account for just over one third of the Region's malaria cases,[8] and the deaths in these two countries represents 45% of all deaths in the Region. The Region has not met the AWG targets for 2020 for reductions in the disease incidence or the 2020 targets for reductions in disease incidence and mortality. The results are 38% and 40% lower than these targets, respectively.

Cancer incidence

Cancers already account for 10% to 20% of morbidity on the African continent.[9] According to the United Nations, the burden of cancer is expected to almost double in the next 20 years as the population ages, to reach 1.5 million new cases and 1 million deaths annually by 2040. A paper by the International Agency for Research on Cancer (IARC) published in *The Lancet Oncology* and echoed by the UN report estimated that there would be 801 392 new cancer cases and 520 158 cancer deaths yearly in sub-Saharan Africa by 2020. Female breast cancer, with 129 400 cases, and cervical cancer, with 110 300 cases, account for two out of the 10 common cancers diagnosed. The most common types of cancer diagnosed in women are breast cancer, which ranked first in 28 countries, and cervical cancer, which ranked first in 19 countries. The most common types of cancer in men were prostate cancer, with 77 300 case, liver cancer, with 24 700 cases, and colorectal cancer, with 23 400 cases. Prostate cancer has the highest incidence among the cancers in men in 40 sub-Saharan African countries.

8 WHO (2021), Malaria report 2021, Regional data and trends

9 Gombé, C., Godet, J. and Gueye, S. (2017), les Cancers en Afrique francophone, Alliance des Ligues francophones Africaines et Méditerranéennes contre le cancer (ALIAM), Paris.

The risk for a sub-Saharan African woman to develop cancer by the age of 75 is 14.1%, with breast cancer, at 4.1%, and cervical cancer, at 3.5%, accounting for half of this risk. For men, the corresponding cancer incidence at age 75 is 12.2%, with prostate cancer at 4.2%, accounting for a third of this risk. Cancer occurs at any age, even in children, but its incidence increases almost exponentially from the age of 40 in women and 45 in men.

The growth and ageing of the population, urbanisation and lifestyle changes will lead to a rapid increase in cancer incidence. The absence of preventive measures, the delay in diagnosis, the lack of health workers trained in cancerology, and the lack of dedicated facilities and equipment all mean that, if measures are not taken quickly to tackle cancer, mortality levels associated with it will continue to rise at the same rate as incidence. This scourge is increasingly affecting populations in low-income and middle-income countries, where poverty, inadequacies in health systems and in training of health professionals, poor health education, and social or cultural prejudices are important challenges.

Percentage of births with birth defects or anomalies

Birth anomalies are among the leading causes of child mortality, chronic morbidity and disability. There are currently no reliable estimates of the number of children born with a serious congenital disorder with genetic, infectious or environmental causes.[10] A study published in the *BMJ Global Health* journal that had been conducted in 51 hospitals providing paediatric surgical care in 19 sub-Saharan African countries from October 2016 to April 2017, shows that in sub-Saharan Africa, gastroschisis and anorectal malformation resulted in 75.5% and 11.2% deaths, respectively, compared with 2% and 3%, respectively, in high-income countries. Congenital malformations involving the intestinal tract have particularly high mortality rates in low-income and middle-income countries, as many of the cases require emergency surgical care after birth. Member States in the Africa Region need to improve their process for early detection of congenital diseases to prevent child deaths.

Prevalence of congenital heart defects

The most common serious congenital disorders are heart defects, neural tube defects and Down's syndrome. Congenital heart disease is a cardiac abnormality that occurs during the formation of the heart in the intrauterine life. The incidence is estimated to be 7–8 per 1000 births. Several studies reported by African authors show variable but comparative prevalence among the countries, but the studies[11] all concordantly underline the worrying nature of congenital heart disease in Africa. The differences in the prevalence of congenital disorders could be related to factors such as the selection criteria for adult patients, the paediatric series or the ultrasound series.

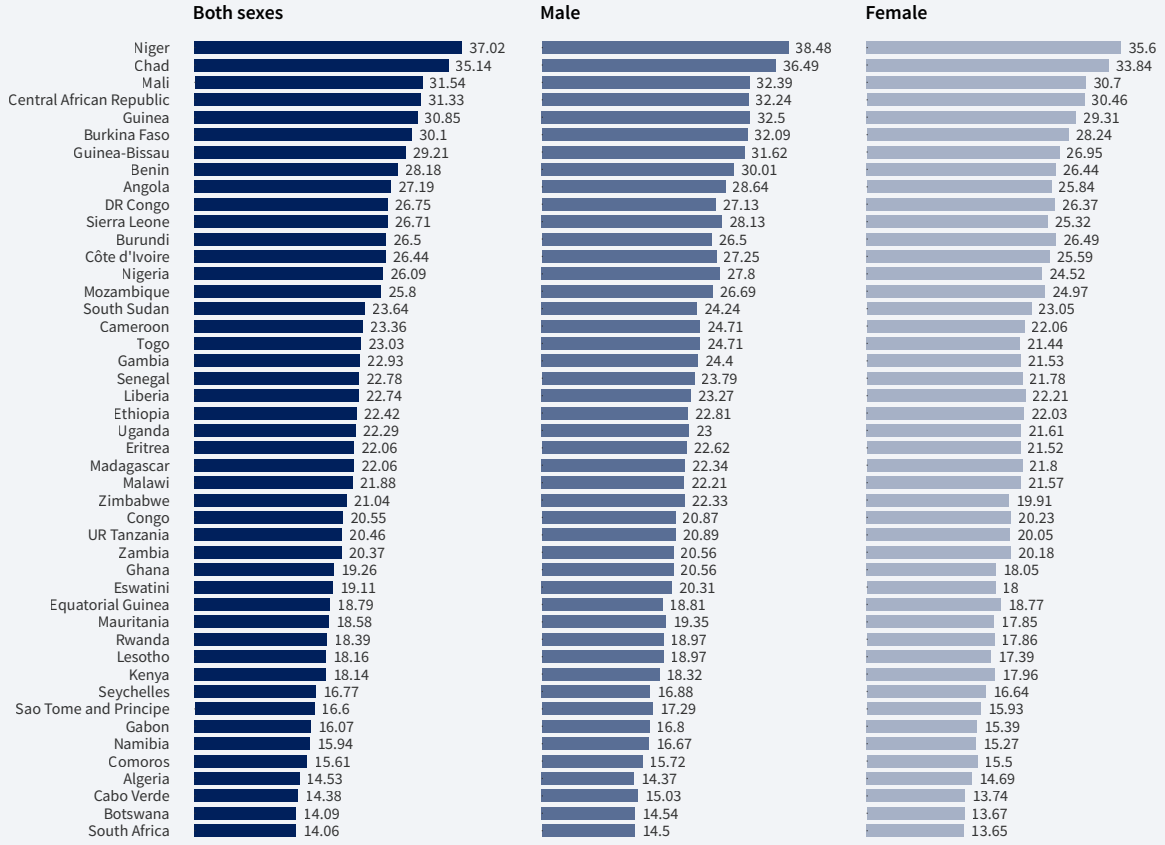
The group with a high frequency of congenital heart disease is aged 1 month to 30 months and it accounts for 55% of the cases. Congenital heart disease in children is a reality in Africa, but its frequency in all the series reported is certainly an underestimate because, except in South Africa, accessibility of Doppler echocardiography is difficult. The penetration of cardiac ultrasound in hospital practice, especially for antenatal screening, remains low in the countries of the WHO African Region, and staff experienced in rare paediatric cardiology are mostly confined to large urban centres.[12]

10 WHO (2010), Congenital malformations, Report of the Secretariat, A63/10.
11 Kinda, G. and al (2015), "Congenital heart disease: epidemiological and echocardiography aspects about 109 cases in Pediatric Teaching Hospital Charles de Gaulle (CDG CHUP) in Ouagadougou, Burkina Faso. Pan Afr Med J. 2015; 20: 81. Published online 29 January 2015, accessed 30 August 2022
12 Les cardiopathies congénitales dans les pays en développement: défis et perspectives (2018) In Annales Africaines de médecine, Editorial Volume 12 n°1: décembre 2018 available at https://anafrimed.net/editorial-les-cardiopathies-congenitales-dans-les-pays-en-developpement-defis-et-perspectives/ accessed 30 August 2022

Figure 7.2.3. Prevalence of congenital heart defects (per 1 million births) in the WHO African Region, 2010–2019, IHME

The prevalence of heart defects in Africa is higher in boys than in girls. A decline in the prevalence of congenital heart defects was observed in the WHO African Region between 2010 and 2019. The level of the decline over the decade was 7.4% per million births, with the level going from 24.4 per million newborns to 22.6. The decline affected both female and male newborns, although it was more marked among boys at 8.2% than among girls at 7.4%.

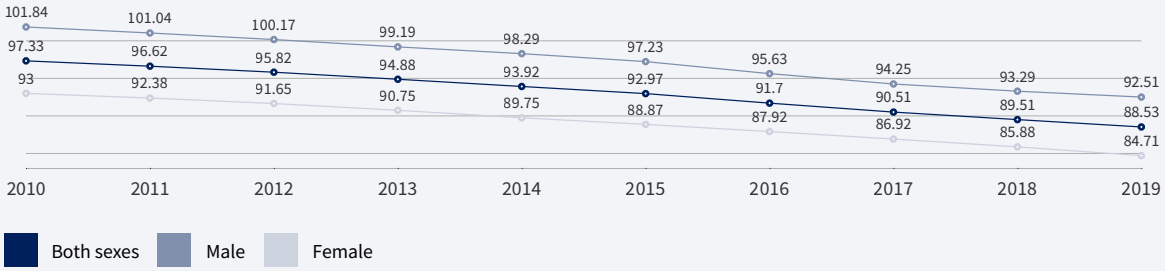
Figure 7.2.4. Prevalence of congenital heart defects (per 1 million births) in the WHO African Region, by sex and by country, 2019, IHME



The prevalence of congenital heart defects in 2019 was 22.6 per 1 million births, and there was a difference between girls, who were less exposed, and boys. Except for Burundi, where there was perfect equality, and four other countries,[13] where only data for boys were available, this difference is respected. The countries with the highest prevalence of congenital heart defects also had very low incomes, such as Niger, Chad, Mali, Central African Republic and Guinea.

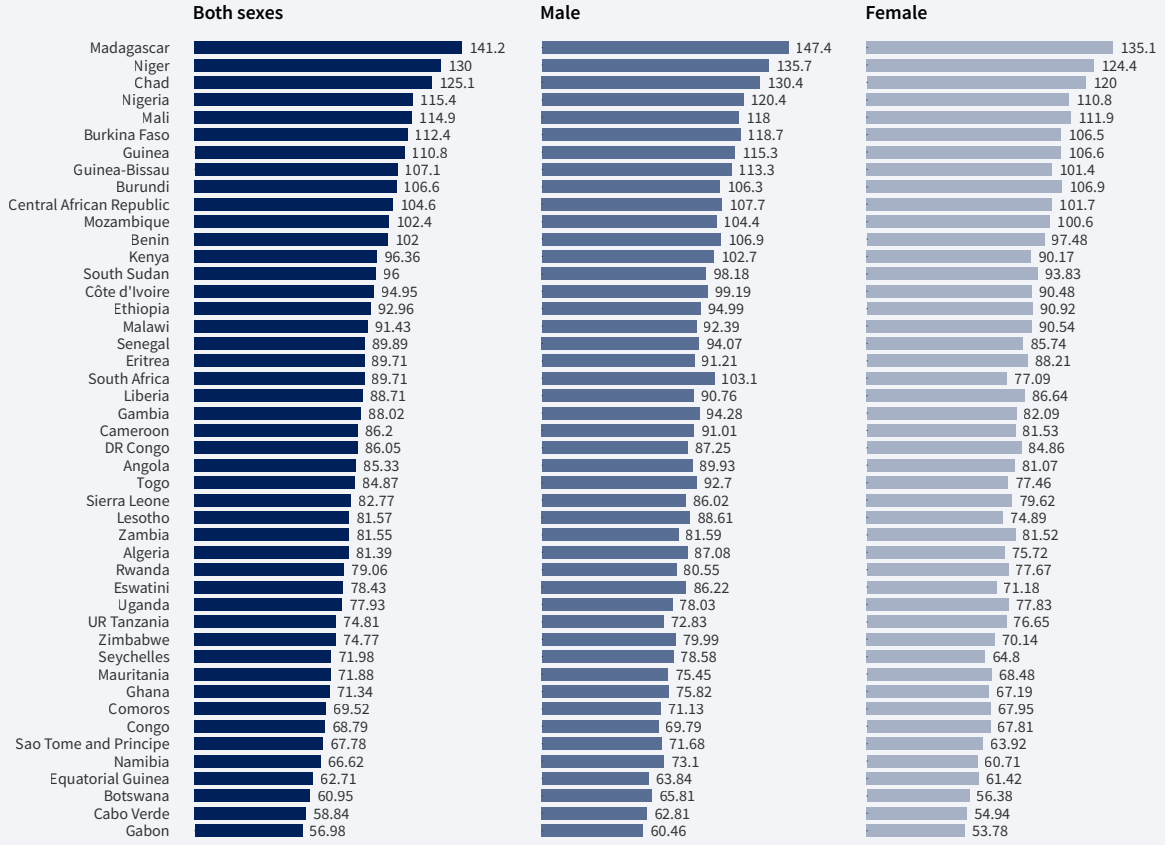
13 Zimbabwe, Tanzania, Ghana and Eswatini

Figure 7.2.5. Prevalence of births with defects/anomalies (per 1 million births) in the WHO African Region, by sex, 2010–2019, IHME



The prevalence of births with defects in the WHO African Region shows sex differences, with boys being more affected than girls. The prevalence of anomalies per 1 million births in 2019 was 92.51 for boys and 84.71 for girls, with the average at 88.53. For both boys and girls, there was a continuous and marked decline in the prevalence between 2010 and 2019, averageing 9.2% for boys and 8.9% for girls.

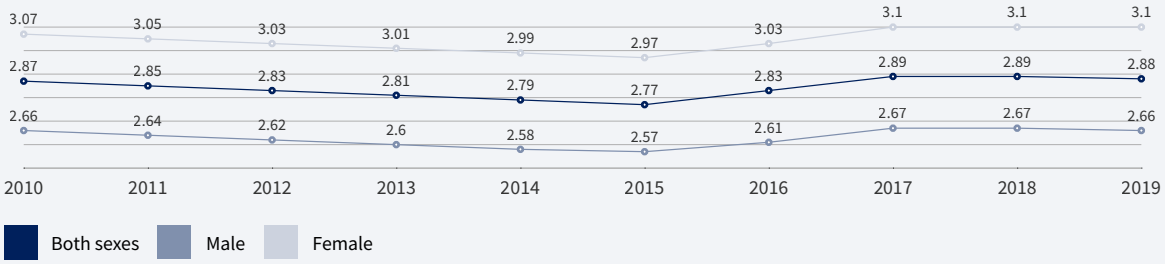
Figure 7.2.6. Prevalence of births with defects (per 1 million births) in the WHO African Region, by sex and country, 2019, IHME



The average prevalence of congenital anomalies in the WHO African Region is 88.5 per million births, but differences exist between countries, ranging from 141.2 to 68.8. At the country level, Madagascar, Niger, Chad, Nigeria and Mali are the countries with the highest prevalence of congenital anomalies.

Prevalence of congenital neural tube defects

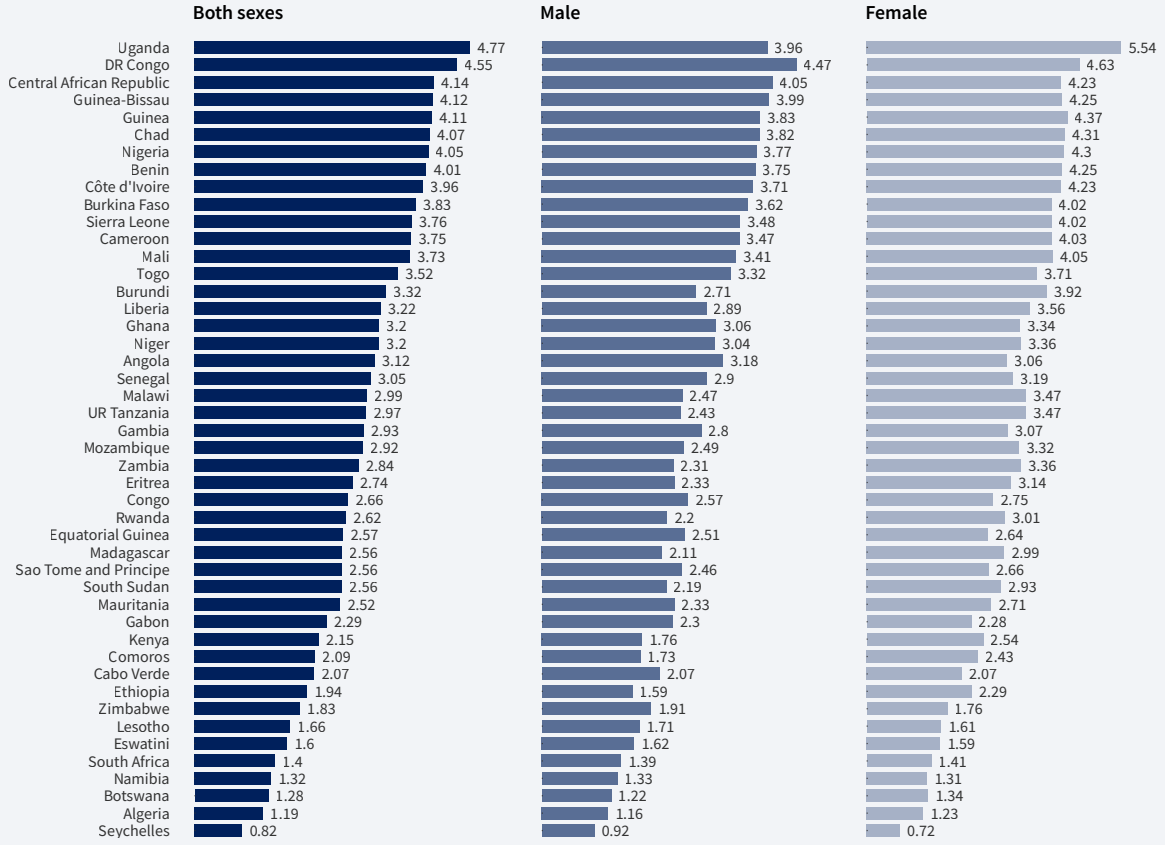
Figure 7.2.7. Prevalence of congenital neural tube defects (per 1 million births) in the WHO African Region, by sex, 2010–2019, IHME



Neural tube defects are among the most serious and common of congenital anomalies. They are embryopathies that occur in the first weeks of an embryo's intrauterine life during the genesis of the central nervous system.

Vitamin B9 as folic acid or folate is essential for many body functions. Folate is useful for DNA synthesis and repair, among other things, and is involved in the rapid division and growth of cells. Periconceptional folic acid supplementation in cases of deficiency in a woman is effective in preventing neural tube defects.[14] Over the 10 years between 2010 and 2019, the prevalence of neural tube defects has remained relatively stable, affecting an average of 2.88 births per million newborns, although there was a slight decline in the middle of the decade, with the level dropping to 2.77 defects per million births. Female newborns are affected more often than are male newborns.

Figure 7.2.8. Prevalence of congenital neural tube defects (per 1 million births) in the WHO African Region, 2019, IHME



14 Bantouré, O. (2017) Knowledge, attitudes and prevention practices of neural tube anomalies in women attending prenatal consultation in the Niamey-Niger Region

In the WHO African Region, the gender differences in neural tube defects observed at the regional level are not always marked within the countries. The countries with the lowest risk are Ethiopia, Zimbabwe and Eswatini. And those with the highest prevalence of neural tube defects are Uganda and the Democratic Republic of the Congo. When gender difference is considered, the prevalence ranking for factors is sometimes reworked.

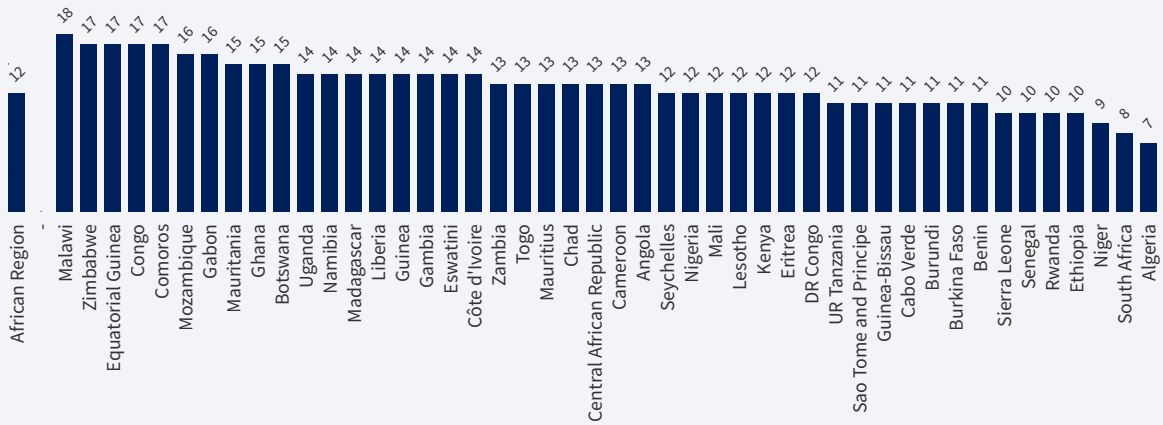
Early motherhood, multiparity and lack of access to certain health services are among the risk factors incriminated. But also the lack of a national policy for the fortification of certain foods with folic acid, the lack of analysis of health data on congenital malformations and of information on knowledge, attitudes and prevention practices, etc. are series of priorities that states must set themselves in order to limit the consequences of congenital anomalies and prevent them.

Prevalence of low birth weight

Birth weight is one of the main determinants of perinatal survival, and low birth weight is associated with infant morbidity and mortality and the risk of developmental disorders and diseases in later life. The prevalence of low birth weight in sub-Saharan Africa among newborns weighed at birth was 9.76% (95% CI: 9.63% to 9.89%). New female sex, non-participation in personal health care decision-making and wide intergenerational intervals, the woman's relationship status (divorced/separated) and twin pregnancies are associated with increased chances of low birth weight. On the other hand, a high education level for the woman and husband, antenatal care, older maternal age and multiparity are associated with a reduced incidence of low birth weight. A study[15] based on prevalence data from 35 sub-Saharan countries found the magnitude of low birth weight to be high in these countries. The findings suggest that it is important to place greater emphasis on women who lack support, have multiple pregnancies or are in poor health care decision-making circumstances.

Prevalence of preterm births or preterm birth rate

Figure 7.2.9. Prevalence of preterm births (per 100 live births) in the WHO African Region, 2010, WHO



Each year, nearly 15 million babies are born prematurely, that is before completing 37 weeks of gestation, which represents more than 1 in 10 newborns, with the rate varying between 5% and 18%. The prevalence is increasing in Africa. More than 60% of the global preterm births occur in Africa and South Asia. This is a global problem, however, and even though the poorest countries have an average of 12% of babies born prematurely, higher income countries are not very far behind with 9%.

15 Tessema, ZT. (2021), Prevalence of low birth weight and its associated factor at birth in sub-Saharan Africa: A generalised linear mixed model.

Among the 10 countries with the highest rates of preterm births[16] per 100 live births in 2016, eight were African.[17] Survival rates for preterm babies show striking inequalities between countries. In low-income countries, half of all babies born at 32 weeks (2 months too early) die because they lack care that could be provided affordably such as warmth, breastfeeding and basic care for infections and respiratory problems. Continuity of obstetric care where effective obstetric services exist reduces prematurity by about 24%. Quality care before, between and during pregnancies ensures that a woman has a positive pregnancy experience.

The five countries with the highest prevalence of prematurity in 2010, all of them with a prevalence of more than 17% were Malawi, Zimbabwe, Equatorial Guinea, Republic of the Congo and Comoros. Algeria, South Africa and Niger had prematurity rates that were lower than 10%. The prematurity has a socioeconomic component and a sociocultural dimension. The average rate of prematurity of in the Region in 2010 was 12%, and only 14 countries had rates below that.

BOX 4. **Neonatal outcomes**

The weight of a newborn and its gestational age are two correlated neonatal outcomes that determine its survival. Most of the time, pregnant women and even most professionals date the pregnancy from the last menstrual period. The importance of knowing the gestational length is so as to measure the child's ability to adapt to a pulmonary respiratory mode if born before term, that is before 260 days of the pregnancy. This precision will also play a role in qualifying the mortality to be attributed to a newborn in case of death or stillbirth. This element is still crucial in classifying the type of prematurity according to the WHO definition, as well as in determining the vital prognosis, risk of disability or the life expectancy a priori or viability. A pregnancy lasts on average 40 weeks. A baby born before the 37th week is called premature. The definition of prematurity has evolved over time. No births are known to have occurred before the 22nd week of gestation and very few births have occurred after the 44th week. There are many causes of prematurity, including medical conditions affecting the pregnant woman, such as genitourinary infections, generalised infections such as malaria and TB etc., uterine anomalies and placental problems, and also threats of hypertension, diabetes, sickle cell disease, etc. In addition, there are risk factors such as being too young or too old, multiparity, smoking, alcohol, unhealthy living conditions, low level of education, domestic violence, pollution and diet. A preterm delivery heightens the risk of preterm delivery for the next child by three times. The facilities in neonatal and intensive care units must be able to meet the demands of premature and low birth weight babies, with qualified and trained staff to save the lives of newborns. The prevention of low birth weight (less than 2500 grams) and prematurity (younger than 37 weeks) is a public health challenge where health promotion is an approach to be considered, especially in the African context.

16 Liu, L. et al (2016) Global, regional, and national causes of under–5 mortality in 2000–15: an updated systematic analysis with implications for the Sustainable Development Goals. Lancet. 2016;388(10063):3027–35.

17 Malawi (18,1%), Comoros (16,7%), Congo (16,7%), Zimbabwe (16,6%), Equatorial Guinea (16,5%), Mozambique (16,4%), Gabon (16,3%) and Mauritania (15,4%).

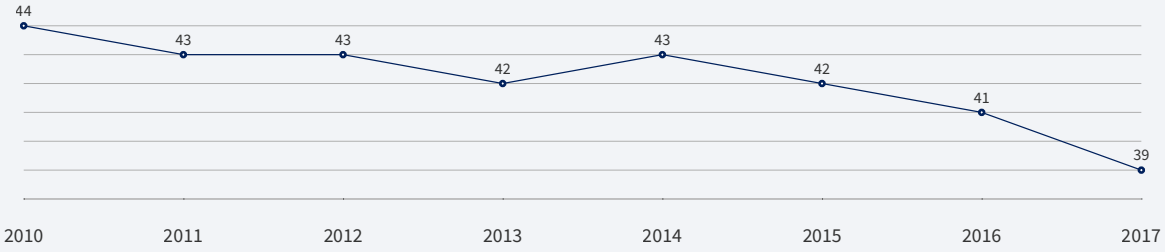
7.3 Mortality by cause

Maternal mortality ratio

Refer to page N° 70

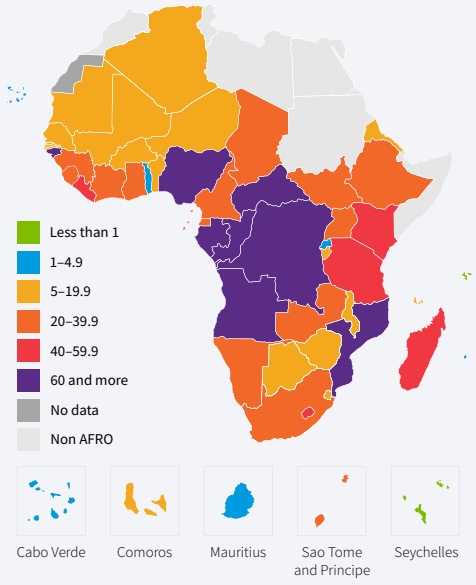
TB mortality rate

Figure 7.3.1. TB mortality rate (per 100 000 population) in the WHO African Region, 2010–2017, WHO



Africa has had more than 500 000 deaths from TB each year, with nearly 2.5 million cases reported in 2019, representing 25% of the global disease burden. Yet TB screening and treatment is free in all countries. The mortality rate from TB in the WHO Region declined between 2010 and 2017, going from 44 per 100 000 people to 39 per 100 000.

Figure 7.3.2. TB mortality rate (per 100 000 population) in the WHO African Region, 2017, WHO



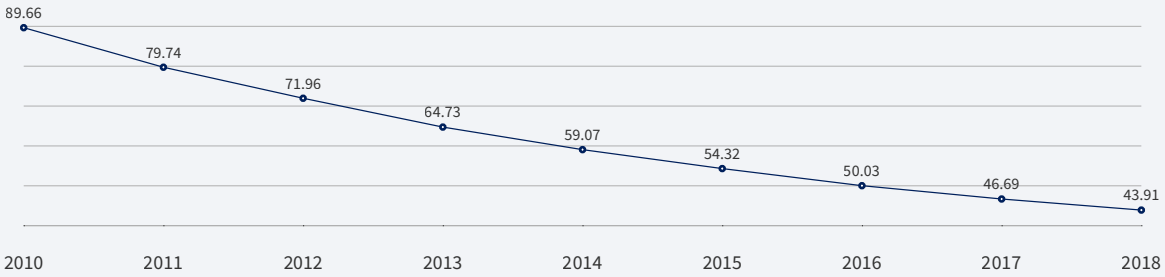
The differences in TB mortality among the countries in the Region are marked. A large proportion of the countries in the West African subregion have the lowest TB mortality rates, while high rates are more prevalent in the Central African subregion, while the rates in East and Southern African subregion seem to be between these two.

TB mortality rates vary widely. They range from 98 per 100 000 people in Gabon to 0.3 per 100 000 people in the Seychelles. There appears to be no relationship between TB mortality rates and the income level of the countries. For example, with Gabon, a high middle-income country, has the highest TB mortality rate in the WHO African Region.

AIDS-related mortality rate

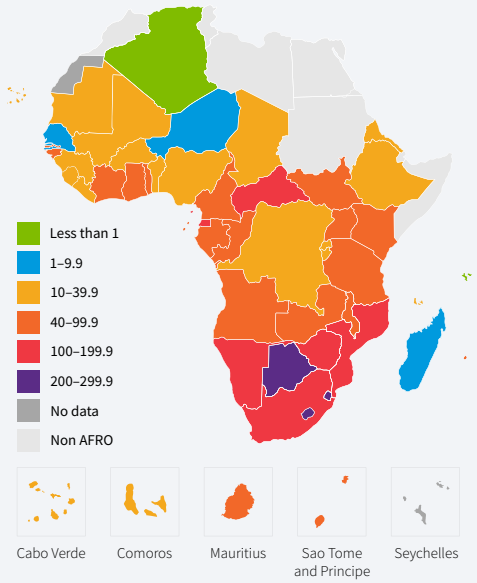
The number of the global AIDS-related deaths in 2021 was estimated to be around 650 000, compared with 2 million [1.6 million–2.7 million] in 2004 and 1.4 million [1.1 million–1.8 million] in 2010. AIDS-related deaths have declined by 68% since their peak in 2004 and by 52% since 2010. The decline levels since 2010 are 57% among women and girls and 47% among men and boys.

Figure 7.3.3. AIDS-related mortality rate (per 100 000 population) in the WHO African Region, 2010–2018, WHO



The decline in AIDS mortality is holding steady. Based on data for 2021 with 420 000 (340 000–530 000) as the estimated deaths for the year, the mortality rate would be around 37.4 per 100 000 people in the WHO African Region. Among the countries in the Region, AIDS mortality rates varied widely for 2018, from 289.3 deaths per 100 000 people for Lesotho to 0.5 deaths per 100 000 people for Algeria.

Figure 7.3.4. AIDS-related mortality rate (per 100 000 population) in the WHO African Region, 2018, WHO

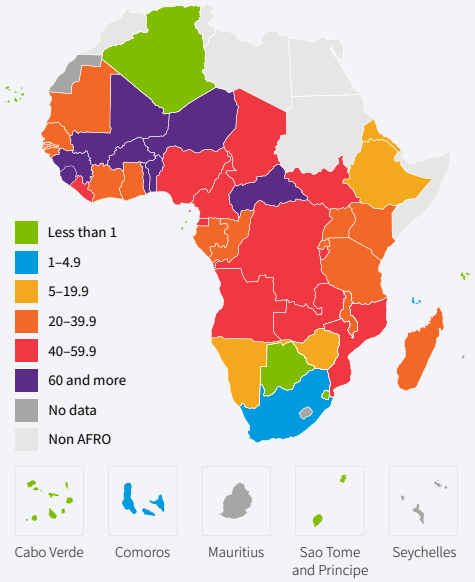


Member States from the high-middle incomes group were among the top half of the countries with the highest AIDS-related mortality rates in 2018. The countries within the East and Southern Africa subregion had higher mortality rates than the other countries in the Region, with the rates being much higher in the southernmost part. The West African subregion had more favourable data for AIDS-related deaths within its countries.

Malaria mortality rate

The new methodology applied in 32 countries in sub-Saharan Africa to determine the contribution to death levels by different causes in 2020 found malaria to have been responsible for an estimated 627 000 deaths, 69 000 more than the previous year. Almost two thirds (47 000) of these deaths were due to disruptions during the COVID-19 pandemic, while the rest were associated with the change in the WHO methodology and were independent of the disruptions associated with COVID-19.

Figure 7.3.5. Malaria mortality rate (per 100 000 population) in the WHO African Region, 2018, WHO



The new estimates on malaria deaths highlight the fact that the WHO African Region continues to bear the heaviest burden of malaria, with 96% of all malaria deaths in 2020 occurring in the Region and with under-five children under being the primary victims of the disease and constituting 80% of all malaria deaths in the Region. The downward trend in the malaria mortality rates has been maintained since 2000. Malaria mortality fell from 30.1 deaths per 100 000 population at risk of malaria in 2000 to 13.8 in 2019 and to 15.3 in 2020. An estimated 10.6 million malaria deaths were averted worldwide between 2000 and 2020, 95% of which were averted in the WHO African Region.

Malaria mortality rates are correlated with countries' income levels. West and Central African countries are more vulnerable to the disease than are East and Southern Africa countries. The *WHO global technical strategy for malaria control 2016–2030* (GTS) calls for reducing of malaria incidence and mortality rates by at least 40% by 2020. In 2020, the global mortality rate was 15.3 deaths per 100 000 people at risk of malaria, while the target was 8.9, a gap of 42%. The situation remains precarious, especially in sub-Saharan Africa, where the burden of malaria is still unacceptably high and where the convergence of several threats poses an additional challenge to efforts to control the disease.

Premature noncommunicable disease (NCD) mortality

Refer to page N° 80

Mortality from household and ambient air pollution

Refer to page N° 86

Mortality from unsafe water, unsafe sanitation and lack of hygiene

Refer to page N° 86

Mortality from unintentional poisoning

Refer to page N° 87

Suicide rate

Refer to page N° 81

Death rate due to road traffic injuries

Refer to page N° 83

Number of deaths, missing persons and persons affected by disaster per 100 000 people

Refer to page N° 107

Mortality rate due to homicide

Refer to page N° 109

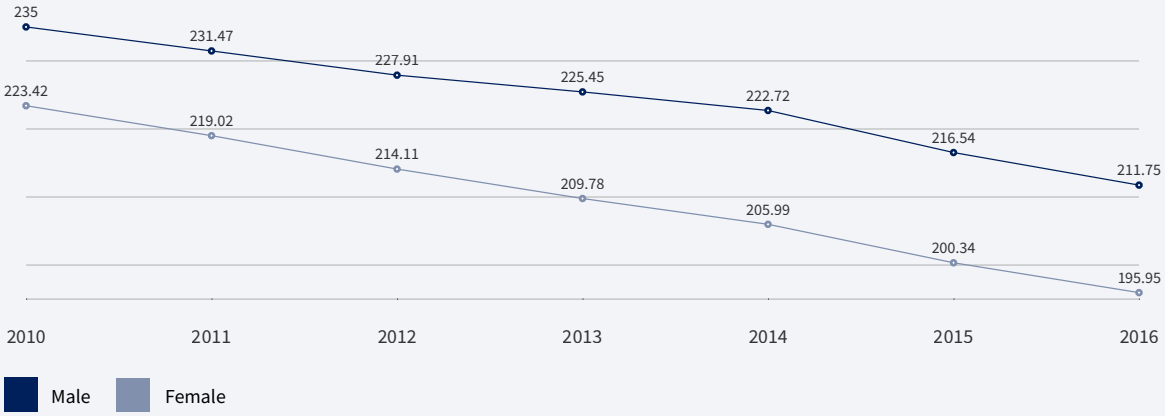
BOX 5. **COVID-19 mortality in Africa from 2020 to 2022**

The general slowdown of the COVID-19 pandemic was confirmed on the continent in the first quarter of 2022 despite some episodic resurgences, particularly in the southern zone. A study by The Lancet has some optimism about the evolution of the disease in 2022, indicating that the total number of cases of infection in Africa should be 166.2 million this year, compared with 227.5 million in 2021. Mortality is expected to fall by 94% in 2022. In 2021, COVID-19 killed 113 102 people on the continent, an official figure of more than 300 deaths every day. Current projections are for 23 000 deaths for the whole of 2022, or about 60 a day. Many public health experts have long believed that the number of cases was greatly underestimated, and researchers announced in late 2021 that the actual death toll was likely seven times higher. Because of the large number of asymptomatic people, these data are unreliable. Underestimation is a real problem and beyond Africa in its occurrence. In April 2022 the WHO Regional Office for Africa estimated that the true toll was probably even higher than these various assessments suggested. Some 65% of the African population would have been infected with COVID-19 since 2020, which would be 97 times higher than the official statistics. The figures are constantly changing, but some data can be mentioned with certainty. The (official) milestone of 12 million people being infected, 4 million of them in South Africa alone, was passed in the first quarter of 2022, while the number of deaths now exceeds 254 000. At the end of last year, Madagascar reached the symbolic milestone of 1000 COVID-19 deaths and Zimbabwe reached 5000 deaths. South Africa reached 100 000 COVID-19 deaths in March 2022.

7.4 Mortality by age

Adolescent mortality rate

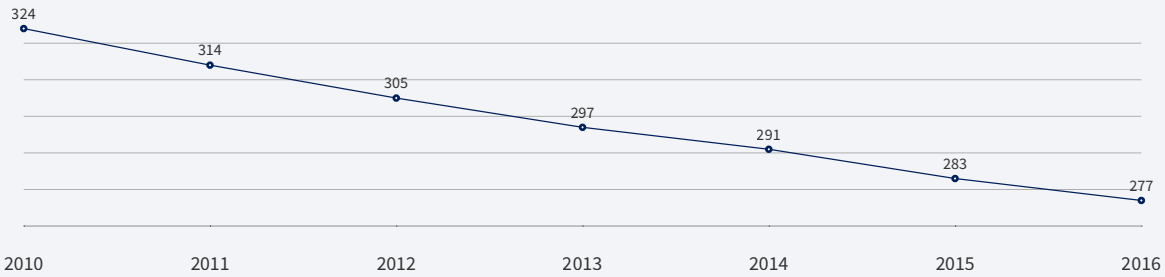
Figure 7.4.1. Adolescent mortality rate (100 000 adolescents) in the WHO African Region, 2010–2016



The adolescent mortality rate has decreased in recent years and at equal among both girls and boys. The downward trend is parallel, although it appears to be slightly more pronounced for females. Between 2010 and 2016, the mortality rates per 100 000 adolescents fell from 235 to 211.8 for young men and from 223.4 to 196 for young women. There are differences in adolescent mortality rates among countries, while within the countries the differences remain between males and females. For example, Nigeria's adolescent mortality rate ranks fourth for women and fifteen for men.

Adult mortality rate for ages between 15 and 60 years

Figure 7.4.2. Adult mortality rate (per 1000 population) in the WHO African Region, 2010–2016, WHO



Adult mortality in the WHO African Region declined from 2010 to 2016 by 14.5%. In the Region and globally, the data describe male mortality as excess in almost all countries.

Adult mortality in sub-Saharan Africa remains poorly studied.[18] In the absence of efficient vital registration systems, adult mortality often must be estimated from imperfect data. Among these data is the information provided by individuals on the survival of their relatives such as parents, brothers, sisters, etc. that researchers have started looking at as it constitutes an important statistical heritage that deserves to be more fully exploited, given the many epidemics Africa has experienced.

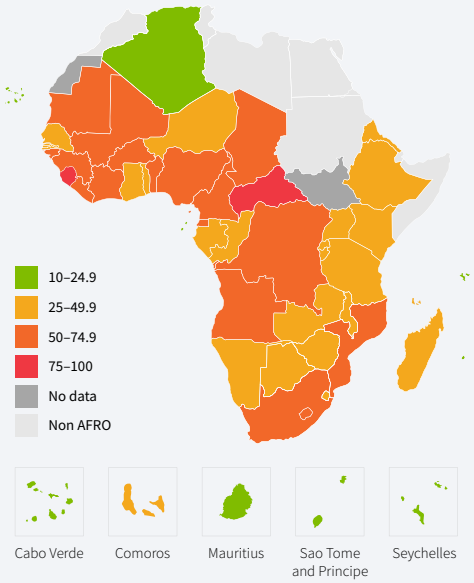
18 Masquelier, B. (2010) Estimation de la mortalité adulte en Afrique subsaharienne à partir de la survie des proches: Apports de la microsimulation, Première edition, Presses Universitaires de Louvain

Under-five mortality rate

Refer to page N° 72

Infant mortality rate

Figure 7.4.3. Infant mortality rate (per 1000 live births) in the WHO African Region, 2019, WHO



The mortality rate among children under the age of one year in Africa in 2020 was around 41.6 deaths per 1000 live births. Infant mortality on the continent had decreased significantly compared with 2000, when approximately 81 newborns and infants per 1000 died before one year of age.

Two countries are strongly marked by this indicator. One is Sierra Leone, with a statistic that is associated to the lack of adequate hospitals and health facilities, the consequences of the Ebola crisis of 2015, a high level of malnutrition and problems with access to clean water. The second one is the Central African Republic, which has insufficient monitoring of pregnant women owing to a lack of qualified health personnel and health facilities lacking equipment such as incubators for premature newborns.

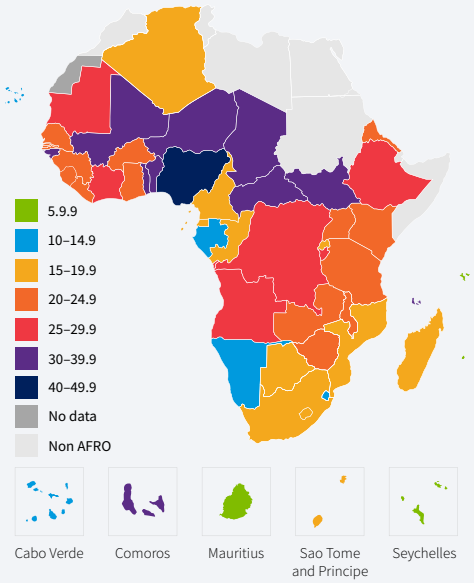
Neonatal mortality rate

Refer to page N° 74

Stillbirth rate

According to the report, “A low-key tragedy: the global burden of stillbirth,” 84% of stillbirths occur in low-income and lower middle-income countries, and in 2019, three out of four stillbirths occurred in sub-Saharan Africa and South-East Asia. The report describes a stillbirth as the birth of an infant without signs of life at 28 weeks of pregnancy or more. Every 16 seconds a mother somewhere in the world experiences the horrific ordeal of giving birth to a stillborn child. It is estimated that nearly 2 million babies are stillborn each year. In sub-Saharan Africa, about 50% of stillbirths occur during labour.

Figure 7.4.4. Stillbirth rate (per 1000 total births) in the WHO African Region, 2015



Stillbirth rates are related to the socioeconomic level of countries. Low-income countries have more stillbirths in their population. In the WHO African Region, the high middle-income to high-income countries are among the 12 countries with the lowest stillbirth rates. The regional range is 9.5 in Mauritius and Seychelles to 42.9 in Nigeria. Despite progress in health services to prevent or treat the causes of child deaths, progress in reducing the stillbirth rate has been slow, with the level declining at an average of 2.3% per year over the last 20 years.

References

1 WHO (2019), WHO guide to using lot quality assurance-cluster sampling surveys to assess neonatal tetanus mortality. Geneva.

2 Angola, Guinea, Mali, Nigeria, Central African Republic and South Sudan.

3 Burkina Faso, Central African Republic, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Mali, Niger and Nigeria.

4 WHO (2021) Cholera Annual Report 2020, Weekly Epidemiological Record 37 September 2021, 96:445–460.

5 UNAIDS (2022), Epidemiological estimates 2022.

6 Spearman C.W. et al. (2017), Hepatitis B in sub-Saharan Africa: strategies to achieve the 2030 elimination targets. Lancet Gastroenterol Hepatol. 2017;2(12):900.

7 Makuza, JD. et al. (2019), Prevalence of hepatitis B surface antigen (HBsAg) positivity and its associated factors in Rwanda, BMC Infectious Diseases, 2019 19:381

8 WHO (2021), Malaria report 2021, Regional data and trends

9 Gombé, C., Godet, J. and Gueye, S. (2017), les Cancers en Afrique francophone, Alliance des Ligues francophones Africaines et Méditerranéennes contre le cancer (ALIAM), Paris.

10 WHO (2010), Congenital malformations, Report of the Secretariat, A63/10.

11 Kinda, G. and al (2015), "Congenital heart disease: epidemiological and echocardiography aspects about 109 cases in Pediatric Teaching Hospital Charles de Gaulle (CDG CHUP) in Ouagadougou, Burkina Faso. Pan Afr Med J. 2015; 20: 81. Published online 29 January 2015, accessed 30 August 2022

12 Les cardiopathies congénitales dans les pays en développement: défis et perspectives (2018) In Annales Africaines de médecine, Editorial Volume 12 n°1: décembre 2018 available at https://anafrimed.net/editorial-les-cardiopathies-congenitales-dans-les-pays-en-developpement-defis-et-perspectives/ accessed 30 August 2022

13 Zimbabwe, Tanzania, Ghana and Eswatini

14 Bantouré, O. (2017) Knowledge, attitudes and prevention practices of neural tube anomalies in women attending prenatal consultation in the Niamey-Niger Region

15 Tessema, ZT. (2021), Prevalence of low birth weight and its associated factor at birth in sub-Saharan Africa: A generalised linear mixed model.

16 Liu, L. et al (2016) Global, regional, and national causes of under–5 mortality in 2000–15: an updated systematic analysis with implications for the Sustainable Development Goals. Lancet. 2016;388(10063):3027–35.

17 Malawi (18,1%), Comoros (16,7%), Congo (16,7%), Zimbabwe (16,6%), Equatorial Guinea (16,5%), Mozambique (16,4%), Gabon (16,3%) and Mauritania (15,4%).

18 Masquelier, B. (2010) Estimation de la mortalité adulte en Afrique subsaharienne à partir de la survie des proches: Apports de la microsimulation, Première edition, Presses Universitaires de Louvain

Conclusions and key considerations

The health statistics for the WHO African Region in 2021 show a varied profile, with countries at different stages of achievement of the target indicators. In general, progress has been observed in almost all areas. The health emergencies that the Region has faced recently, particularly the COVID-19 pandemic, have shown us that although the Region was not prepared for this particular disease, the response was appropriate and the pandemic was contained with the fewest possible deaths. However, the statistics also revealed a disruption in the continuity of health services delivery, leading to a degradation of some indicators and slowing down progress towards achieving UHC and SDGs. The improvement of health information systems has had an impact on the monitoring of health indicators, although some key data are still not available. In the same line of good practice and effective action, health promotion programs using all types of media and community mobilisation have improved population health indicators, as well as morbidity and mortality control. All of these aspects must now be integrated into structured, operational, and reliable monitoring and response systems.

Despite many advances in terms of life expectancy and improved access to health care in the WHO African Region, many challenges remain. Universal health coverage is one of these objectives that must be prioritised and to which financial, infrastructural and human resources must be allocated. Areas such as NCDs, health system (including service delivery, HIS, financing, human workforce and infrastructures) need to be strengthened. This also includes well-being, as well as maternal and child health.

Countries of the Region should prioritise the revision of health policies and/or strategies with targeted interventions to achieve the 2030 goals, including strengthening intersectoral collaboration (One Health), as well as advocacy and partnership focused on country priorities. Abuja 2001's target must also be considered as high priority in governments' agenda with more endogenous resources for health, and resilience of the health system should be made effective at all levels of the health system pyramid.

Annex – Index of indicators

World Health Organization
African Region

iAHO
Integrated African Health Observatory

iaho@who.int
aho.afro.who.int