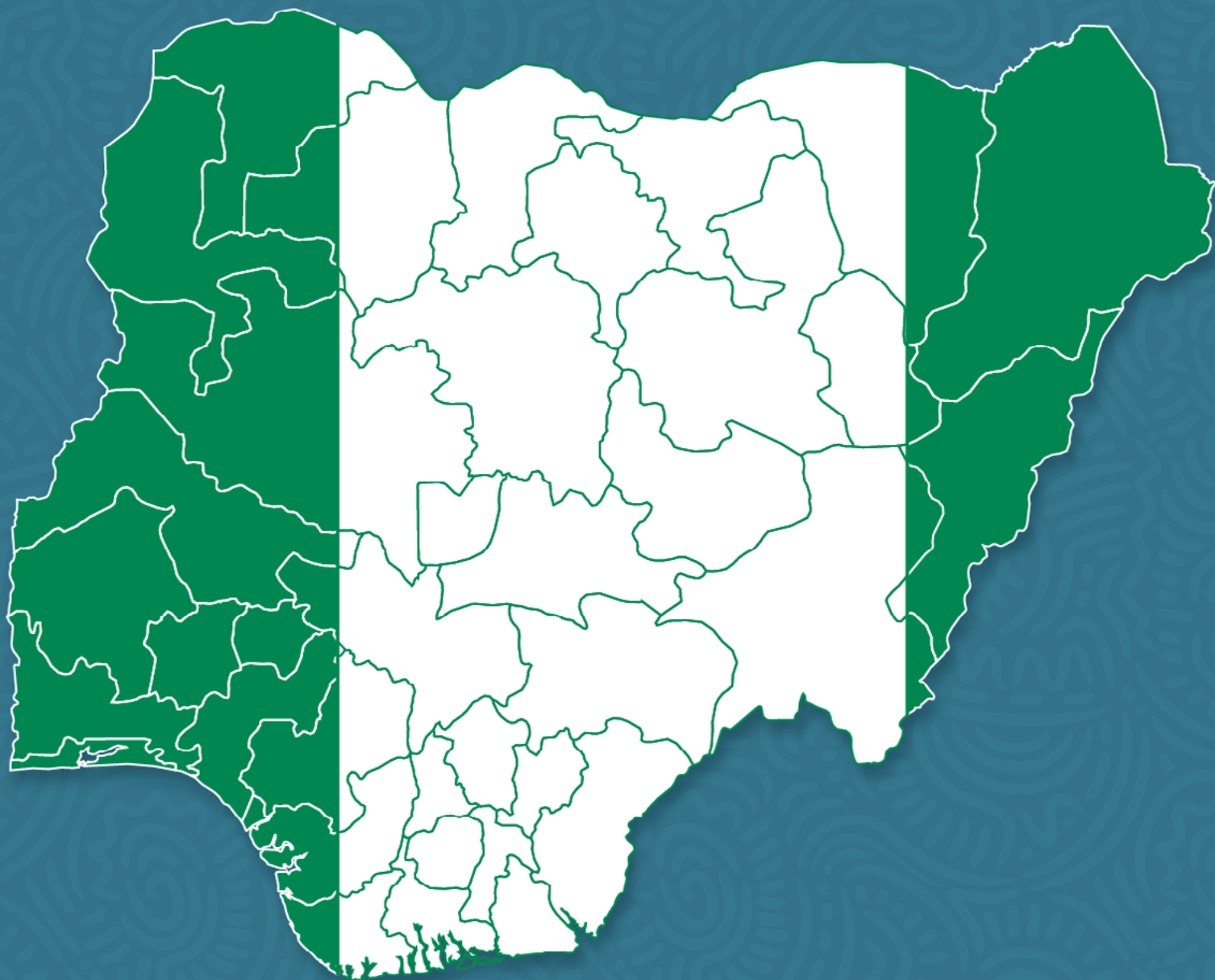


Report on malaria in Nigeria 2022



World Health
Organization

African Region

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Organization**

African Region

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Abbreviations

HBHI	High Burden to High Impact
IPT	intermittent preventive treatment of malaria
ITN	insecticide treated nets
MIS	Malaria Indicators Survey
NMEP	National Malaria Elimination Programme
RDT	rapid diagnostic test
SMC	seasonal malaria chemoprevention

01

INTRODUCTION

The Federal Republic of Nigeria is a country in West Africa. It is situated between the Sahel to the north and the Gulf of Guinea to the south in the Atlantic Ocean. It covers an area of 923 769 square kilometres, and with a population of over 225 million, it is the most populous country in Africa. Nigeria borders Niger in the north, Chad in the north-east, Cameroon in the east, and Benin in the west. Nigeria is a Federal Republic comprising 36 States and the Federal Capital Territory, where the capital, Abuja, is located. The largest city in Nigeria is Lagos, the second-largest metropole in Africa.

Malaria is a major public health concern in Nigeria, with an estimated 68 million cases and 194 000 deaths due to the disease in 2021. Nigeria has the highest burden of malaria globally, accounting for nearly 27% of the global malaria burden. The risk of transmission exists throughout the country, all year round. However, the incidence of malaria is highest in the northern and north-eastern parts of the country. As one of the countries supported under the High Burden to High Impact (HBHI) approach, Nigeria has been a leader in implementing data-informed strategies to tailor interventions subnationally. The country has also established an integrated national malaria data repository that is accessible at the local government level. A nationwide training exercise on the use of the repository for routine decision making was also implemented.

In May 2022, the country convened its local and external stakeholders for a “data deep-dive” week in Abuja to explore the progress the country has made in the use of strategic information to drive impact against malaria. One of the recommendations from this meeting was a request by the Nigeria National Malaria Elimination Programme (NMEP) to WHO to develop state-level malaria profile reports. With input from the NMEP and its partners, the WHO Global Malaria Programme and the Communicable and Non-Communicable diseases cluster of the WHO African Region have developed this Nigeria report.

The report presents an overview of the malaria situation across all States in Nigeria, focusing on population demographics, malaria interventions, climate and disease burden. For each State, the report presents trends in population, rainfall patterns, intervention coverage and use, malaria prevalence, and incidence. Additionally, the number of malaria cases averted over time is presented. The year 2009 was selected as the baseline (or counterfactual in the absence of interventions) for computing cases averted, considering that this was the year the first mass bed net campaign was implemented in Nigeria. A summary section on the key contextual issues in each State is presented at the end of each State’s profile.

02

SUMMARY OF RESULTS & COUNTRY PROFILE

Progress

- Nigeria is the most populous country in Africa with a population of 225 million in 2021, increasing from 123 million people in 2000.
- WHO estimates that Nigeria had 68 million cases in 2021 accounting for 27% of the global burden, and 28% of the burden in the WHO African Region.
- WHO also estimates that the severe form of malaria has led to 194 000 deaths in 2021 alone, about 80% of these in children under the age of 5 years. This accounts for 31% of all malaria deaths globally and 40% in the WHO African Region.
- Despite the high burden and the challenges of the COVID-19 pandemic, malaria incidence has reduced by 26% since 2000, from 413 per 1000 population in 2000 to 306 per 1000 in 2021. In 2019 before the pandemic, malaria incidence was 302 per 1000 population.
- In the same period, the malaria mortality rate (i.e. deaths per 1000 population at risk) fell by 55% from 2.1 per 1000 population in 2000 to 0.9 per 1000 population in 2021. The malaria mortality rate in 2019 was 1.2 per 1000 population.
- Data from household surveys show that malaria prevalence in children, assessed via microscopy and rapid diagnostic test (RDT), dropped from 27% and 45% in 2015 to 22% and 40% in 2021, respectively.
- From 2010 the year after the first mass campaign was implemented to 2021, an estimated 166 million malaria cases and 0.85 million malaria deaths were likely averted.

- To achieve these results, the Government of Nigeria and its partners, under the coordination of the National Malaria Elimination Programme (NMEP), have made considerable strides in scaling up preventive and curative interventions.
- Between 2009 to 2021, about 220 million insecticide treated nets (ITNs) were distributed in 37 States. The proportion of the population who slept under ITNs the night before the survey increased from 22.9% in 2010 to 36.4% in 2021. Percentage of children under the age of 5 years who slept under an insecticide treated net (ITN) the night before the survey increased from 28.9% in 2010 to 41.2% in 2021.
- The coverage for the intermittent preventive treatment of malaria in pregnancy – receiving two or more doses of sulfadoxine-pyrimethamine (SP) – rose from 22% in 2015 to 26% in 2020, it declined to 23% in 2021.
- Nigeria has also implemented a considerable expansion of seasonal malaria chemoprevention (SMC) in children under the age of 5 years. In 2013, only an average of about 209 000 children had received SMC in only one State. By 2021, these had increased to about 24 million children in 18 States.
- Among children who were reported to have had a fever the two weeks preceding household surveys, about 63% sought care in 2021. The majority of children sought care in the private formal (31%) and informal sector (25%) while 45% sought care in the private sector.
- Among those who sought care for fever, the percentage who received a blood test increased from 6.5% in 2010 to 39% in 2021.

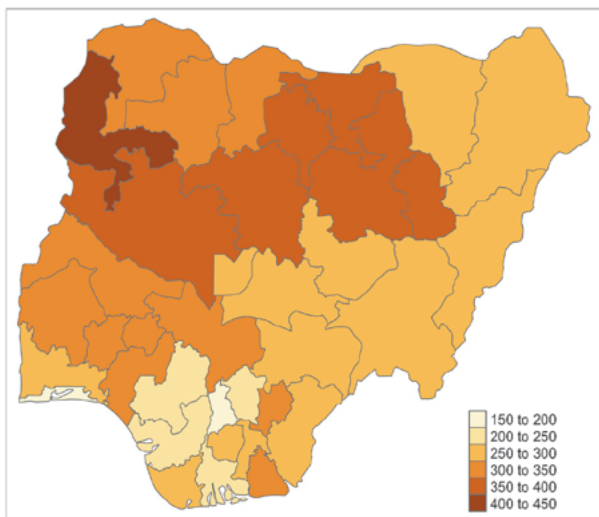
Challenges

- Despite the progress that Nigeria has achieved, the country is faced with several important challenges that hamper its fight against malaria.
- Overall, malaria continues to exert a huge burden on the people of Nigeria, especially its young children. WHO estimates that malaria accounts for 20% of all deaths in children under the age of 5 years in 2021.
- Like other high burden countries in the WHO African region, and despite the best efforts of the country and its partners, the disruptions to essential malaria services in Nigeria led to additional 480 000 malaria cases and 10 000 malaria deaths according to WHO estimates.
- Even before the pandemic, malaria cases and deaths, in absolute numbers, continued to rise since 2016. This is probably to a combination of reducing intervention coverage, the spread of insecticide resistance reducing the effectiveness of ITNs, humanitarian emergencies, and relatively high population growth.
- While malaria cases decreased in 13 States since 2010, 24 States (Adamawa, Akwa Ibom, Bauchi, Bayelsa, Borno, Delta, Ekiti, Enugu, Federal Capital Territory, Gombe, Imo, Jigawa, Kaduna, Kano, Kebbi, Lagos, Niger, Ogun, Ondo, Osun, Oyo, Rivers, Sokoto, and Yobe) have registered increases in malaria cases. Of these, Kano and Lagos States and Federal Capital Territory were among the top three States where the estimated malaria incidence increased the most.

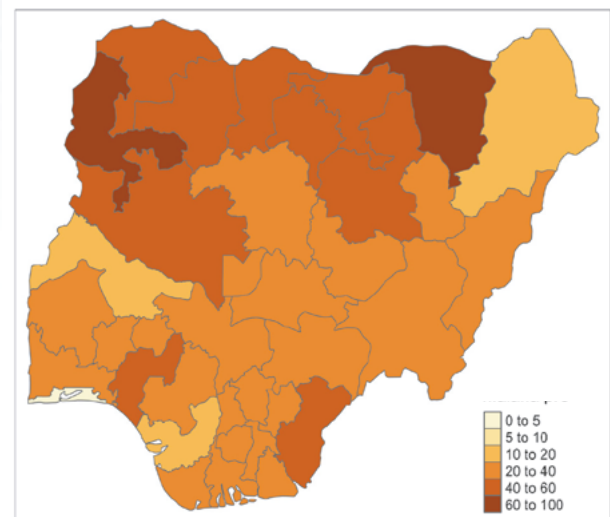
- In 2021, about 37% of children under the age of 5 years still do not receive care within two weeks of fever onset.
- Only a quarter of all children with fever get tested, and among those who seek care, only 39% are tested. Despite recent improvements, malaria parasitological diagnosis remains low in Nigeria, leading to inappropriate treatment of patients and irrational use of malaria drugs.
- In addition to consultation fees at public health facilities, the high use of the private sector highlights that there is a high out-of-pocket expenditure by households on fever, and by extension on malaria, care. Among low-income communities, such expenditure could be catastrophic and plunge them deeper into poverty impairing their ability to seek further health care.
- The low level of diagnosis also undermines the quality and reliability of malaria data reported through the health system.
- Direct budgetary support to Nigeria's malaria programme is mostly from external sources, in particular by the Global Fund that supports 13 States and the US President's Malaria Initiative that supports 11 States.
- For many years the remaining 13 States did not have external donor support until the recent agreement with the World Bank and Islamic Development Bank to support these States.
- Of the US\$ 3.84 billion investment in malaria since 2000, it is estimated that 21% (US\$ 0.82 billion) were from domestic sources, excluding out-of-pocket expenditure by households, and the rest were from the Global Fund (40%, US\$ 1.54 billion), US PMI (24%, US\$ 0.92 billion), the World Bank (9.6%; US\$ 0.37 billion), UK Aid (4%, US\$ 0.15 billion) and the remainder from other sources.
- While Nigeria has been at the forefront of using subnational data for effective malaria planning and implementation, the increasing budget constraints will require further prioritization. In addition, a considerable increase in domestic funding is required. Synergies with other health programmes through improved integration will likely increase the efficiency of implementation.
- Insecticide resistance, particularly to pyrethroids, threatens the effectiveness of ITNs to prevent malaria. While the country has gradually moved to use of new generation nets, these come at a higher cost. This will affect the ability to sustain the current levels of ITN coverage and reduce the budget for other essential malaria commodities.

NIGERIA

Estimated malaria incidence per 1000 population in 2021

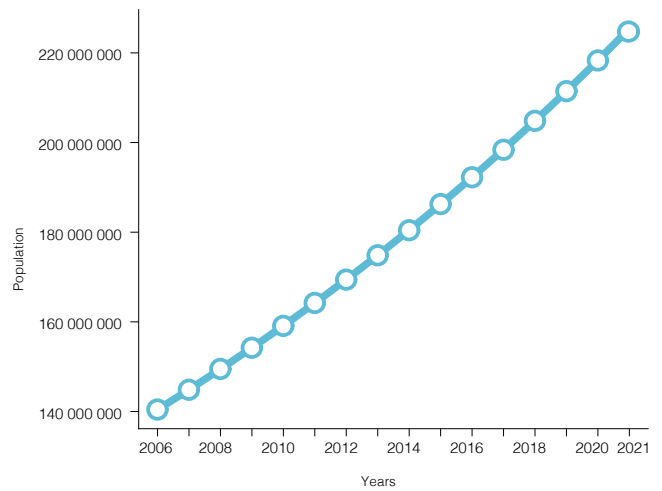


Malaria prevalence (%) according to RDT in children under 5 years, MIS 2021

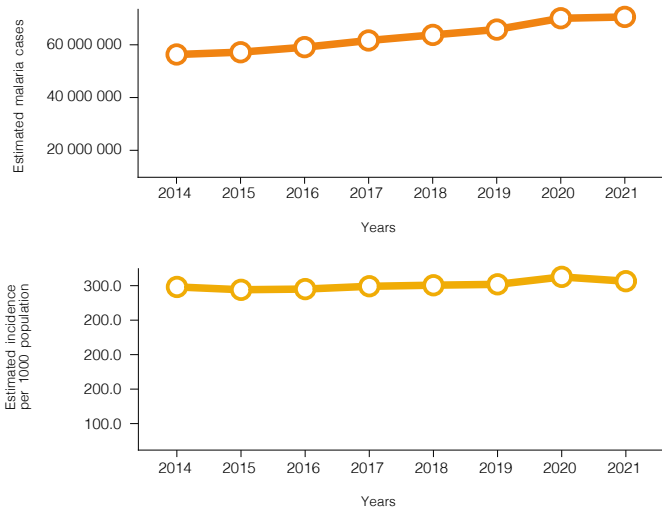


INDICATORS	VALUE	UNIT
Estimated population in 2021	225 402 000	
Malaria prevalence according to RDT	39.6	%
Malaria prevalence according to microscopy	22.3	%
Estimated malaria cases in 2021	67 965 000	
Estimated incidence per thousand population in 2021	306.5	/1000
Persons with access to an insecticide-treated mosquito net (ITN)	43.1	%
Existing insecticide-treated mosquito nets (ITNs) used last night	75.1	%
Population who slept under an insecticide-treated mosquito net (ITN) last night	36.4	%
Children under 5 who slept under any net	42.3	%
Children under 5 who slept under an insecticide-treated net (ITN)	41.2	%
Advice or treatment for fever sought from a health facility or provider	62.8	%
Children with fever who had blood taken from a finger or heel for testing	38.7	%

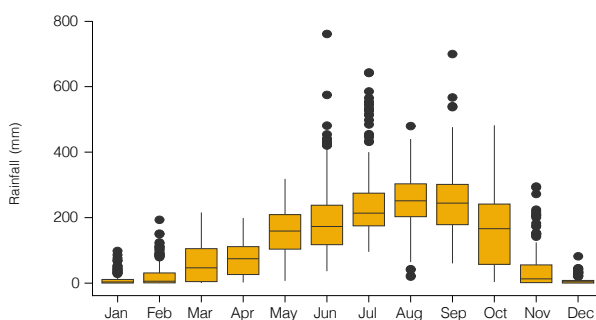
Population count



Estimated malaria cases and incidence

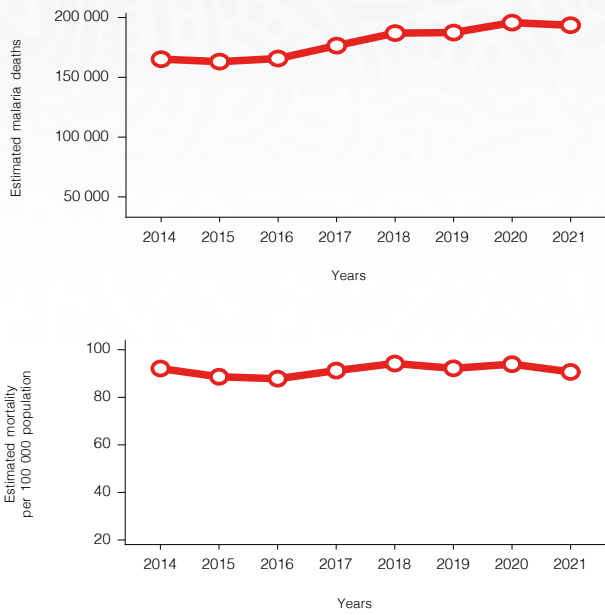


Monthly rainfall

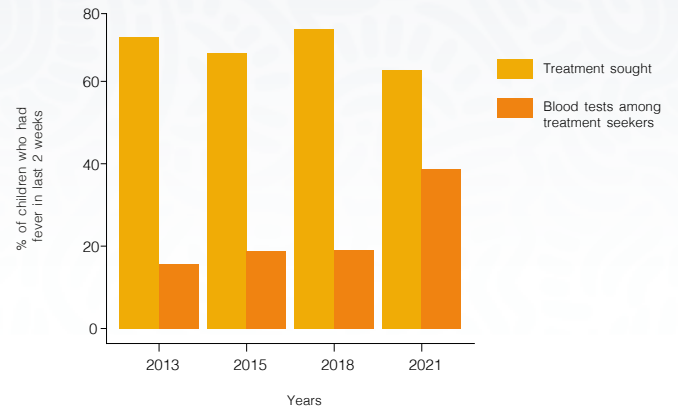


02 | Summary of results & country profile

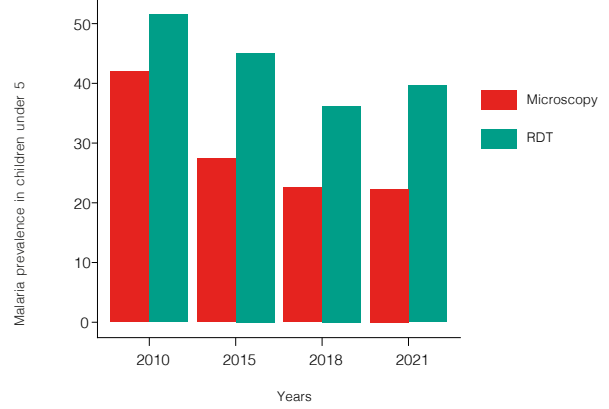
Estimated malaria deaths and mortality rate



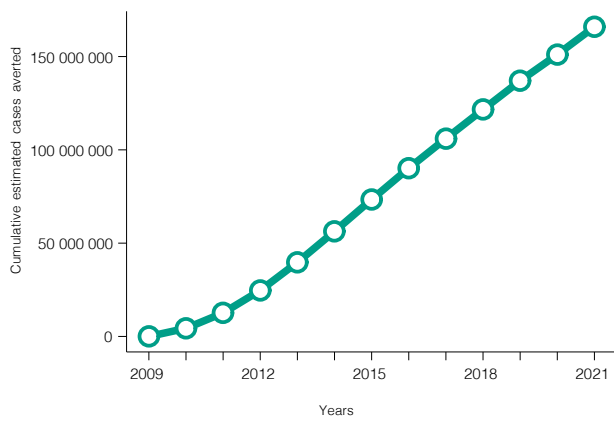
Diagnosis and treatment for malaria in children under 5 years



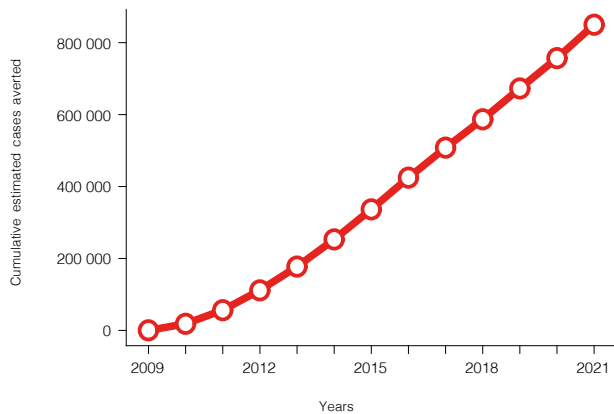
Malaria prevalence in children under 5 years



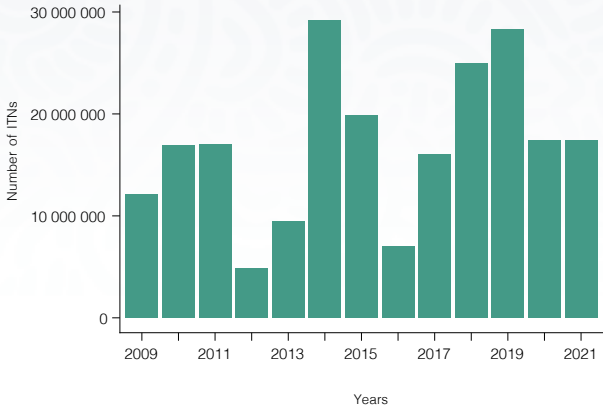
Cumulative estimated cases averted



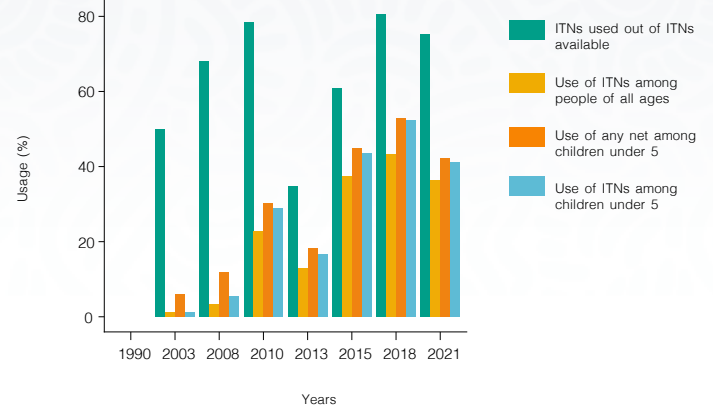
Cumulative estimated deaths averted



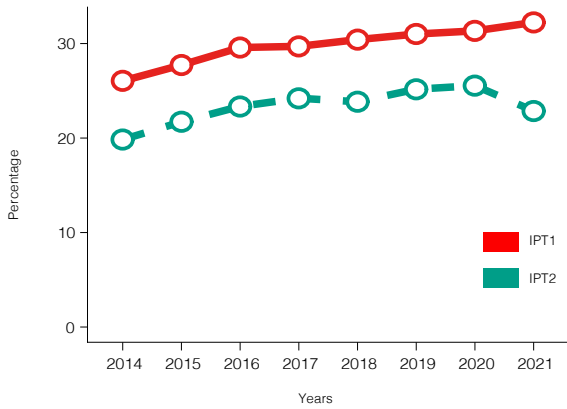
Insecticide treated nets - mass campaign distribution



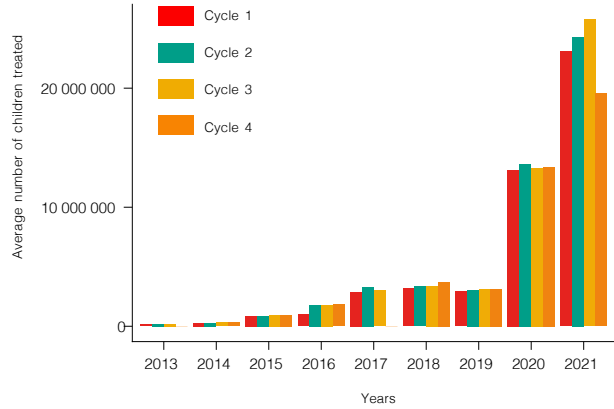
Access, coverage and use of ITNs



IPT1 and IPT2 coverage



Average number of children treated with seasonal malaria chemoprevention

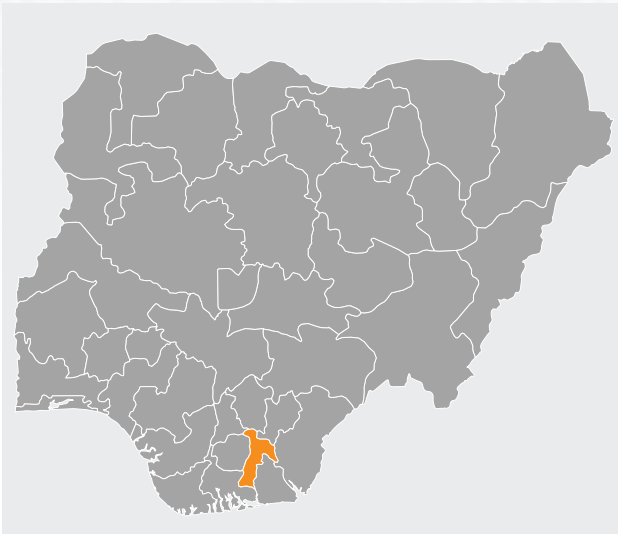


03

PROFILE OF NIGERIA STATES

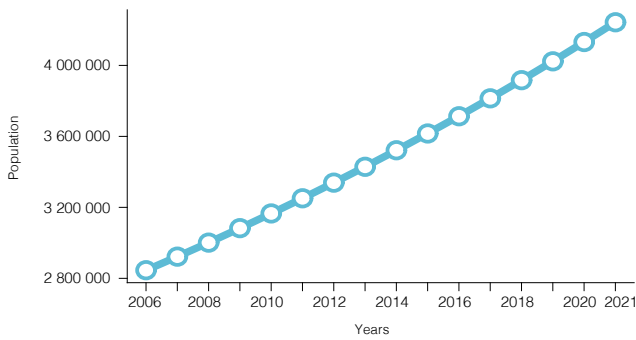


ABIA STATE

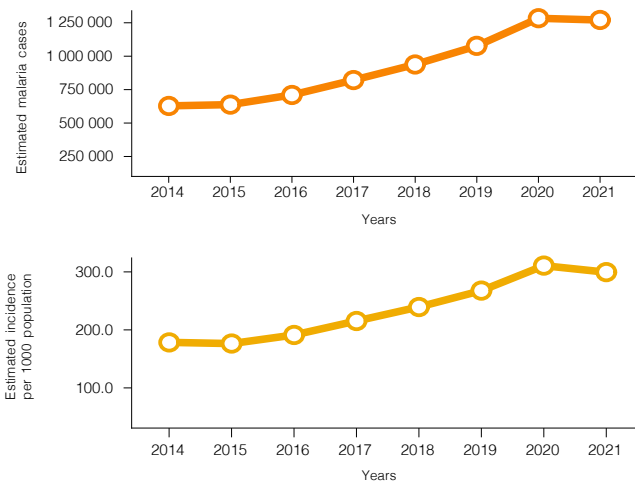


INDICATORS	VALUE	UNIT
Estimated population in 2021	4 243 000	
Malaria prevalence according to RDT	26.4	%
Malaria prevalence according to microscopy	14.5	%
Estimated malaria cases in 2021	1 271 000	
Estimated incidence per thousand population in 2021	299.4	/1000
Year of most recent ITN campaign	2015	
Year of preceding ITN campaign	2012	
Persons with access to an ITN	24.1	%
Existing ITNs used last night	50.2	%
Population who slept under an ITN the night before the survey	15.3	%
Children under 5 who slept under any net	21.9	%
Children under 5 who slept under an ITN	21.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	79.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	14.3	%

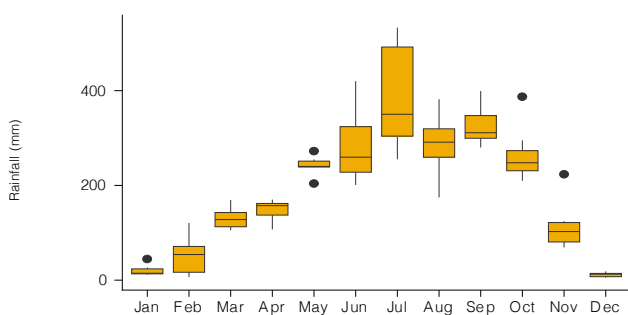
Population count



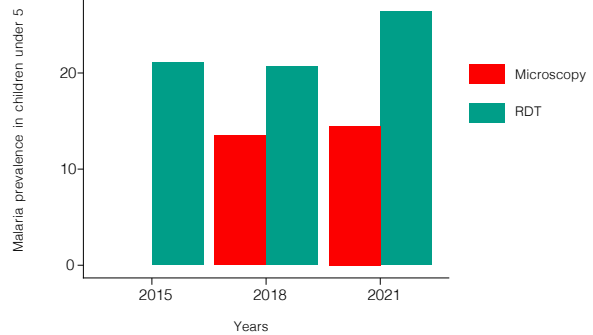
Estimated malaria cases and incidence



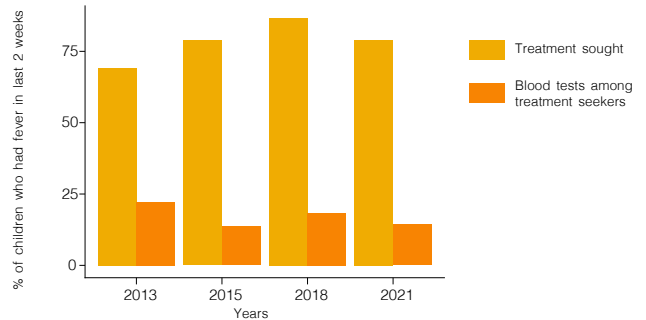
Monthly rainfall



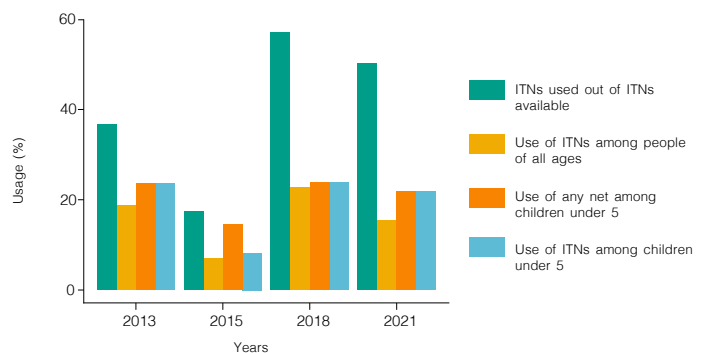
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

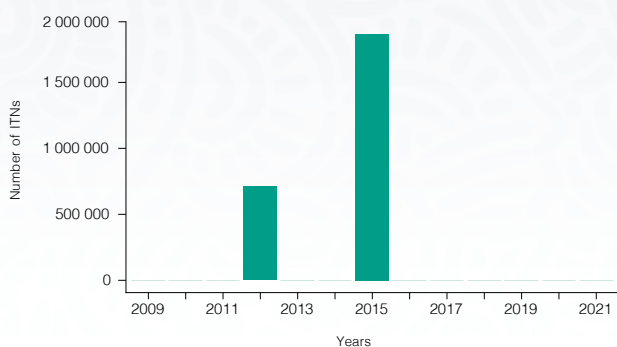


Access, coverage and use of ITNs

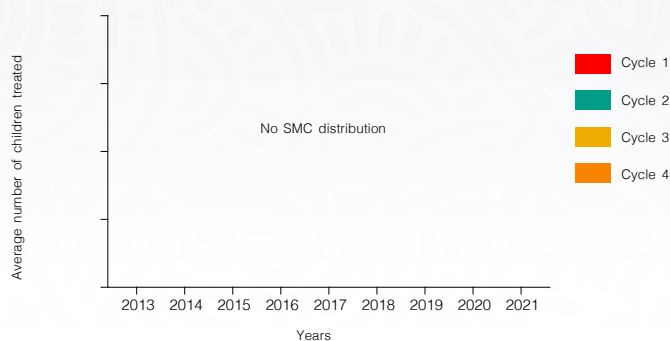


03 | Profiles of Nigeria states

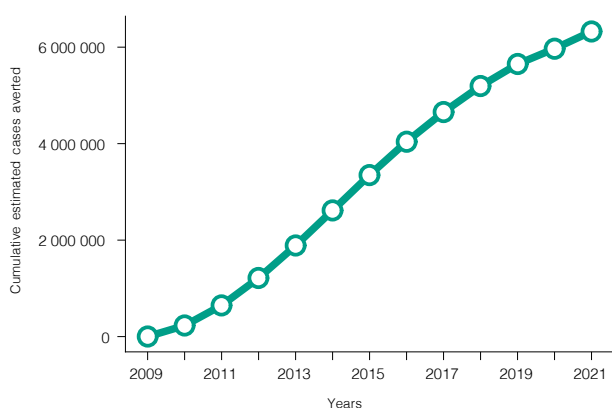
Insecticide treated nets - mass campaign distribution



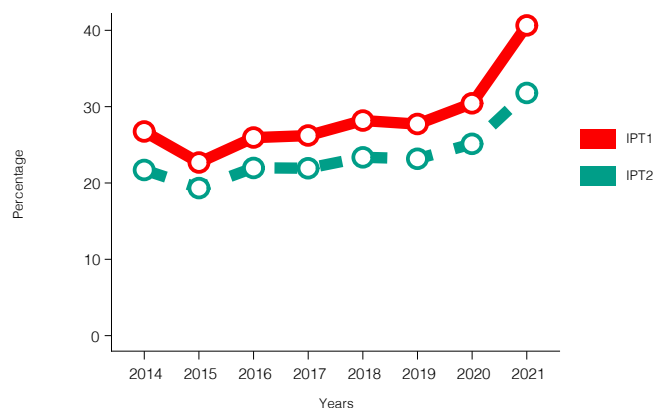
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Abia State is located in the South-Eastern region of Nigeria. It borders Enugu, Ebonyi, Imo, Cross River, Akwa Ibom, and Rivers States. The State capital is Umuahia while the largest city and commercial center is Aba. The State’s estimated population was 3.8 million in 2019 (1) and 4.4 million in 2022.

The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 2,070.9 millimeters (3).

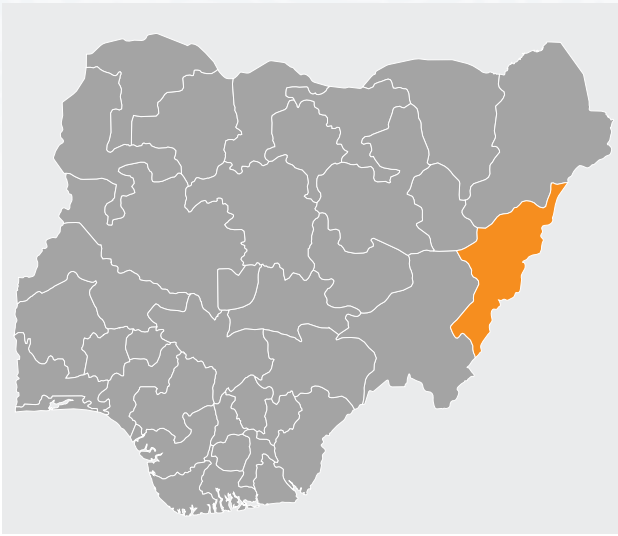
The State contributed an estimated 1.9% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.0 million to 1.3 million, the estimated incidence increased from 239.5 to 299.4 per 1000 population (4). Malaria prevalence by microscopy was 14.5% in 2021 (5).¹

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2015. Since 2009, over 2.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 7.0% in 2015 to 15.3% in 2021. Care seeking among children with fever in the State hardly changed from 78.8% in 2015 to 79.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 13.6% in 2015 to 14.3% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 19.3% in 2015 to 31.8% in 2021 (5).

An estimated 3.4 million cases were averted between 2009 and 2015, and 6.3 million between 2009 and 2021.

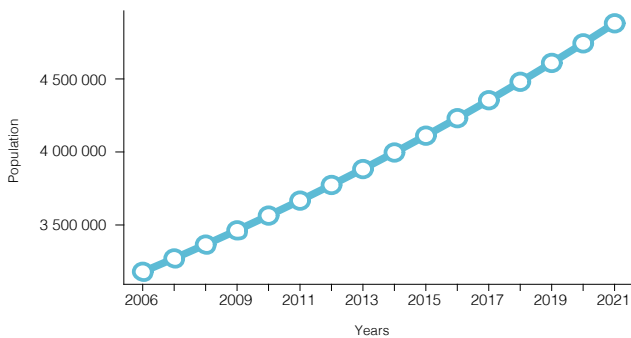
¹ Malaria prevalence by microscopy data was not available for Abia in 2015.

ADAMAWA STATE

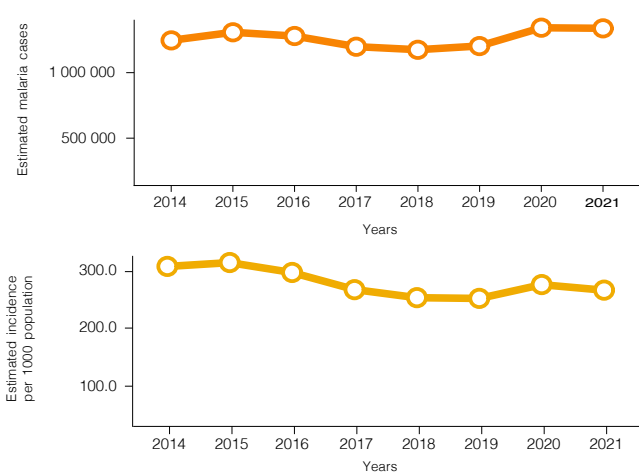


INDICATORS	VALUE	UNIT
Estimated population in 2021	4 881 000	
Malaria prevalence according to RDT	28	%
Malaria prevalence according to microscopy	10.7	%
Estimated malaria cases in 2021	1 339 000	
Estimated incidence per thousand population in 2021	274.2	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2017	
Persons with access to an ITN	73.9	%
Existing ITNs used last night	84.8	%
Population who slept under an ITN the night before the survey	67.5	%
Children under 5 who slept under any net	78.1	%
Children under 5 who slept under an ITN	78.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	65.6	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	28.7	%

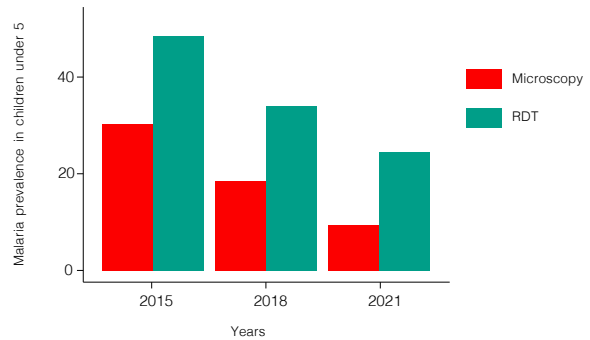
Population count



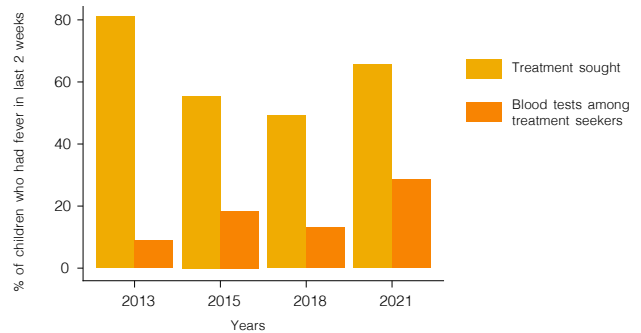
Estimated malaria cases and incidence



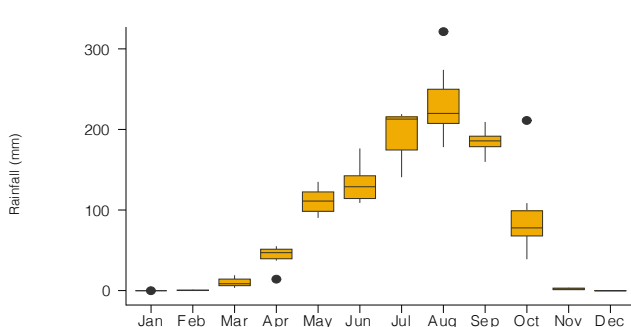
Malaria prevalence in children under 5 years



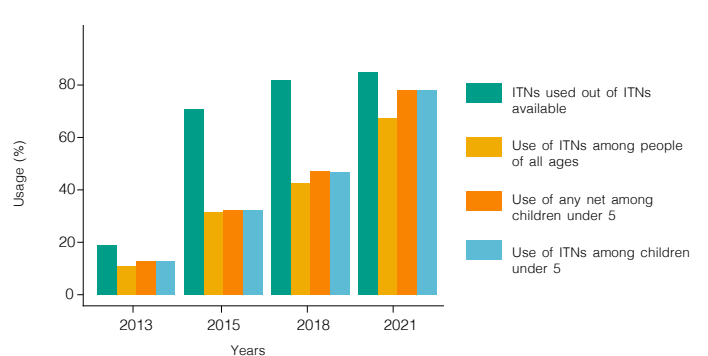
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

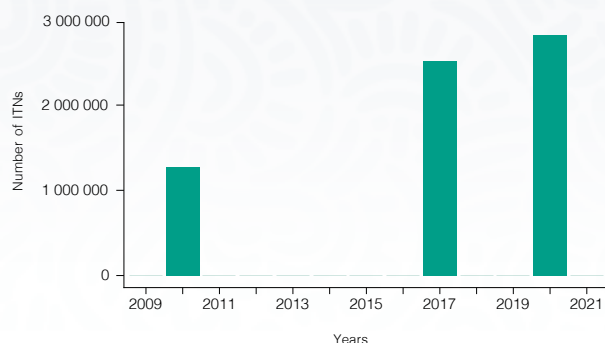


Access, coverage and use of ITNs

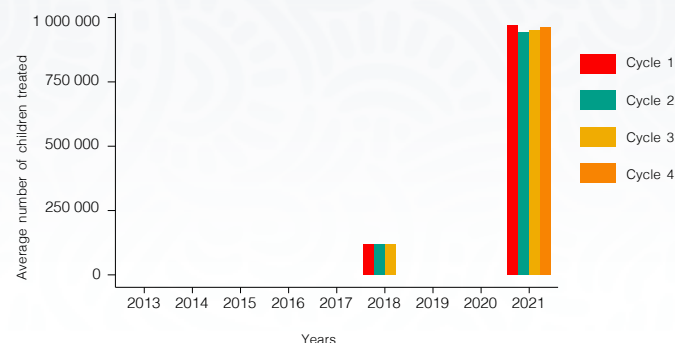


03 | Profiles of Nigeria states

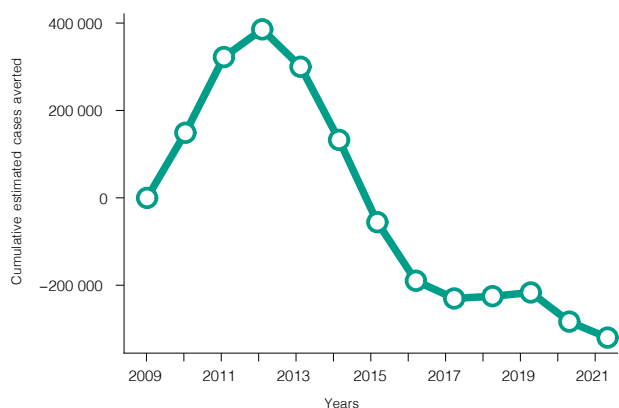
Insecticide treated nets - mass campaign distribution



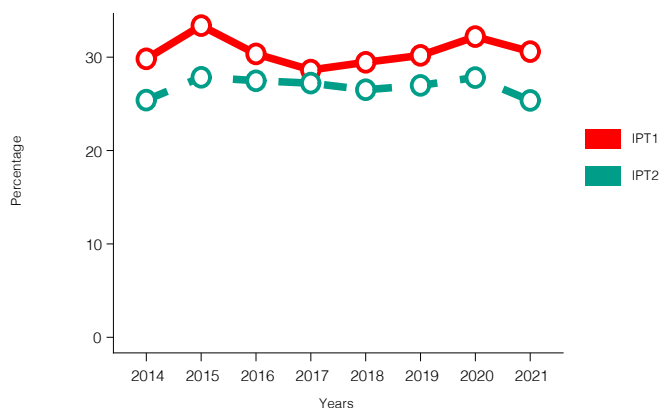
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Adamawa State is located in the North-Eastern Region of Nigeria. It borders Borno, Gombe, Taraba states, and the Republic of Cameroon. The State features highlands, mountains, the Adamawa Plateau, and rivers such as the Benue and Gongola. The State’s estimated population was 4.5 million in 2019 (1) and 5.0 million in 2022.

The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 1,074.9 millimeters (3).

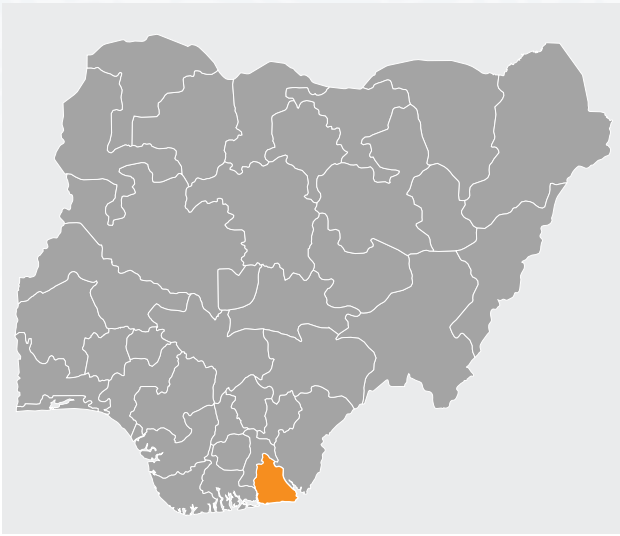
The State contributed an estimated 2.0% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.2 million to 1.3 million, the estimated incidence increased from 262.3 to 274.2 per 1000 population (4). Malaria prevalence by microscopy decreased from 34.7% in 2015 to 10.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 6.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 31.6% in 2015 to 67.5% in 2021. Care seeking among children with fever in the State increased from 55.5% in 2015 to 65.6% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 18.4% in 2015 to 28.7% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 27.9% in 2015 to 25.4% in 2021 (5).

The cumulative estimated cases averted between 2009 and 2021 was negative as there was an increase in cases during this period.²

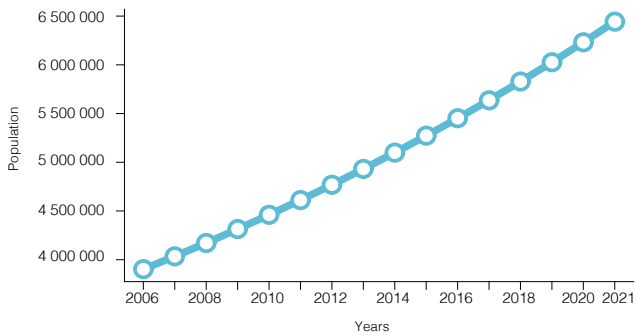
² Negative cases averted can occur when the estimated number of cases for several years after 2009 is higher than the number of cases estimated for 2009 (the baseline year for the calculation of cases averted).

AKWA IBOM STATE

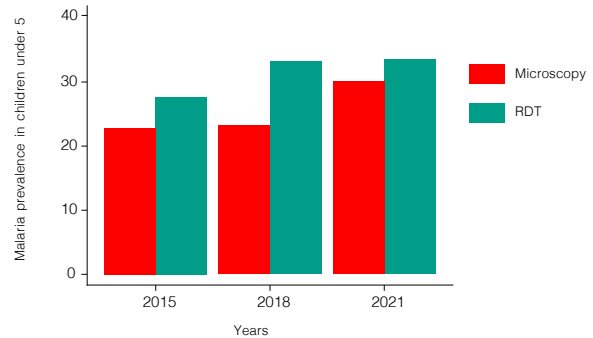


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 443 000	
Malaria prevalence according to RDT	33.5	%
Malaria prevalence according to microscopy	30.1	%
Estimated malaria cases in 2021	1 935 000	
Estimated incidence per thousand population in 2021	300.3	/1000
Year of most recent ITN campaign	2018	
Year of preceding ITN campaign	2014	
Persons with access to an ITN	28.1	%
Existing ITNs used last night	53.3	%
Population who slept under an ITN the night before the survey	17.8	%
Children under 5 who slept under any net	19.5	%
Children under 5 who slept under an ITN	19.5	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	44.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	11	%

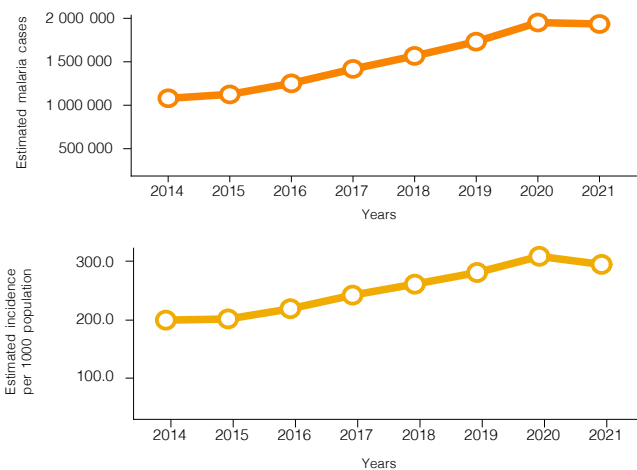
Population count



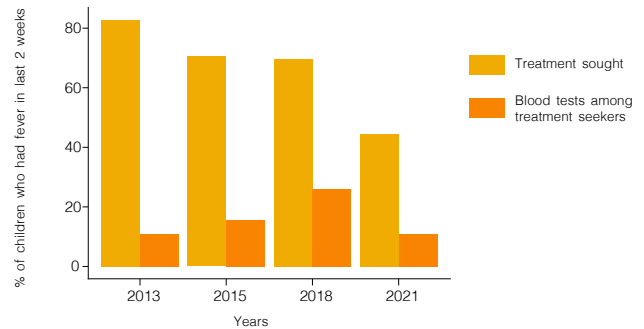
Malaria prevalence in children under 5 years



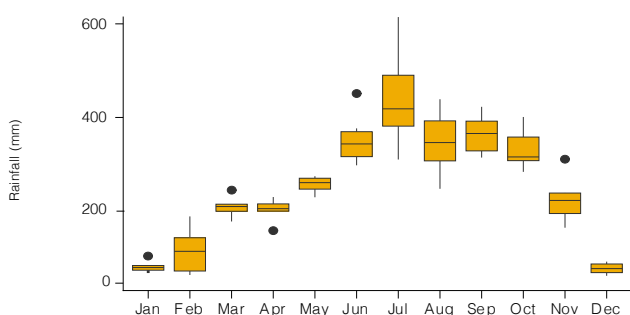
Estimated malaria cases and incidence



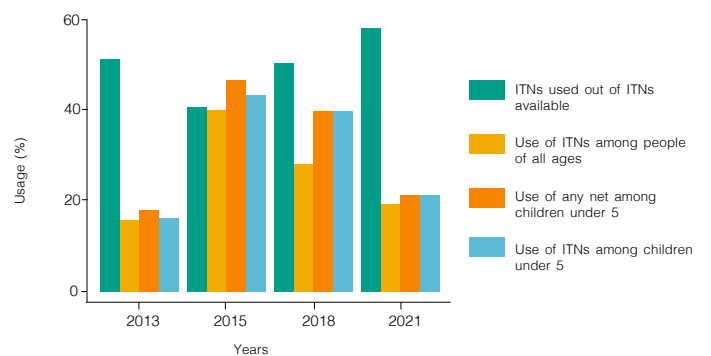
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

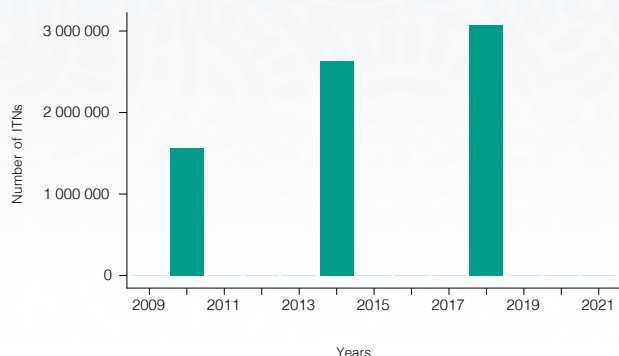


Access, coverage and use of ITNs

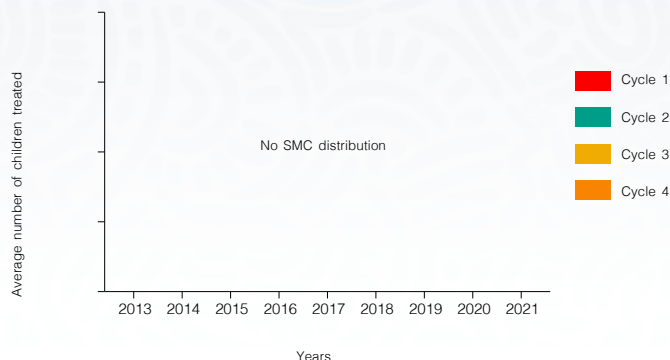


03 | Profiles of Nigeria states

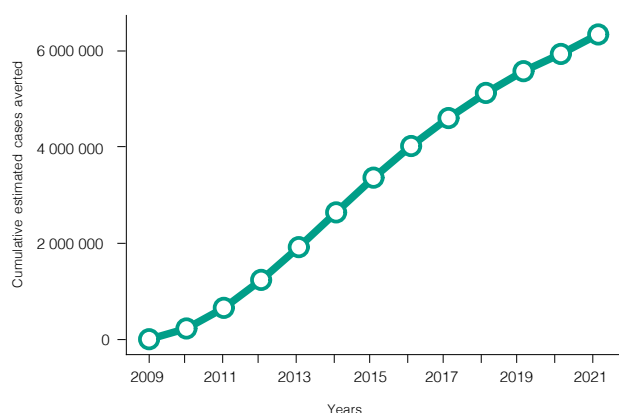
Insecticide treated nets - mass campaign distribution



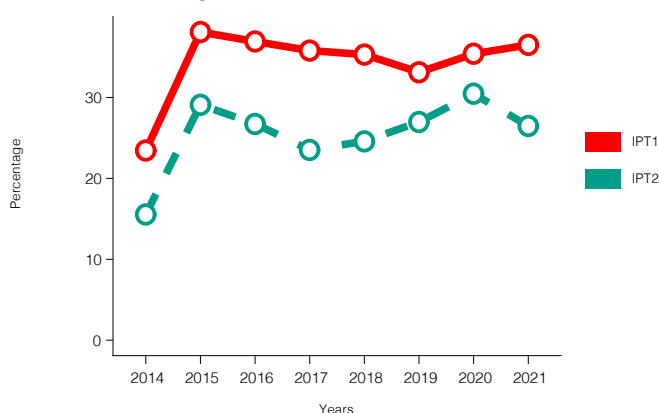
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Akwa Ibom State is located in the South-Southern Region of Nigeria. It borders Cross River to the east, Rivers and Abia to the west, and the Atlantic Ocean to the south. The State's estimated population was 4.8 million in 2019 (1) and 6.7 million in 2022.

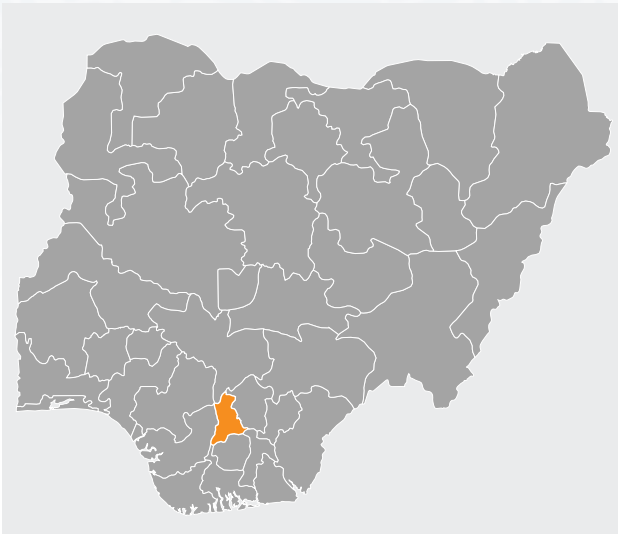
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 2,432.1 millimeters (3).

The State contributed an estimated 2.8% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.6 million to 1.9 million and the estimated incidence increased from 268.9 to 300.3 per 1000 population (4). Malaria prevalence by microscopy increased from 22.8% in 2015 to 30.1% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2018. Since 2009, over 10.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 36.8% in 2015 to 17.8% in 2021. Care seeking among children with fever in the State decreased from 70.5% in 2015 to 44.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 15.5% in 2015 to 11.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 29.1% in 2015 to 26.5% in 2021 (5).

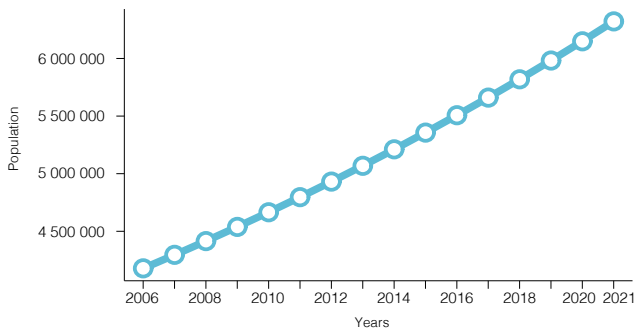
An estimated 4.0 million cases were averted between 2009 and 2015, and 7.6 million between 2009 and 2021.

ANAMBRA STATE

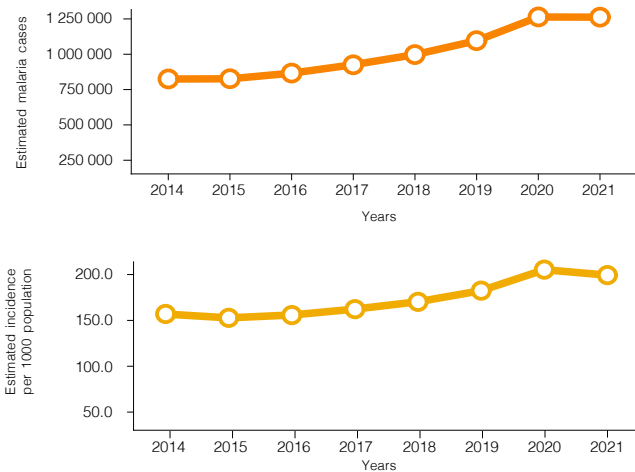


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 322 000	
Malaria prevalence according to RDT	20.2	%
Malaria prevalence according to microscopy	5.4	%
Estimated malaria cases in 2021	1 262 000	
Estimated incidence per thousand population in 2021	199.7	/1000
Year of most recent ITN campaign	2014	
Year of preceding ITN campaign	2009	
Persons with access to an ITN	18.5	%
Existing ITNs used last night	63.6	%
Population who slept under an ITN the night before the survey	10.3	%
Children under 5 who slept under any net	20.4	%
Children under 5 who slept under an ITN	20.4	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	88.5	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	8.7	%

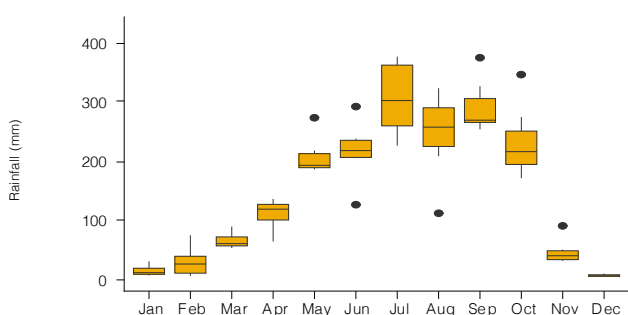
Population count



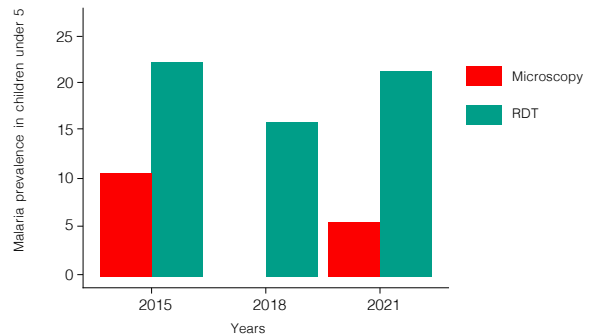
Estimated malaria cases and incidence



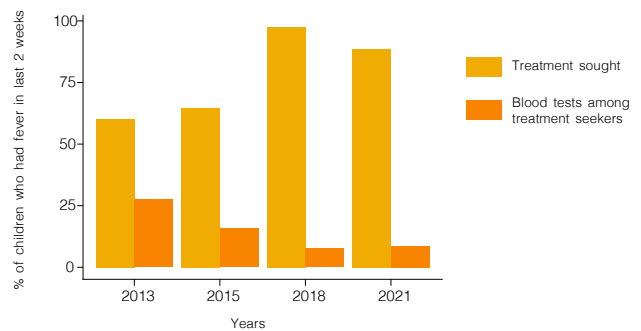
Monthly rainfall



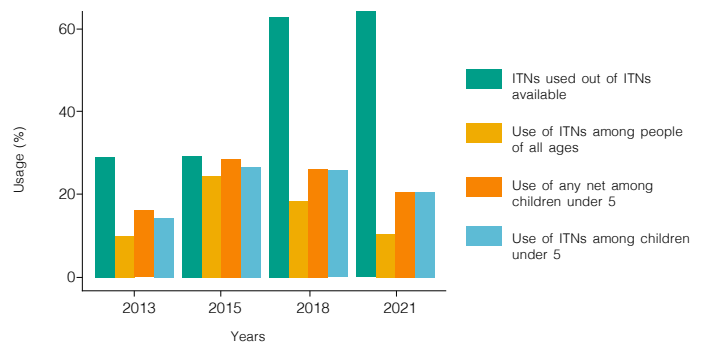
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

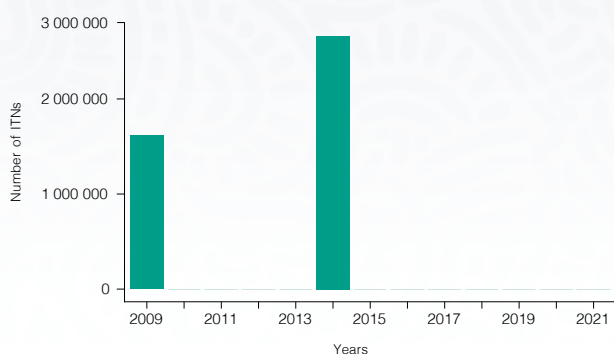


Access, coverage and use of ITNs

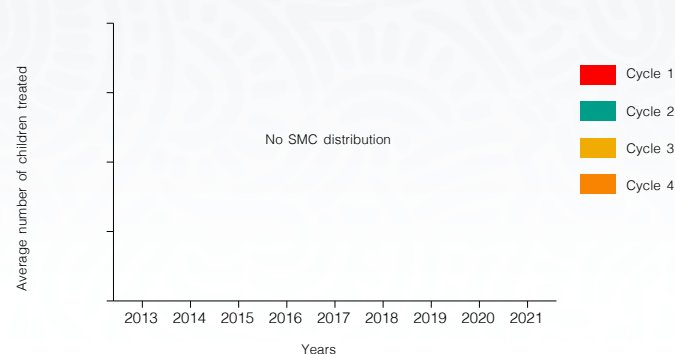


03 | Profiles of Nigeria states

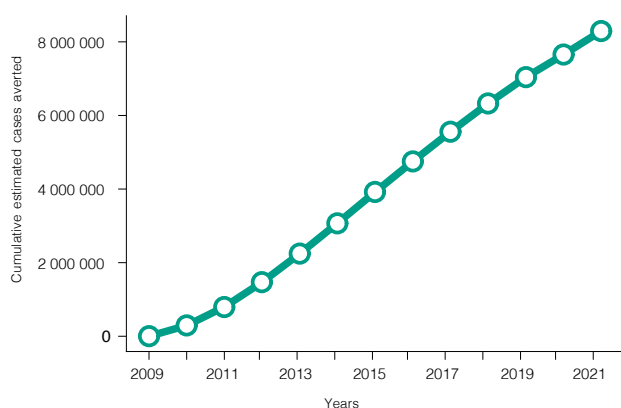
Insecticide treated nets - mass campaign distribution



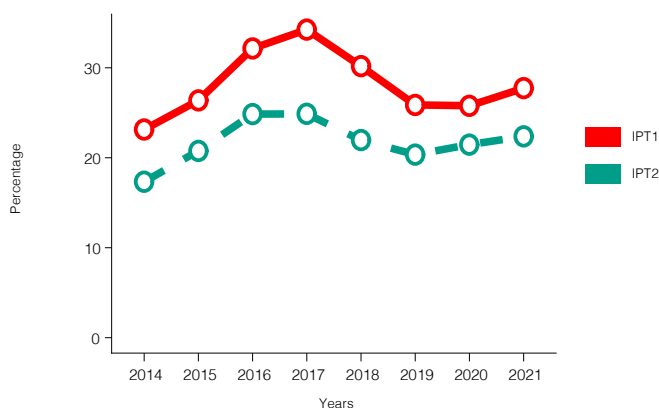
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Anambra State is located in the South-Eastern Region of Nigeria. It borders Imo, Enugu, Kogi, Delta, and Rivers States, featuring a major trade center in Onitsha and significant economic, industrial, and agricultural activities. The State’s estimated population was 5.6 million in 2019 (1) and 6.5 million in 2022.

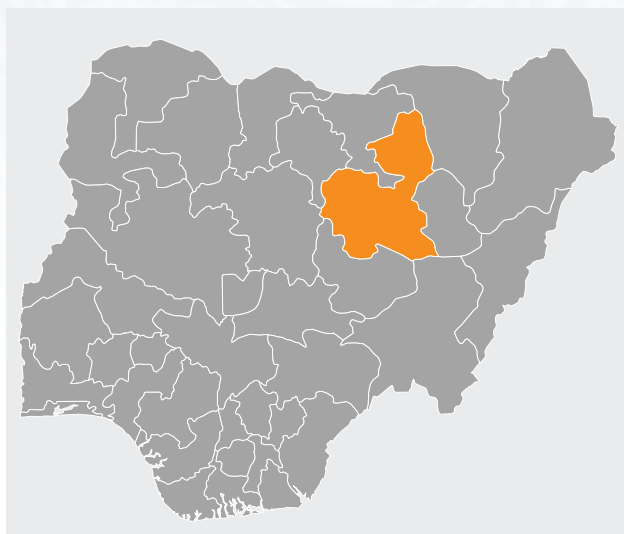
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,667.3 millimeters (3).

The State contributed an estimated 1.9% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.0 million to 1.3 million, the estimated incidence increased from 171.4 to 199.7 per 1000 population (4). Malaria prevalence by microscopy decreased from 10.2% in 2015 to 5.4% in 2021 (5,6).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2014. Since 2009, over 8.1 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 24.1% in 2015 to 10.3% in 2021. Care seeking among children with fever in the State increased from 64.7% in 2015 to 88.5% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 15.8% in 2015 to 8.7% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 20.8% in 2015 to 22.4% in 2021 (5–7).

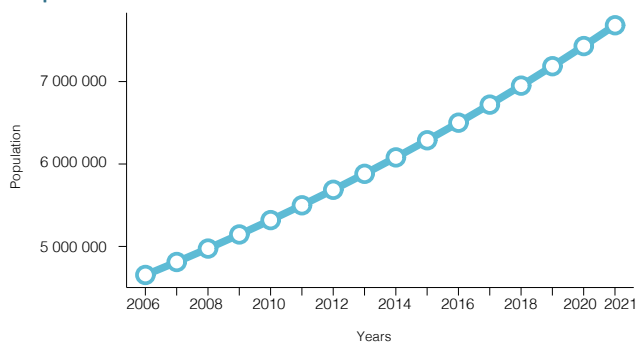
An estimated 3.9 million cases were averted between 2009 and 2015, and 8.3 million between 2009 and 2021.

BAUCHI STATE

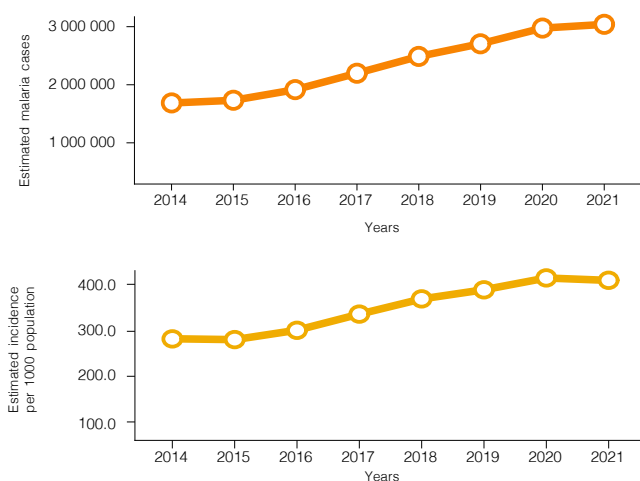


INDICATORS	VALUE	UNIT
Estimated population in 2021	7 683 000	
Malaria prevalence according to RDT	59.6	%
Malaria prevalence according to microscopy	31.7	%
Estimated malaria cases in 2021	3 039 000	
Estimated incidence per thousand population in 2021	395.6	/1000
Year of most recent ITN campaign	2018	
Year of preceding ITN campaign	2014	
Persons with access to an ITN	54.4	%
Existing ITNs used last night	84.7	%
Population who slept under an ITN the night before the survey	48.9	%
Children under 5 who slept under any net	56.1	%
Children under 5 who slept under an ITN	52.7	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	59.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	60.2	%

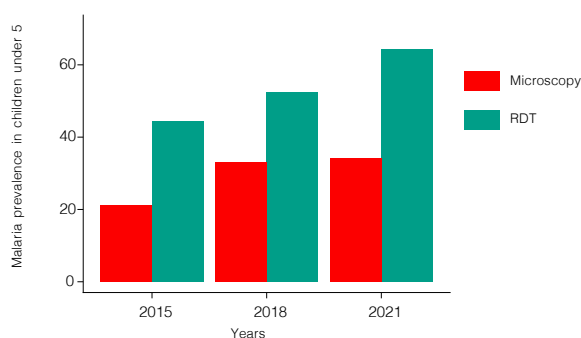
Population count



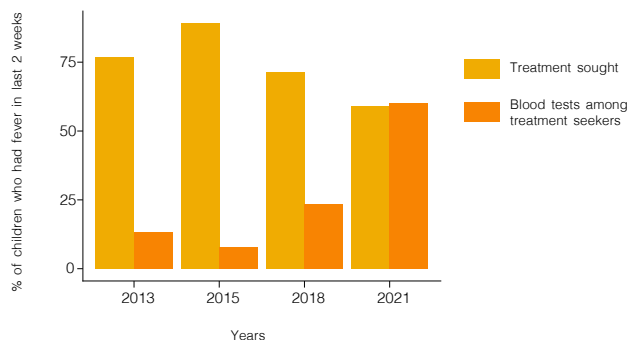
Estimated malaria cases and incidence



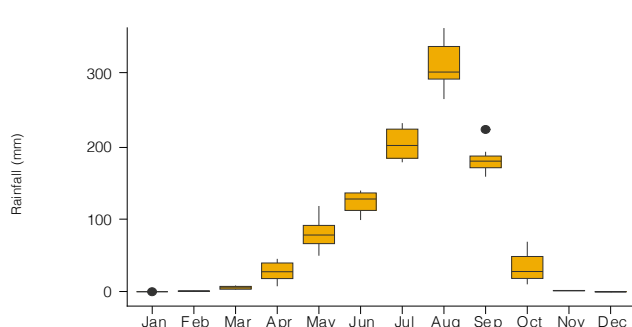
Malaria prevalence in children under 5 years



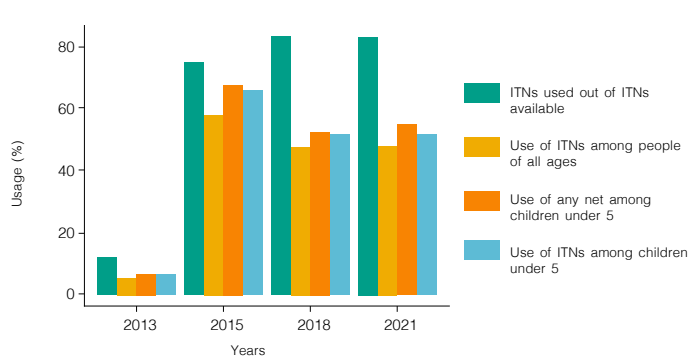
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

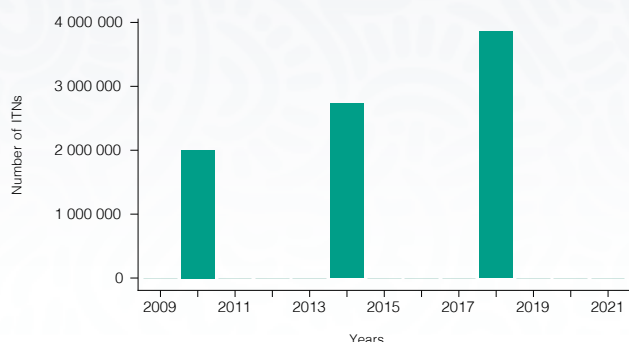


Access, coverage and use of ITNs

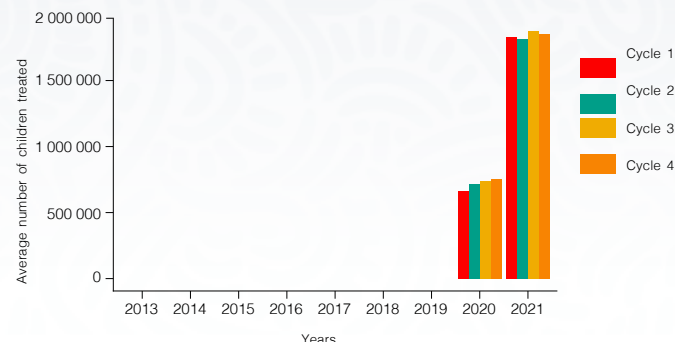


03 | Profiles of Nigeria states

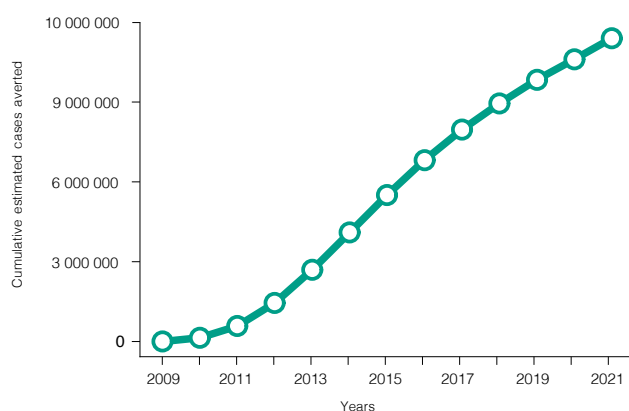
Insecticide treated nets - mass campaign distribution



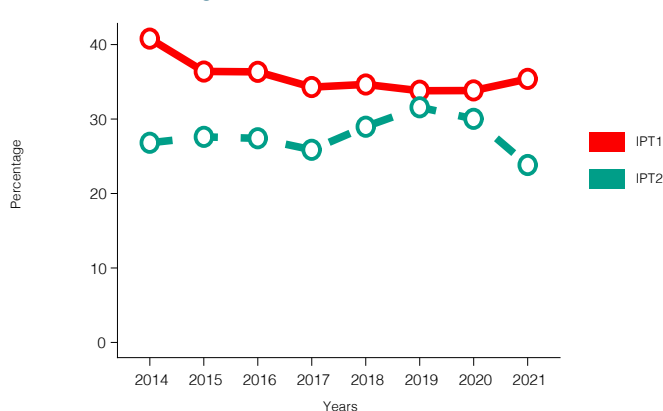
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Bauchi State is located in the North-Eastern region of Nigeria. It borders Kano and Jigawa to the north, Taraba and Plateau to the south, Gombe and Yobe to the east, and Kaduna to the west. The State’s estimated population was 7.5 million in 2019 (1) and 7.9 million in 2022.

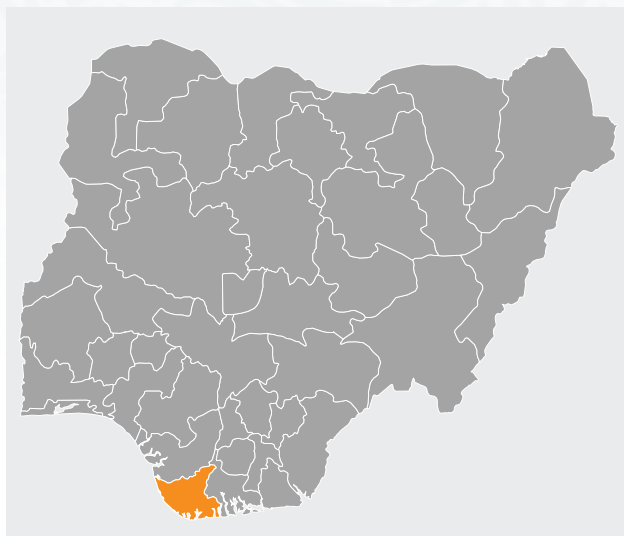
The State experiences two distinct seasons: the dry season (November to May) and the rainy season (June to October) (9), with annual rainfall averaging around 889.3 millimeters (3).

The State contributed an estimated 4.5% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 2.5 million to 3.0 million, the estimated incidence increased from 358.0 to 395.6 per 1000 population (4). Malaria prevalence by microscopy increased from 19.6% in 2015 to 31.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2018. Since 2009, over 8.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 59.2% in 2015 to 48.9% in 2021. Care seeking among children with fever in the State decreased from 89.1% in 2015 to 59.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 8.0% in 2015 to 60.2% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 27.6% in 2015 to 23.8% in 2021 (5).

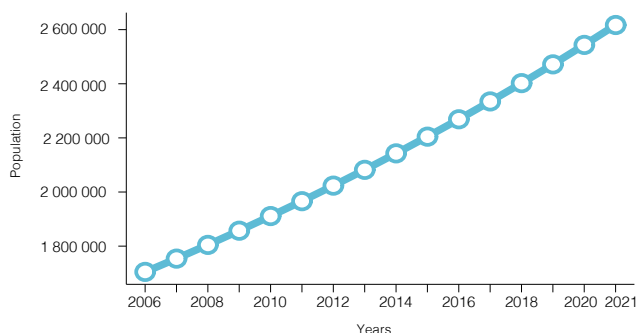
An estimated 5.5 million cases were averted between 2009 and 2015, and 11.4 million between 2009 and 2021.

BAYELSA STATE

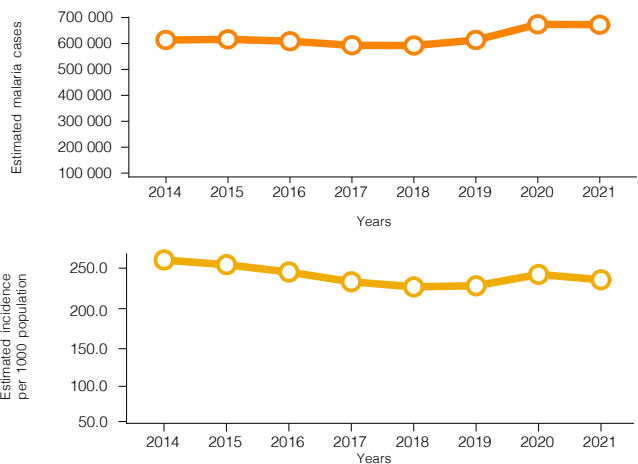


INDICATORS	VALUE	UNIT
Population of last census in 2021	2 617 000	
Malaria prevalence according to RDT	27.1	%
Malaria prevalence according to microscopy	16.7	%
Estimated malaria cases in 2021	673 000	
Estimated incidence per thousand population in 2021	257.1	/1000
Year of most recent ITN campaign	2011	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	21.4	%
Existing ITNs used last night	70.8	%
Population who slept under an ITN the night before the survey	17.9	%
Children under 5 who slept under any net	25.9	%
Children under 5 who slept under an ITN	22.8	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	52.2	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	19.9	%

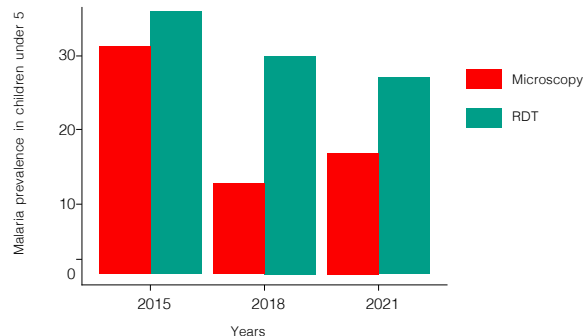
Population count



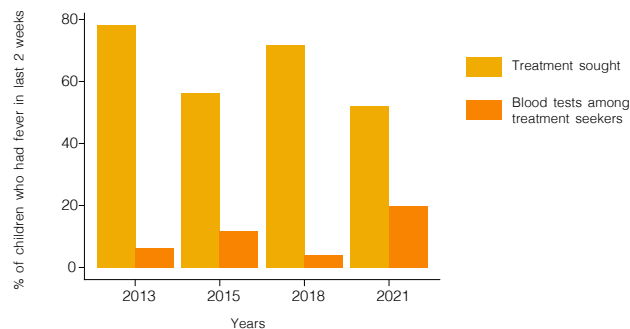
Estimated malaria cases and incidence



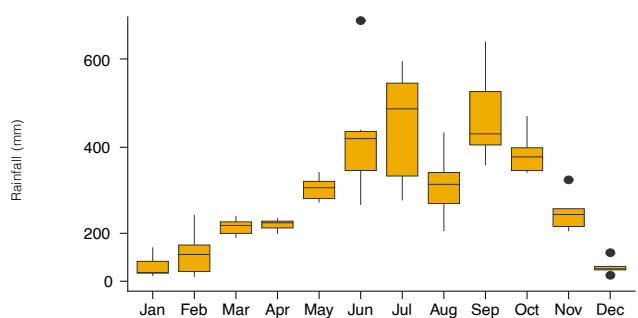
Malaria prevalence in children under 5 years



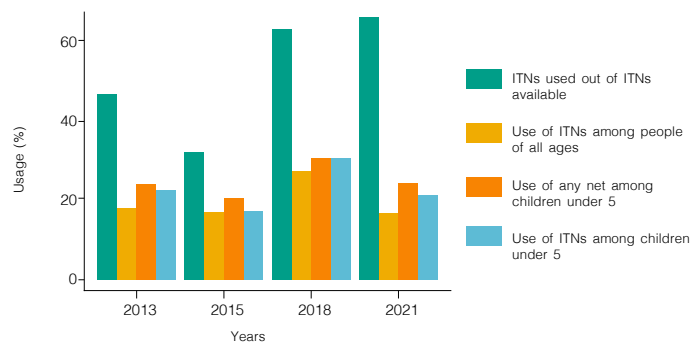
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

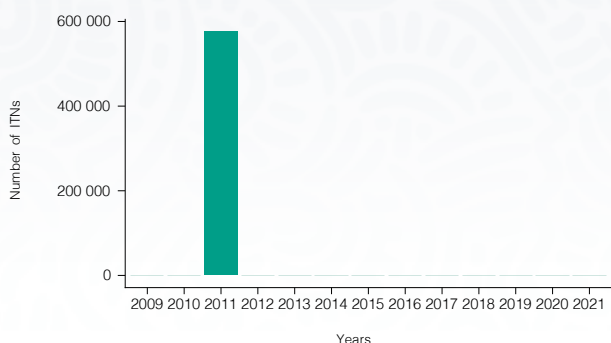


Access, coverage and use of ITNs

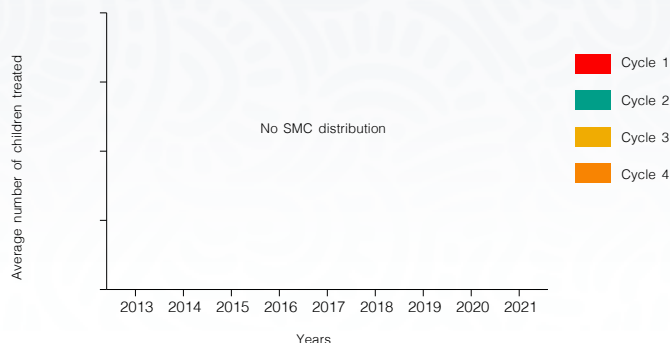


03 | Profiles of Nigeria states

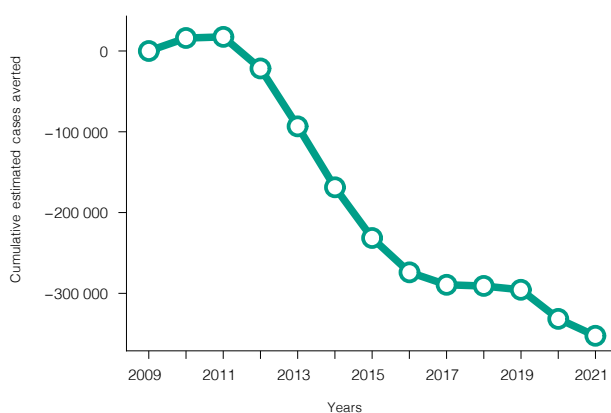
Insecticide treated nets - mass campaign distribution



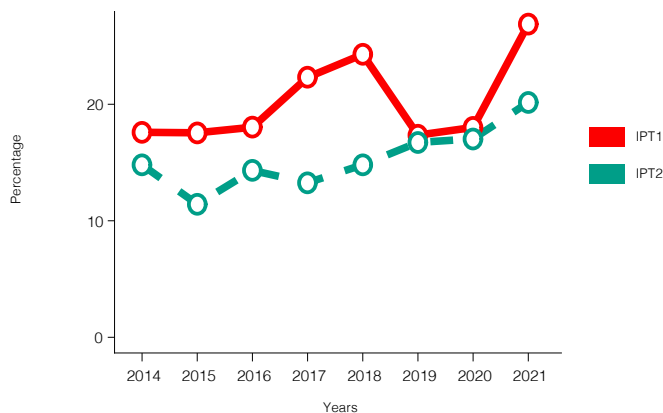
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Bayelsa State is located in the South-Southern Region of Nigeria. It borders Rivers State to the west, Delta State to the east, and the Gulf of Guinea to the south. The State's estimated population was 2.4 million in 2019 (1) and 2.7 million in 2022.

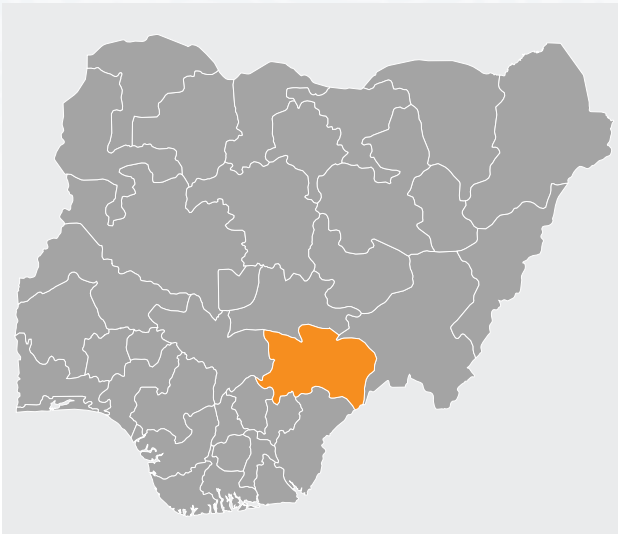
The State experiences two distinct seasons: the dry season (December to April) and the rainy season (May to November) (9), with annual rainfall averaging around 2,701.6 millimeters (3).

The State contributed an estimated 1.0% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 0.6 million to 0.7 million, the estimated incidence increased from 246.5 to 257.1 per 1000 population (4). Malaria prevalence by microscopy decreased from 31.4% in 2015 to 16.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2011. Since 2009, over 0.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 18.2% in 2015 to 17.9% in 2021. Care seeking among children with fever in the State decreased from 56.3% in 2015 to 52.2% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 11.9% in 2015 to 19.9% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 11.4% in 2015 to 20.2% in 2021 (5).

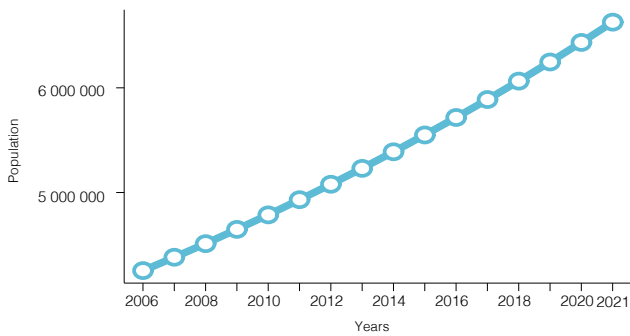
The cumulative estimated cases averted between 2009 and 2021 was negative as there was an increase in cases during this period.

BENUE STATE

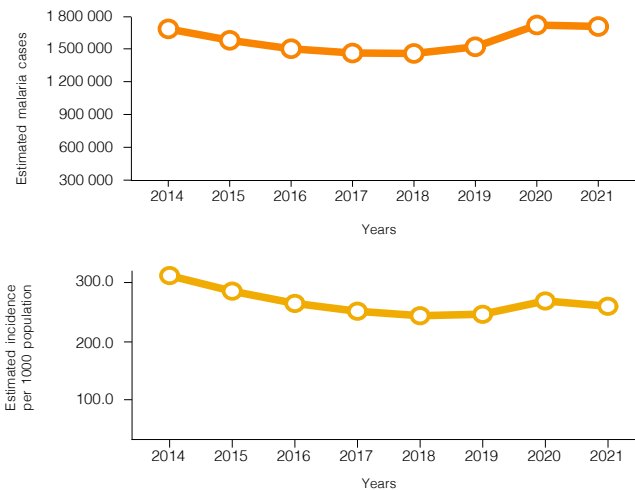


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 627 000	
Malaria prevalence according to RDT	34	%
Malaria prevalence according to microscopy	17.6	%
Estimated malaria cases in 2021	1 704 000	
Estimated incidence per thousand population in 2021	257.2	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2016	
Persons with access to an ITN	58.3	%
Existing ITNs used last night	87.2	%
Population who slept under an ITN the night before the survey	56.6	%
Children under 5 who slept under any net	57.6	%
Children under 5 who slept under an ITN	57.6	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	73.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	23.3	%

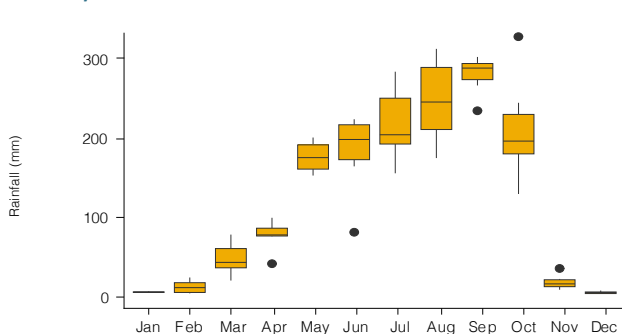
Population count



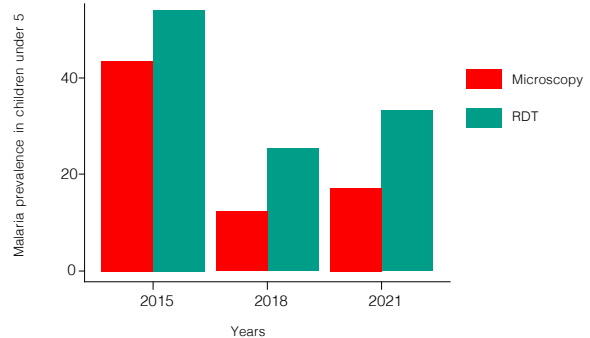
Estimated malaria cases and incidence



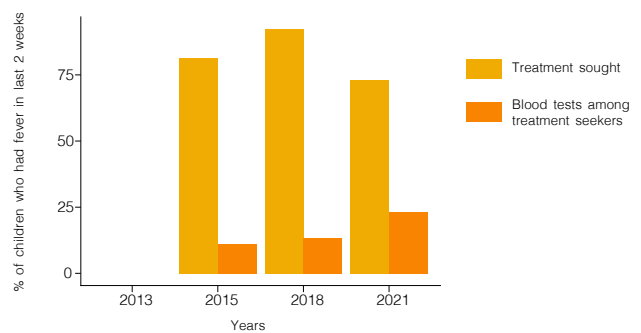
Monthly rainfall



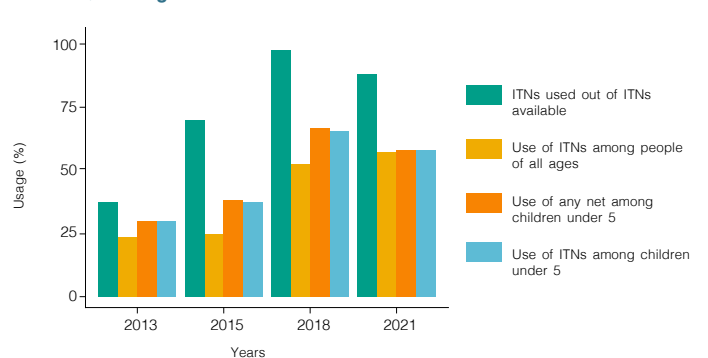
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

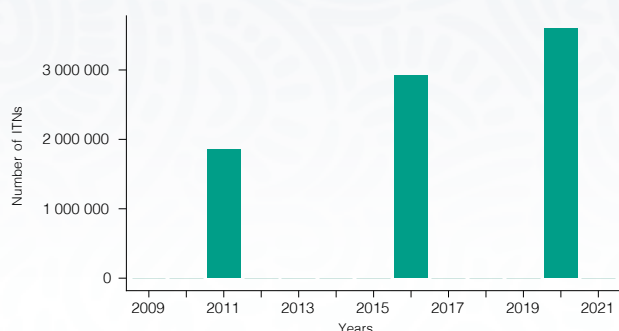


Access, coverage and use of ITNs



03 | Profiles of Nigeria states

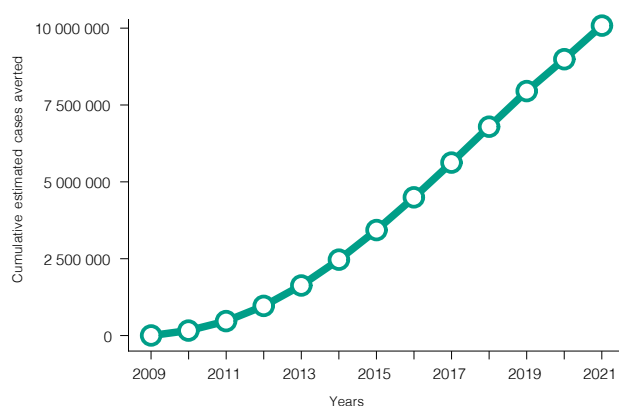
Insecticide treated nets - mass campaign distribution



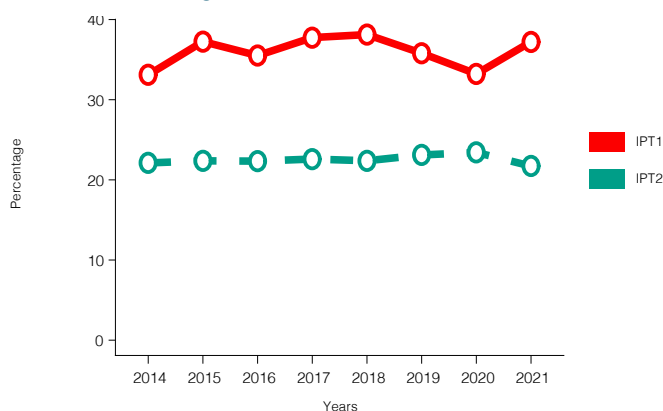
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Benue State is located in the North-Central Region of Nigeria. It borders Nasarawa to the north; Taraba to the east; Kogi to the west; Enugu to the south-west; Ebonyi and Cross River to the south; and has an international border with the Republic of Cameroon to the south-east. The State's estimated population was 5.8 million in 2019 (1) and 6.8 million in 2022.

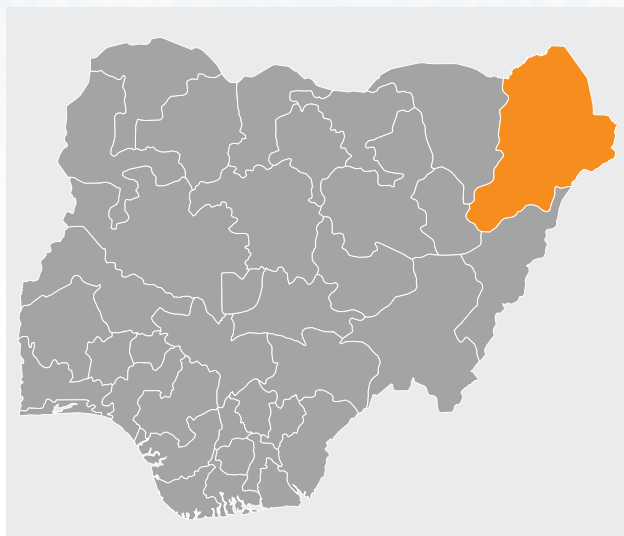
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,314.5 millimeters (3).

The State contributed an estimated 2.5% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.5 million to 1.7 million, the estimated incidence increased from 240.3 to 257.2 per 1000 population (4). Malaria prevalence by microscopy decreased from 44.5% in 2015 to 17.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 8.4 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 24.6% in 2015 to 56.6% in 2021. Care seeking among children with fever in the State decreased from 81.3% in 2015 to 73.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 11.2% in 2015 to 23.3% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 22.4% in 2015 to 21.7% in 2021 (5).

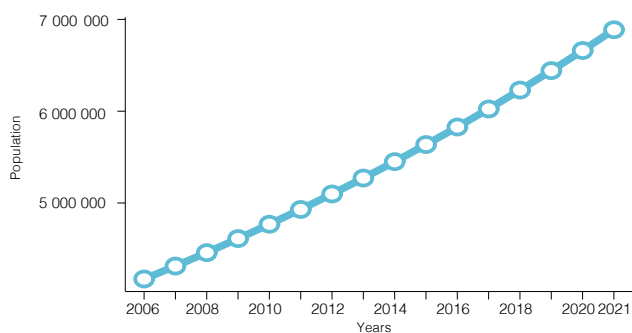
An estimated 3.4 million cases were averted between 2009 and 2015, and 10.1 million between 2009 and 2021.

BORNO STATE

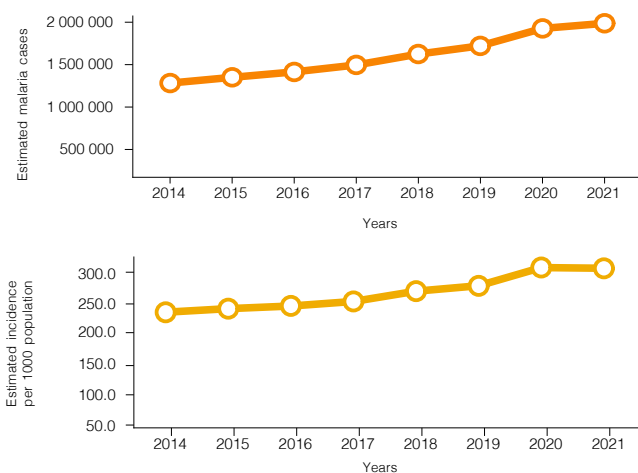


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 887 000	
Malaria prevalence according to RDT	18.6	%
Malaria prevalence according to microscopy	5.6	%
Estimated malaria cases in 2021	1 987 000	
Estimated incidence per thousand population in 2021	288.5	/1000
Year of most recent ITN campaign	2011	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	31.5	%
Existing ITNs used last night	91.6	%
Population who slept under an ITN the night before the survey	34.2	%
Children under 5 who slept under any net	41.7	%
Children under 5 who slept under an ITN	38.3	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	48.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	28.3	%

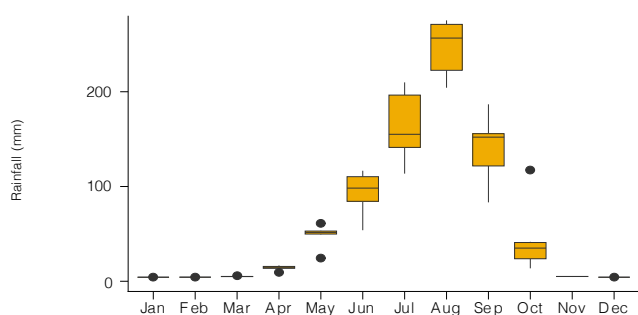
Population count



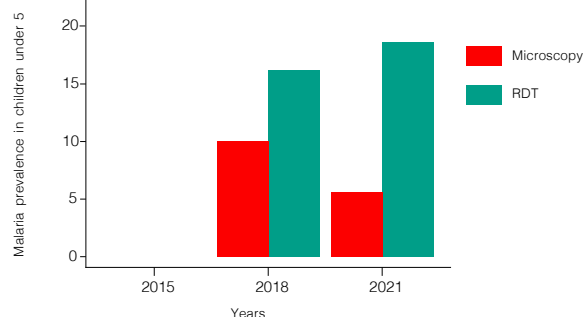
Estimated malaria cases and incidence



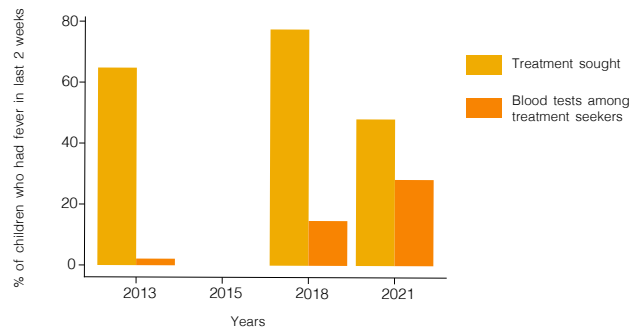
Monthly rainfall



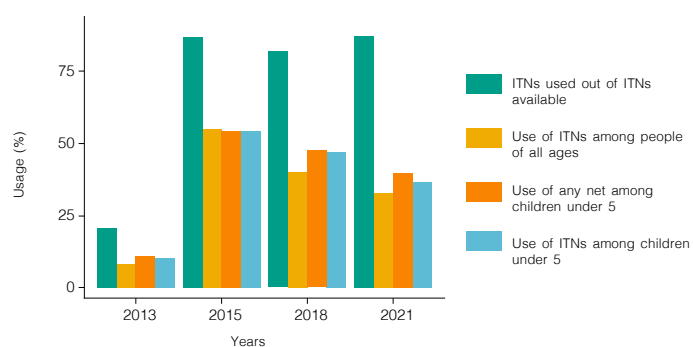
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

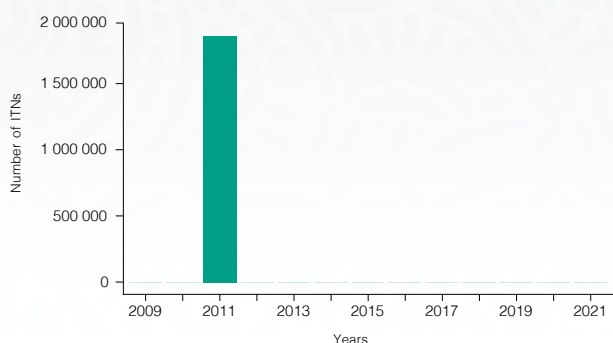


Access, coverage and use of ITNs

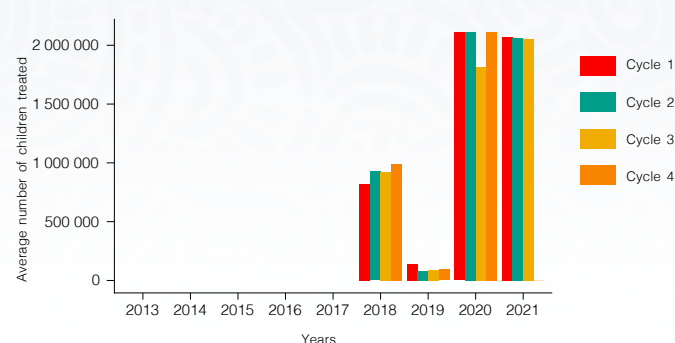


03 | Profiles of Nigeria states

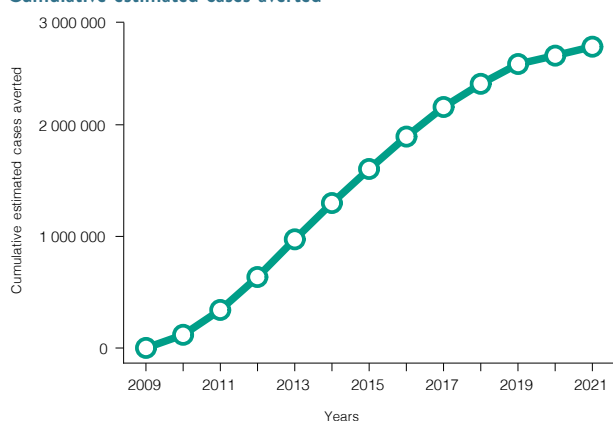
Insecticide treated nets - mass campaign distribution



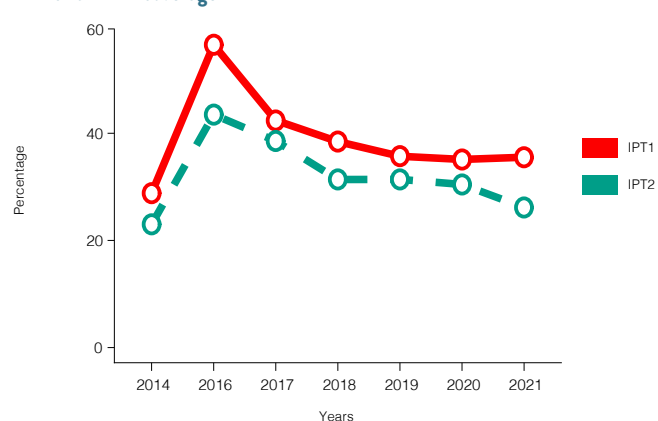
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Borno State is located in the North-Eastern Region of Nigeria. It borders the Republic of Niger to the north, the Republic of Chad to the east, Adamawa and Gombe States to the south, and Yobe State to the west. The State's estimated population was 5.8 million in 2019 (1) and 7.1 million in 2022.

The State experiences two distinct seasons: the dry season (October to May) and the rainy season (June to September) (9), with annual rainfall averaging around 660.0 millimeters (3).

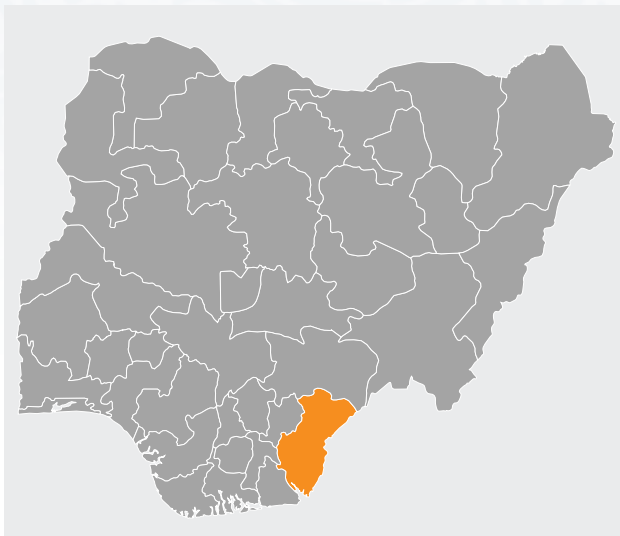
The State contributed an estimated 2.9% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.6 million to 2.0 million, the estimated incidence increased from 260.7 to 288.5 per 1000 population (4). Malaria prevalence by microscopy was 5.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2011. Since 2009, over 1.8 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 57.5% in 2015 to 34.2% in 2021. Care seeking among children with fever in the State was 48.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis was 28.3% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 23.0% in 2014 to 26.1% in 2021 (5).³

An estimated 1.6 million cases were averted between 2009 and 2015, and 2.7 million between 2009 and 2021.

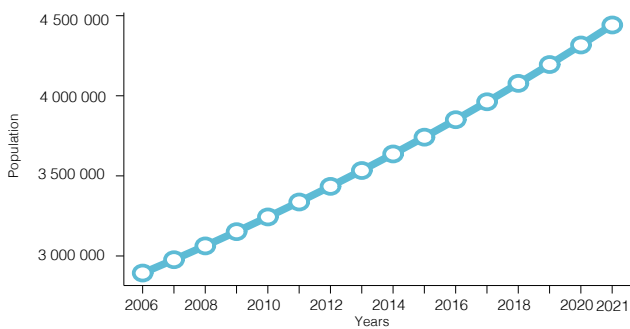
³ Lack of IPTp coverage data of the year 2015 for Borno State.

CROSS RIVER STATE

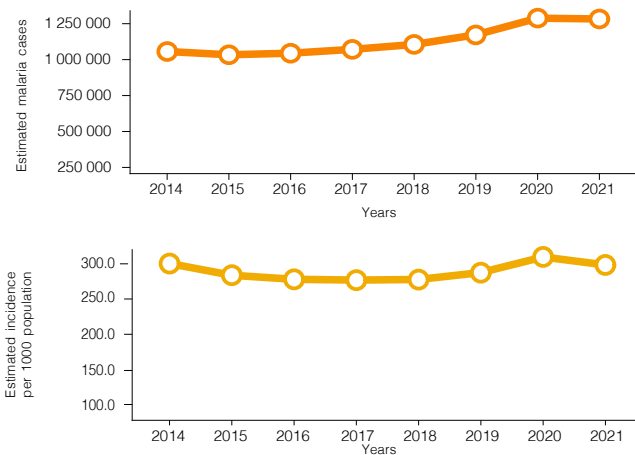


INDICATORS	VALUE	UNIT
Estimated population in 2021	4 442 000	
Malaria prevalence according to RDT	40.6	%
Malaria prevalence according to microscopy	23.6	%
Estimated malaria cases in 2021	1 283 000	
Estimated incidence per thousand population in 2021	288.8	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	41.8	%
Existing ITNs used last night	66.9	%
Population who slept under an ITN the night before the survey	30.6	%
Children under 5 who slept under any net	38.7	%
Children under 5 who slept under an ITN	38.7	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	58.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	25.3	%

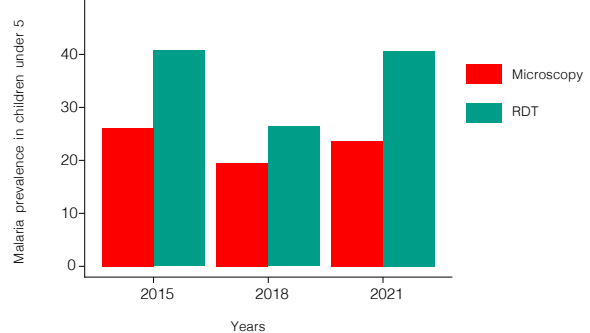
Population count



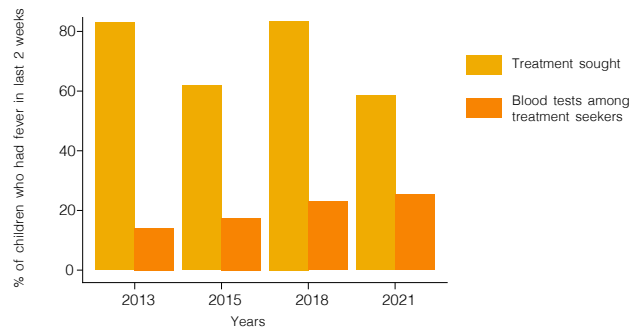
Estimated malaria cases and incidence



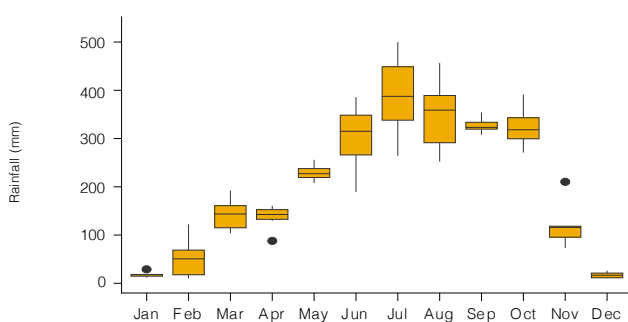
Malaria prevalence in children under 5 years



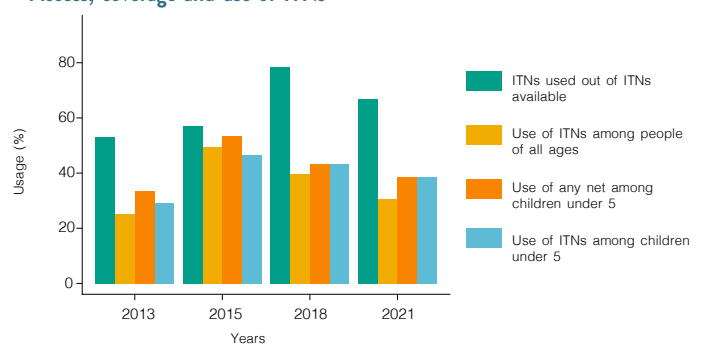
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

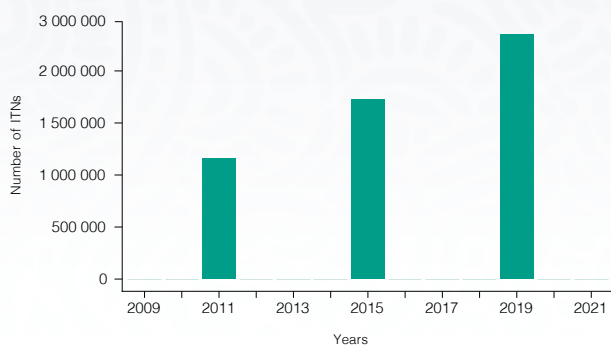


Access, coverage and use of ITNs

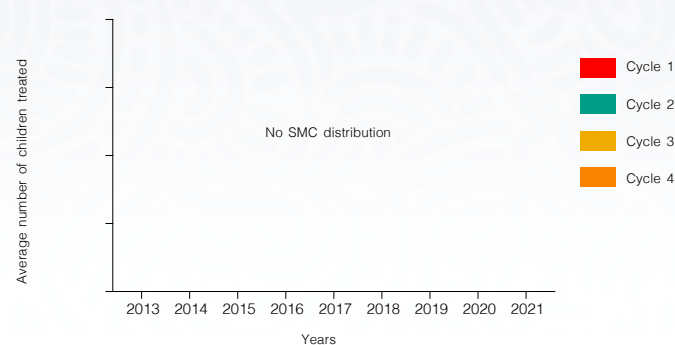


03 | Profiles of Nigeria states

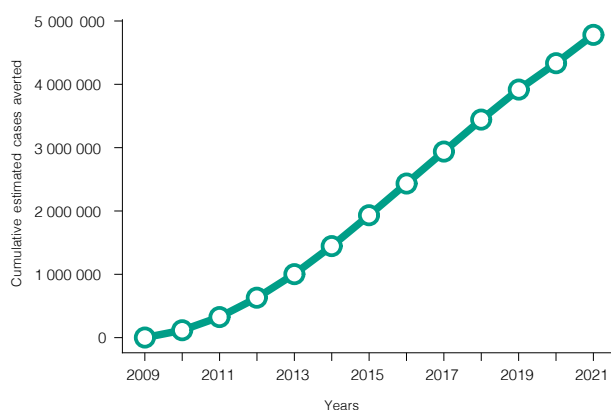
Insecticide treated nets - mass campaign distribution



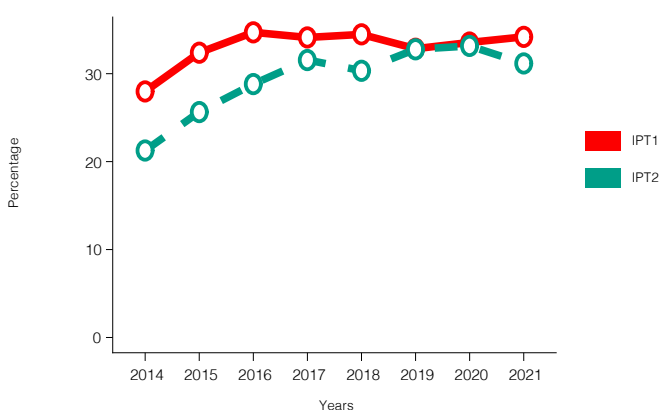
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Cross River State is located in the South-Southern Region of Nigeria. It borders Benue, Ebonyi, Abia, the Republic of Cameroon’s Sud-Ouest Province, Akwa-Ibom, and the Atlantic Ocean. The State’s estimated population was 4.2 million in 2019 (1) and 4.6 million in 2022.

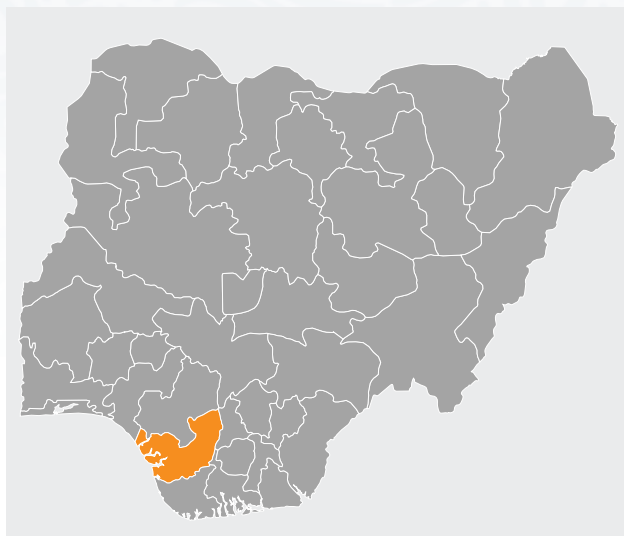
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 2,284.6 millimeters (3).

The State contributed an estimated 1.9% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.1 million to 1.3 million, the estimated incidence increased from 271.2 to 288.8 per 1000 population (4). Malaria prevalence by microscopy decreased from 26.1% in 2015 to 23.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 5.2 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 49.6% in 2015 to 30.6% in 2021. Care seeking among children with fever in the State decreased from 61.8% in 2015 to 58.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 17.5% in 2015 to 25.3% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 25.6% in 2015 to 31.2% in 2021 (5).

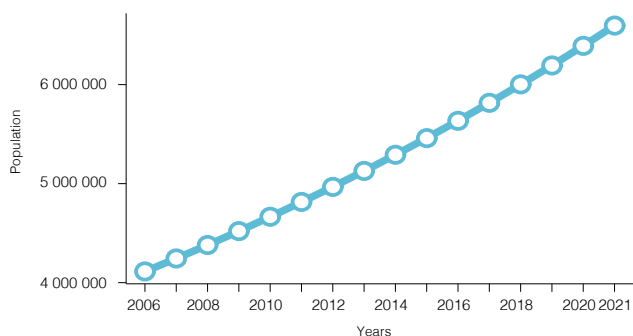
An estimated 1.9 million cases were averted between 2009 and 2015, and 4.8 million between 2009 and 2021.

DELTA STATE

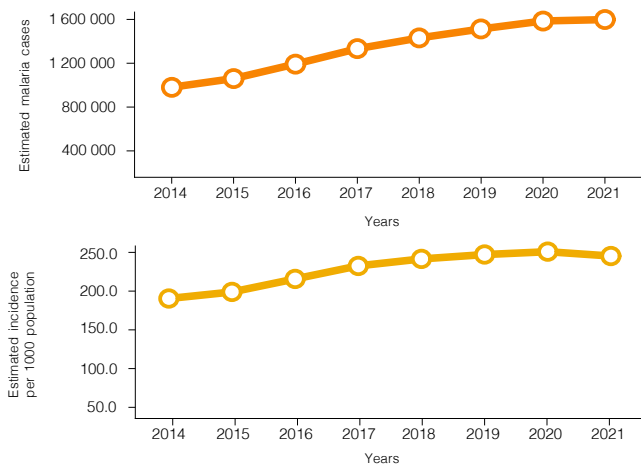


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 596 000	
Malaria prevalence according to RDT	18.9	%
Malaria prevalence according to microscopy	10	%
Estimated malaria cases in 2021	1 598 000	
Estimated incidence per thousand population in 2021	242.3	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2013	
Persons with access to an ITN	43	%
Existing ITNs used last night	53.8	%
Population who slept under an ITN the night before the survey	26.2	%
Children under 5 who slept under any net	28.1	%
Children under 5 who slept under an ITN	28.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	42.6	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	49.1	%

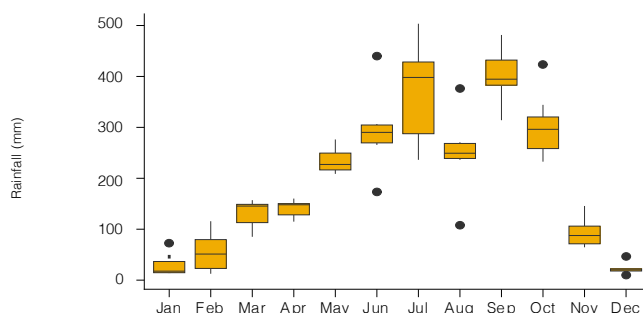
Population count



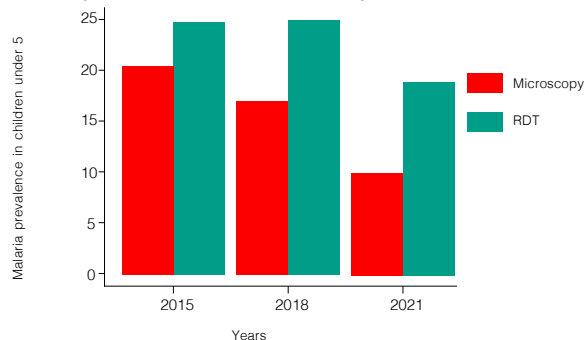
Estimated malaria cases and incidence



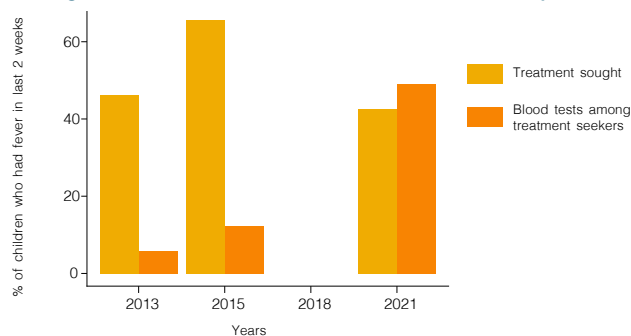
Monthly rainfall



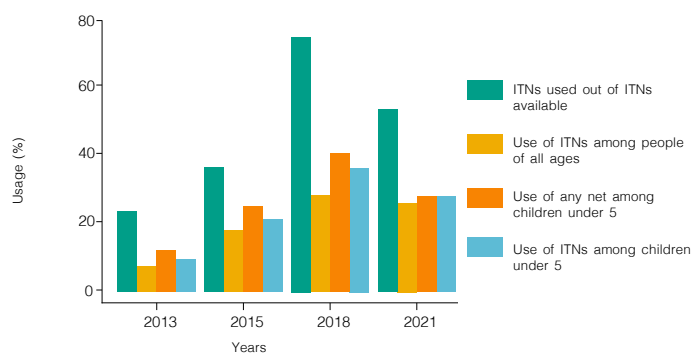
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

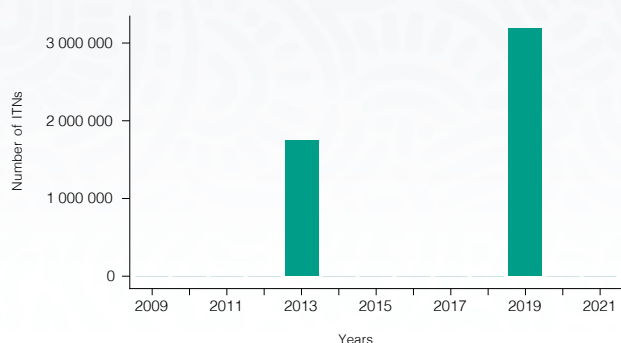


Access, coverage and use of ITNs

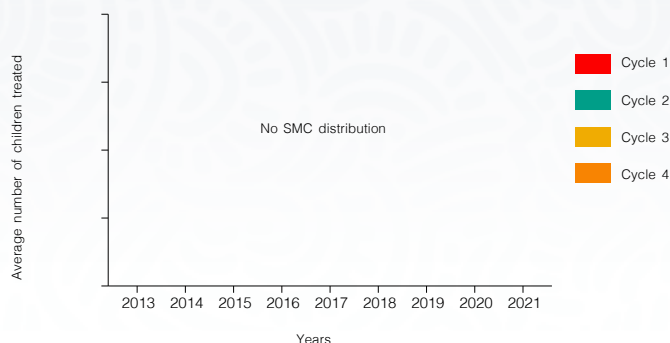


03 | Profiles of Nigeria states

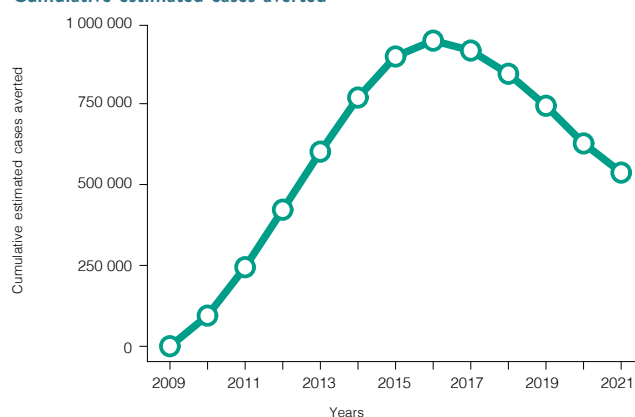
Insecticide treated nets - mass campaign distribution



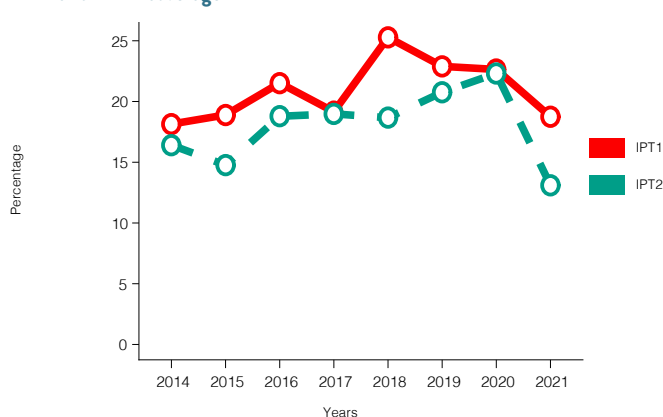
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Delta State is located in the South-Southern Region of Nigeria. It borders Edo to the north, Anambra and Rivers to the east, and Bayelsa to the south, while the Bight of Benin covers about 160 kilometers of the State’s coastline to the west. The State’s estimated population was 5.3 million in 2019 (1) and 6.8 million in 2022.

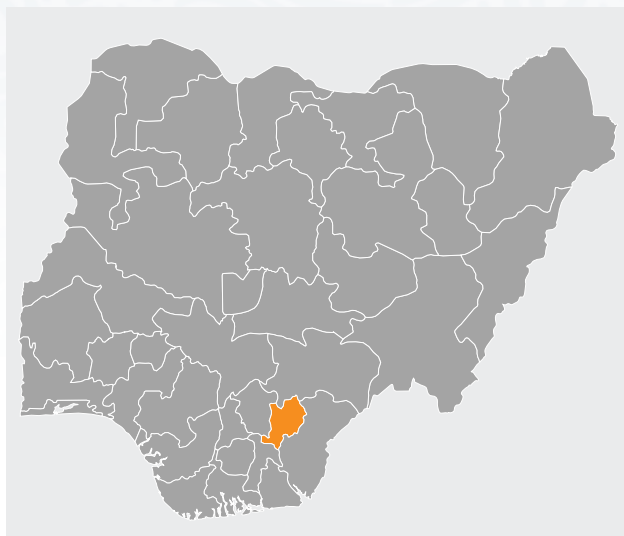
The State experiences two distinct seasons: the dry season (December to February) and the rainy season (March to November) (9), with annual rainfall averaging around 2,088.8 millimeters (3).

The State contributed an estimated 2.4% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.4 million to 1.6 million, the estimated incidence increased from 238.4 to 242.3 per 1000 population (4). Malaria prevalence by microscopy decreased from 20.4% in 2015 to 10.0% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 4.9 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 18.1% in 2015 to 26.2% in 2021. Care seeking among children with fever in the State decreased from 65.7% in 2015 to 42.6% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 12.3% in 2015 to 49.1% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 14.8% in 2015 to 13.1% in 2021 (5).

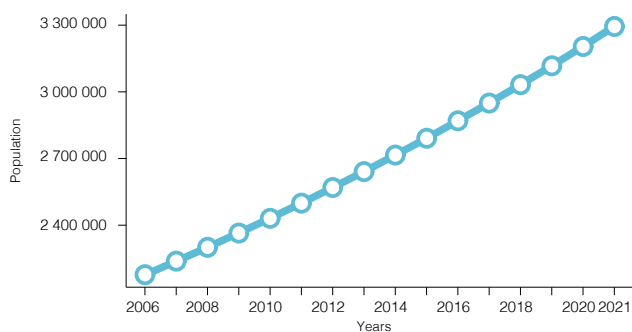
An estimated 0.9 million cases were averted between 2009 and 2015, and 0.6 million between 2009 and 2021.

EBONYI STATE

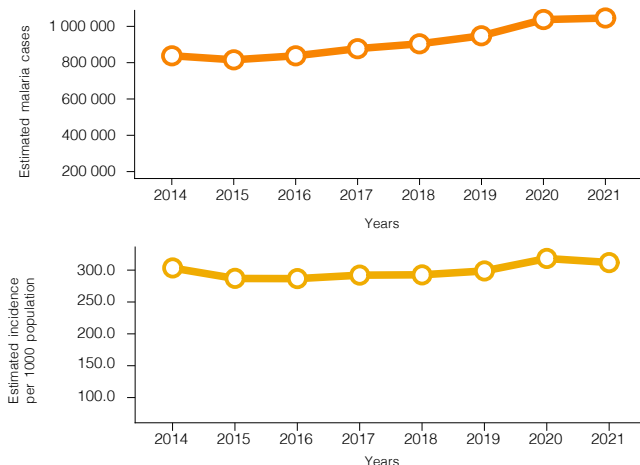


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 294 000	
Malaria prevalence according to RDT	30.2	%
Malaria prevalence according to microscopy	25.7	%
Estimated malaria cases in 2021	1 046 000	
Estimated incidence per thousand population in 2021	317.5	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	52.3	%
Existing ITNs used last night	65.9	%
Population who slept under an ITN the night before the survey	48.1	%
Children under 5 who slept under any net	53.9	%
Children under 5 who slept under an ITN	53.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	72	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	27.4	%

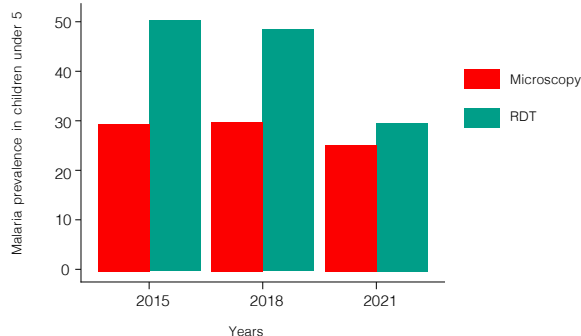
Population count



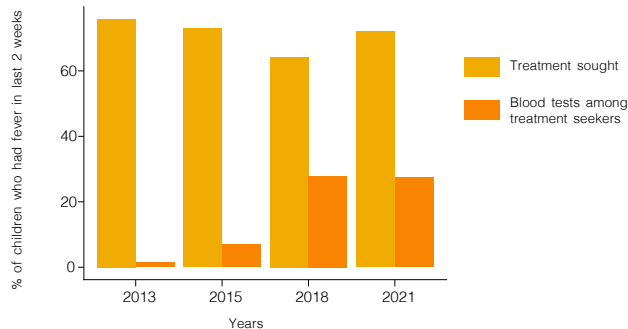
Estimated malaria cases and incidence



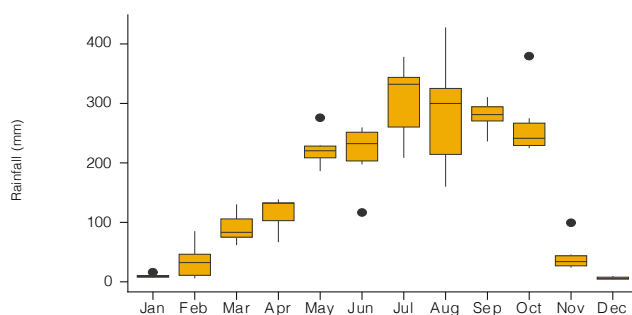
Malaria prevalence in children under 5 years



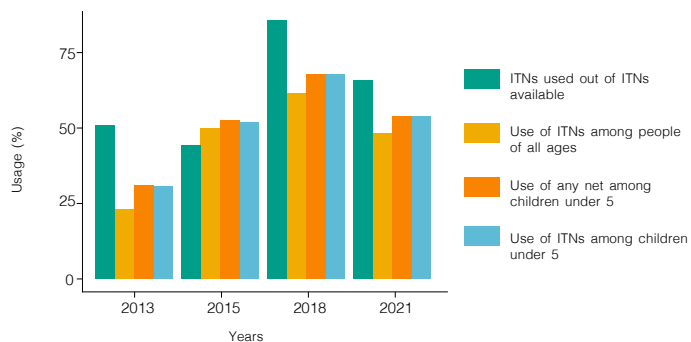
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

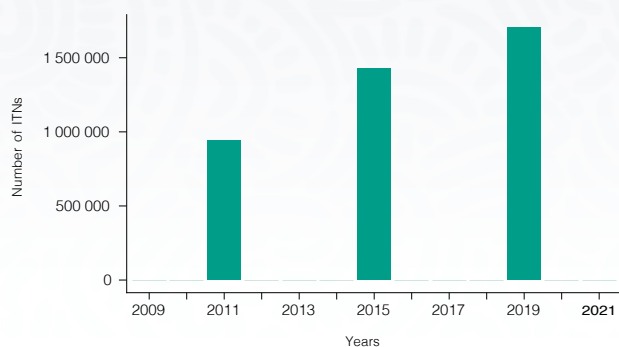


Access, coverage and use of ITNs

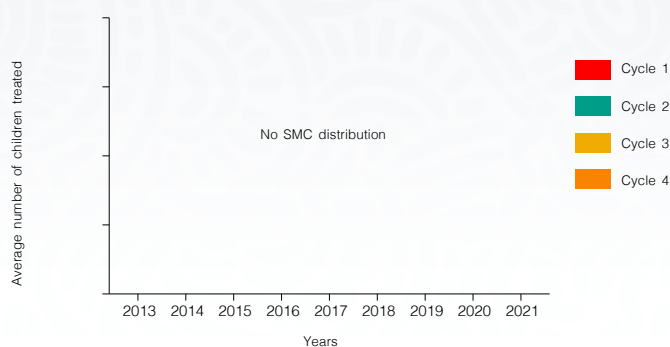


03 | Profiles of Nigeria states

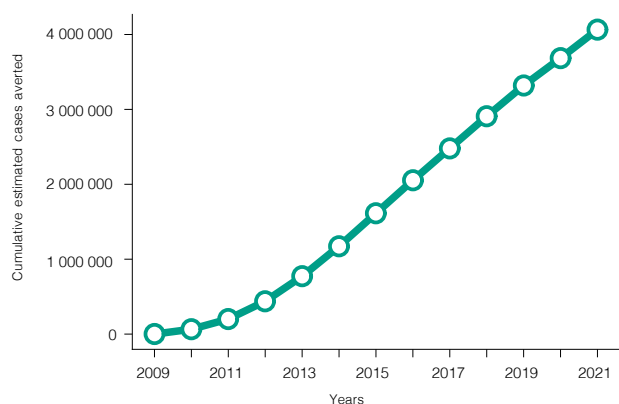
Insecticide treated nets - mass campaign distribution



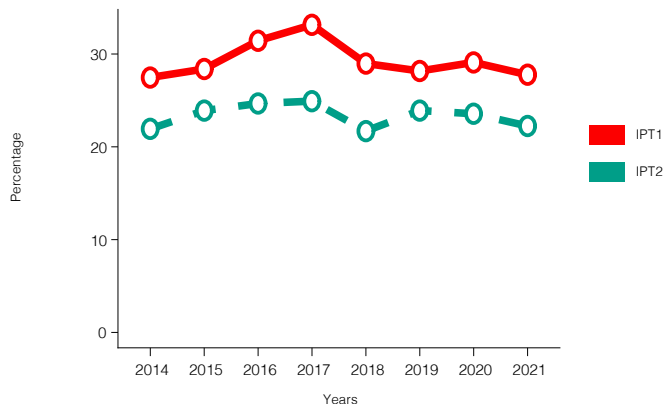
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Ebonyi State is located in South-Eastern Region of Nigeria. It borders Benue, Cross River, Enugu, and Abia, featuring Cross Niger transition forests, drier Guinea forest-savanna mosaic. The State's estimated population was 3.0 million in 2019 (1) and 3.4 million in 2022.

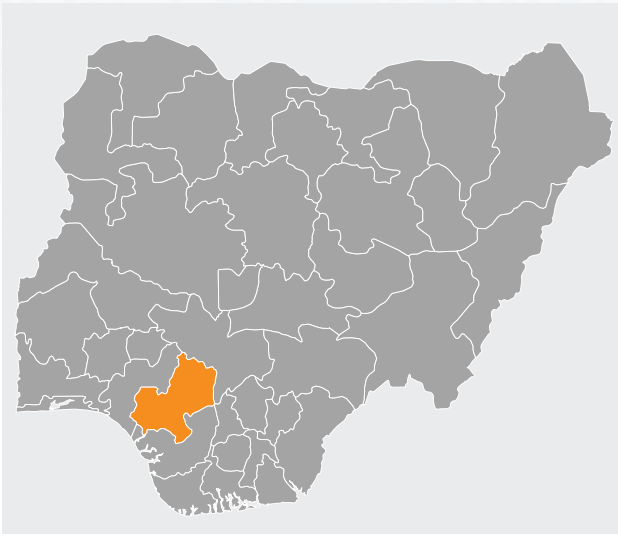
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,719.9 millimeters (3).

The State contributed an estimated 1.5% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased remained at around 1.0 million, the estimated incidence increased from 298.1 to 317.5 per 1000 population (4). Malaria prevalence by microscopy decreased from 30.0% in 2015 to 25.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 4.1 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 50.0% in 2015 to 48.1% in 2021. Care seeking among children with fever in the State decreased from 73.0% in 2015 to 72.0% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 7.0% in 2015 to 27.4% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 23.9% in 2015 to 22.2% in 2021 (5).

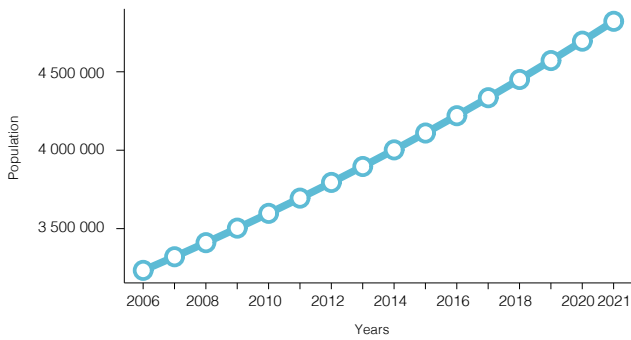
An estimated 1.6 million cases were averted between 2009 and 2015, and 4.1 million between 2009 and 2021.

EDO STATE

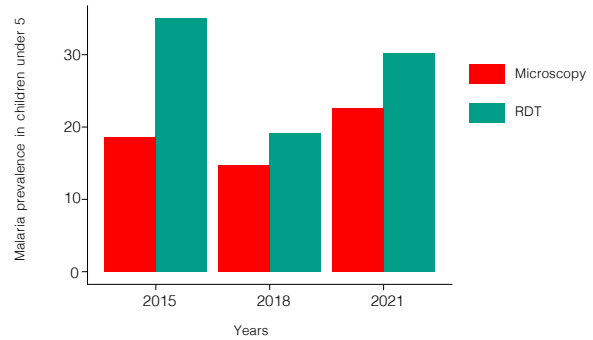


INDICATORS	VALUE	UNIT
Estimated population in 2021	4 822 000	
Malaria prevalence according to RDT	30.2	%
Malaria prevalence according to microscopy	25.7	%
Estimated malaria cases in 2021	1 191 000	
Estimated incidence per thousand population in 2021	317.5	/1000
Year of most recent ITN campaign	2017	
Year of preceding ITN campaign	2012	
Persons with access to an ITN	52.3	%
Existing ITNs used last night	65.9	%
Population who slept under an ITN the night before the survey	48.1	%
Children under 5 who slept under any net	53.9	%
Children under 5 who slept under an ITN	53.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	72	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	27.4	%

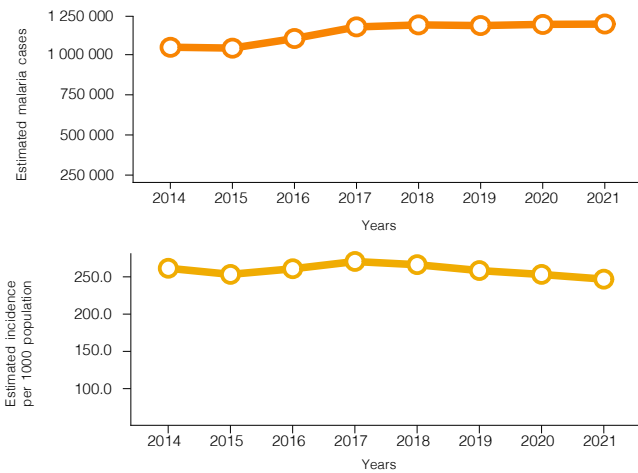
Population count



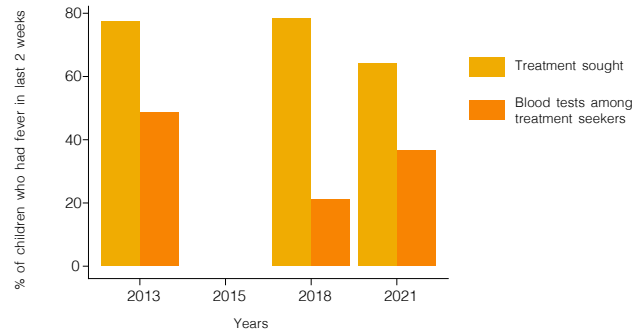
Malaria prevalence in children under 5 years



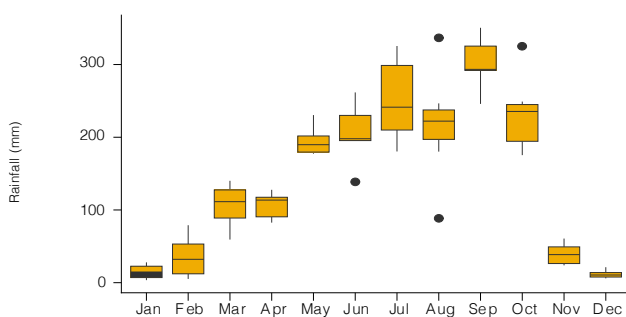
Malaria cases and incidence



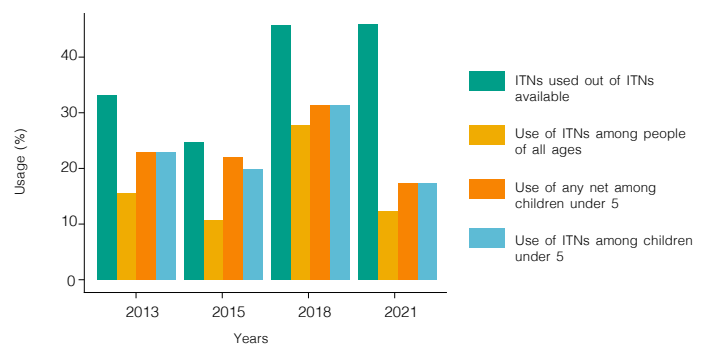
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

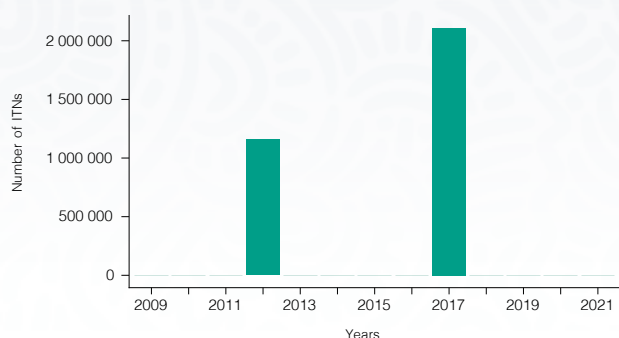


Access, coverage and use of ITNs

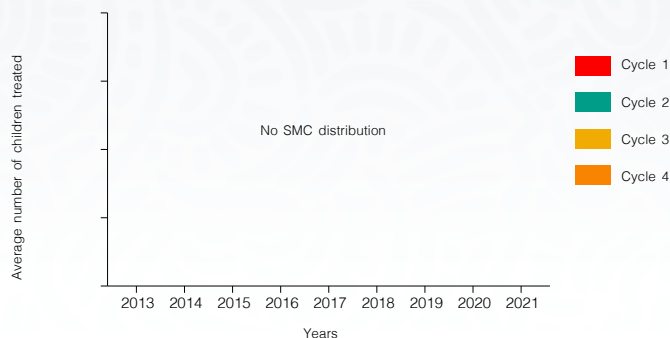


03 | Profiles of Nigeria states

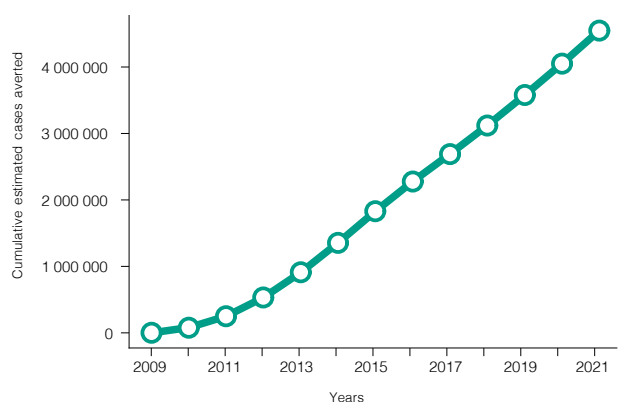
Insecticide treated nets - mass campaign distribution



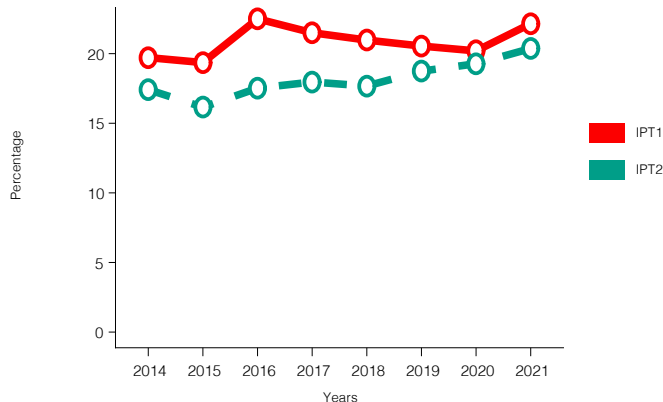
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Edo State is located in the South-Southern Region of Nigeria. It borders Kogi, Anambra, Delta, and Ondo, with the Niger River along its eastern edge. The State’s estimated population was 4.5 million in 2019 (1) and 5.0 million in 2022.

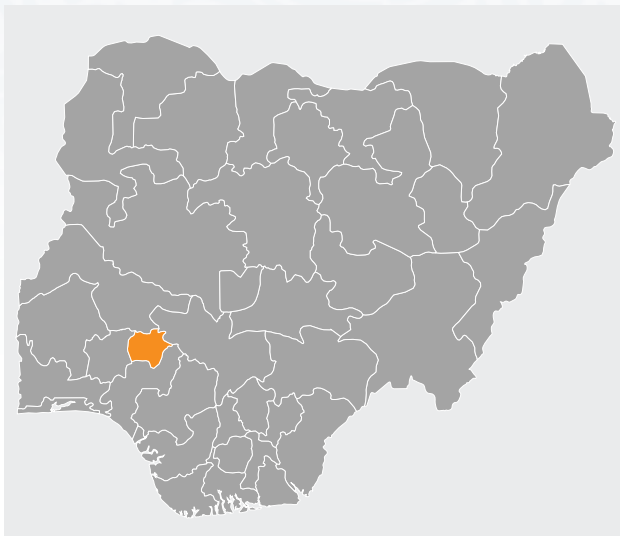
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,577.2 millimeters (3).

The State contributed an estimated 1.8% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.2 million, the estimated incidence decreased from 266.3 to 246.9 per 1000 population (4). Malaria prevalence by microscopy increased from 18.6% in 2015 to 22.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2017. Since 2009, over 3.3 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 10.7% in 2015 to 12.3% in 2021. Care seeking among children with fever in the State was 64.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis was 36.5% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 16.2% in 2015 to 20.4% in 2021 (5).

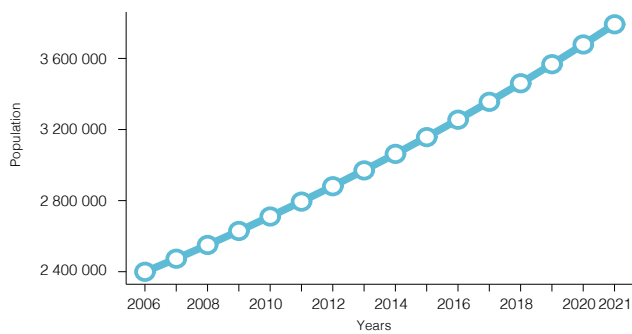
An estimated 1.8 million cases were averted between 2009 and 2015, and 4.5 million between 2009 and 2021.

EKITI STATE

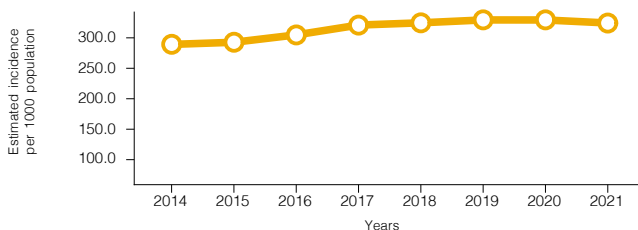
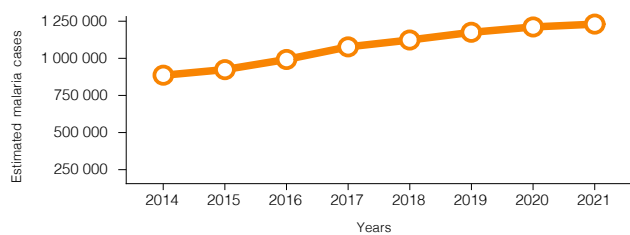


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 792 000	
Malaria prevalence according to RDT	36.5	%
Malaria prevalence according to microscopy	20.8	%
Estimated malaria cases in 2021	1 230 000	
Estimated incidence per thousand population in 2021	324.4	/1000
Year of most recent ITN campaign	2014	
Year of preceding ITN campaign	2009	
Persons with access to an ITN	19.4	%
Existing ITNs used last night	52.9	%
Population who slept under an ITN the night before the survey	9.9	%
Children under 5 who slept under any net	10.8	%
Children under 5 who slept under an ITN	10.8	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	41.2	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	14.6	%

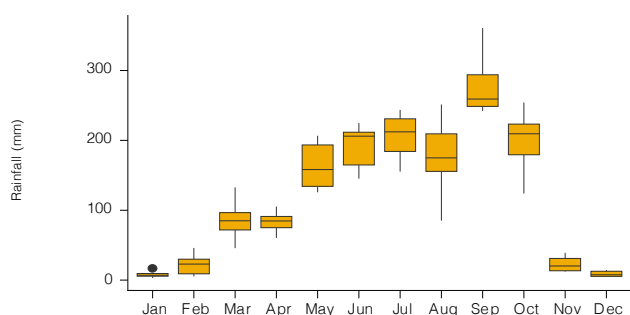
Population count



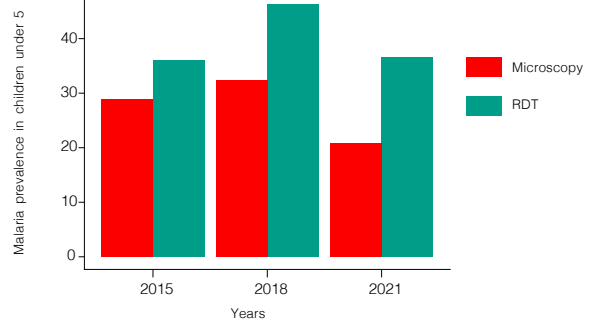
Estimated malaria cases and incidence



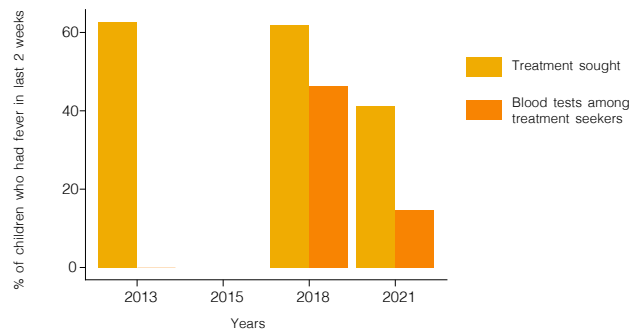
Monthly rainfall



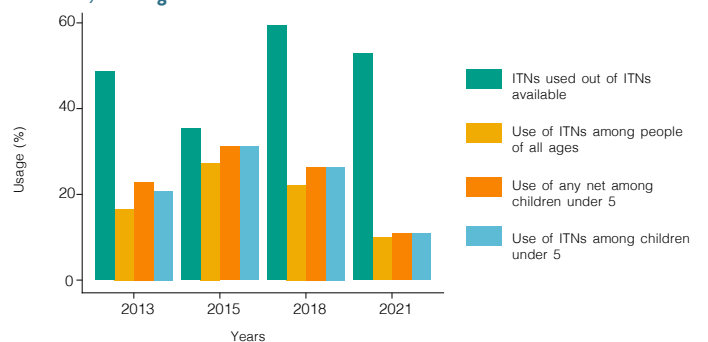
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

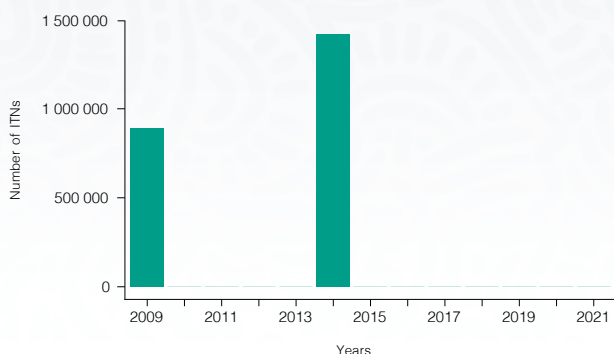


Access, coverage and use of ITNs

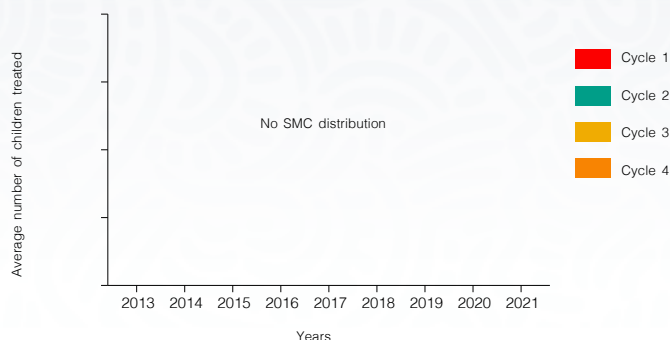


03 | Profiles of Nigeria states

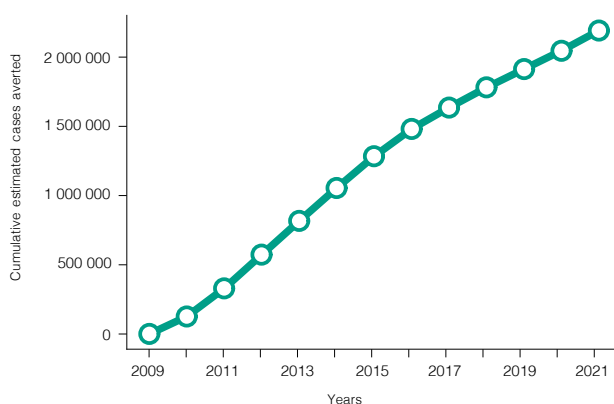
Insecticide treated nets - mass campaign distribution



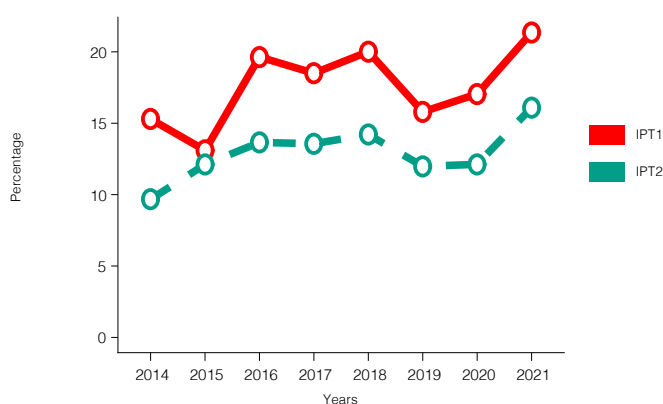
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Ekiti State is located in South-Western Region of Nigeria. It borders Kwara to the north, Kogi to the north-east, to the south and south-east by Ondo, and Osun to the west. The State's estimated population was 3.4 million in 2019 (1) and 3.9 million in 2022.

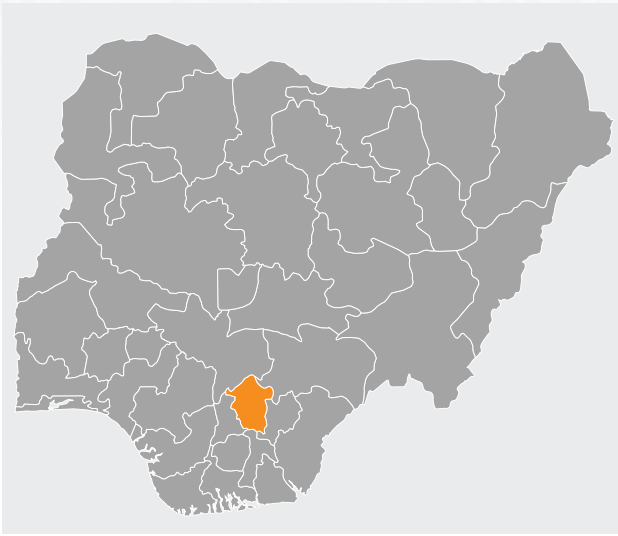
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,333.5 millimeters (3).

The State contributed an estimated 1.8% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.1 million, the estimated incidence decreased from 324.7 to 324.4 per 1000 population (4). Malaria prevalence by microscopy decreased from 28.8% in 2015 to 20.8% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2014. Since 2009, over 2.3 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 27.3% in 2015 to 9.9% in 2021. Care seeking among children with fever in the State was 41.2% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis was 14.6% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 12.1% in 2015 to 16.1% in 2021 (5).

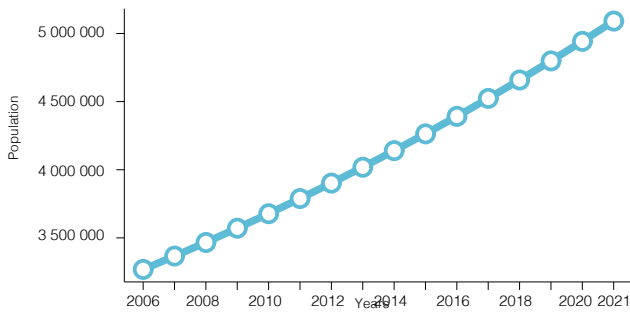
An estimated 1.3 million cases were averted between 2009 and 2015, and 2.2 million between 2009 and 2021.

ENUGU STATE

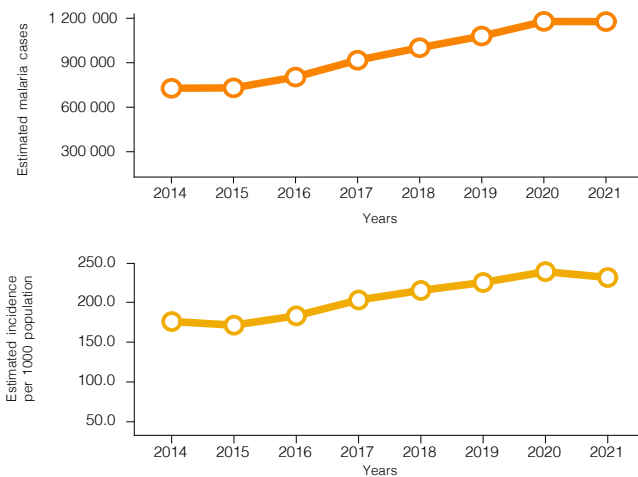


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 091 000	
Malaria prevalence according to RDT	30.2	%
Malaria prevalence according to microscopy	24.3	%
Estimated malaria cases in 2021	1 177 000	
Estimated incidence per thousand population in 2021	231.2	/1000
Year of most recent ITN campaign	2011	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	17.6	%
Existing ITNs used last night	53.4	%
Population who slept under an ITN the night before the survey	9.8	%
Children under 5 who slept under any net	12.9	%
Children under 5 who slept under an ITN	12.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	73.2	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	16.5	%

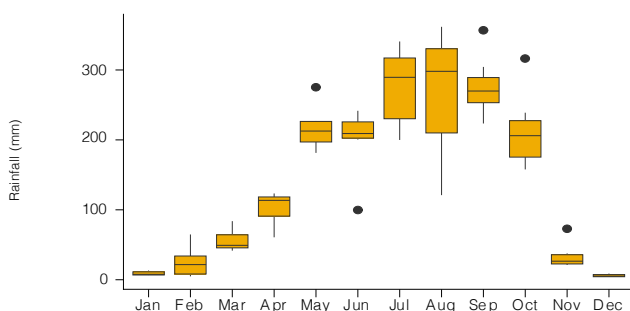
Population count



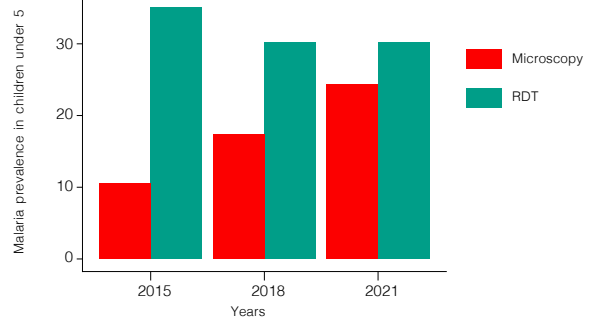
Estimated malaria cases and incidence



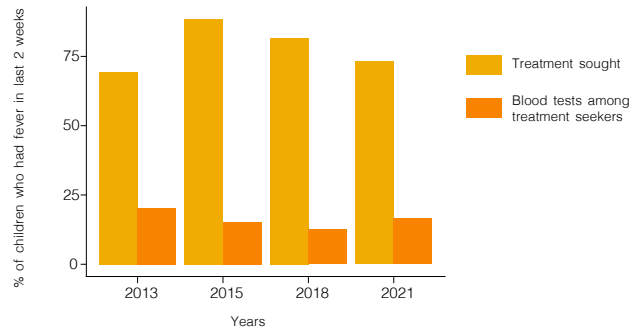
Monthly rainfall



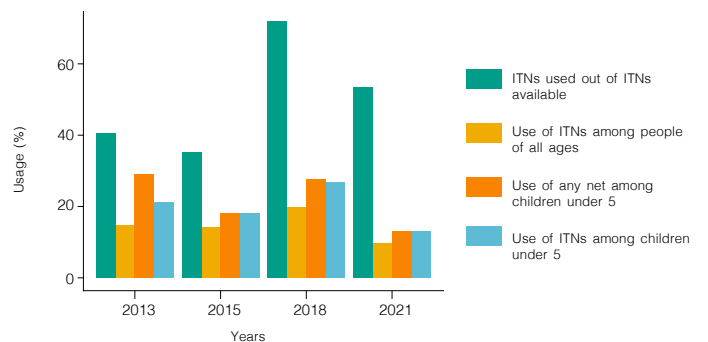
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

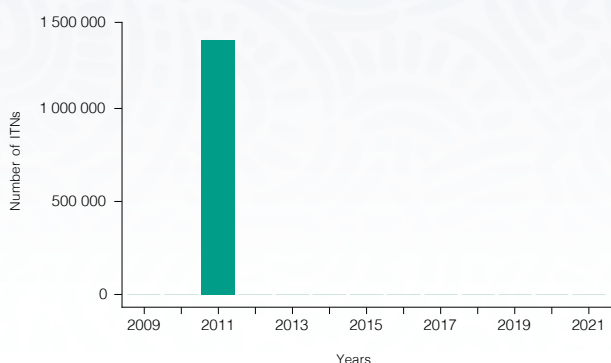


Access, coverage and use of ITNs

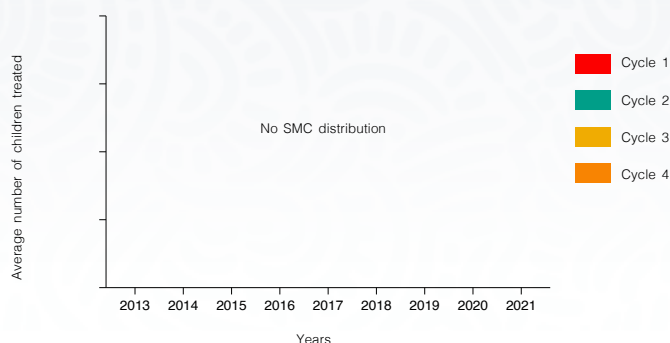


03 | Profiles of Nigeria states

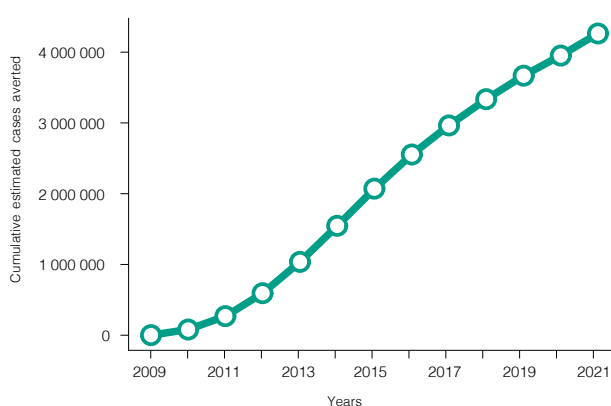
Insecticide treated nets - mass campaign distribution



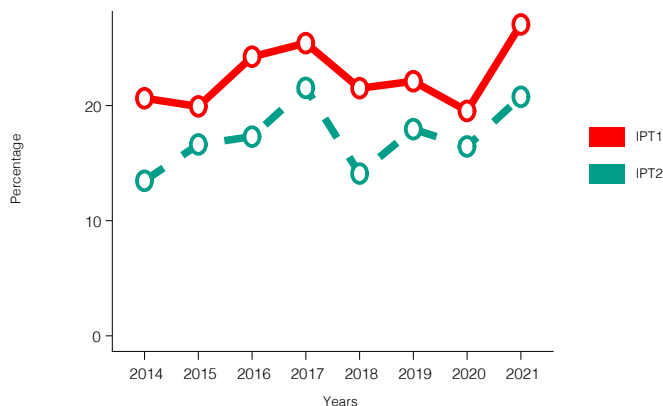
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Enugu State is located in the South-Eastern Region of Nigeria. It borders Benue and Kogi to the north, Ebonyi to the east and south-east, Abia to the south, and Anambra to the west. The State's estimated population was 4.4 million in 2019 (1) and 5.2 million in 2022.

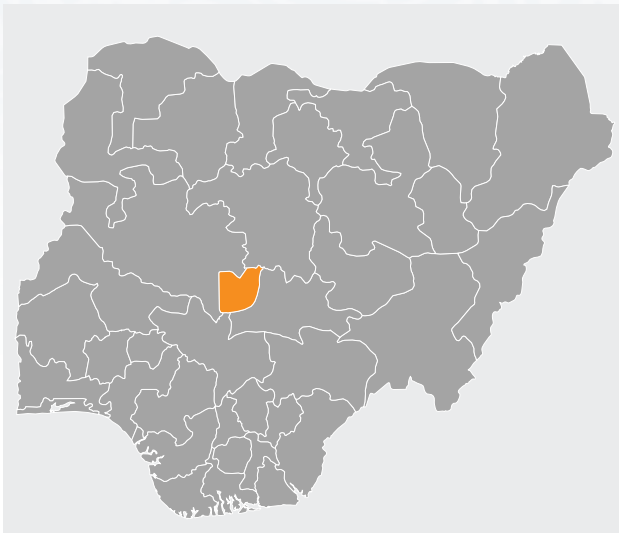
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 1,548.2 millimeters (3).

The State contributed an estimated 1.7% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.0 million to 1.2 million, the estimated incidence increased from 214.9 to 231.2 per 1000 population (4). Malaria prevalence by microscopy increased from 10.5% in 2015 to 24.3% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2011. Since 2009, over 1.4 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 14.1% in 2015 to 9.8% in 2021. Care seeking among children with fever in the State decreased from 88.4% in 2015 to 73.2% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 15.3% in 2015 to 16.5% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 16.6% in 2015 to 20.8% in 2021 (5).

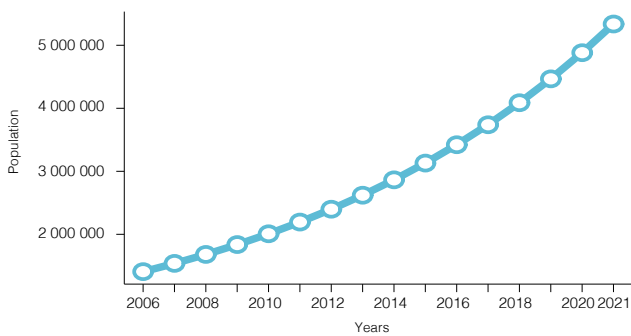
An estimated 2.1 million cases were averted between 2009 and 2015, and 4.3 million between 2009 and 2021.

FEDERAL CAPITAL

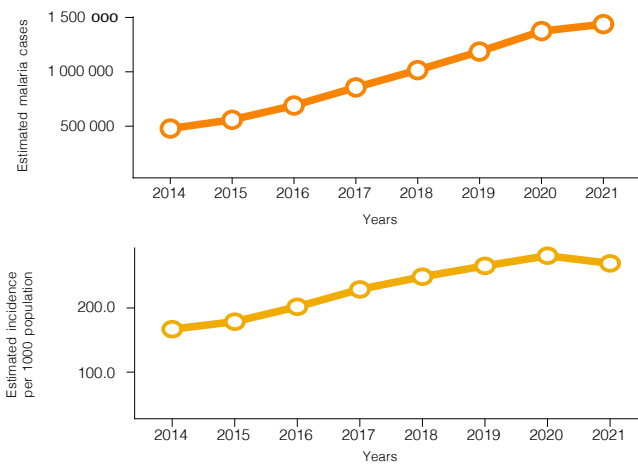


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 338 000	
Malaria prevalence according to RDT	34.6	%
Malaria prevalence according to microscopy	18.8	%
Estimated malaria cases in 2021	1 438 000	
Estimated incidence per thousand population in 2021	269.4	/1000
Year of most recent ITN campaign	2011	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	31.1	%
Existing ITNs used last night	82.3	%
Population who slept under an ITN the night before the survey	28.6	%
Children under 5 who slept under any net	48.2	%
Children under 5 who slept under an ITN	42.3	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	77.7	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	27.4	%

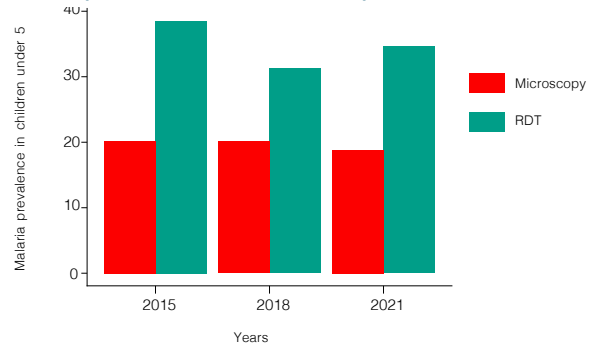
Population count



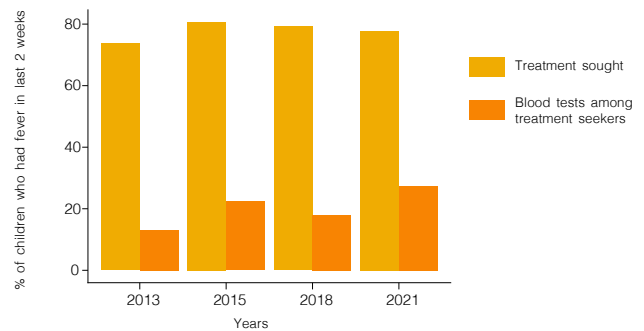
Estimated malaria cases and incidence



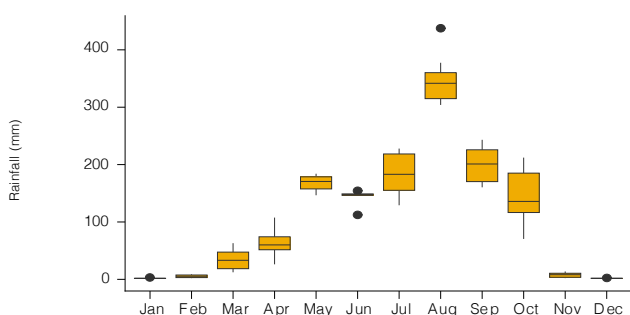
Malaria prevalence in children under 5 years



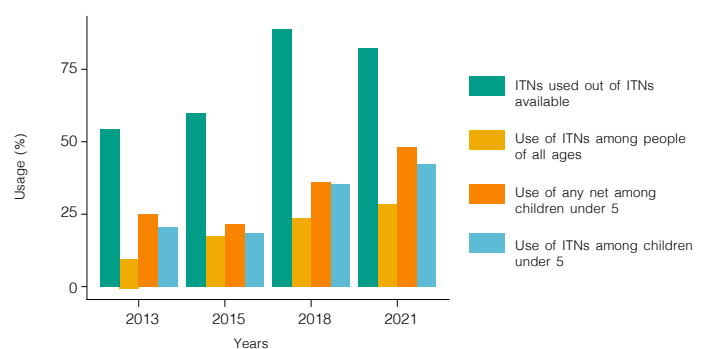
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

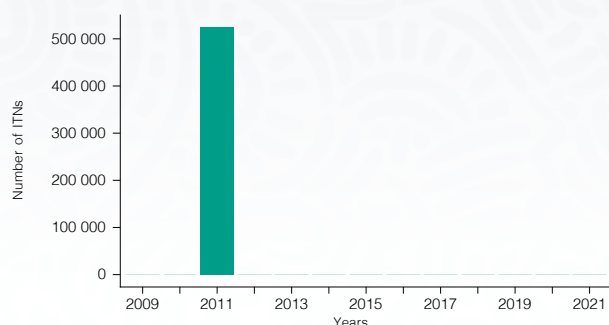


Access, coverage and use of ITNs

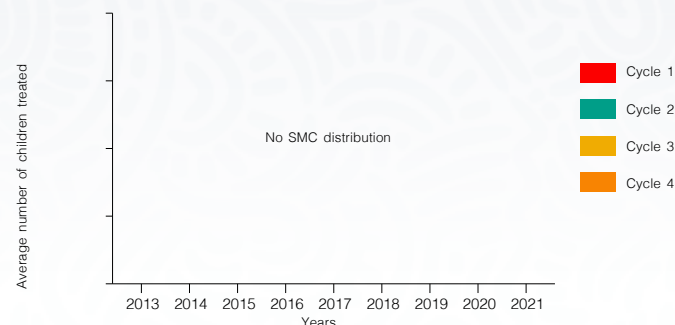


03 | Profiles of Nigeria states

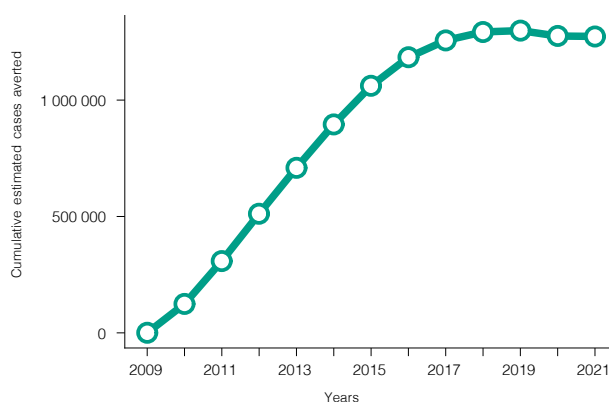
Insecticide treated nets - mass campaign distribution



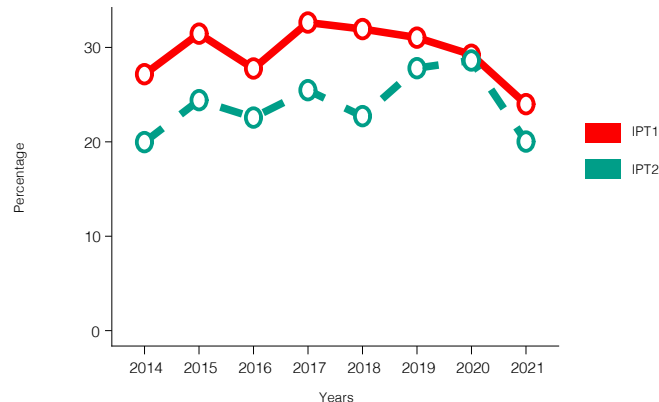
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Federal Capital Territory is located in the North-Central Region of Nigeria and hosts the capital of the country. It borders Niger to the west and north, Kaduna to the north-east, Nasarawa to the east and south, and Kogi to the south-west. The State's estimated population was 2.7 million in 2019 (1) and 5.8 million in 2022.

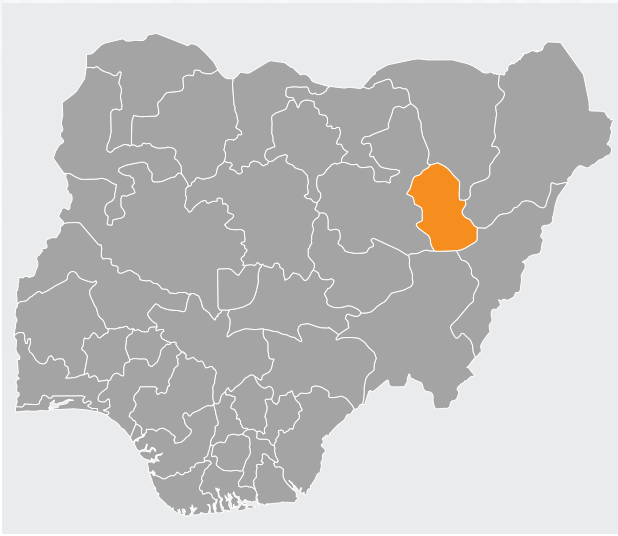
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,215.0 millimeters (3).

The State contributed an estimated 2.1% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.0 million to 1.4 million, the estimated incidence increased from 248.6 to 269.4 per 1000 population (4). Malaria prevalence by microscopy decreased from 20.2% in 2015 to 18.8% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2011. Since 2009, over 0.5 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 17.4% in 2015 to 28.6% in 2021. Care seeking among children with fever in the State decreased from 80.6% in 2015 to 77.7% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 22.3% in 2015 to 27.4% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 24.4% in 2015 to 20.0% in 2021 (5).

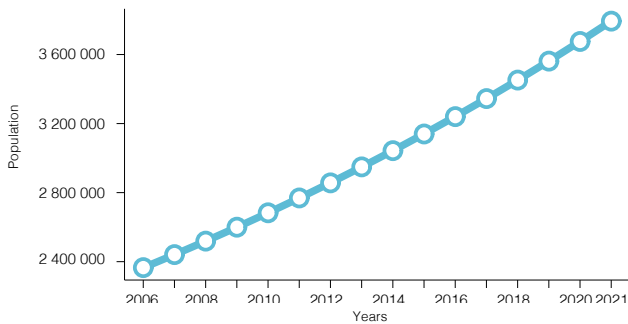
An estimated 1.1 million cases were averted between 2009 and 2015, and 1.3 million between 2009 and 2021.

GOMBE STATE

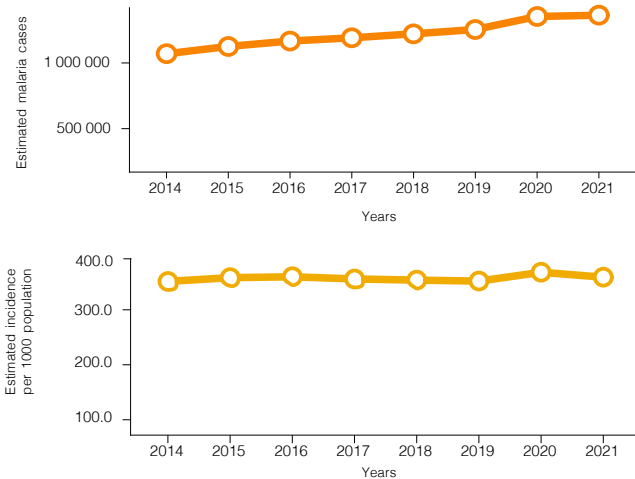


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 793 000	
Malaria prevalence according to RDT	33.1	%
Malaria prevalence according to microscopy	17.7	%
Estimated malaria cases in 2021	1 363 000	
Estimated incidence per thousand population in 2021	359.3	/1000
Year of most recent ITN campaign	2021	
Year of preceding ITN campaign	2018	
Persons with access to an ITN	68.5	%
Existing ITNs used last night	79.4	%
Population who slept under an ITN the night before the survey	63.3	%
Children under 5 who slept under any net	65.2	%
Children under 5 who slept under an ITN	64.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	56.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	30.9	%

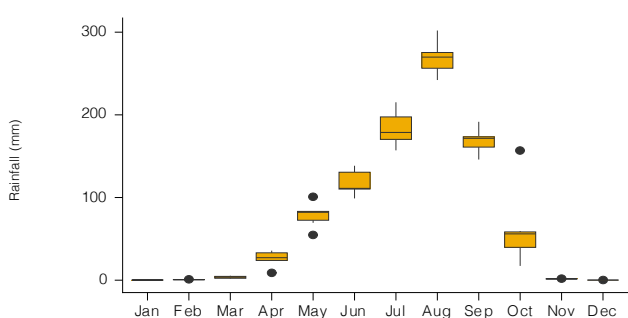
Population count



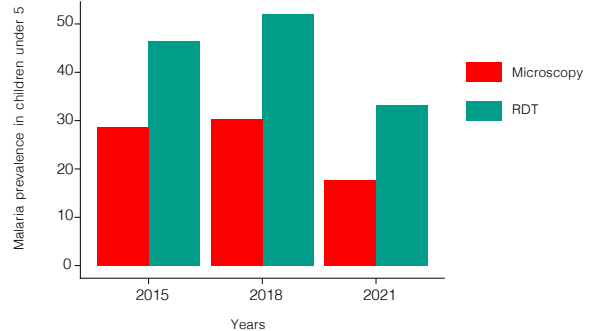
Estimated malaria cases and incidence



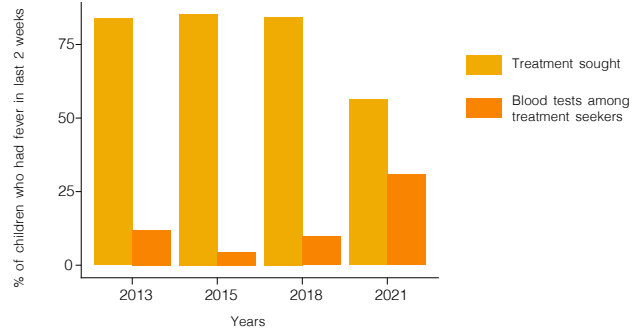
Monthly rainfall



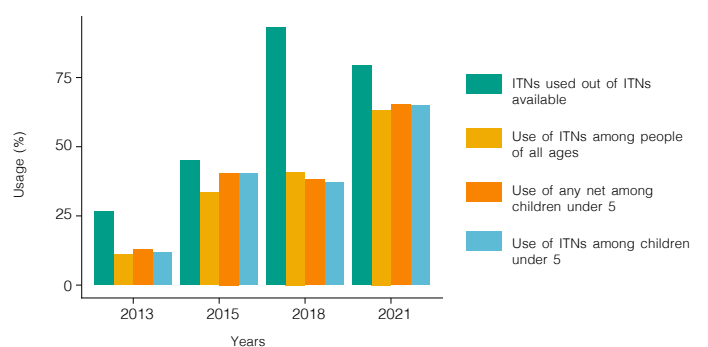
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

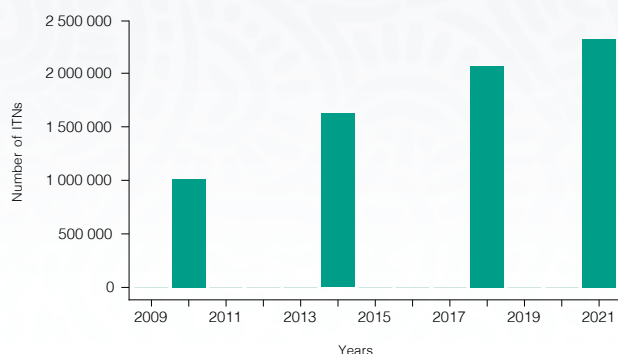


Access, coverage and use of ITNs

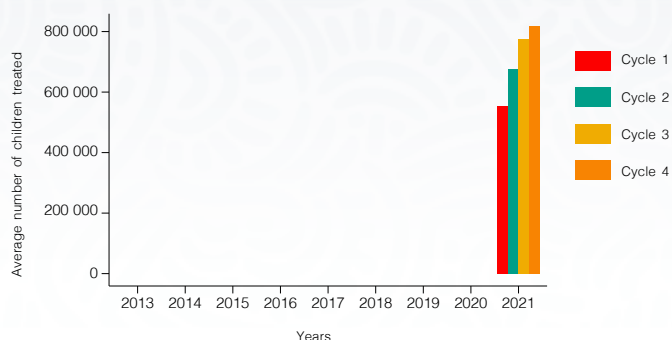


03 | Profiles of Nigeria states

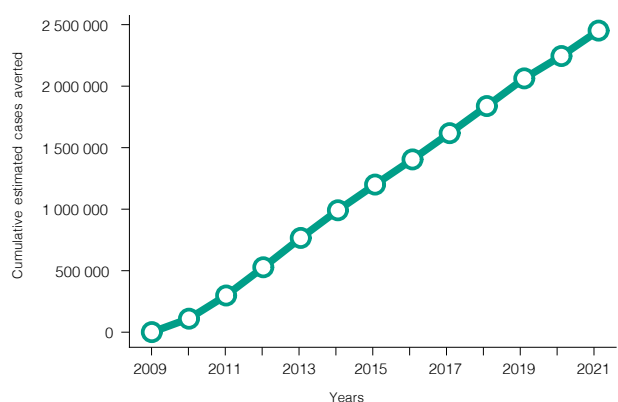
Insecticide treated nets - mass campaign distribution



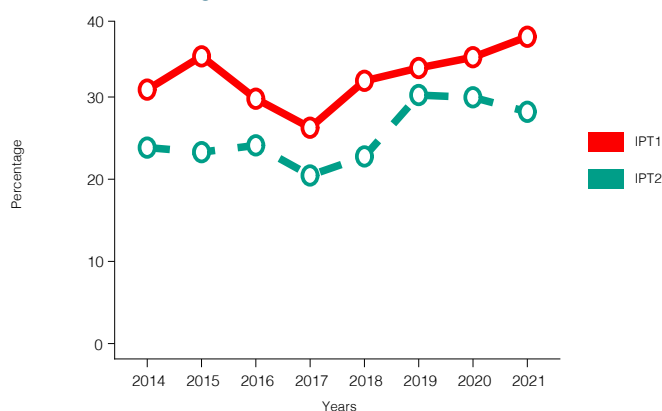
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Gombe State is located in the North-Eastern Region of Nigeria. It borders Borno and Yobe to the north and north-east, Taraba to the south, Adamawa to the south-east, and Bauchi to the west. The State's estimated population was 3.6 million in 2019 (1) and 3.9 million in 2022.

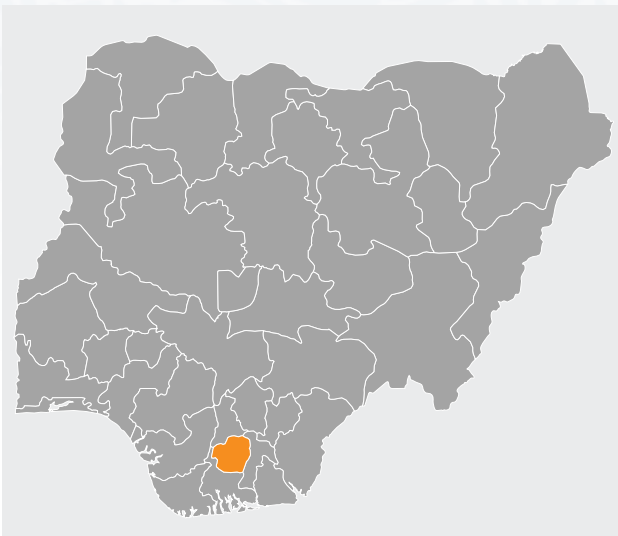
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 851.0 millimeters (3).

The State contributed an estimated 2.0% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.2 million to 1.4 million, the estimated incidence increased from 353.9 to 359.3 per 1000 population (4). Malaria prevalence by microscopy decreased from 28.6% in 2015 to 17.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2021. Since 2009, over 7.0 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 33.6% in 2015 to 63.3% in 2021. Care seeking among children with fever in the State decreased from 85.4% in 2015 to 56.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 4.4% in 2015 to 30.9% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 23.3% in 2015 to 28.2% in 2021 (5).

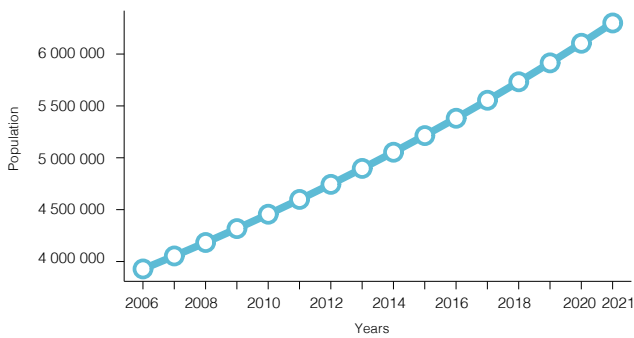
An estimated 1.2 million cases were averted between 2009 and 2015, and 2.5 million between 2009 and 2021.

IMO STATE

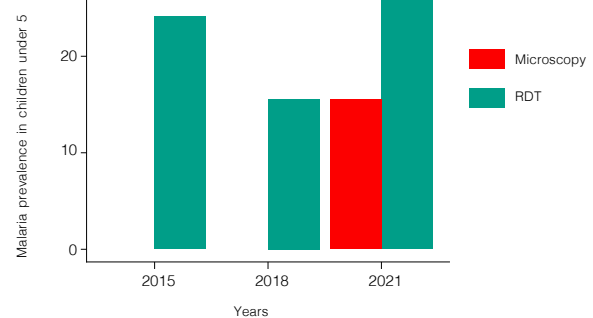


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 300 000	
Malaria prevalence according to RDT	26.2	%
Malaria prevalence according to microscopy	15.5	%
Estimated malaria cases in 2021	1 734 000	
Estimated incidence per thousand population in 2021	275.2	/1000
Year of most recent ITN campaign	2017	
Year of preceding ITN campaign	2012	
Persons with access to an ITN	22.8	%
Existing ITNs used last night	26.5	%
Population who slept under an ITN the night before the survey	7.4	%
Children under 5 who slept under any net	10.6	%
Children under 5 who slept under an ITN	10.6	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	77.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	20	%

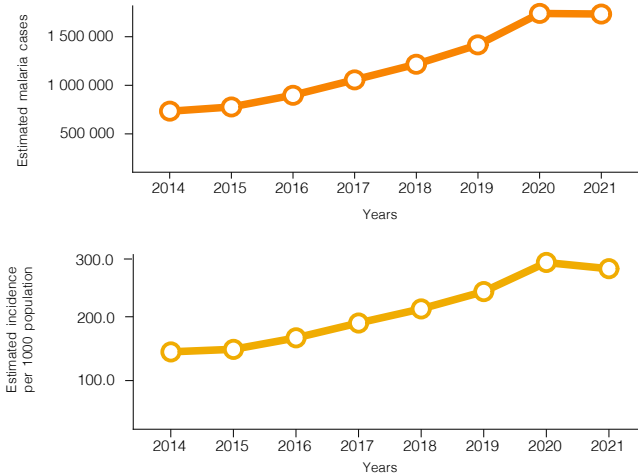
Population count



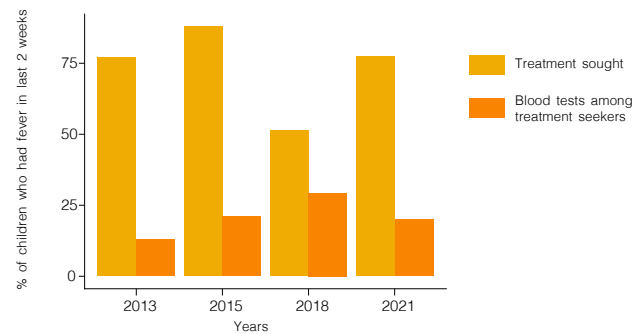
Malaria prevalence in children under 5 years



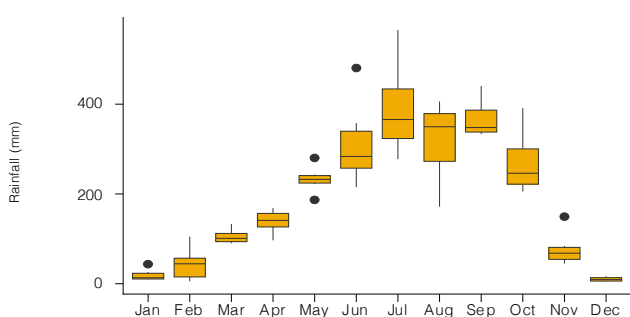
Estimated malaria cases and incidence



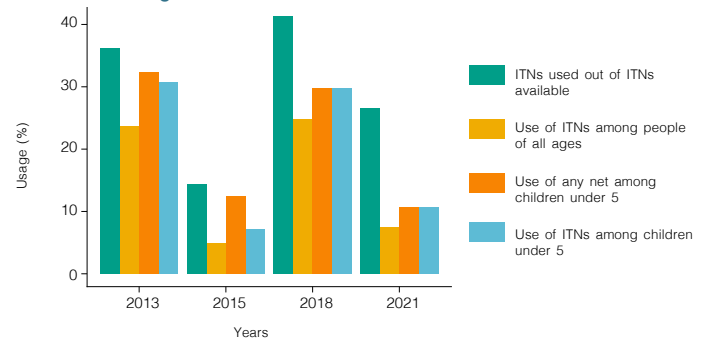
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

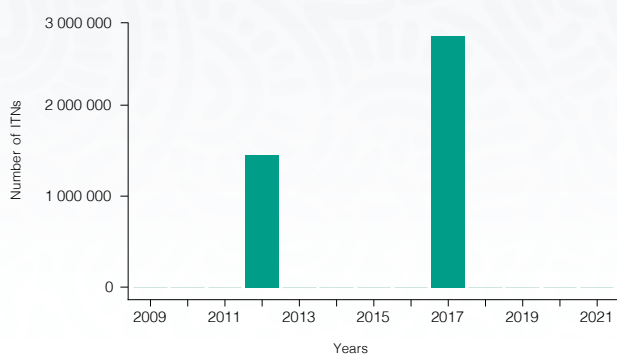


Access, coverage and use of ITNs

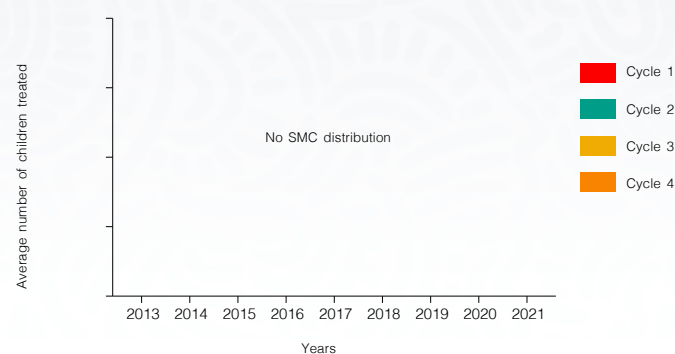


03 | Profiles of Nigeria states

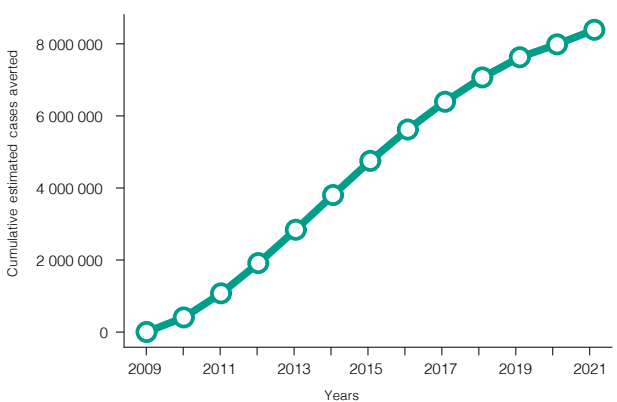
Insecticide treated nets - mass campaign distribution



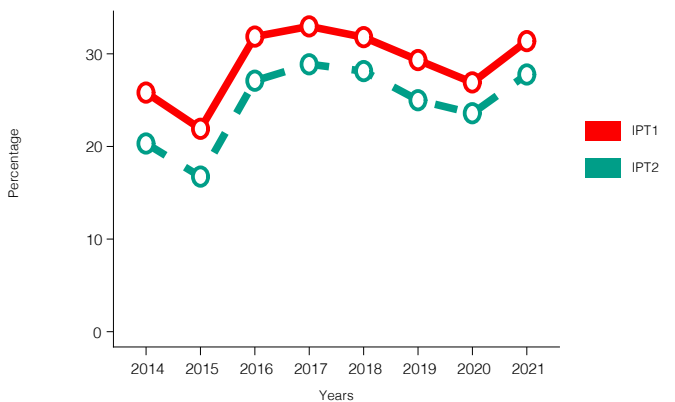
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Imo State is located in the South-Eastern Region of Nigeria. It borders Anambra, Rivers and Abia State, with the Niger Delta swamp forests in the far east and the drier Cross-Niger transition forests in the other parts of the State. It is highly dependent on agricultural production and minor industrial extraction of crude oil. The State's estimated population was 5.2 million in 2019 (1) and 6.5 million in 2022.

The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 2,095.0 millimeters (3).

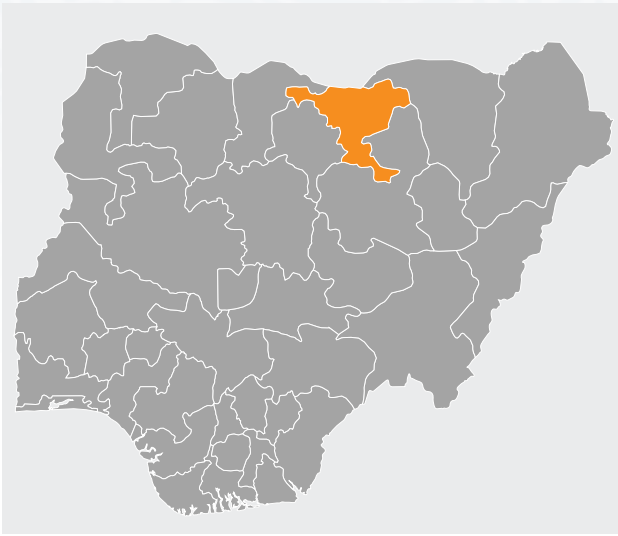
The State contributed an estimated 2.6% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.2 million to 1.7 million, the estimated incidence increased from 212.4 to 275.2 per 1000 population (4). Malaria prevalence by microscopy was 15.5% in 2021 (5).⁴

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2017. Since 2009, over 4.2 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 5.9% in 2015 to 7.4% in 2021. Care seeking among children with fever in the State decreased from 87.9% in 2015 to 77.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 21.0% in 2015 to 20.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 16.7% in 2015 to 27.8% in 2021 (5).

An estimated 4.8 million cases were averted between 2009 and 2015, and 8.4 million between 2009 and 2021.

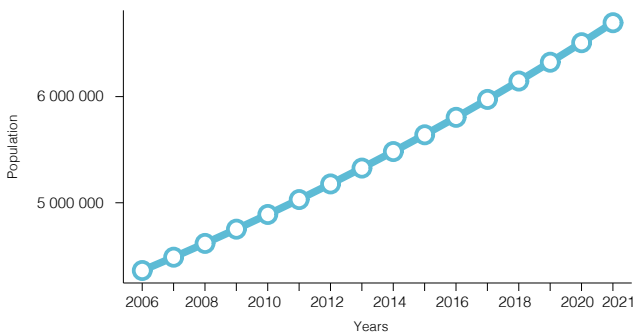
⁴ Malaria prevalence by microscopy data was not available for Imo State in 2015.

JIGAWA STATE

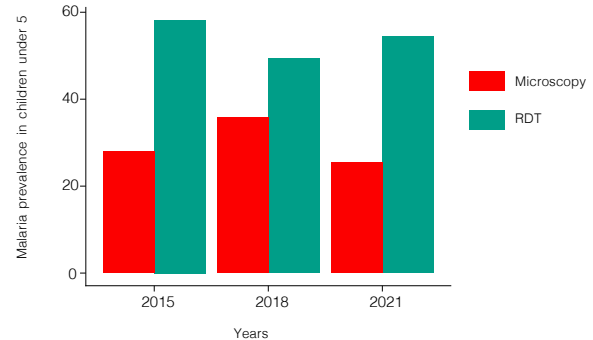


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 696 000	
Malaria prevalence according to RDT	54.5	%
Malaria prevalence according to microscopy	25.4	%
Estimated malaria cases in 2021	2 559 000	
Estimated incidence per thousand population in 2021	382.1	/1000
Year of most recent ITN campaign	2021	
Year of preceding ITN campaign	2018	
Persons with access to an ITN	69.6	%
Existing ITNs used last night	88.3	%
Population who slept under an ITN the night before the survey	63.4	%
Children under 5 who slept under any net	71.2	%
Children under 5 who slept under an ITN	70.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	76.3	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	46.5	%

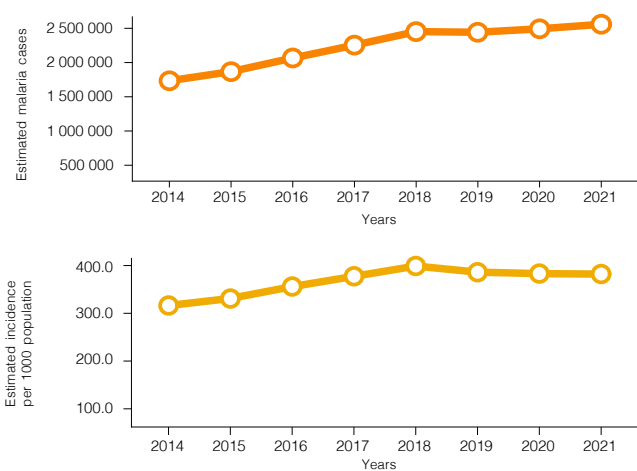
Population count



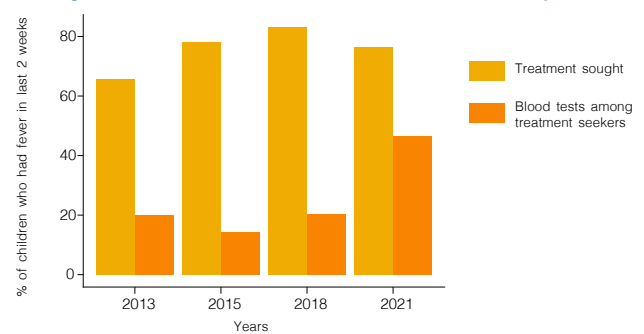
Malaria prevalence in children under 5 years



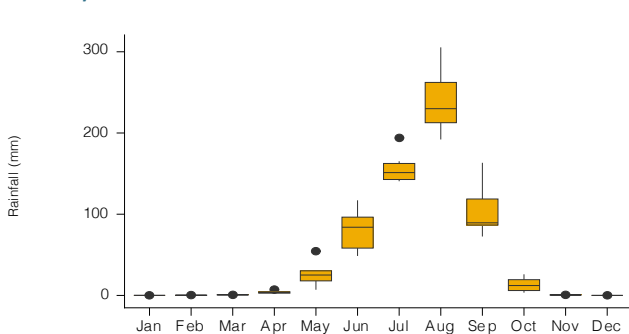
Estimated malaria cases and incidence



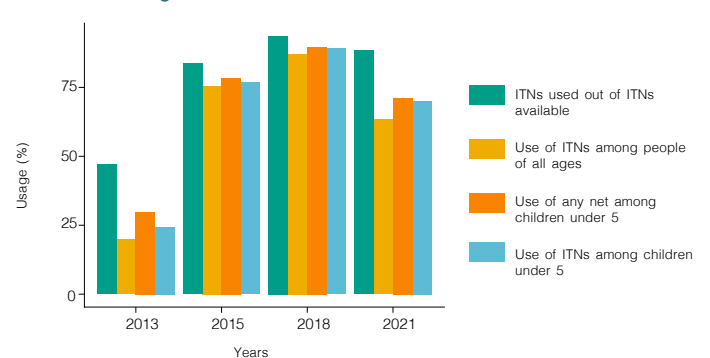
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

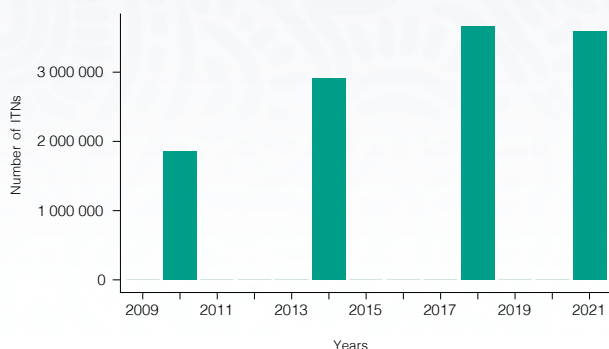


Access, coverage and use of ITNs

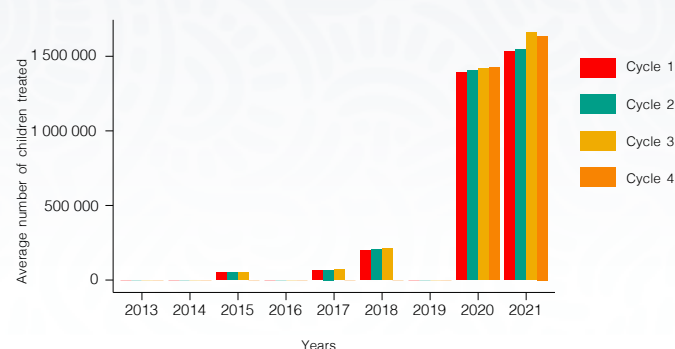


03 | Profiles of Nigeria states

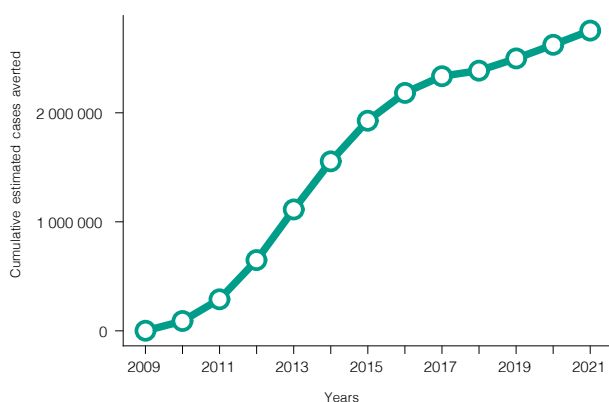
Insecticide treated nets - mass campaign distribution



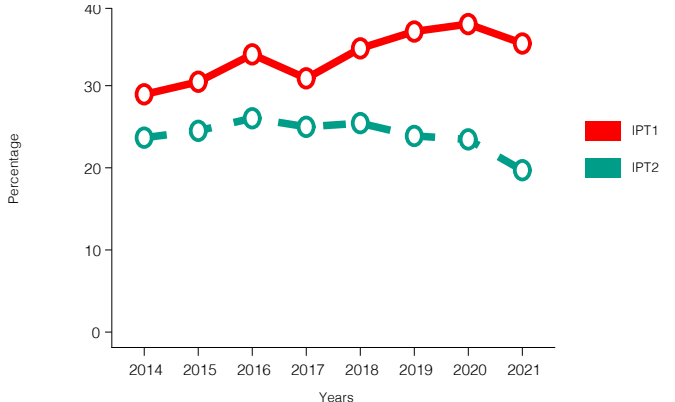
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Jigawa State is located in the North-Western Region of Nigeria. It borders Kano and Katsina to the west, Bauchi to the east and Yobe to the north-east and the Republic of Niger to the north. The State's estimated population was 6.8 million in 2019 (1) and 6.9 million in 2022.

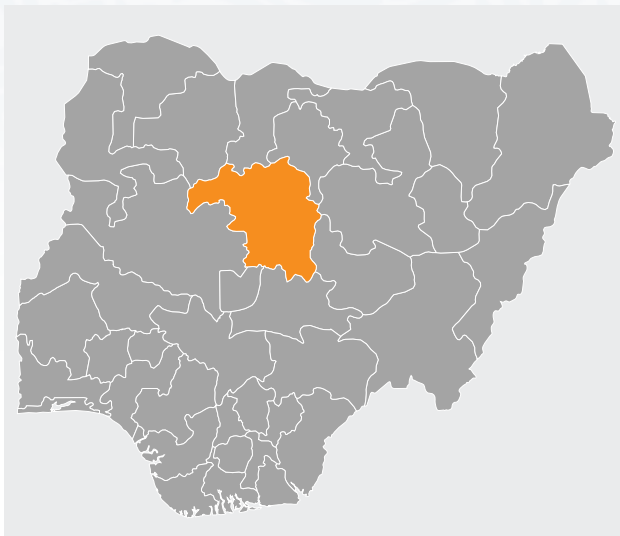
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 589.4 millimeters (3).

The State contributed an estimated 3.8% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 2.5 million, the estimated incidence decreased from 398.9 to 382.1 per 1000 population (4). Malaria prevalence by microscopy decreased from 27.9% in 2015 to 25.4% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2021. Since 2009, over 12.0 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 75.5% in 2015 to 63.4% in 2021. Care seeking among children with fever in the State decreased from 78.1% in 2015 to 76.3% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 14.2% in 2015 to 46.5% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 24.5% in 2015 to 19.7% in 2021 (5).

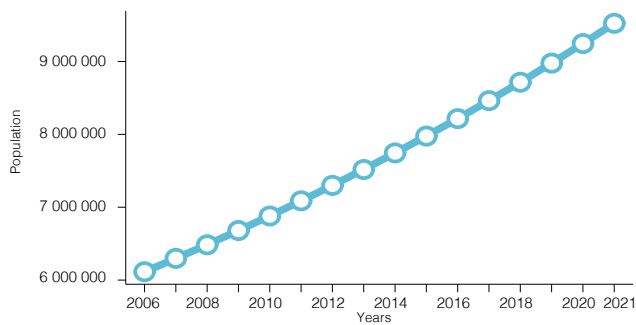
An estimated 1.9 million cases were averted between 2009 and 2015, and 2.8 million between 2009 and 2021.

KADUNA STATE

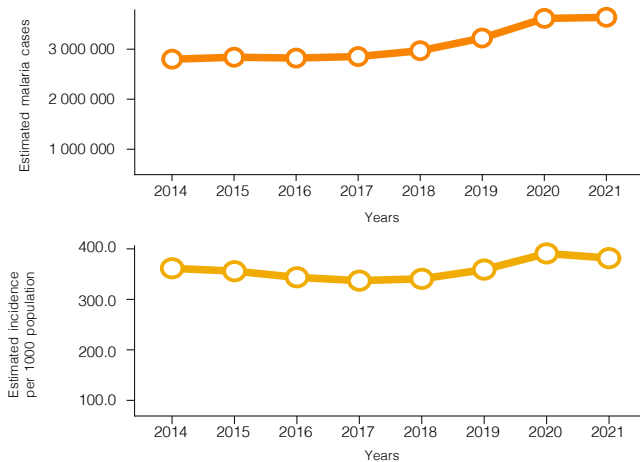


INDICATORS	VALUE	UNIT
Estimated population in 2021	9 525 000	
Malaria prevalence according to RDT	32.3	%
Malaria prevalence according to microscopy	16.2	%
Estimated malaria cases in 2021	3 636 000	
Estimated incidence per thousand population in 2021	381.7	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	63.3	%
Existing ITNs used last night	77.6	%
Population who slept under an ITN the night before the survey	57.1	%
Children under 5 who slept under any net	63	%
Children under 5 who slept under an ITN	62.4	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	83.8	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	22	%

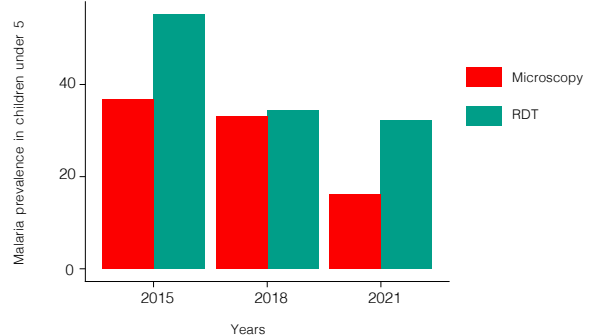
Population count



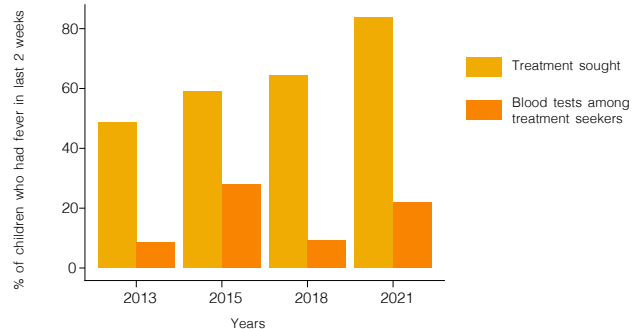
Estimated malaria cases and incidence



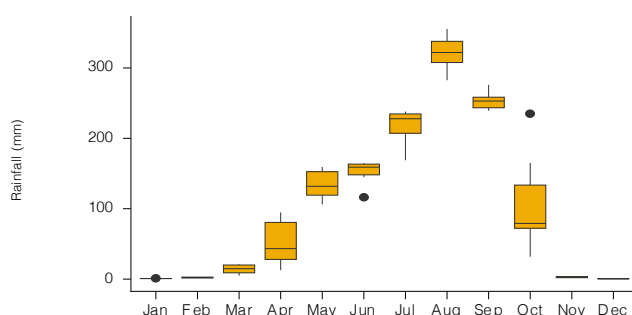
Malaria prevalence in children under 5 years



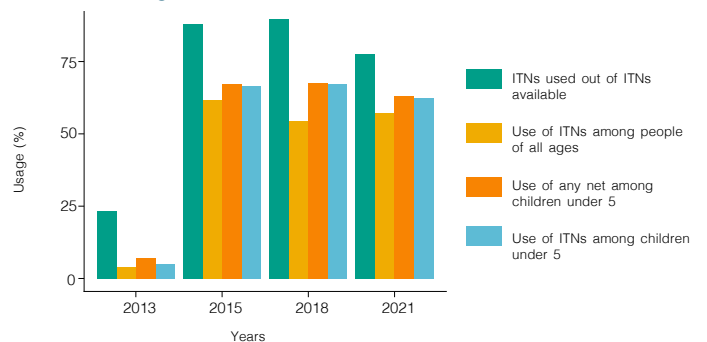
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

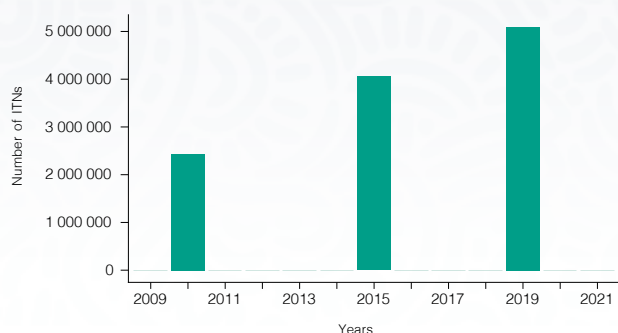


Access, coverage and use of ITNs

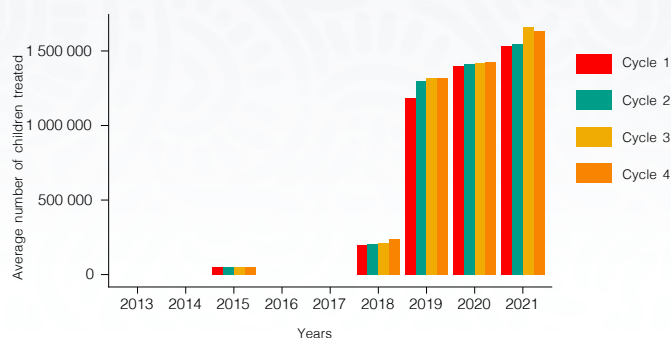


03 | Profiles of Nigeria states

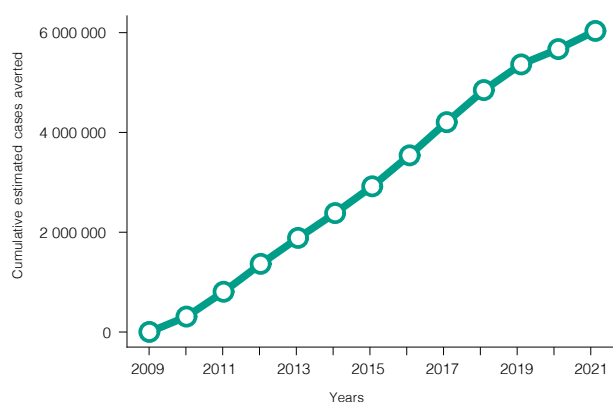
Insecticide treated nets - mass campaign distribution



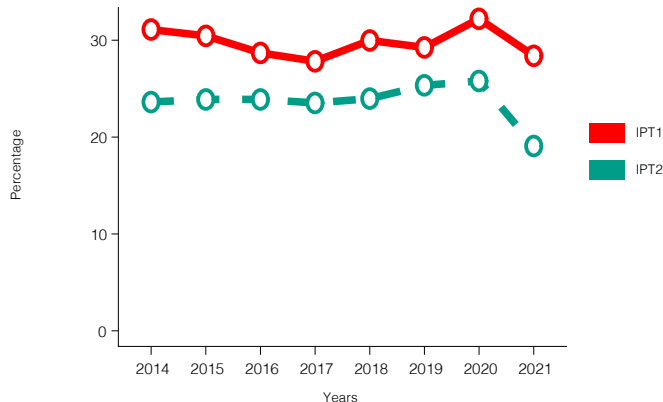
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Kaduna State is located in the North-Western Region of Nigeria. It borders Kebbi, Zamfara, Katsina, and Jigawa States. The State’s estimated population was 8.3 million in 2019 (1) and 9.8 million in 2022.

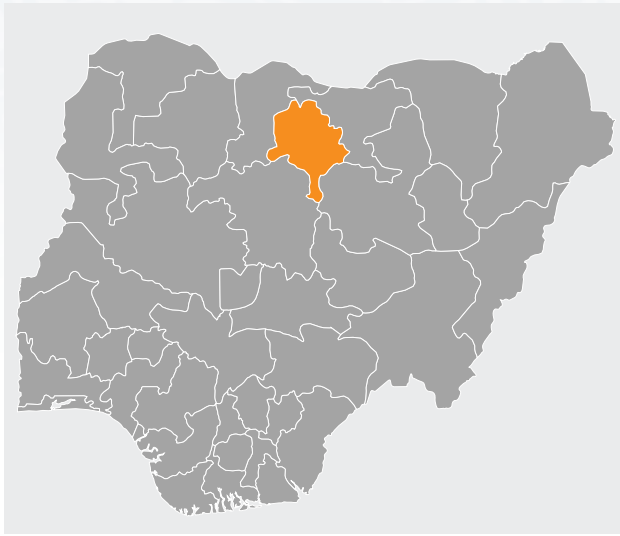
The State experiences two distinct seasons: the dry season (December to February) and the rainy season (March to November) (9), with annual rainfall averaging around 1,175.0 millimeters (3).

The State contributed an estimated 5.3% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 3.0 million to 3.6 million, the estimated incidence increased from 340.6 to 381.7 per 1000 population (4). Malaria prevalence by microscopy decreased from 36.7% in 2015 to 16.2% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 11.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 61.6% in 2015 to 57.1% in 2021. Care seeking among children with fever in the State increased from 58.9% in 2015 to 83.8% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 27.8% in 2015 to 22.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 23.9% in 2015 to 19.1% in 2021 (5).

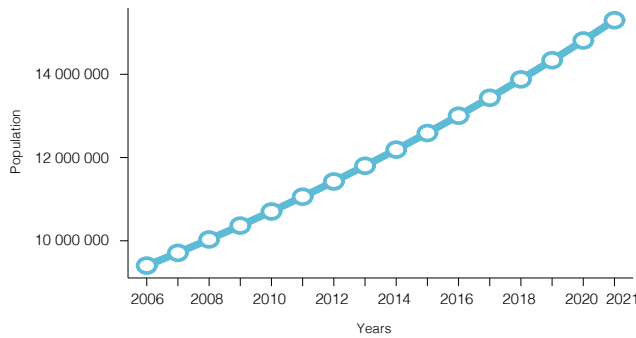
An estimated 2.9 million cases were averted between 2009 and 2015, and 6.0 million between 2009 and 2021.

KANO STATE

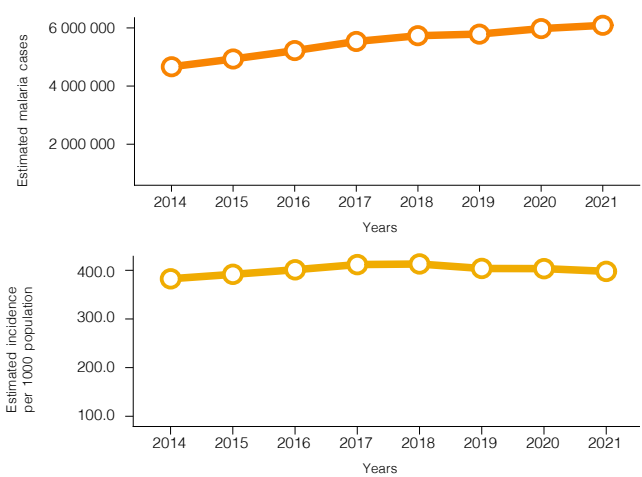


INDICATORS	VALUE	UNIT
Estimated population in 2021	15 300 000	
Malaria prevalence according to RDT	54	%
Malaria prevalence according to microscopy	25.5	%
Estimated malaria cases in 2021	6 088 000	
Estimated incidence per thousand population in 2021	397.9	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	63.3	%
Existing ITNs used last night	90.8	%
Population who slept under an ITN the night before the survey	63	%
Children under 5 who slept under any net	64.8	%
Children under 5 who slept under an ITN	64.8	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	44.5	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	30.6	%

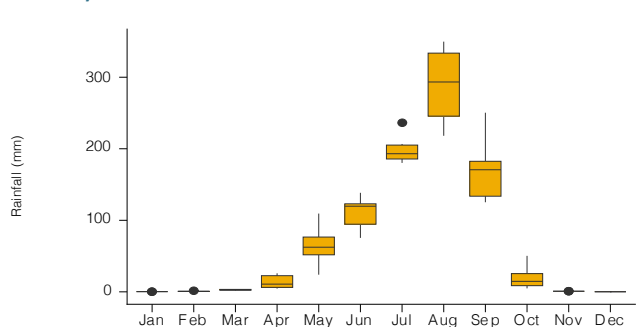
Population count



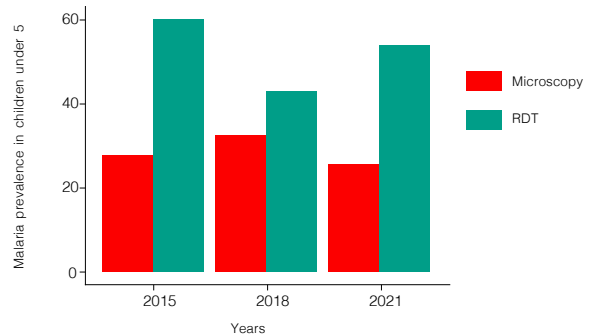
Estimated malaria cases and incidence



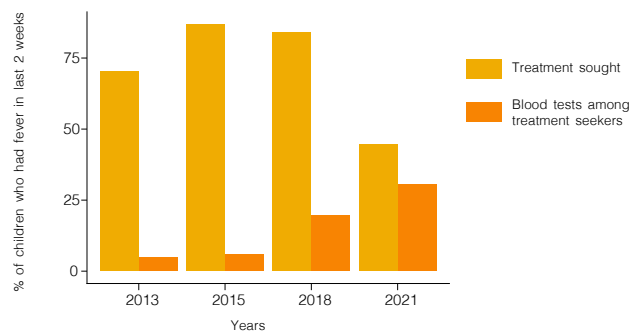
Monthly rainfall



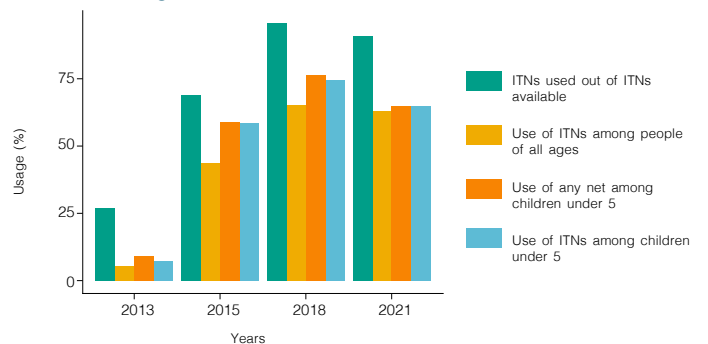
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

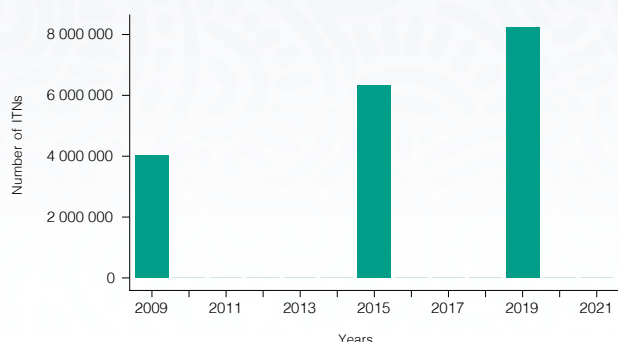


Access, coverage and use of ITNs

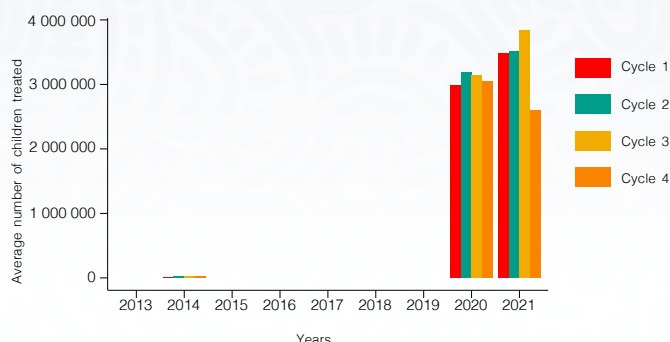


03 | Profiles of Nigeria states

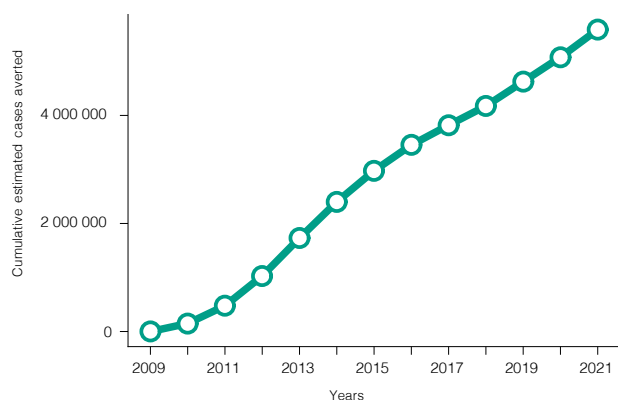
Insecticide treated nets - mass campaign distribution



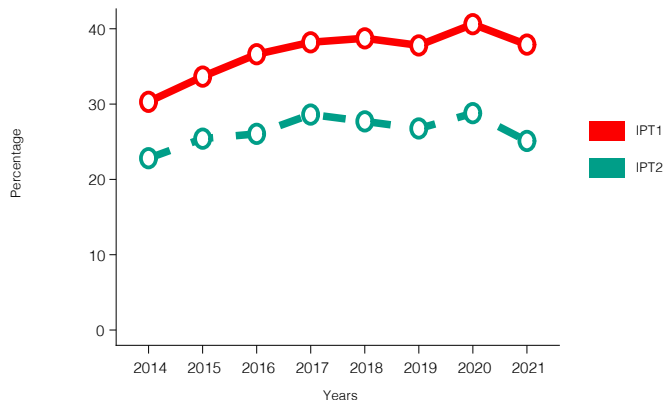
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Kano State is located in the North-Western Region of Nigeria. It borders Katsina to the north-west, Jigawa to the north-east, Bauchi to the south-east, and Kaduna to the south-west. The State's estimated population was 14.3 million in 2019 (1) and 15.8 million in 2022.

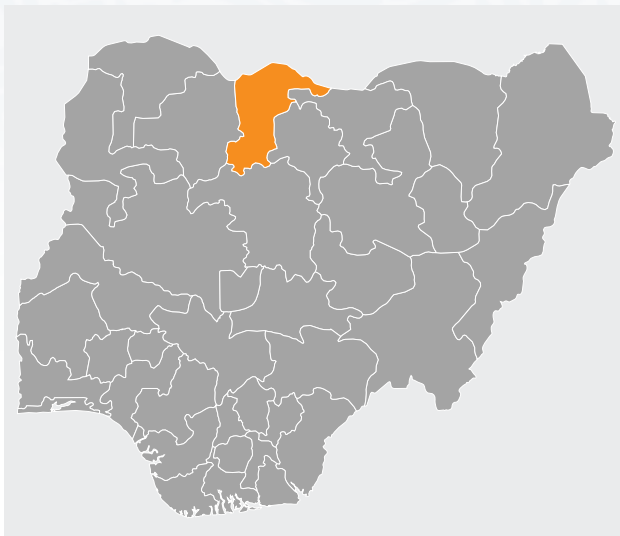
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 813.5 millimeters (3).

The State contributed an estimated 9.0% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 5.7 million to 6.1 million, the estimated incidence decreased from 412.9 to 397.9 per 1000 population (4). Malaria prevalence by microscopy decreased from 27.7% in 2015 to 25.5% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 18.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 43.8% in 2015 to 63.0% in 2021. Care seeking among children with fever in the State decreased from 86.9% in 2015 to 44.5% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 5.8% in 2015 to 30.6% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 25.4% in 2015 to 25.1% in 2021 (5).

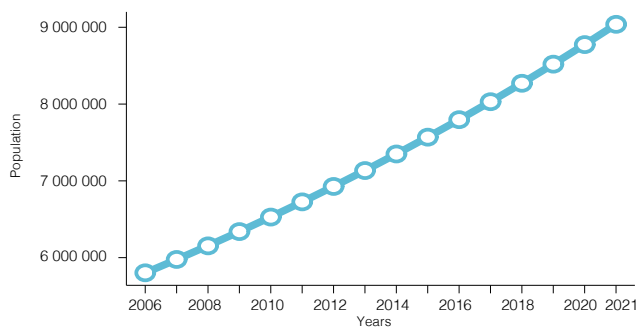
An estimated 3.0 million cases were averted between 2009 and 2015, and 5.6 million between 2009 and 2021.

KATSINA STATE

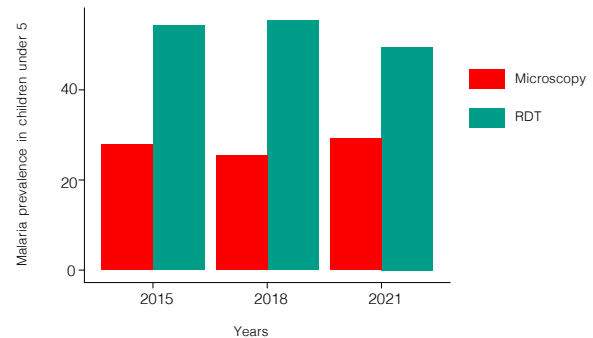


INDICATORS	VALUE	UNIT
Estimated population in 2021	9 039 000	
Malaria prevalence according to RDT	49.5	%
Malaria prevalence according to microscopy	29.3	%
Estimated malaria cases in 2021	3 157 000	
Estimated incidence per thousand population in 2021	349.3	/1000
Year of most recent ITN campaign	2018	
Year of preceding ITN campaign	2014	
Persons with access to an ITN	40	%
Existing ITNs used last night	89.8	%
Population who slept under an ITN the night before the survey	41.8	%
Children under 5 who slept under any net	48.1	%
Children under 5 who slept under an ITN	48.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	80.5	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	65.7	%

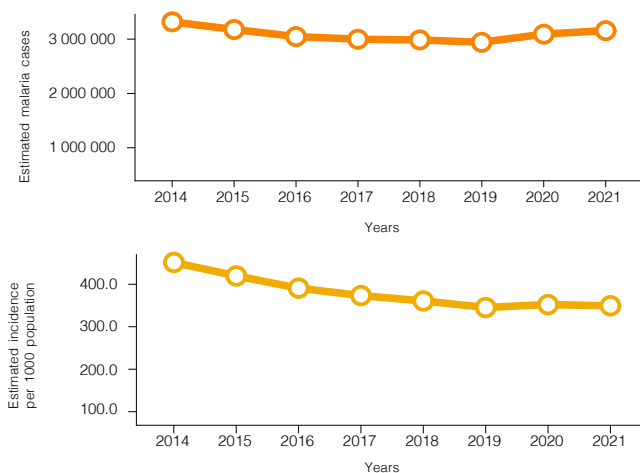
Population count



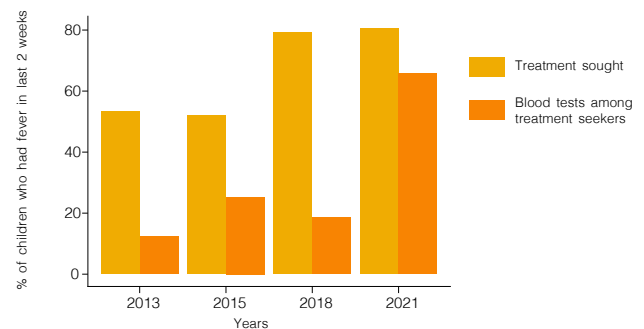
Malaria prevalence in children under 5 years



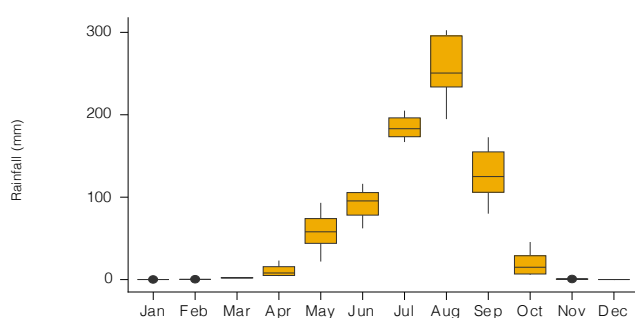
Estimated malaria cases and incidence



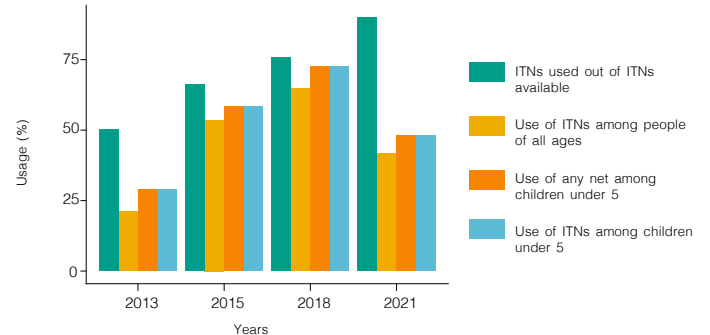
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

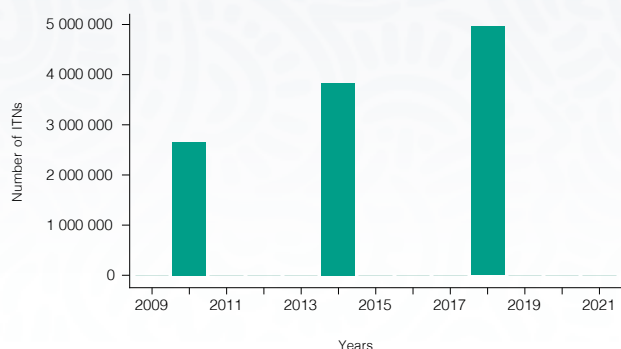


Access, coverage and use of ITNs

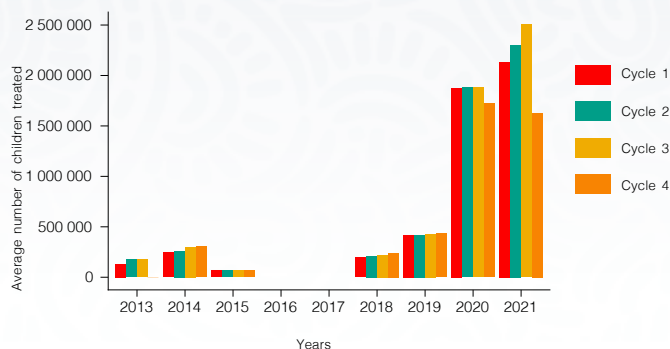


03 | Profiles of Nigeria states

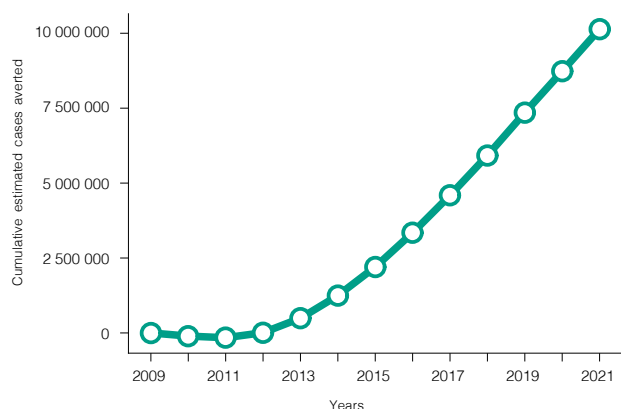
Insecticide treated nets - mass campaign distribution



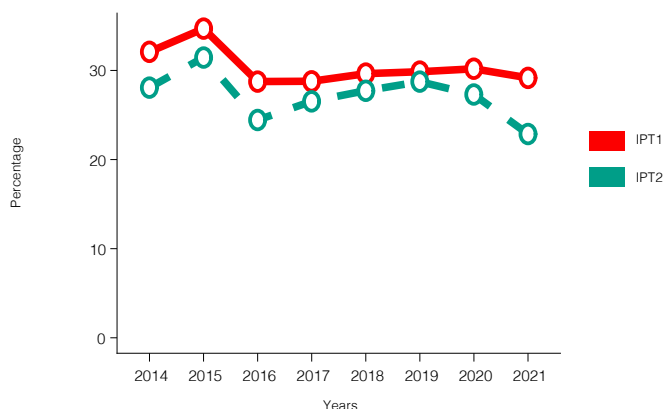
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Katsina State is located in the North-Western Region of Nigeria. It borders Kaduna, Zamfara, Kano, and Jigawa States. The State’s estimated population was 9.3 million in 2019 (1) and 9.3 million in 2022.

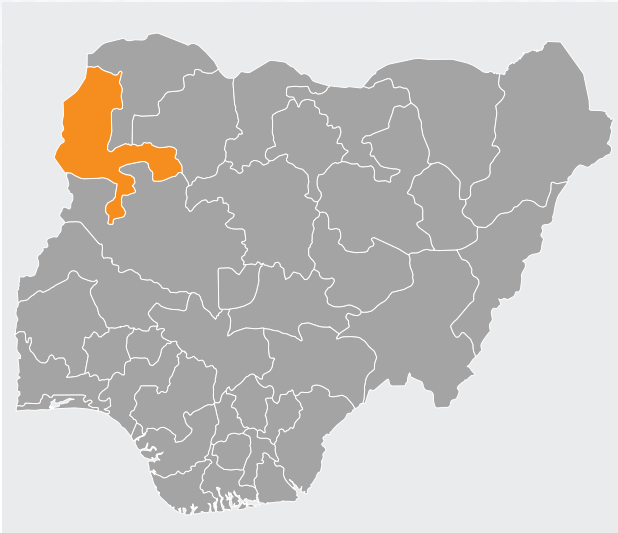
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 705.6 millimeters (3).

The State contributed an estimated 4.6% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 3.0 million to 3.2 million, the estimated incidence decreased from 360.8 to 349.3 per 1000 population (4). Malaria prevalence by microscopy increased from 27.8% in 2015 to 29.3% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2018. Since 2009, over 11.4 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 53.6% in 2015 to 41.8% in 2021. Care seeking among children with fever in the State increased from 52.1% in 2015 to 80.5% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 25.3% in 2015 to 65.7% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 31.5% in 2015 to 22.9% in 2021 (5).

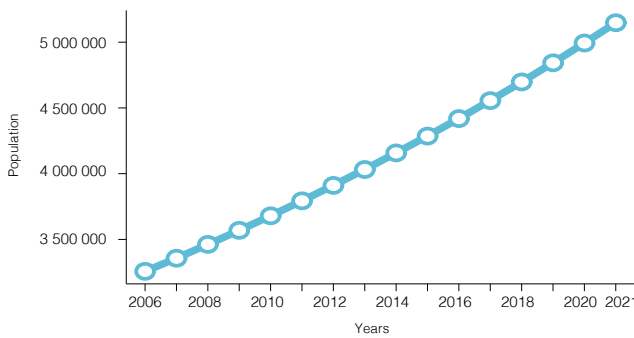
An estimated 2.2 million cases were averted between 2009 and 2015, and 10.1 million between 2009 and 2021.

KEBBI STATE

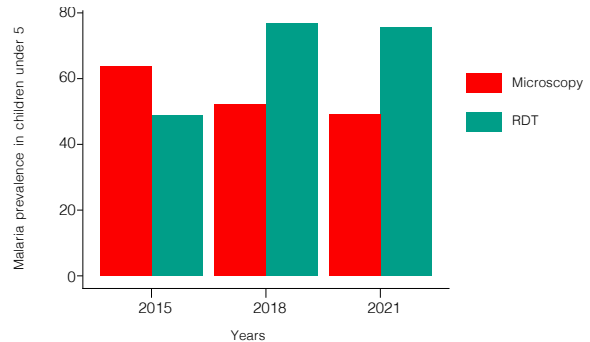


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 148 000	
Malaria prevalence according to RDT	75.6	%
Malaria prevalence according to microscopy	49	%
Estimated malaria cases in 2021	2 074 000	
Estimated incidence per thousand population in 2021	402.9	/1000
Year of most recent ITN campaign	2014	
Year of preceding ITN campaign	2009	
Persons with access to an ITN	46.9	%
Existing ITNs used last night	73.6	%
Population who slept under an ITN the night before the survey	38.2	%
Children under 5 who slept under any net	46.2	%
Children under 5 who slept under an ITN	43	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	47.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	42.9	%

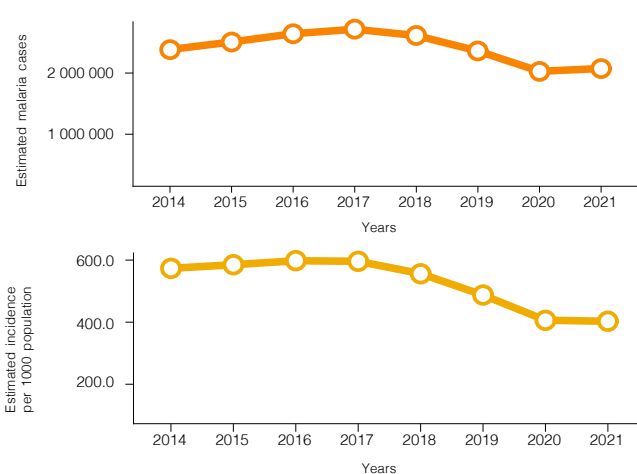
Population count



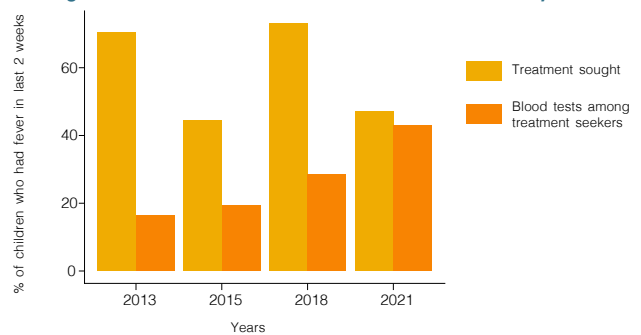
Malaria prevalence in children under 5 years



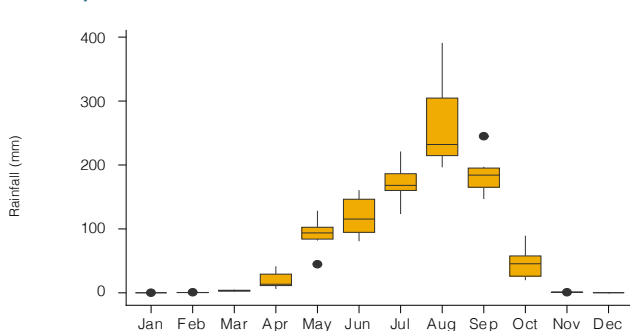
Estimated malaria cases and incidence



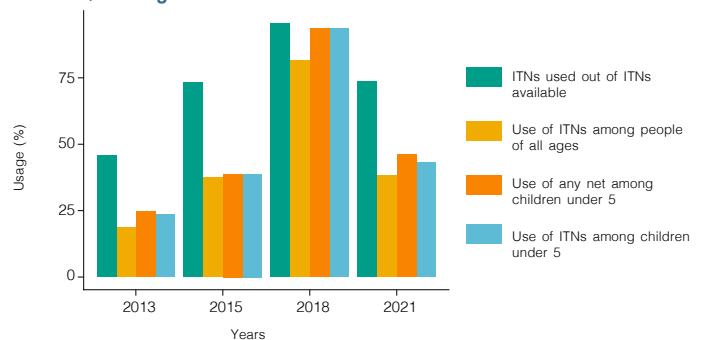
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

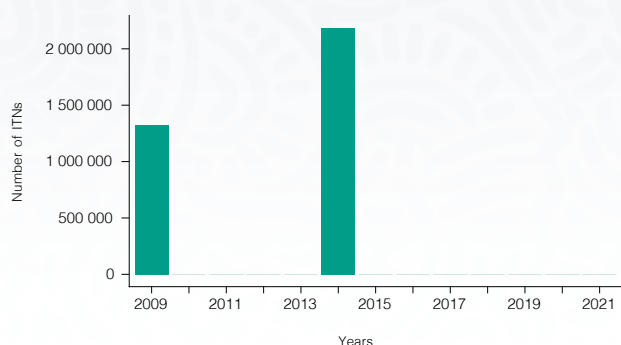


Access, coverage and use of ITNs

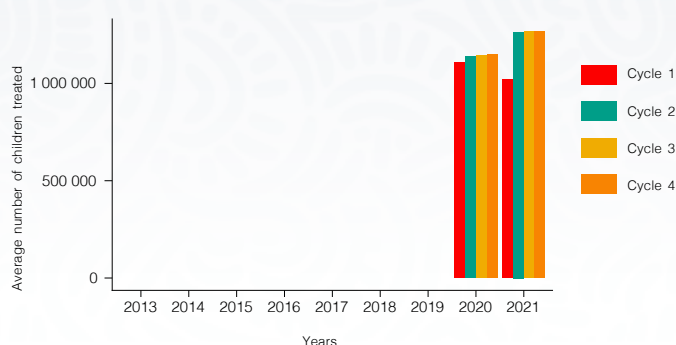


03 | Profiles of Nigeria states

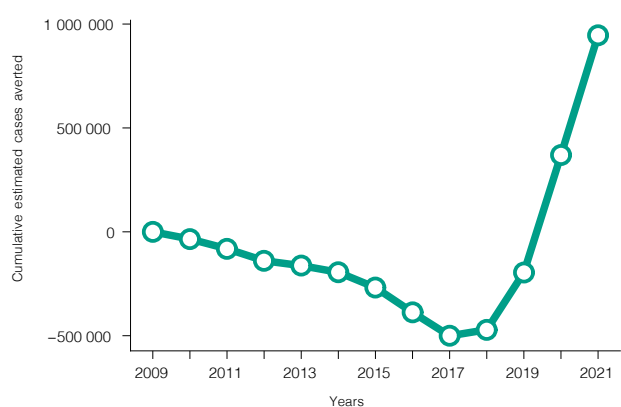
Insecticide treated nets - mass campaign distribution



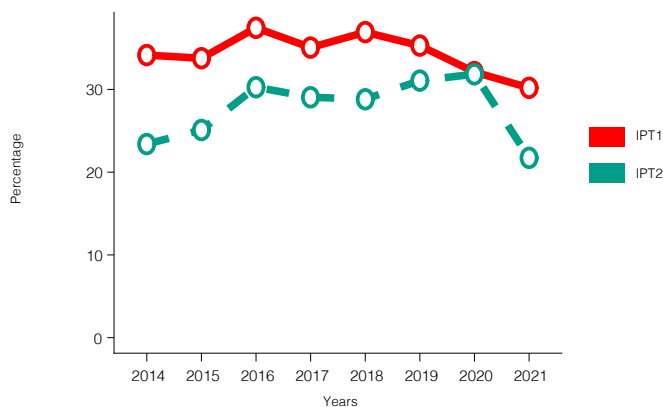
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Kebbi State is located in the North-Western Region of Nigeria. It borders Sokoto and Zamfara to east and north, Niger to the south, and the Republic of Benin and the Republic of Niger to the west. The State's estimated population was 5.0 million in 2019 (1) and 5.3 million in 2022.

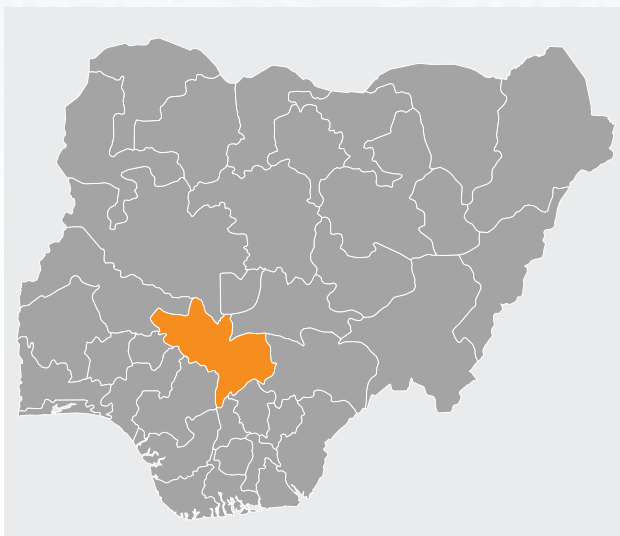
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 845.9 millimeters (3).

The State contributed an estimated 3.1% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases decreased from 2.6 million to 2.1 million, the estimated incidence decreased from 556.3 to 402.9 per 1000 population (4). Malaria prevalence by microscopy decreased from 63.6% in 2015 to 49.0% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2014. Since 2009, over 3.5 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 37.6% in 2015 to 38.2% in 2021. Care seeking among children with fever in the State increased from 44.3% in 2015 to 47.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 19.4% in 2015 to 42.9% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 25.1% in 2015 to 21.7% in 2021 (5).

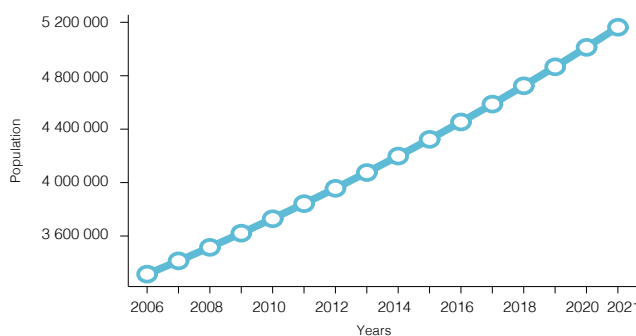
The cumulative estimated cases averted between 2009 and 2015 was negative as there was an increase in cases during this period, and 0.95 million between 2009 and 2021.

KOGI STATE

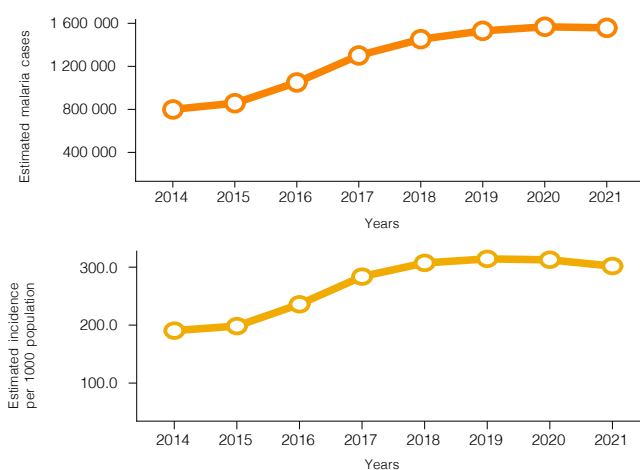


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 163 000	
Malaria prevalence according to RDT	27.7	%
Malaria prevalence according to microscopy	15.9	%
Estimated malaria cases in 2021	1 558 000	
Estimated incidence per thousand population in 2021	301.8	/1000
Year of most recent ITN campaign	2017	
Year of preceding ITN campaign	2013	
Persons with access to an ITN	22.6	%
Existing ITNs used last night	74.9	%
Population who slept under an ITN the night before the survey	18	%
Children under 5 who slept under any net	23.1	%
Children under 5 who slept under an ITN	21	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	66.7	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	31.6	%

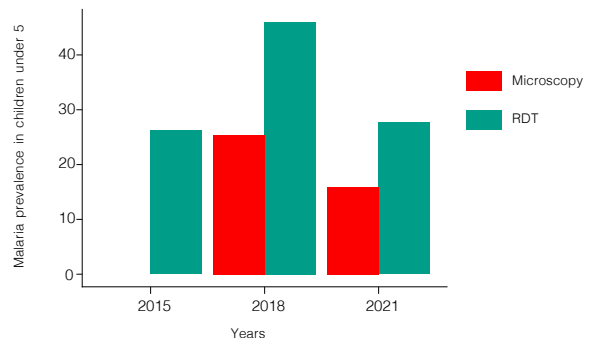
Population count



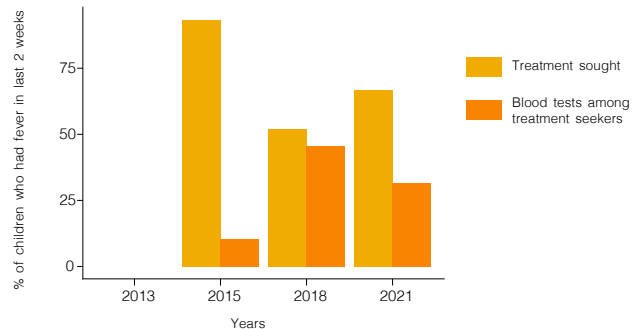
Estimated malaria cases and incidence



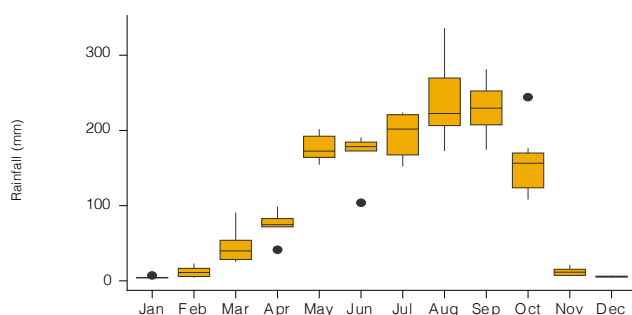
Malaria prevalence in children under 5 years



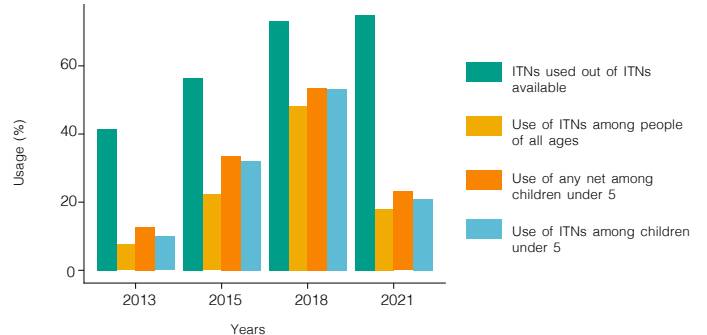
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

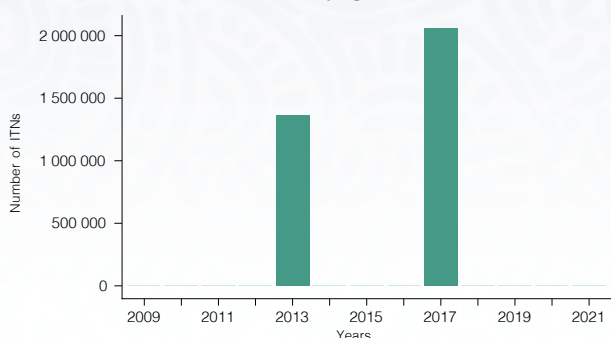


Access, coverage and use of ITNs

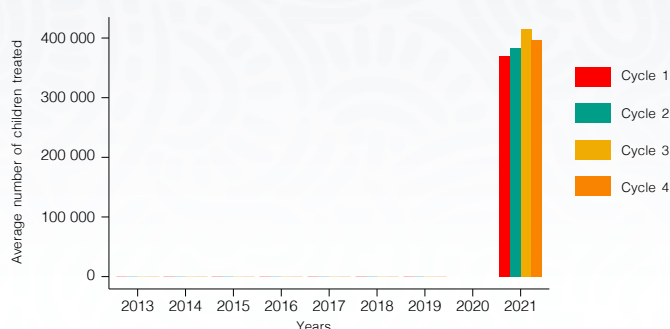


03 | Profiles of Nigeria states

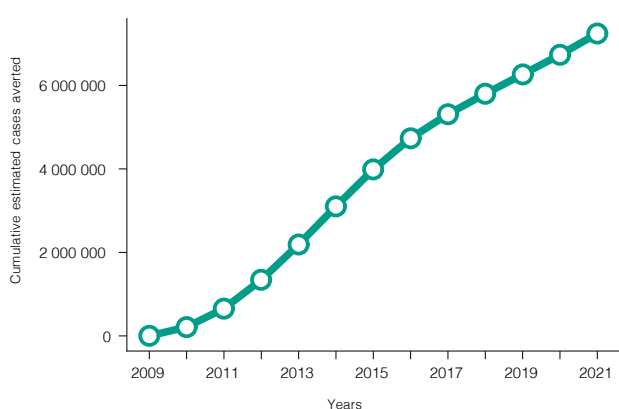
Insecticide treated nets - mass campaign distribution



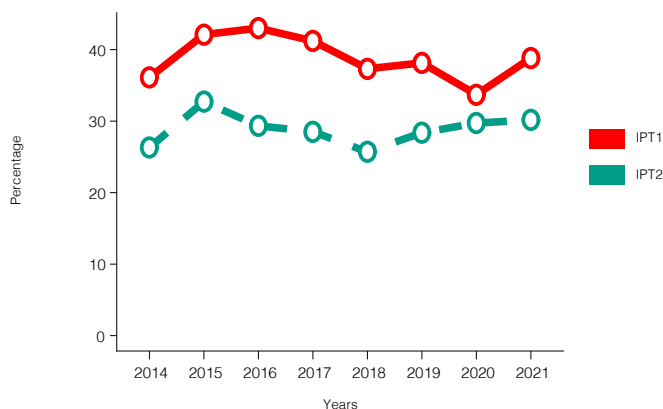
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Kogi State is located in the North-Central Region of Nigeria. It borders Ekiti and Kwara to the west, Federal Capital Territory to the north, Nasarawa to the north-east, Niger to the north-west, Edo and Ondo to the south-west, Anambra and Enugu to the south-east, and Benue to the east. The State's estimated population was 4.2 million in 2019 (1) and 5.3 million in 2022.

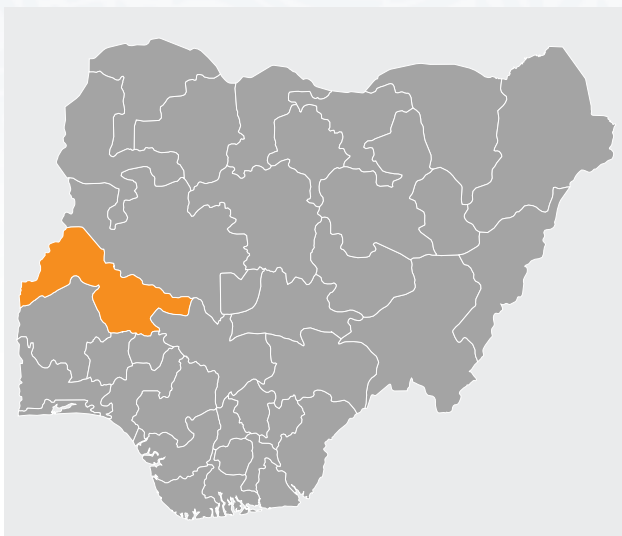
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,221.3 millimeters (3).

The State contributed an estimated 2.3% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.5 million, the estimated incidence decreased from 307.3 to 301.8 per 1000 population (4). Malaria prevalence by microscopy was 15.9% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2017. Since 2009, over 3.4 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 22.3% in 2015 to 18.0% in 2021. Care seeking among children with fever in the State decreased from 93.4% in 2015 to 66.7% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 10.5% in 2015 to 31.6% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 32.7% in 2015 to 30.2% in 2021 (5).

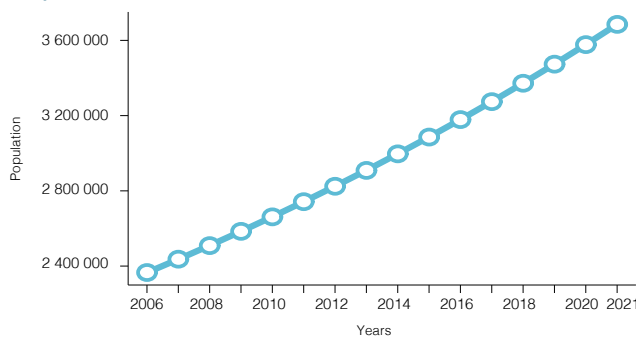
An estimated 4.0 million cases were averted between 2009 and 2015, and 7.2 million between 2009 and 2021.

KWARA STATE

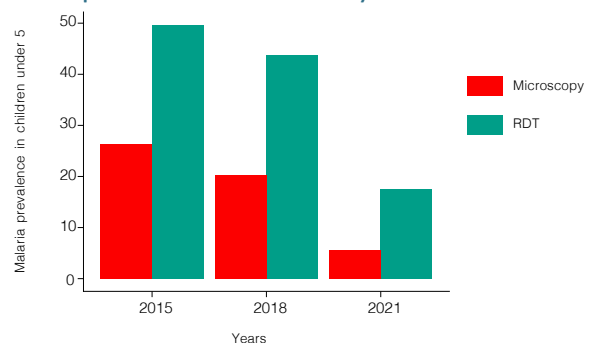


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 685 000	
Malaria prevalence according to RDT	17.6	%
Malaria prevalence according to microscopy	5.6	%
Estimated malaria cases in 2021	1 150 000	
Estimated incidence per thousand population in 2021	312	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2017	
Persons with access to an ITN	48.1	%
Existing ITNs used last night	69.1	%
Population who slept under an ITN the night before the survey	39	%
Children under 5 who slept under any net	46.7	%
Children under 5 who slept under an ITN	44.2	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	57.3	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	77.8	%

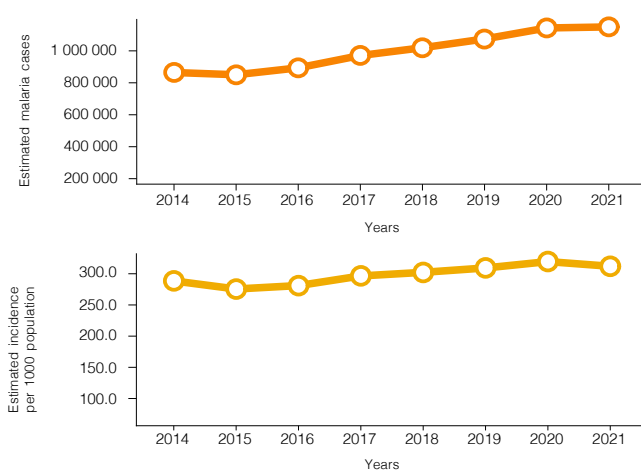
Population count



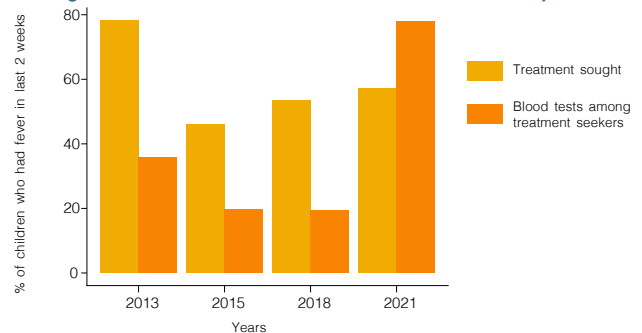
Malaria prevalence in children under 5 years



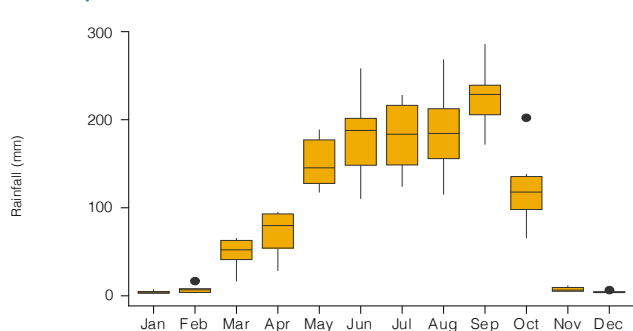
Estimated malaria cases and incidence



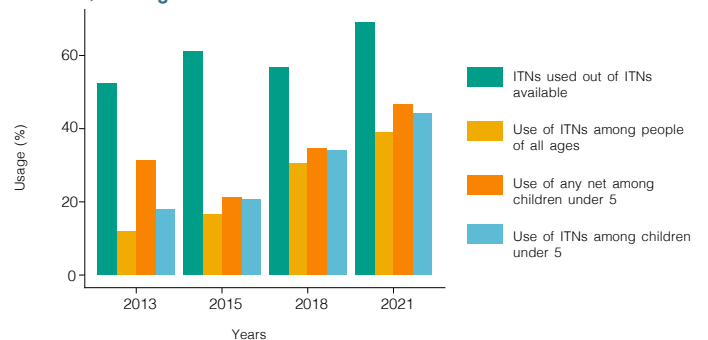
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

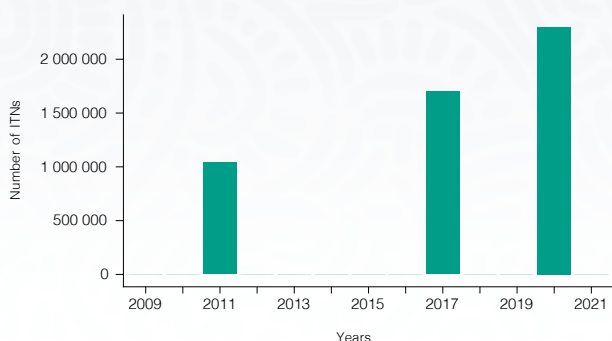


Access, coverage and use of ITNs

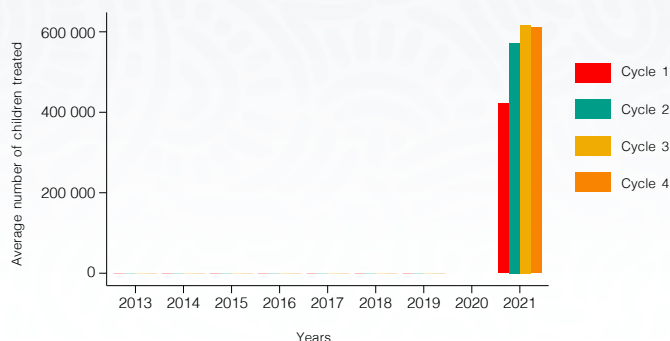


03 | Profiles of Nigeria states

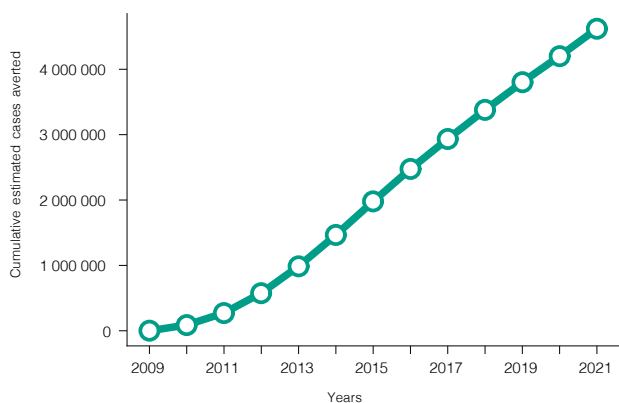
Insecticide treated nets - mass campaign distribution



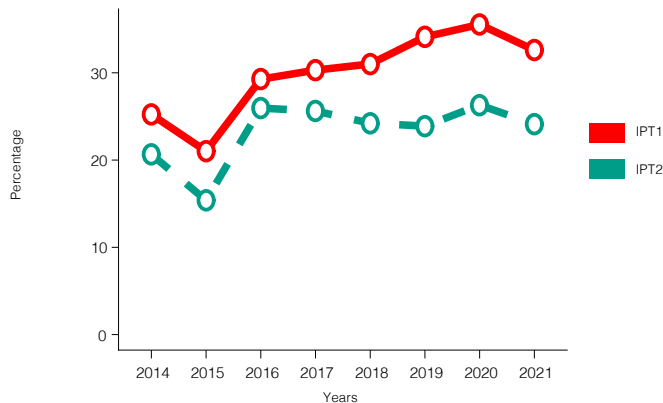
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Kwara State is located in the North-Central Region of Nigeria. It borders Kogi to the east, Niger to the north, and Ekiti, Osun, and Oyo to the south, the Republic of Benin to the west. The State's estimated population was 3.3 million in 2019 (1) and 3.8 million in 2022.

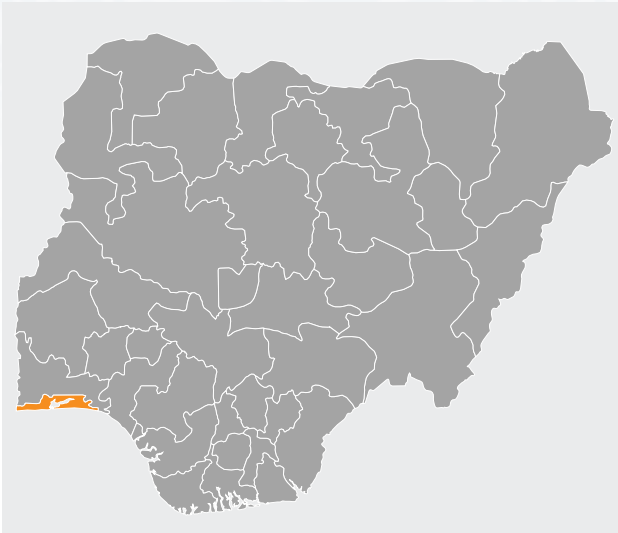
The State experiences two distinct seasons: the dry season (October to April) and the rainy season (May to September) (9), with annual rainfall averaging around 1,094.9 millimeters (3).

The State contributed an estimated 1.4% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.0 million, the estimated incidence increased from 302.3 to 312.0 per 1000 population (4). Malaria prevalence by microscopy decreased from 26.4% in 2015 to 5.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 5.0 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 16.6% in 2015 to 39.0% in 2021. Care seeking among children with fever in the State increased from 46.0% in 2015 to 57.3% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 19.8% in 2015 to 77.8% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 15.4% in 2015 to 24.1% in 2021 (5).

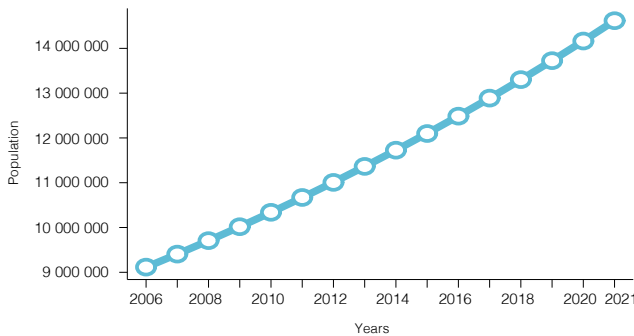
An estimated 2.0 million cases were averted between 2009 and 2015, and 4.6 million between 2009 and 2021.

LAGOS STATE

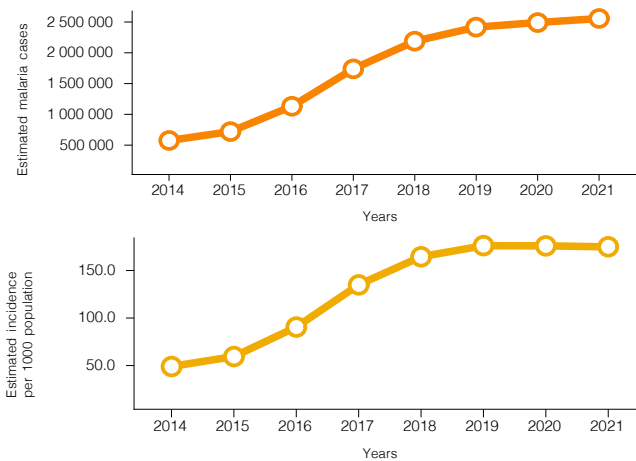


INDICATORS	VALUE	UNIT
Estimated population in 2021	14 618 000	
Malaria prevalence according to RDT	3.2	%
Malaria prevalence according to microscopy	2.6	%
Estimated malaria cases in 2021	2 556 000	
Estimated incidence per thousand population in 2021	174.9	/1000
Year of most recent ITN campaign	2011	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	22.1	%
Existing ITNs used last night	36.8	%
Population who slept under an ITN the night before the survey	9.6	%
Children under 5 who slept under any net	14	%
Children under 5 who slept under an ITN	9.2	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	73.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	36.4	%

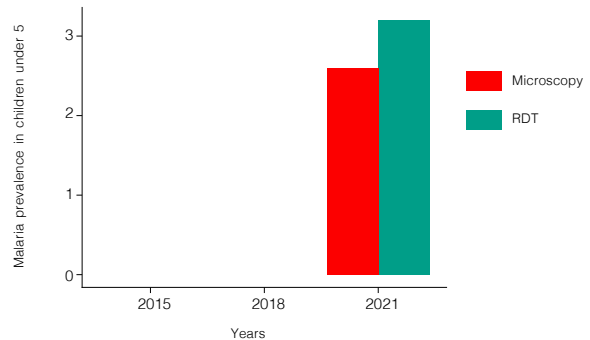
Population count



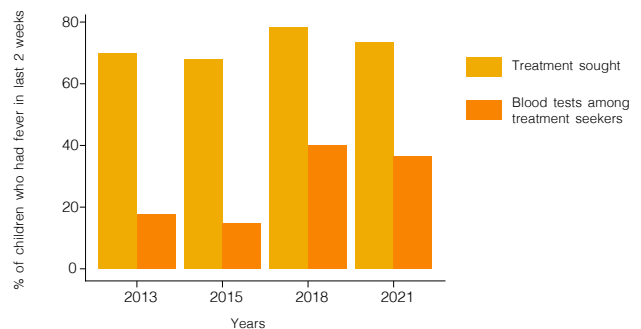
Estimated malaria cases and incidence



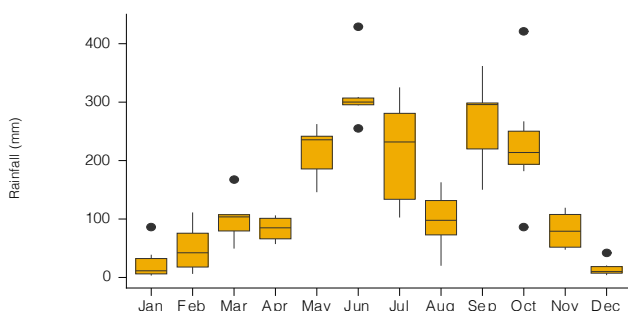
Malaria prevalence in children under 5 years



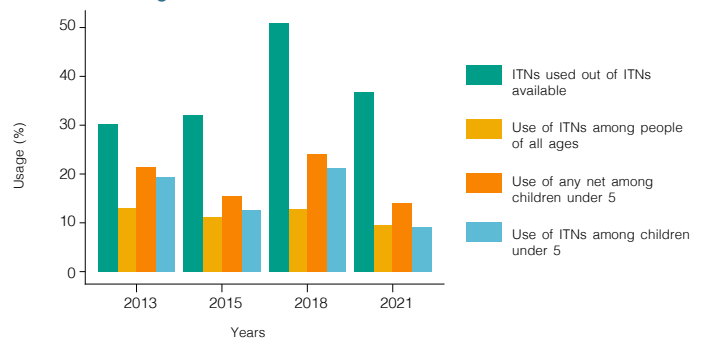
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

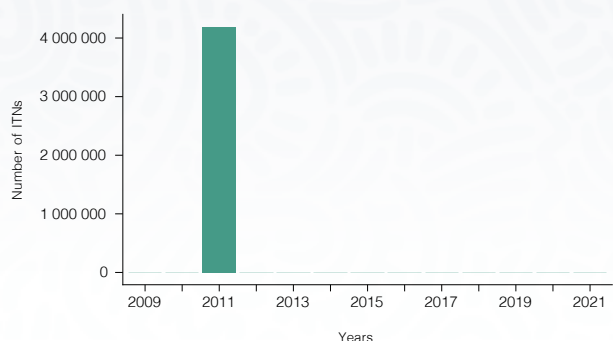


Access, coverage and use of ITNs

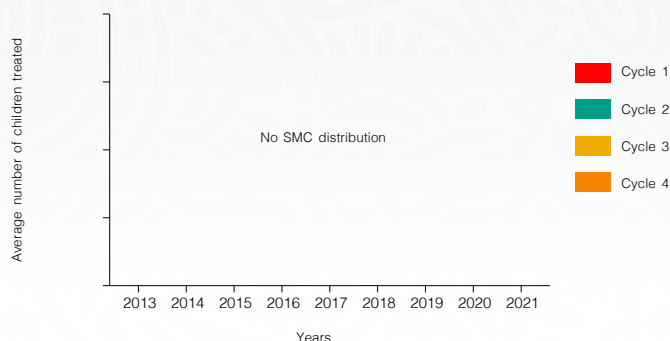


03 | Profiles of Nigeria states

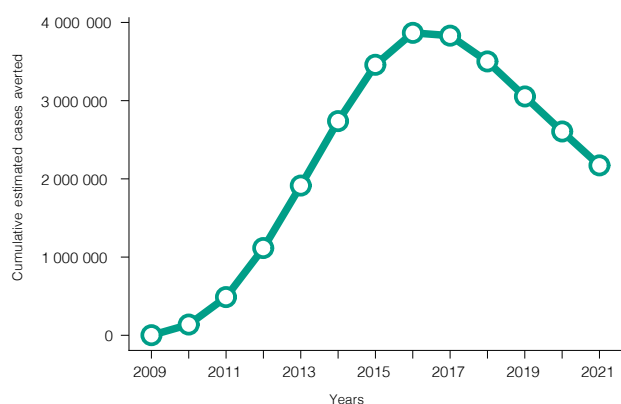
Insecticide treated nets - mass campaign distribution



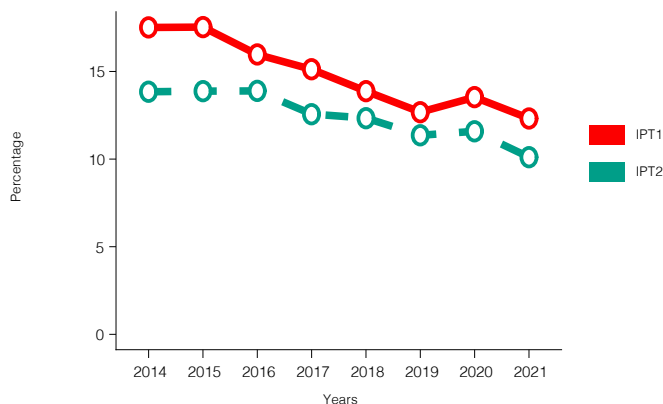
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Lagos State is located in South-Western region of Nigeria. It borders the Republic of Benin to the west and Ogun State to the north-east. The State's estimated population was 12.8 million in 2019 (1) and 15.1 million in 2022.

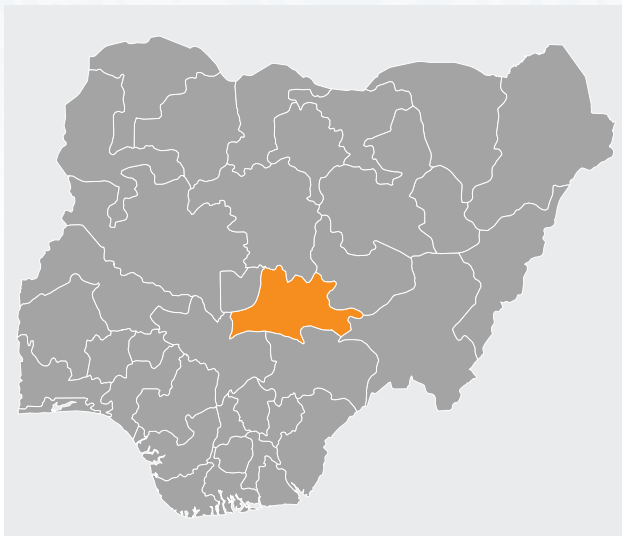
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,535.8 millimeters (3).

The State contributed an estimated 3.8% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 2.2 million to 2.6 million, the estimated incidence increased from 164.5 to 174.9 per 1000 population (4). Malaria prevalence by microscopy was 2.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2011. Since 2009, over 4.2 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 11.1% in 2015 to 9.6% in 2021. Care seeking among children with fever in the State increased from 67.8% in 2015 to 73.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 14.7% in 2015 to 36.4% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 13.9% in 2015 to 10.1% in 2021 (5).

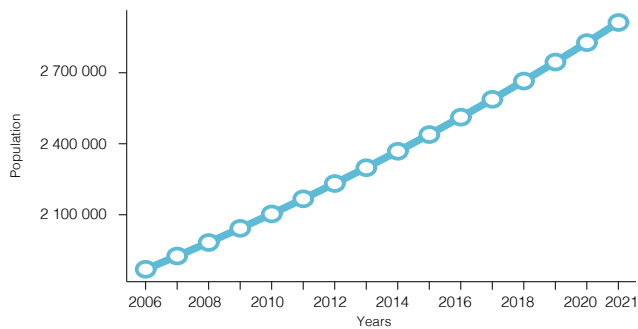
An estimated 3.5 million cases were averted between 2009 and 2015, and 2.2 million between 2009 and 2021.

NASARAWA STATE

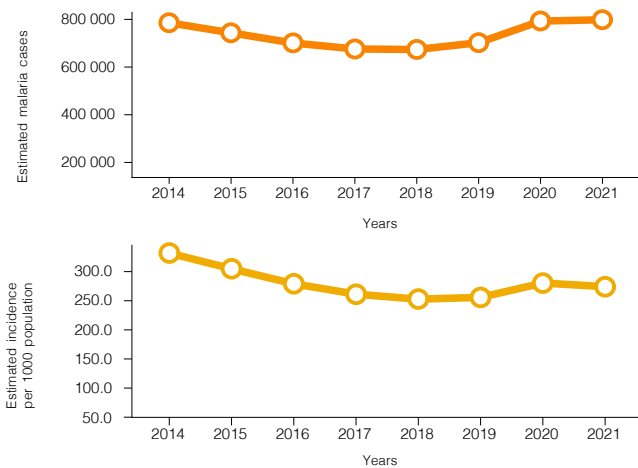


INDICATORS	VALUE	UNIT
Estimated population in 2021	2 912 000	
Malaria prevalence according to RDT	29.9	%
Malaria prevalence according to microscopy	15.3	%
Estimated malaria cases in 2021	798 000	
Estimated incidence per thousand population in 2021	274.1	/1000
Year of most recent ITN campaign	2018	
Year of preceding ITN campaign	2014	
Persons with access to an ITN	20.5	%
Existing ITNs used last night	66.4	%
Population who slept under an ITN the night before the survey	14.5	%
Children under 5 who slept under any net	15.1	%
Children under 5 who slept under an ITN	14.4	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	52.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	63	%

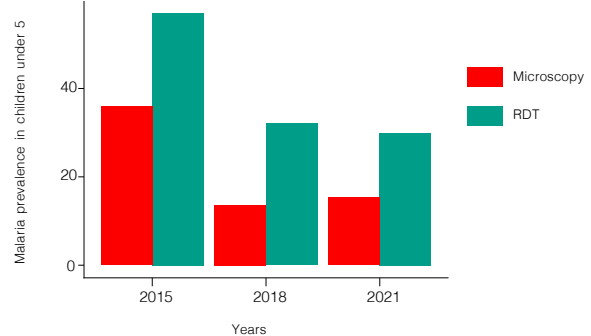
Population count



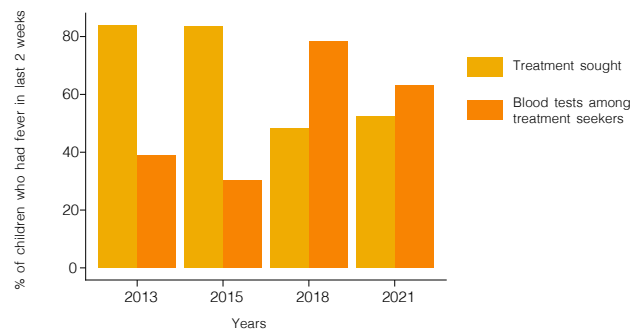
Estimated malaria cases and incidence



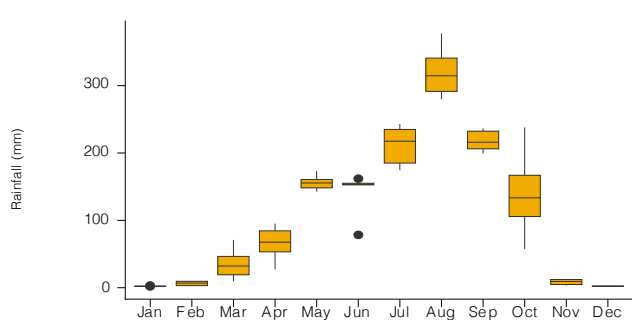
Malaria prevalence in children under 5 years



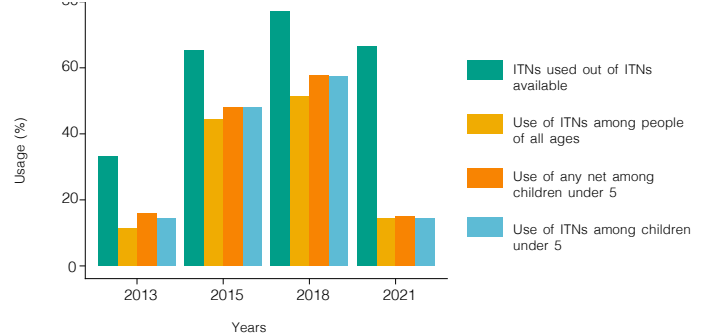
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

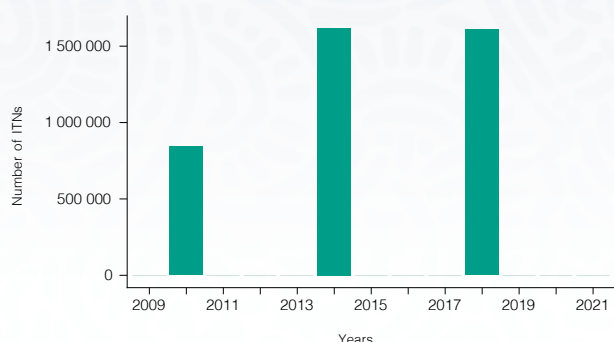


Access, coverage and use of ITNs

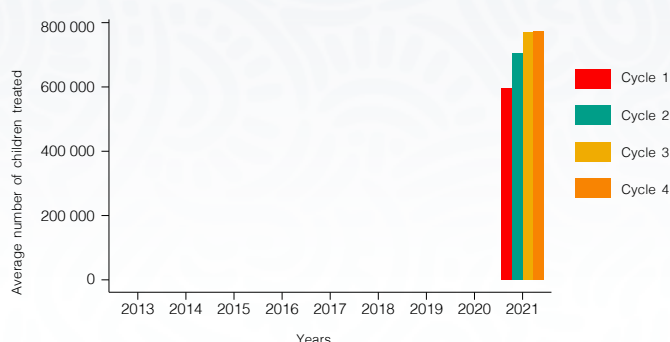


03 | Profiles of Nigeria states

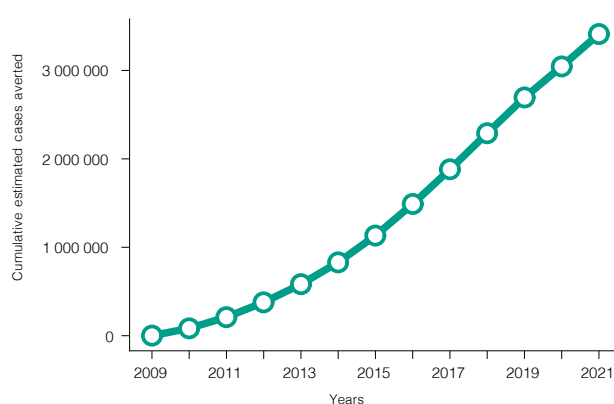
Insecticide treated nets - mass campaign distribution



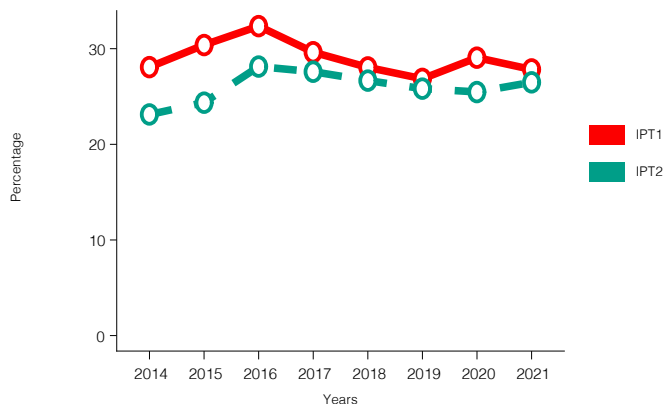
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Nasarawa State is located in the North-Central Region of Nigeria. It borders Taraba and Plateau to the east, Kaduna to the north, Kogi and Benue to the south, and Federal Capital Territory to the west. The State's estimated population was 2.6 million in 2019 (1) and 3.0 million in 2022.

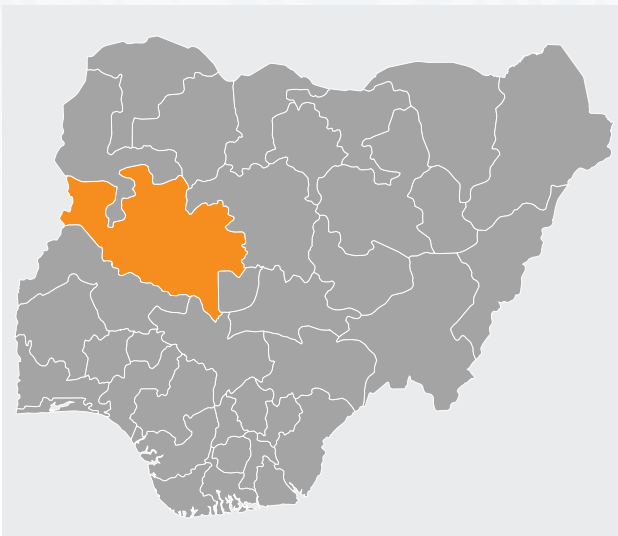
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,217.4 millimeters (3).

The State contributed an estimated 1.2% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 0.7 million, the estimated incidence increased from 252.7 to 274.1 per 1000 population (4). Malaria prevalence by microscopy decreased from 35.9% in 2015 to 15.3% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2018. Since 2009, over 4.1 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 44.4% in 2015 to 14.5% in 2021. Care seeking among children with fever in the State decreased from 83.5% in 2015 to 52.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 30.4% in 2015 to 63.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 24.4% in 2015 to 26.5% in 2021 (5).

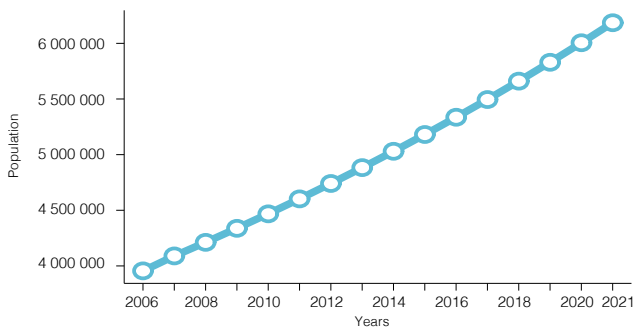
An estimated 1.1 million cases were averted between 2009 and 2015, and 3.4 million between 2009 and 2021.

NIGER STATE

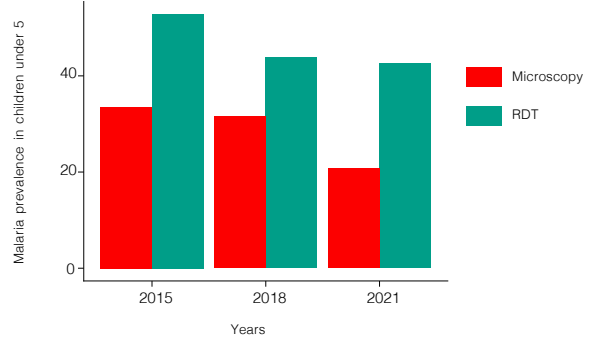


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 185 000	
Malaria prevalence according to RDT	42.6	%
Malaria prevalence according to microscopy	20.7	%
Estimated malaria cases in 2021	2 174 000	
Estimated incidence per thousand population in 2021	351.5	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2014	
Persons with access to an ITN	31.9	%
Existing ITNs used last night	72.3	%
Population who slept under an ITN the night before the survey	22.1	%
Children under 5 who slept under any net	22.1	%
Children under 5 who slept under an ITN	21.4	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	73.6	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	30	%

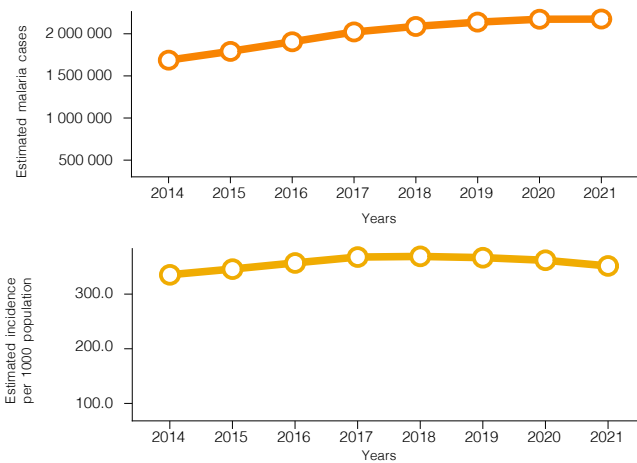
Population count



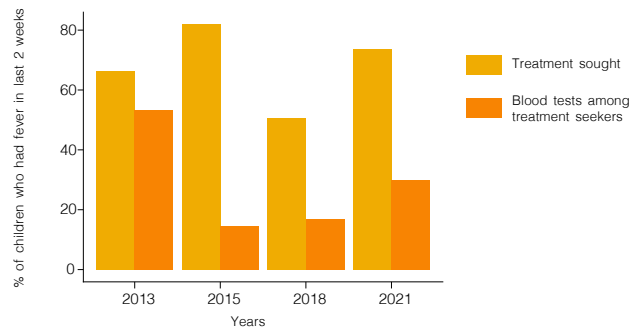
Malaria prevalence in children under 5 years



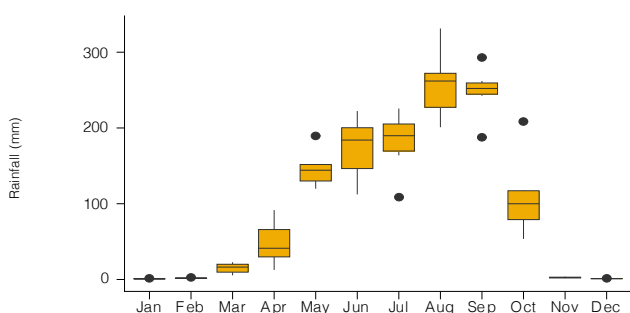
Estimated malaria cases and incidence



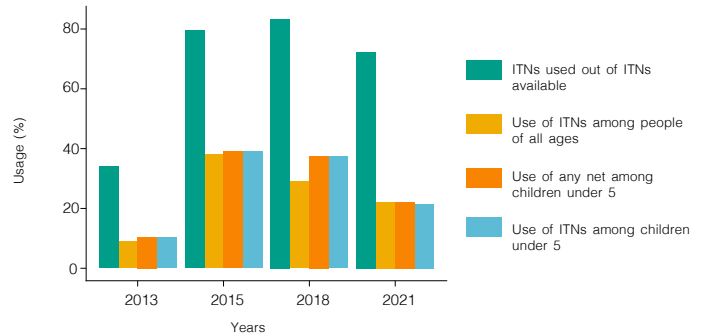
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

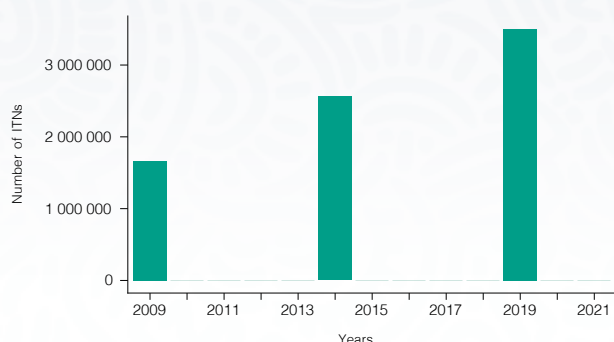


Access, coverage and use of ITNs

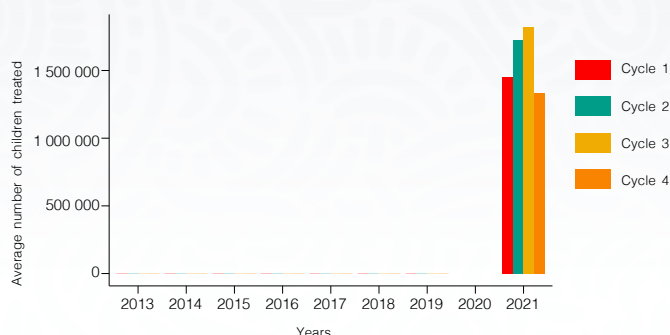


03 | Profiles of Nigeria states

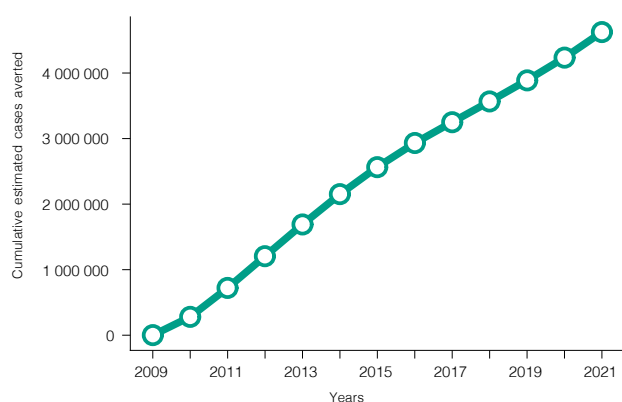
Insecticide treated nets - mass campaign distribution



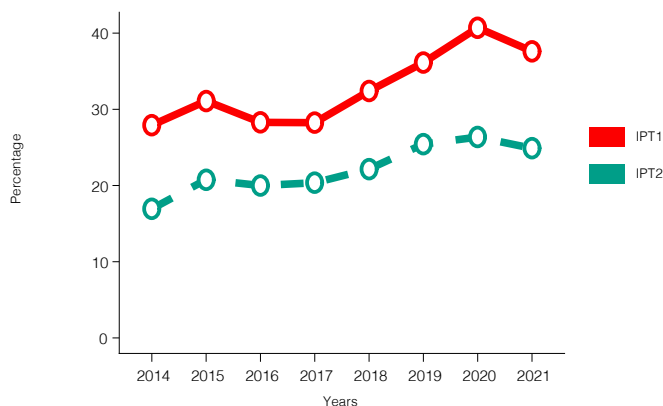
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Niger State is located in the North-Central Region of Nigeria. With the largest landmass in Nigeria, it borders Zamfara, Kebbi, Kaduna to the north, Federal Capital Territory to the east, Kogi and Kwara to the South and the Republic of Benin to the west. The State's estimated population was 6.2 million in 2019 (1) and 6.4 million in 2022.

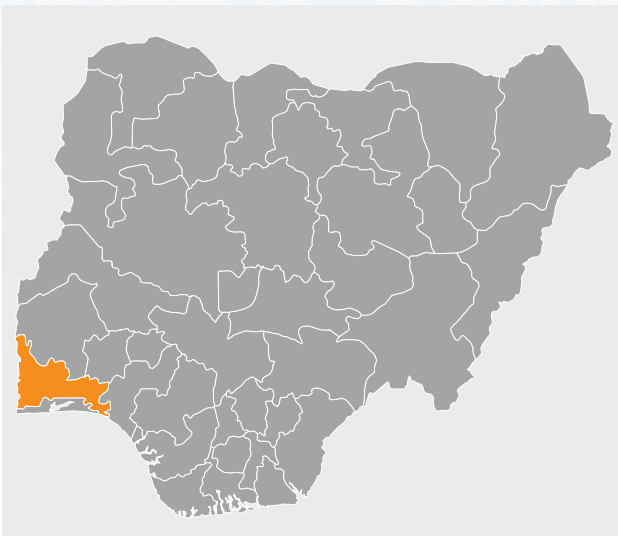
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,101.7 millimeters (3).

The State contributed an estimated 3.2% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 2.1 million, the estimated incidence decreased from 368.9 to 351.5 per 1000 population (4). Malaria prevalence by microscopy decreased from 33.5% in 2015 to 20.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 7.7 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 38.0% in 2015 to 22.1% in 2021. Care seeking among children with fever in the State decreased from 81.9% in 2015 to 73.6% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 14.4% in 2015 to 30.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 20.8% in 2015 to 24.9% in 2021 (5).

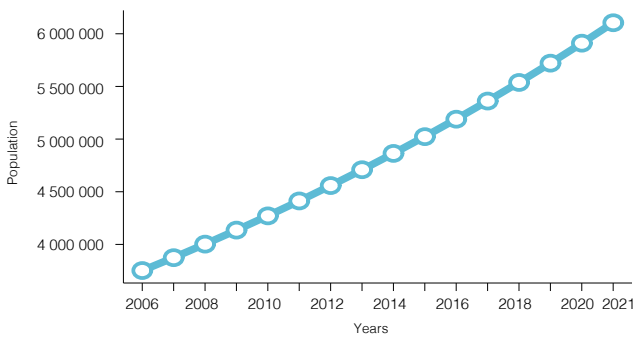
An estimated 2.6 million cases were averted between 2009 and 2015, and 4.6 million between 2009 and 2021.

OGUN STATE

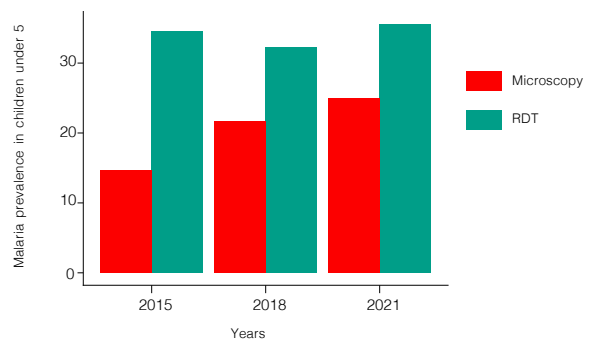


INDICATORS	VALUE	UNIT
Estimated population in 2021	6 105 000	
Malaria prevalence according to RDT	35.6	%
Malaria prevalence according to microscopy	24.9	%
Estimated malaria cases in 2021	1 709 000	
Estimated incidence per thousand population in 2021	279.9	/1000
Year of most recent ITN campaign	2021	
Year of preceding ITN campaign	2018	
Persons with access to an ITN	33.7	%
Existing ITNs used last night	65.5	%
Population who slept under an ITN the night before the survey	21.7	%
Children under 5 who slept under any net	18.2	%
Children under 5 who slept under an ITN	18.2	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	39.4	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	61.7	%

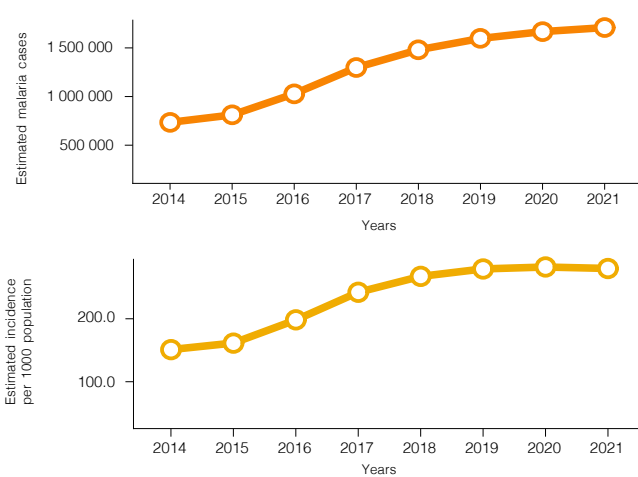
Population count



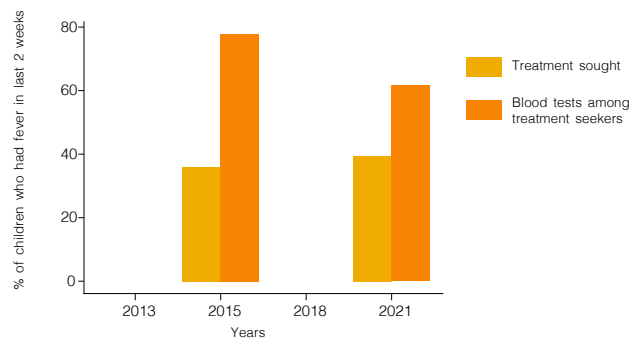
Malaria prevalence in children under 5 years



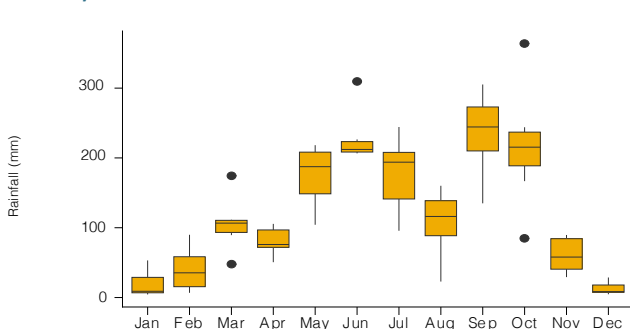
Estimated malaria cases and incidence



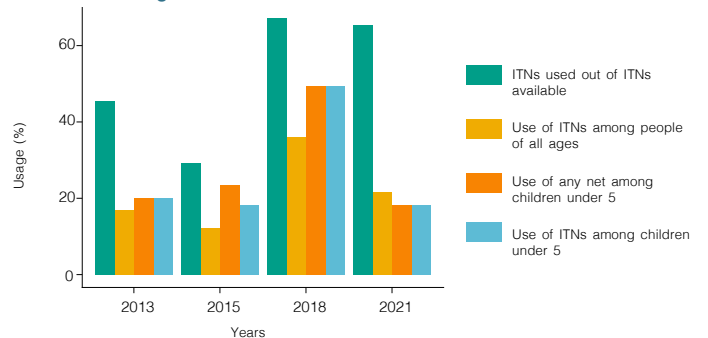
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

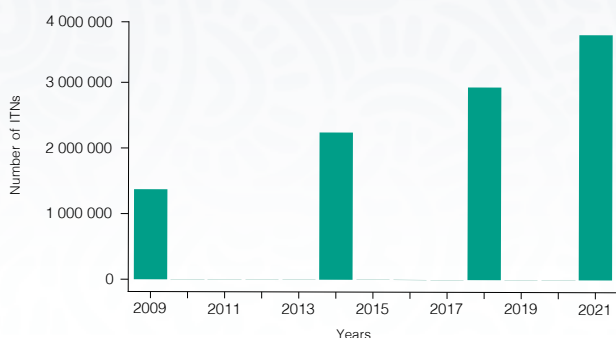


Access, coverage and use of ITNs

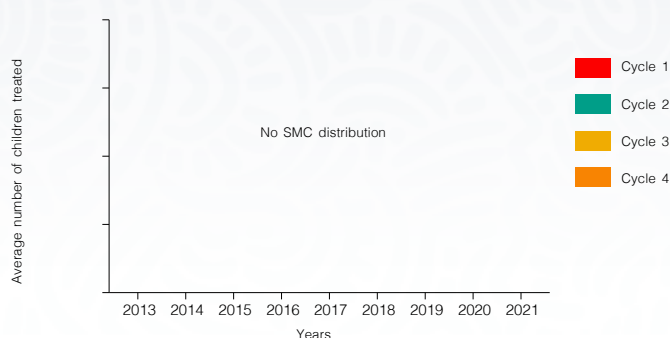


03 | Profiles of Nigeria states

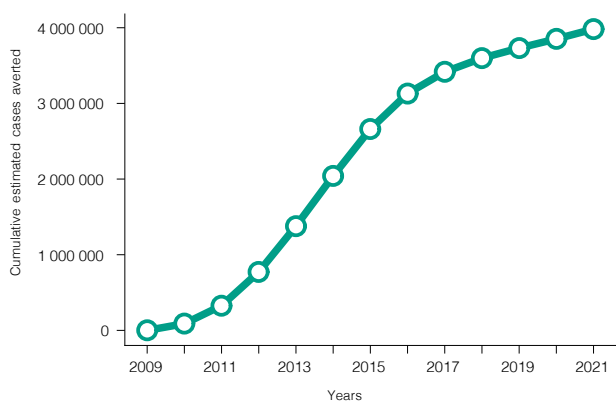
Insecticide treated nets - mass campaign distribution



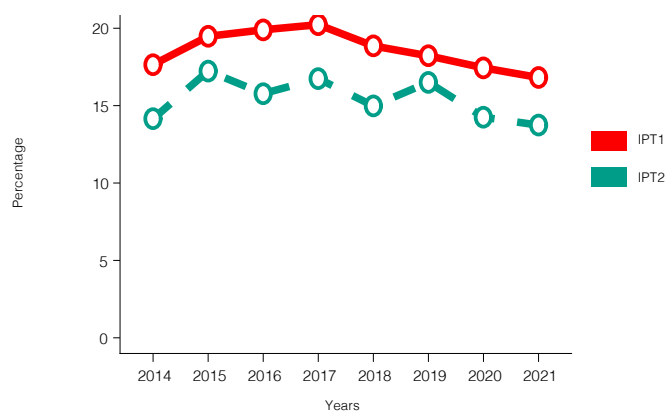
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Ogun State is located in the South-Western Region of Nigeria. It borders Lagos, Oyo, Osun, Ondo, and the Republic of Benin, has Abeokuta as its capital and largest city, featuring a predominantly rainforest landscape, with wooden savanna in the north-west. The State's estimated population was 5.9 million in 2019 (1) and 6.3 million in 2022.

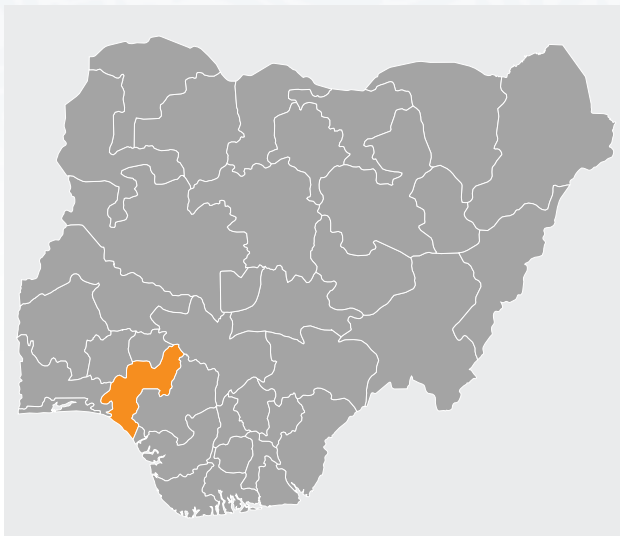
The State experiences two distinct seasons: the dry season (October to February) and the rainy season (March to September) (9), with annual rainfall averaging around 1,332.3 millimeters (3).

The State contributed an estimated 2.5% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.5 million to 1.7 million, the estimated incidence increased from 267.3 to 279.9 per 1000 population (4). Malaria prevalence by microscopy increased from 14.7% in 2015 to 24.9% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2021. Since 2009, over 10.3 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 12.2% in 2015 to 21.7% in 2021. Care seeking among children with fever in the State increased from 36.0% in 2015 to 39.4% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 77.8% in 2015 to 61.7% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 17.2% in 2015 to 13.7% in 2021 (5).

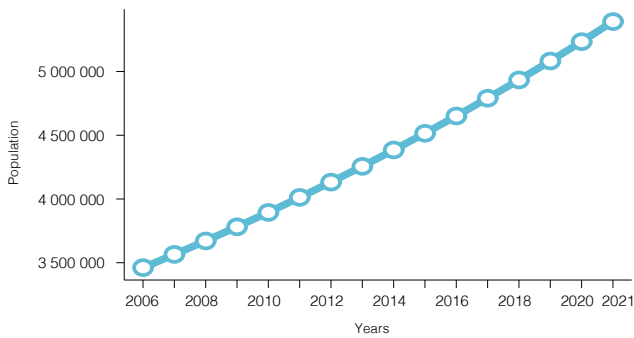
An estimated 2.7 million cases were averted between 2009 and 2015, and 4.0 million between 2009 and 2021.

ONDO STATE

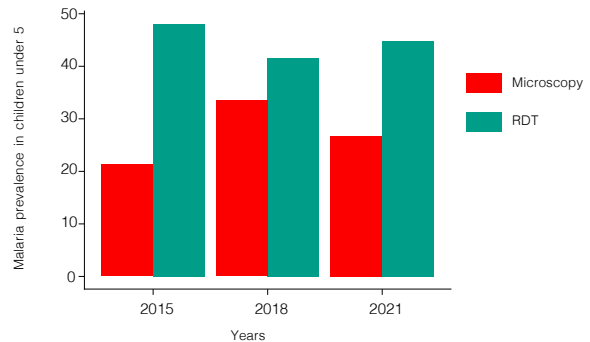


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 392 000	
Malaria prevalence according to RDT	44.8	%
Malaria prevalence according to microscopy	26.7	%
Estimated malaria cases in 2021	1 639 000	
Estimated incidence per thousand population in 2021	304	/1000
Year of most recent ITN campaign	2021	
Year of preceding ITN campaign	2017	
Persons with access to an ITN	24.2	%
Existing ITNs used last night	63.3	%
Population who slept under an ITN the night before the survey	17.7	%
Children under 5 who slept under any net	25.7	%
Children under 5 who slept under an ITN	24.9	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	48.8	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	16	%

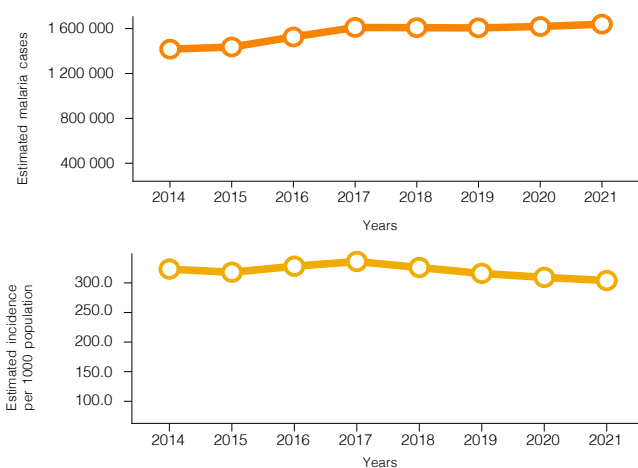
Population count



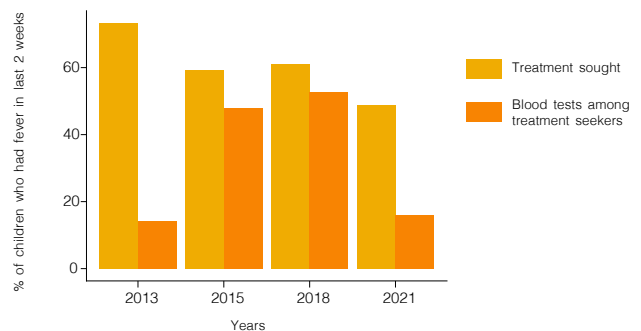
Malaria prevalence in children under 5 years



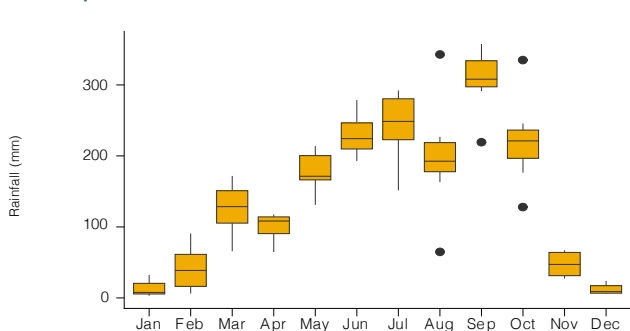
Estimated malaria cases and incidence



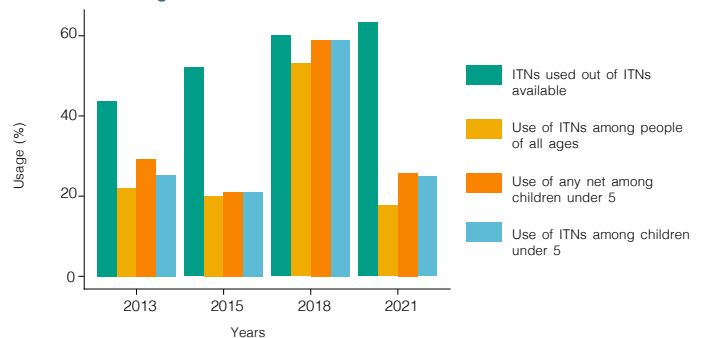
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

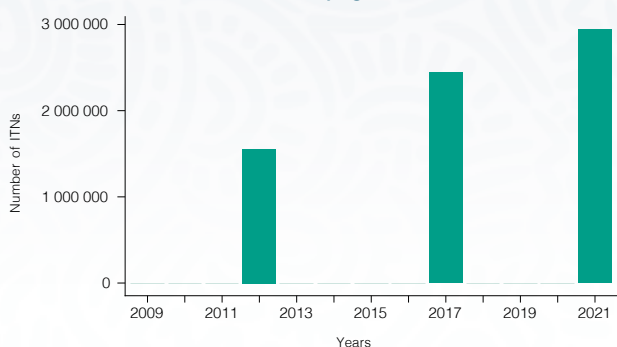


Access, coverage and use of ITNs



03 | Profiles of Nigeria states

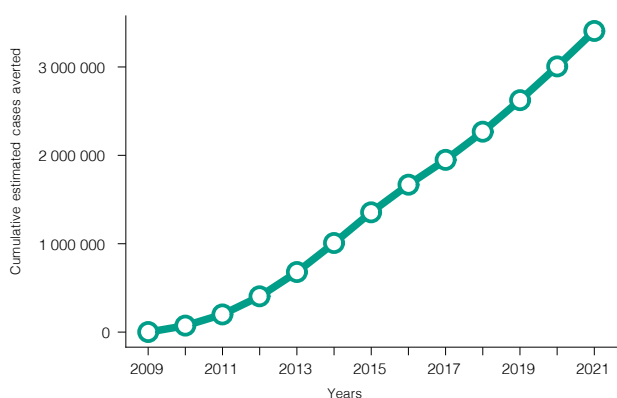
Insecticide treated nets - mass campaign distribution



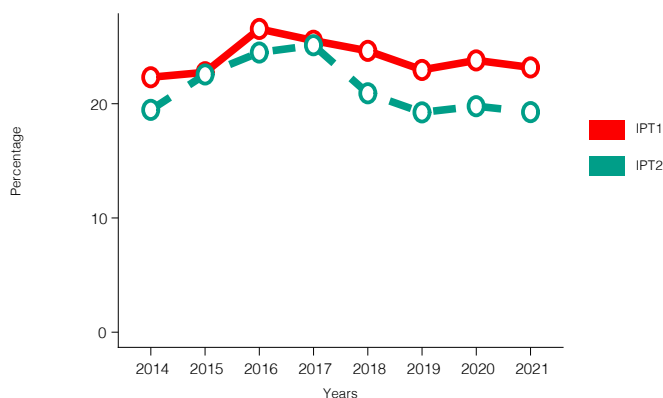
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Ondo State is located in the South-Western Region of Nigeria. It borders Ekiti, Kogi, Edo, Delta, Ogun, and Osun States, has Akure as its capital, with the highest point in Nigeria’s western half at over 1000 meters. The State’s estimated population was 5.0 million in 2019 (1) and 5.6 million in 2022.

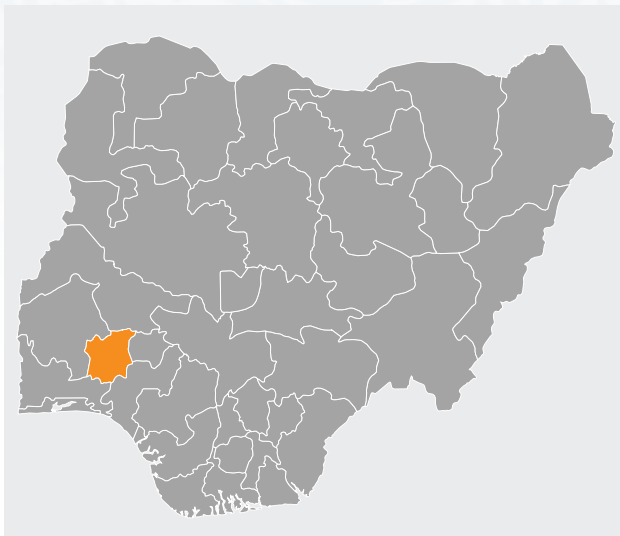
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 1,574.2 millimeters (3).

The State contributed an estimated 2.4% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.6 million, the estimated incidence decreased from 325.9 to 304.0 per 1000 population (4). Malaria prevalence by microscopy increased from 21.3% in 2015 to 26.7% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2021. Since 2009, over 6.9 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 20.1% in 2015 to 17.7% in 2021. Care seeking among children with fever in the State decreased from 59.2% in 2015 to 48.8% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 47.8% in 2015 to 16.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 22.6% in 2015 to 19.3% in 2021 (5).

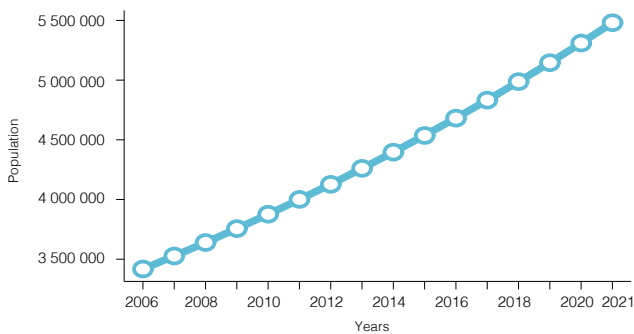
An estimated 1.4 million cases were averted between 2009 and 2015, and 3.4 million between 2009 and 2021.

OSUN STATE

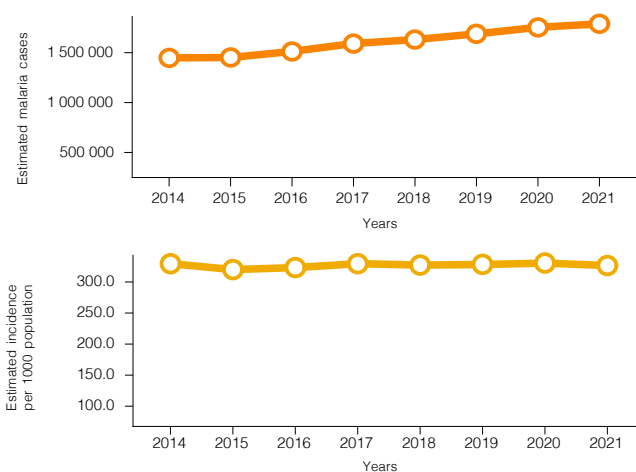


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 481 000	
Malaria prevalence according to RDT	27.6	%
Malaria prevalence according to microscopy	19.3	%
Estimated malaria cases in 2021	1 789 000	
Estimated incidence per thousand population in 2021	326.5	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2017	
Persons with access to an ITN	61.8	%
Existing ITNs used last night	43.2	%
Population who slept under an ITN the night before the survey	35.3	%
Children under 5 who slept under any net	35.1	%
Children under 5 who slept under an ITN	35.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	61	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	48.7	%

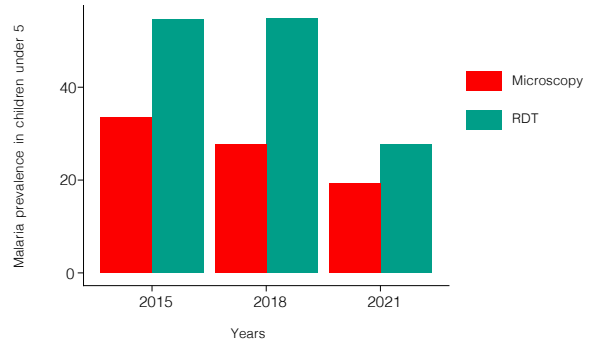
Population count



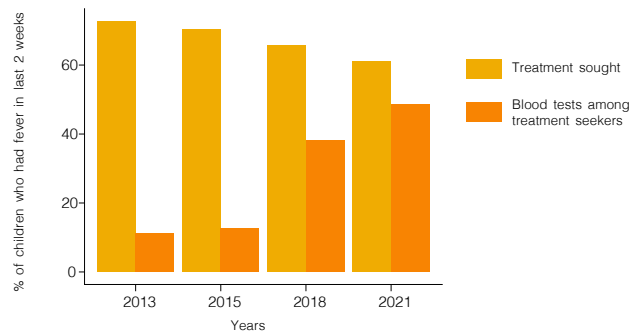
Estimated malaria cases and incidence



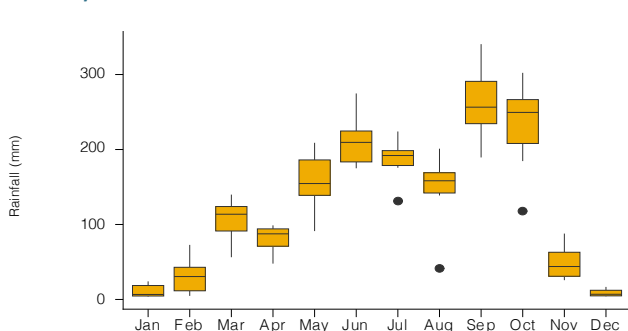
Malaria prevalence in children under 5 years



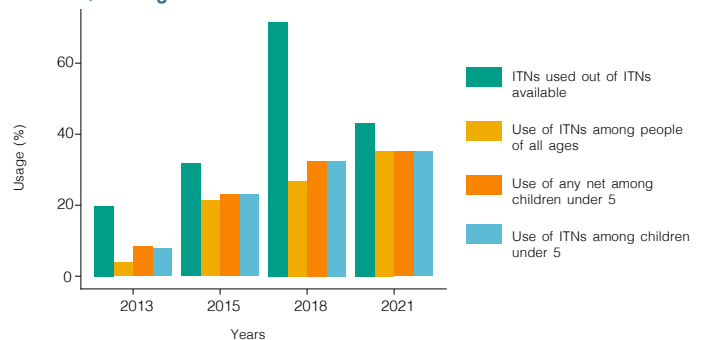
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

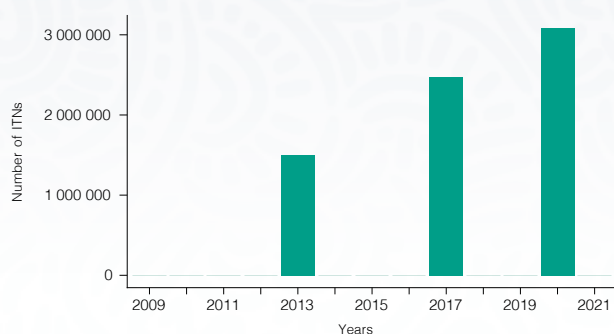


Access, coverage and use of ITNs

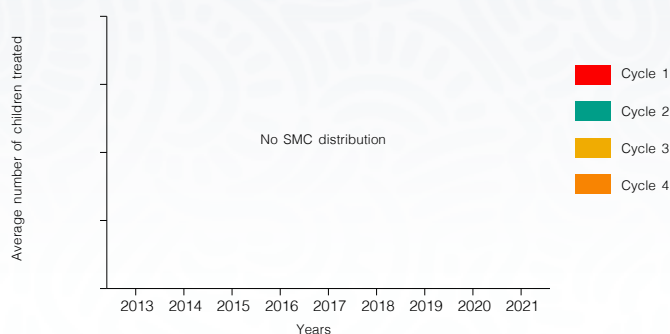


03 | Profiles of Nigeria states

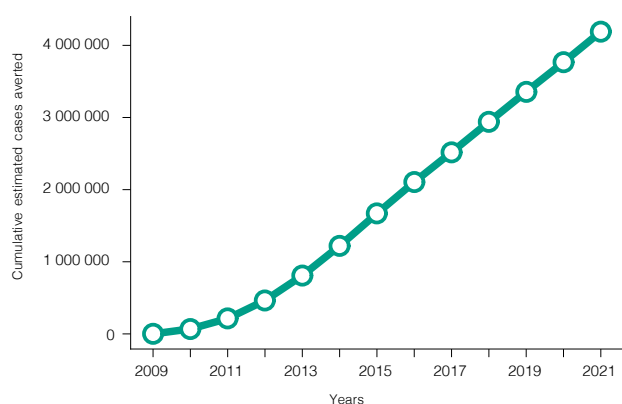
Insecticide treated nets - mass campaign distribution



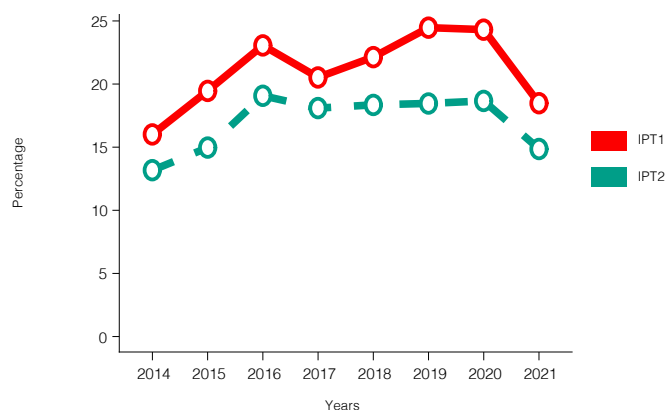
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Osun State is located in the South-Western Region of Nigeria. It borders Ekiti, Ondo, Kwara, Ogun, and Oyo States, features Nigerian lowland forests in the south and drier Guinean forest-savanna mosaic in the north. The State’s estimated population was 4.2 million in 2019 (1) and 5.7 million in 2022.

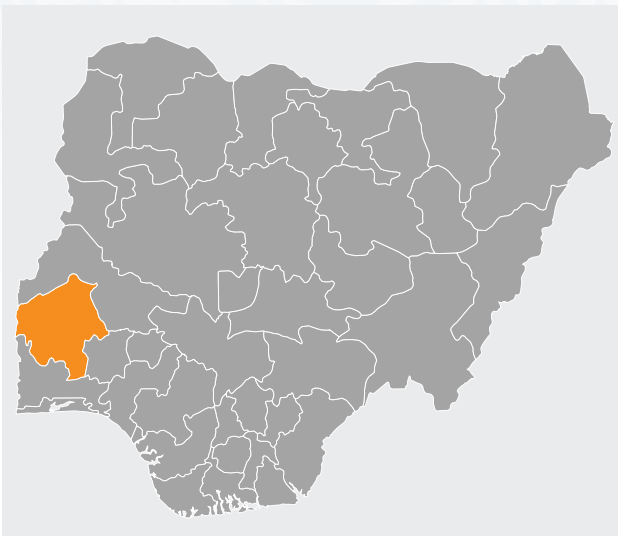
The State experiences two distinct seasons: the dry season (November to February) and the rainy season (March to October) (9), with annual rainfall averaging around 1,361.8 millimeters (3).

The State contributed an estimated 2.6% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.6 million to 1.8 million, the estimated incidence decreased from 327.2 to 326.5 per 1000 population (4). Malaria prevalence by microscopy decreased from 33.4% in 2015 to 19.3% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 7.1 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 21.4% in 2015 to 35.3% in 2021. Care seeking among children with fever in the State decreased from 70.2% in 2015 to 61.0% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 12.7% in 2015 to 48.7% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 15.0% in 2015 to 14.9% in 2021 (5).

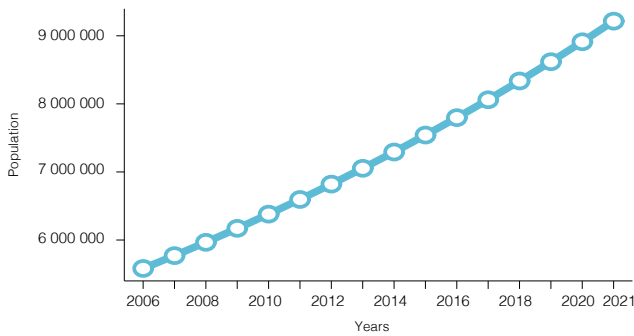
An estimated 1.7 million cases were averted between 2009 and 2015, and 4.2 million between 2009 and 2021.

OYO STATE

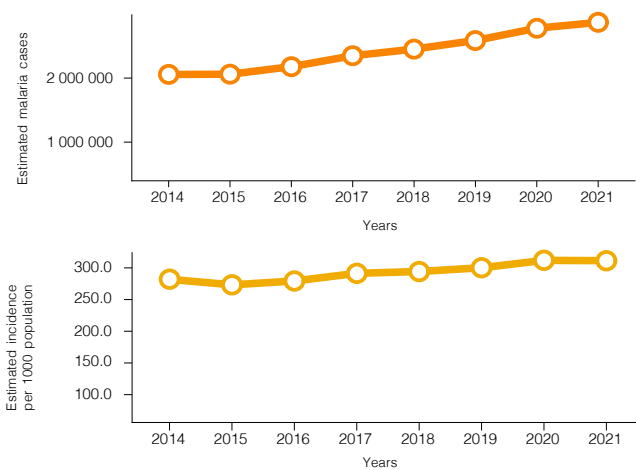


INDICATORS	VALUE	UNIT
Estimated population in 2021	9 215 000	
Malaria prevalence according to RDT	29.6	%
Malaria prevalence according to microscopy	20.9	%
Estimated malaria cases in 2021	2 869 000	
Estimated incidence per thousand population in 2021	311.4	/1000
Year of most recent ITN campaign	2021	
Year of preceding ITN campaign	2016	
Persons with access to an ITN	44.4	%
Existing ITNs used last night	64.7	%
Population who slept under an ITN the night before the survey	31.2	%
Children under 5 who slept under any net	35.6	%
Children under 5 who slept under an ITN	35.6	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	46	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	75	%

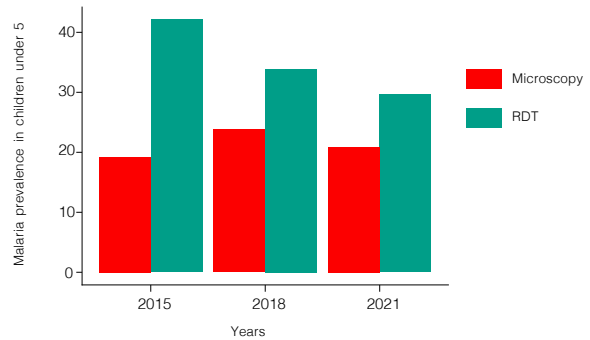
Population count



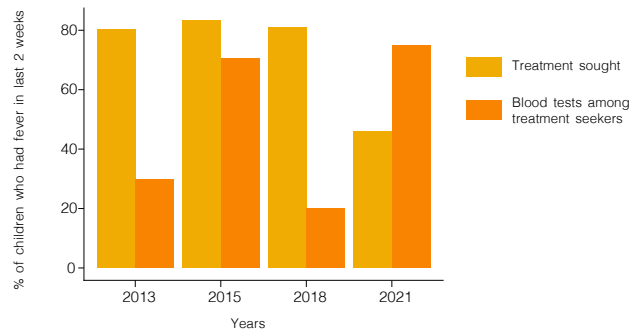
Estimated malaria cases and incidence



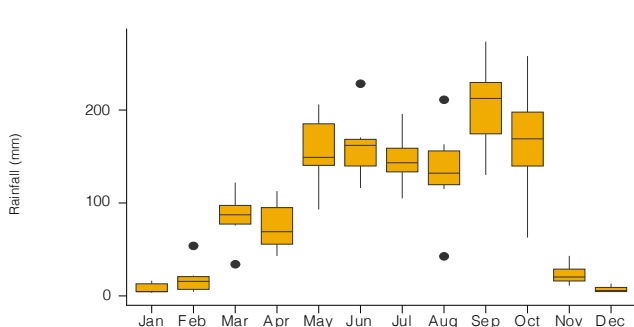
Malaria prevalence in children under 5 years



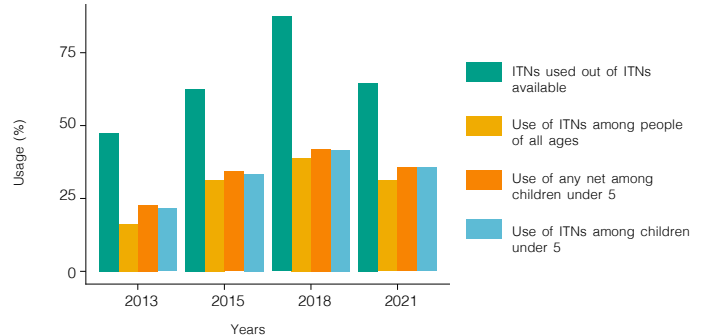
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

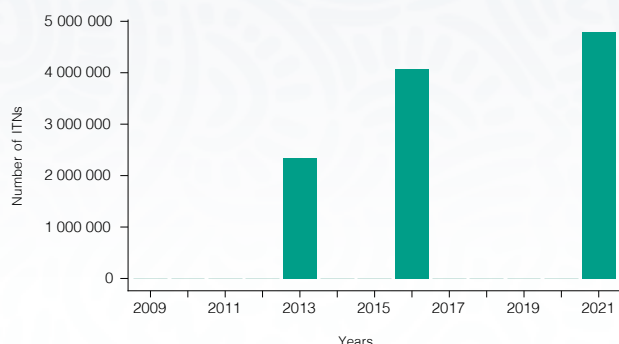


Access, coverage and use of ITNs

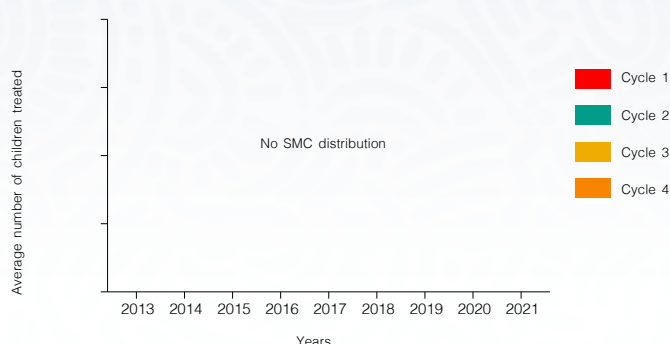


03 | Profiles of Nigeria states

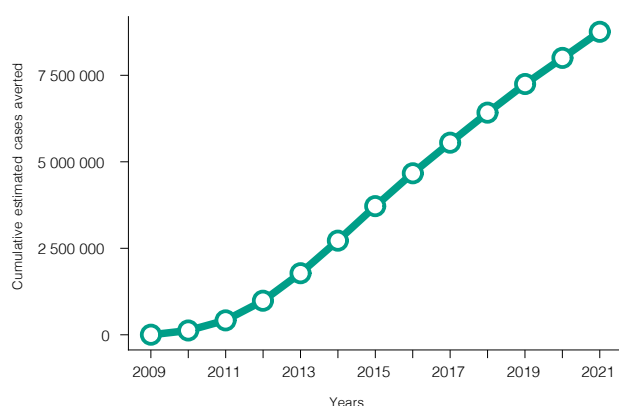
Insecticide treated nets - mass campaign distribution



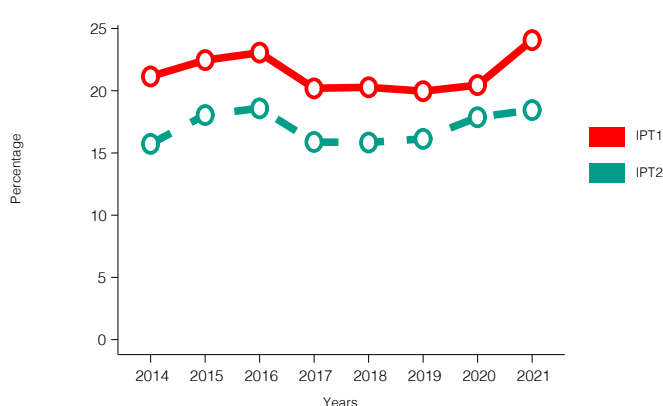
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Oyo State is located in the South-Western Region of Nigeria. It borders Kwara, Osun, Ogun, and the Republic of Benin. The State’s estimated population was 7.5 million in 2019 (1) and 9.5 million in 2022.

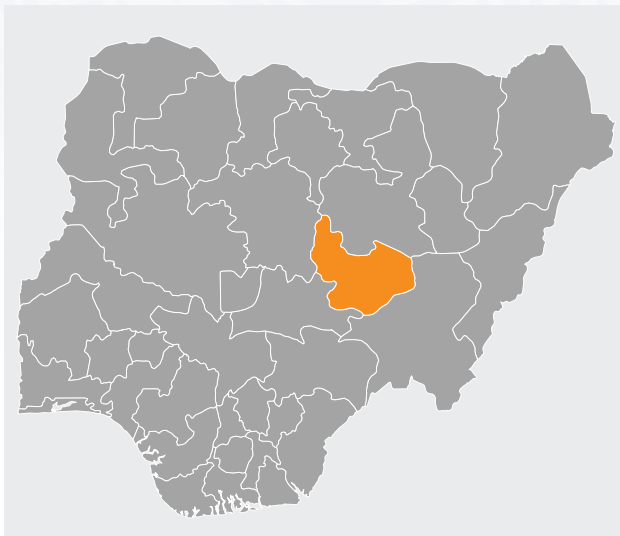
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 1,088.0 millimeters (3).

The State contributed an estimated 4.2% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 2.5 million to 2.9 million, the estimated incidence increased from 294.2 to 311.4 per 1000 population (4). Malaria prevalence by microscopy increased from 19.2% in 2015 to 20.9% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2021. Since 2009, over 11.2 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 31.4% in 2015 to 31.2% in 2021. Care seeking among children with fever in the State decreased from 83.3% in 2015 to 46.0% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 70.5% in 2015 to 75.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 18.1% in 2015 to 18.5% in 2021 (5).

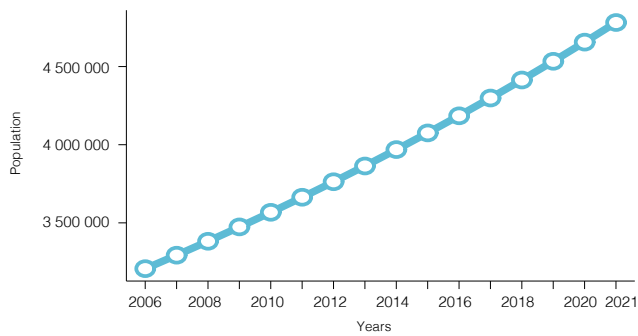
An estimated 3.7 million cases were averted between 2009 and 2015, and 8.8 million between 2009 and 2021.

PLATEAU STATE

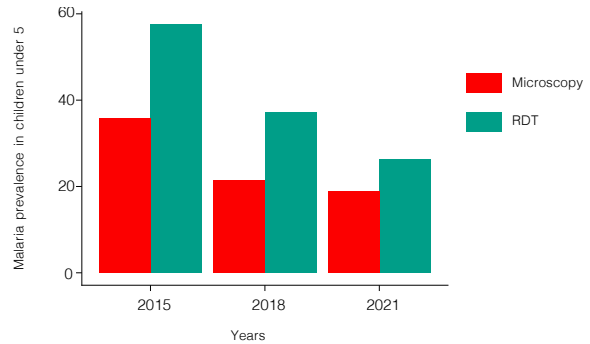


INDICATORS	VALUE	UNIT
Estimated population in 2021	4 782 000	
Malaria prevalence according to RDT	26.4	%
Malaria prevalence according to microscopy	18.8	%
Estimated malaria cases in 2021	1 370 000	
Estimated incidence per thousand population in 2021	286.5	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	25.4	%
Existing ITNs used last night	84	%
Population who slept under an ITN the night before the survey	26.7	%
Children under 5 who slept under any net	30.8	%
Children under 5 who slept under an ITN	29.5	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	52.7	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	19.9	%

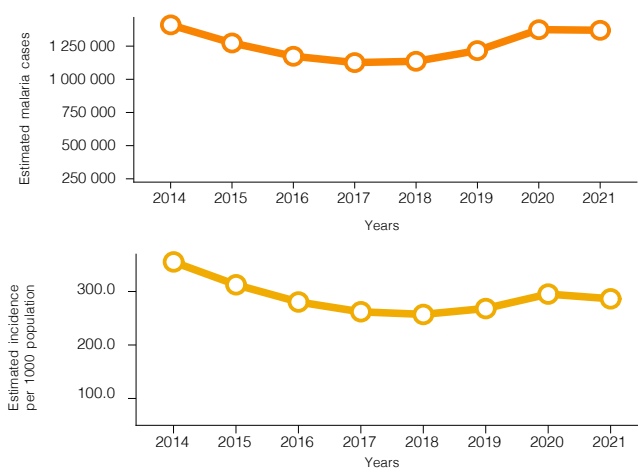
Population count



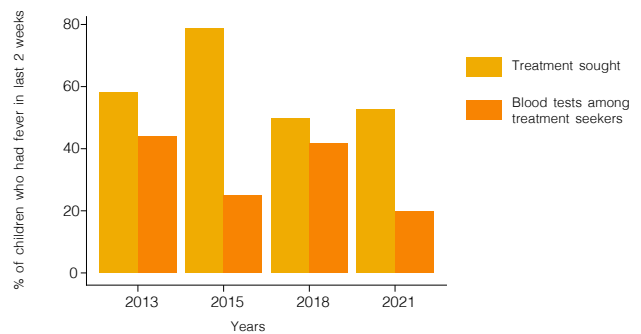
Malaria prevalence in children under 5 years



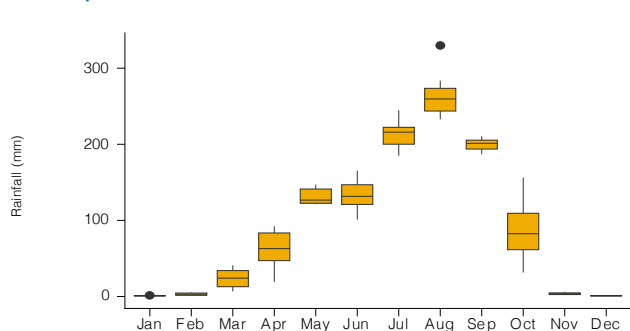
Estimated malaria cases and incidence



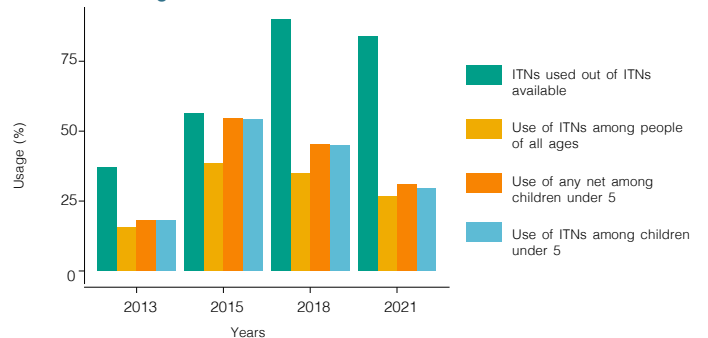
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

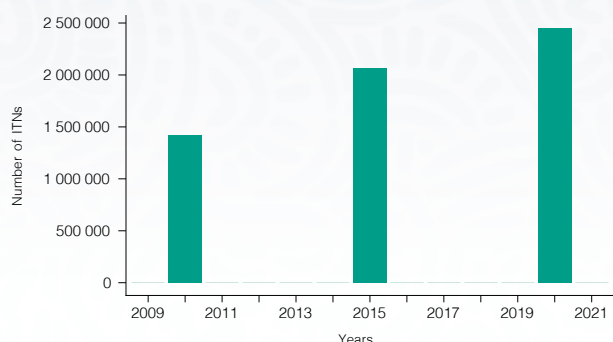


Access, coverage and use of ITNs

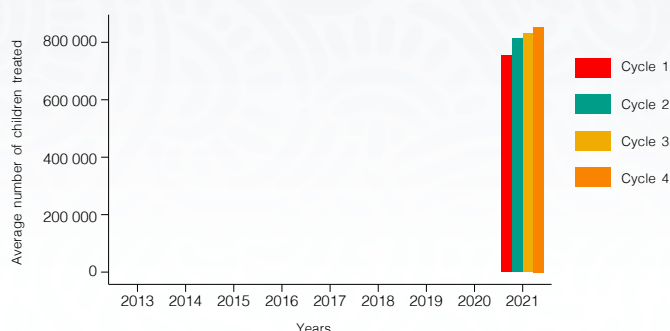


03 | Profiles of Nigeria states

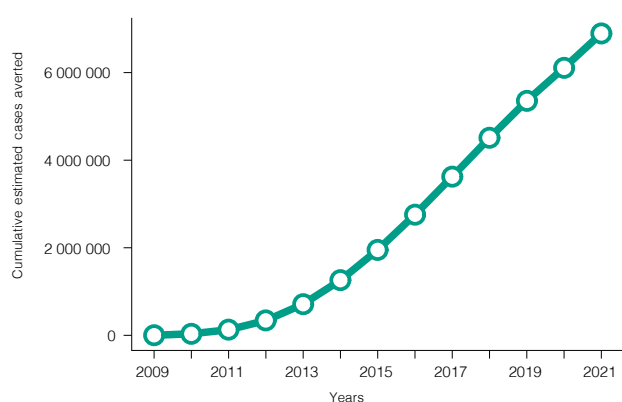
Insecticide treated nets - mass campaign distribution



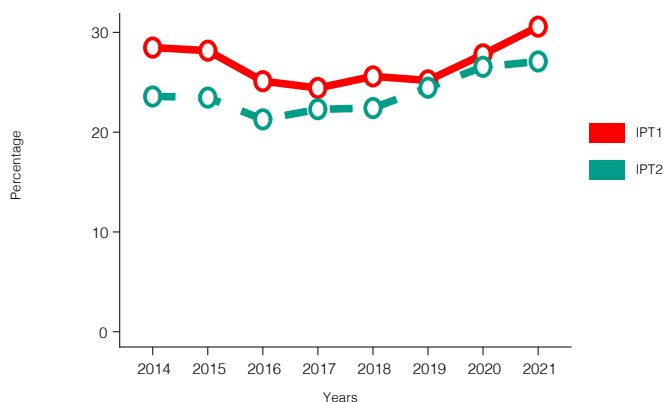
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Plateau State is located in the North-Central Region of Nigeria. It borders Bauchi to the north-east, Kaduna to the north-west, Nasarawa to the south-west and Taraba to the south-east. The State's estimated population was 4.4 million in 2019 (1) and 4.9 million in 2022.

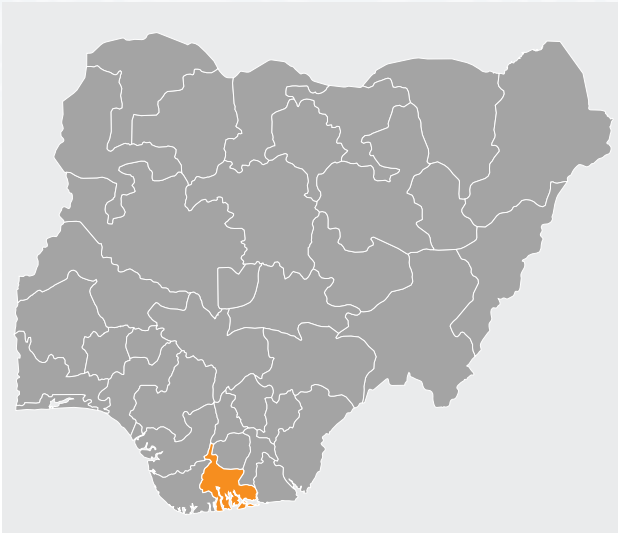
The State experiences two distinct seasons: the dry season (September to April) and the rainy season (May to August) (9), with annual rainfall averaging around 1,042.7 millimeters (3).

The State contributed an estimated 2.0% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.1 million to 1.4 million, the estimated incidence increased from 257.3 to 286.5 per 1000 population (4). Malaria prevalence by microscopy decreased from 35.8% in 2015 to 18.8% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 5.9 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 38.4% in 2015 to 26.7% in 2021. Care seeking among children with fever in the State decreased from 78.6% in 2015 to 52.7% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 24.9% in 2015 to 19.9% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 23.5% in 2015 to 27.1% in 2021 (5).

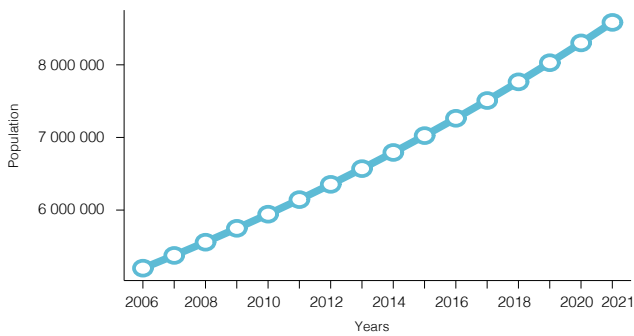
An estimated 2.0 million cases were averted between 2009 and 2015, and 6.9 million between 2009 and 2021.

RIVERS STATE

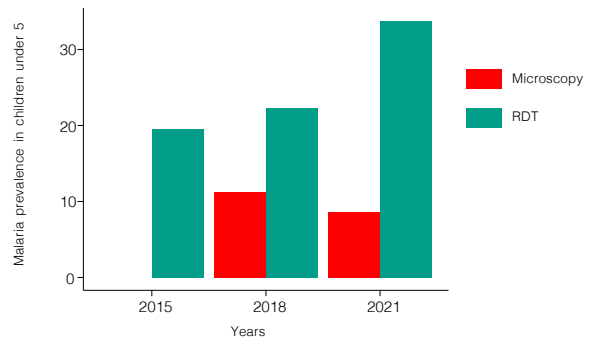


INDICATORS	VALUE	UNIT
Estimated population in 2021	8 584 000	
Malaria prevalence according to RDT	33.8	%
Malaria prevalence according to microscopy	8.6	%
Estimated malaria cases in 2021	1 954 000	
Estimated incidence per thousand population in 2021	227.7	/1000
Year of most recent ITN campaign	2014	
Year of preceding ITN campaign	2010	
Persons with access to an ITN	16.9	%
Existing ITNs used last night	54	%
Population who slept under an ITN the night before the survey	10.5	%
Children under 5 who slept under any net	14.4	%
Children under 5 who slept under an ITN	14.4	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	58.2	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	7.2	%

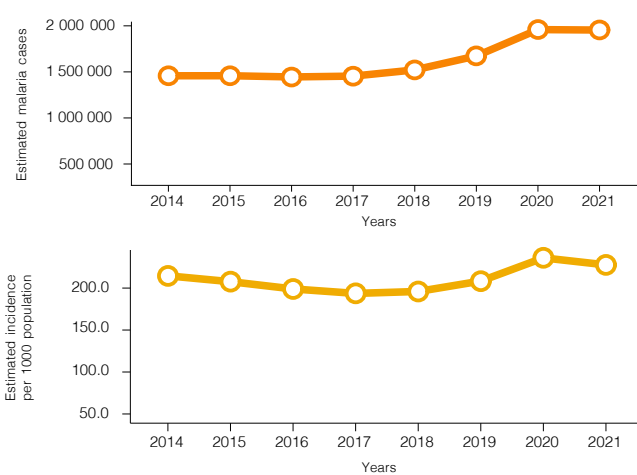
Population count



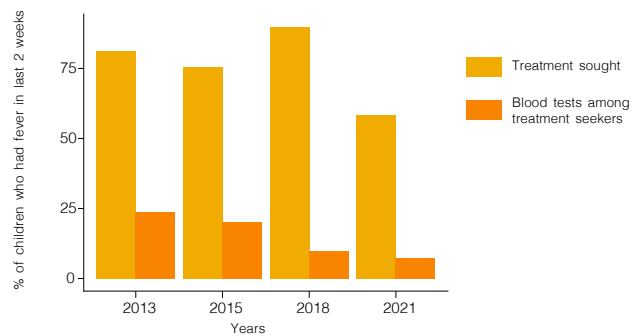
Malaria prevalence in children under 5 years



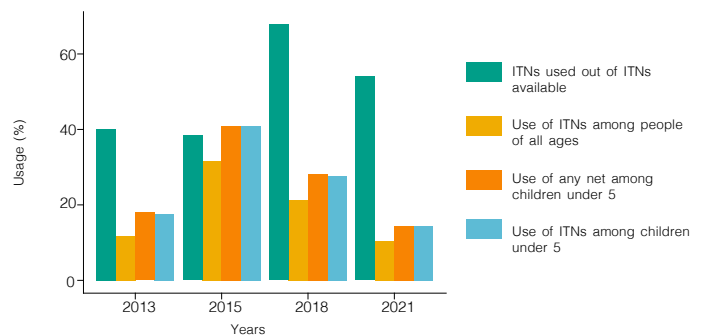
Estimated malaria cases and incidence



Diagnosis and treatment for malaria in children under 5 years

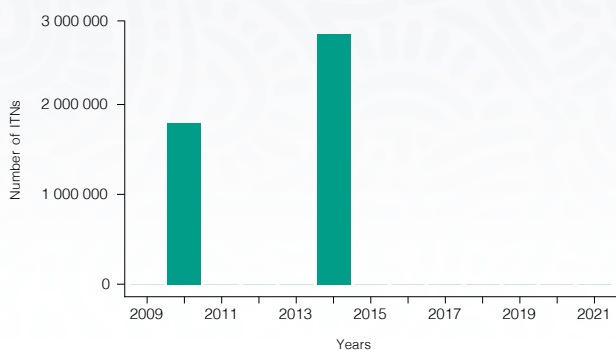


Access, coverage and use of ITNs

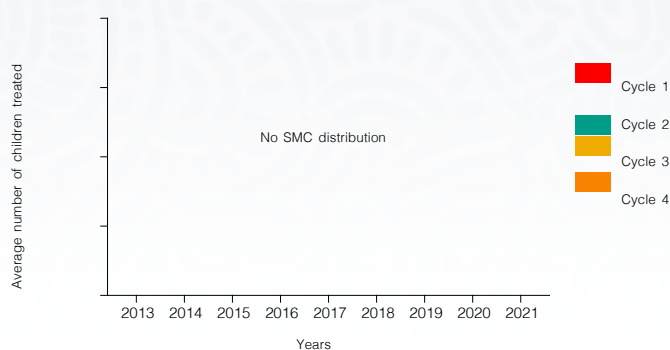


03 | Profiles of Nigeria states

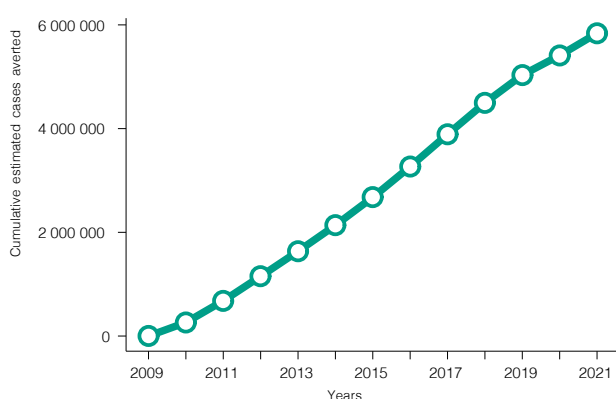
Insecticide treated nets - mass campaign distribution



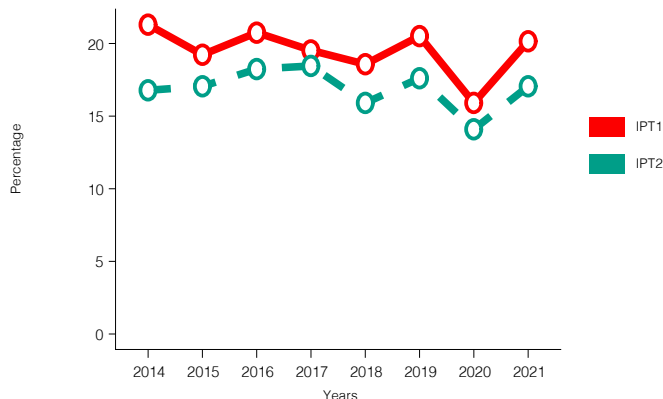
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Rivers State is located in the South-Southern Region of Nigeria. It borders Imo to the north, Abia and Akwa Ibom to the east, and Bayelsa and Delta to the west. The State’s estimated population was 7.0 million in 2019 (1) and 8.9 million in 2022.

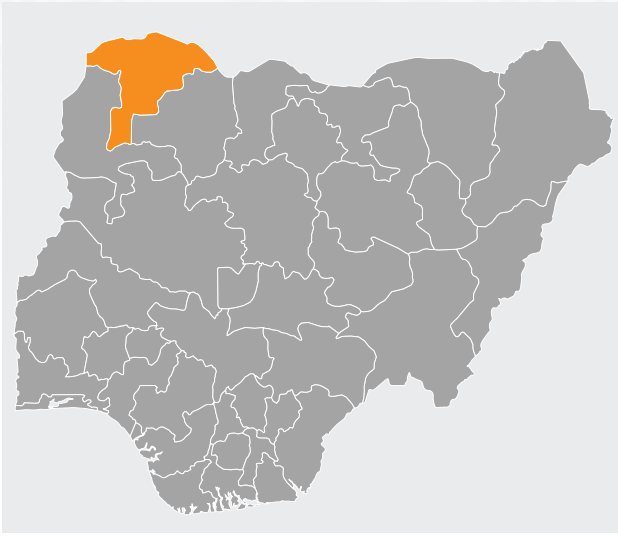
The State experiences two distinct seasons: the dry season (November to March) and the rainy season (April to October) (9), with annual rainfall averaging around 2,414.2 millimeters (3).

The State contributed an estimated 2.9% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases increased from 1.5 million to 2.0 million, the estimated incidence increased from 196.0 to 227.7 per 1000 population (4). Malaria prevalence by microscopy was 8.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2014. Since 2009, over 4.6 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 31.7% in 2015 to 10.5% in 2021. Care seeking among children with fever in the State decreased from 75.6% in 2015 to 58.2% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis decreased from 20.1% in 2015 to 7.2% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 17.1% in 2015 to 17.0% in 2021 (5).

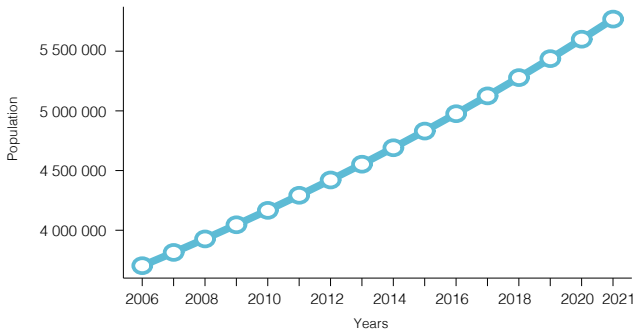
An estimated 2.7 million cases were averted between 2009 and 2015, and 5.8 million between 2009 and 2021.

SOKOTO STATE

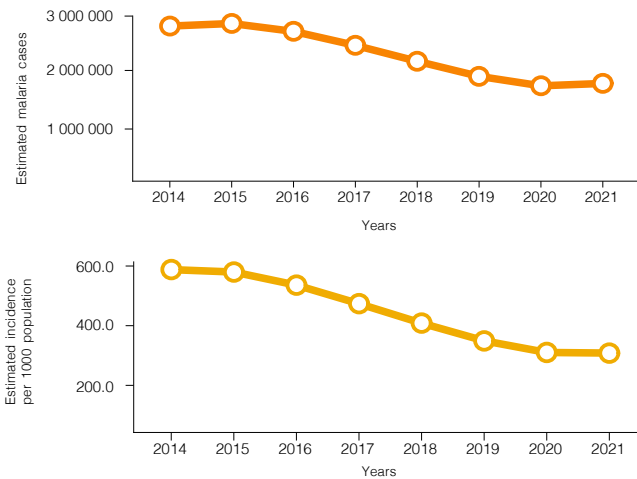


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 769 000	
Malaria prevalence according to RDT	40.3	%
Malaria prevalence according to microscopy	35.9	%
Estimated malaria cases in 2021	1 778 000	
Estimated incidence per thousand population in 2021	308.2	/1000
Year of most recent ITN campaign	2018	
Year of preceding ITN campaign	2013	
Persons with access to an ITN	44.3	%
Existing ITNs used last night	64.3	%
Population who slept under an ITN the night before the survey	31.1	%
Children under 5 who slept under any net	42.3	%
Children under 5 who slept under an ITN	40	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	71.1	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	30.9	%

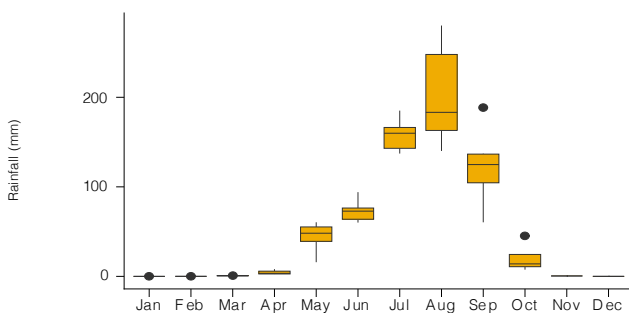
Population count



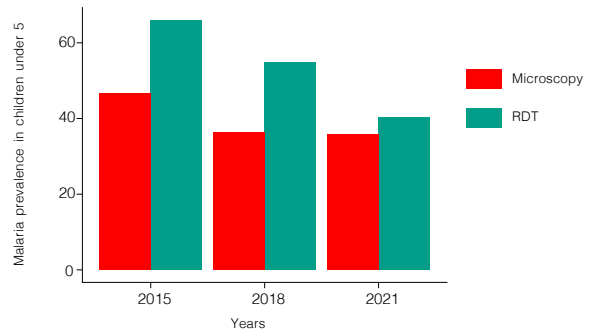
Estimated malaria cases and incidence



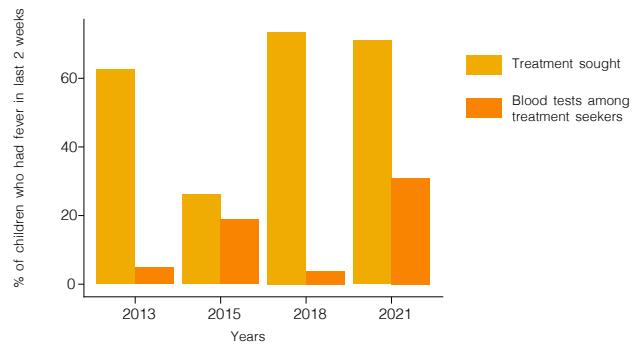
Monthly rainfall



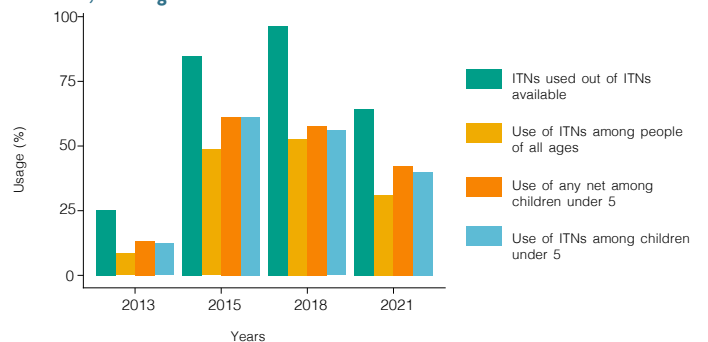
Malaria prevalence in children under 5 years



Diagnosis and treatment for malaria in children under 5 years

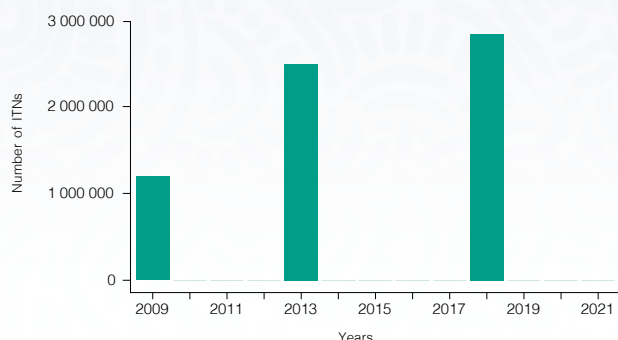


Access, coverage and use of ITNs

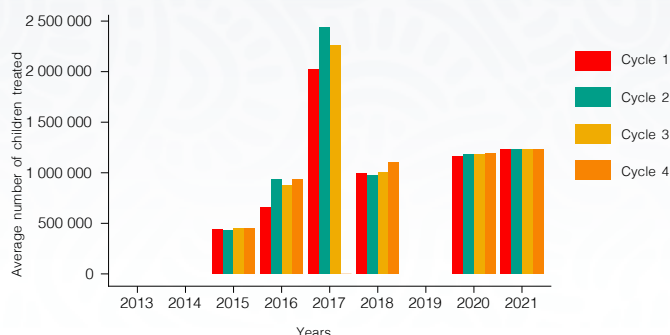


03 | Profiles of Nigeria states

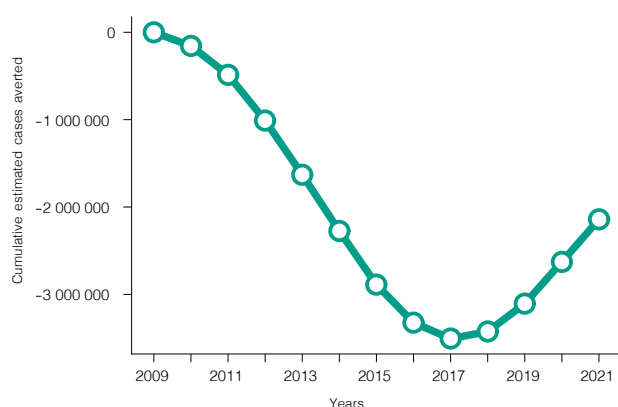
Insecticide treated nets - mass campaign distribution



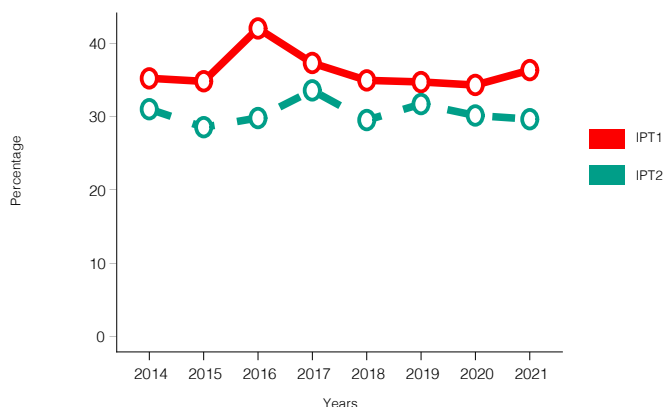
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Sokoto State is located in the North-Western Region of Nigeria. It borders Zamfara to the east and south, Kebbi to the west and south and the Republic of Niger to the north. The State's estimated population was 5.9 million in 2019 (1) and 5.9 million in 2022.

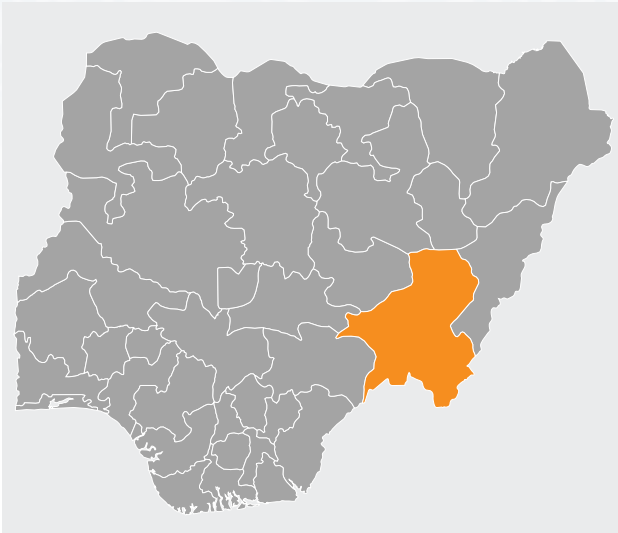
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 586.4 millimeters (3).

The State contributed an estimated 2.6% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases decreased from 2.2 million to 1.8 million, the estimated incidence decreased from 408.4 to 308.2 per 1000 population (4). Malaria prevalence by microscopy decreased from 46.6% in 2015 to 35.9% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2018. Since 2009, over 6.5 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 48.7% in 2015 to 31.1% in 2021. Care seeking among children with fever in the State increased from 26.1% in 2015 to 71.1% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 18.8% in 2015 to 30.9% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 28.5% in 2015 to 29.6% in 2021 (5).

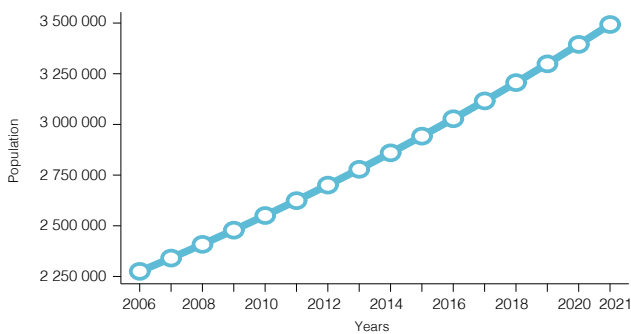
The cumulative estimated cases averted between 2009 and 2021 was negative as there was an increase in cases during this period.

TARABA STATE

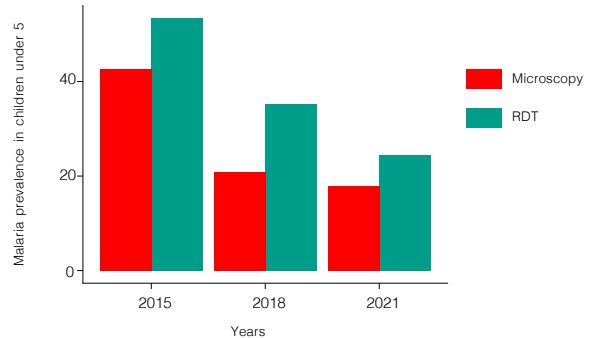


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 493 000	
Malaria prevalence according to RDT	24.5	%
Malaria prevalence according to microscopy	17.9	%
Estimated malaria cases in 2021	1 047 000	
Estimated incidence per thousand population in 2021	299.9	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	45.8	%
Existing ITNs used last night	72.3	%
Population who slept under an ITN the night before the survey	38.2	%
Children under 5 who slept under any net	41.9	%
Children under 5 who slept under an ITN	38.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	46.8	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	47.4	%

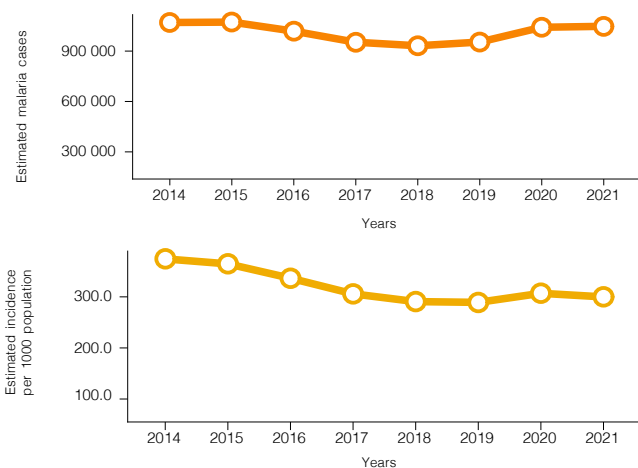
Population count



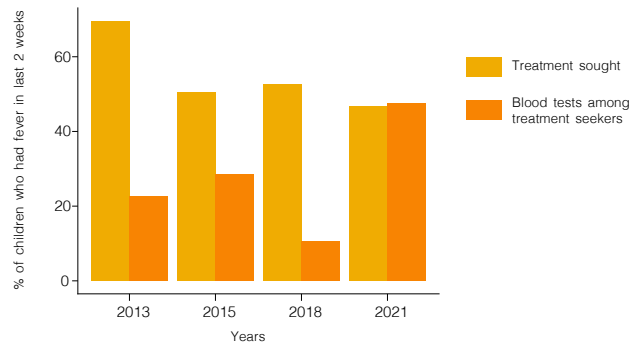
Malaria prevalence in children under 5 years



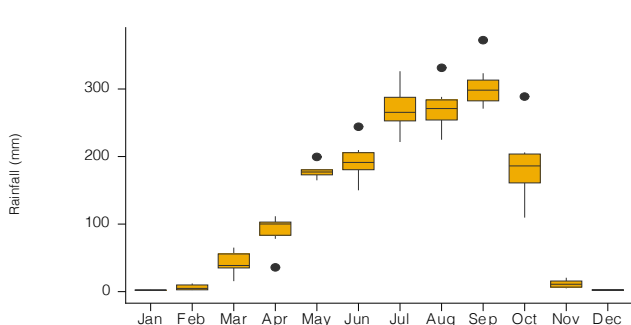
Estimated malaria cases and incidence



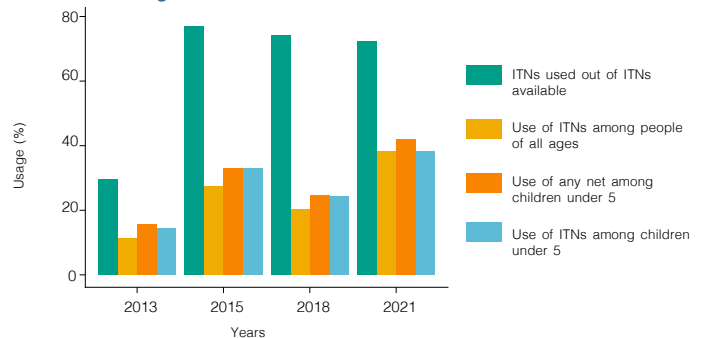
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

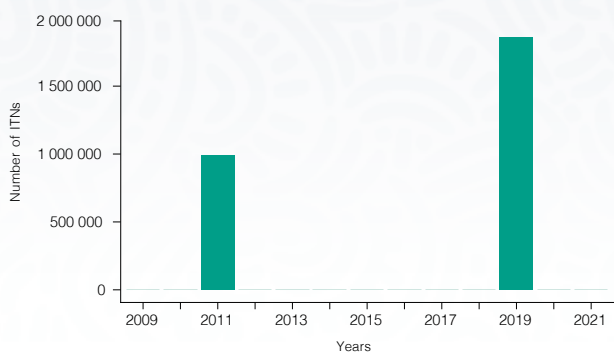


Access, coverage and use of ITNs

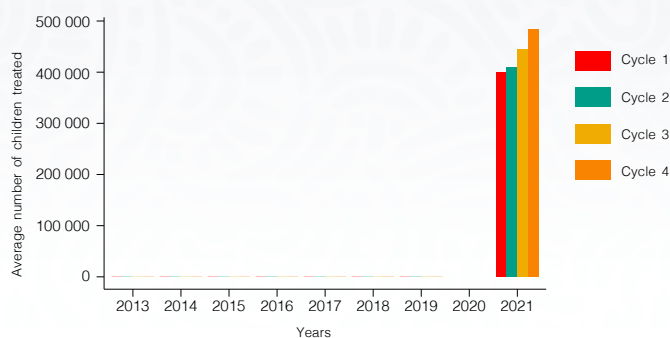


03 | Profiles of Nigeria states

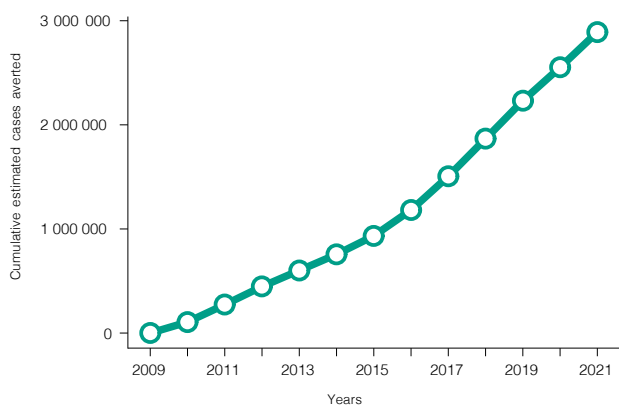
Insecticide treated nets - mass campaign distribution



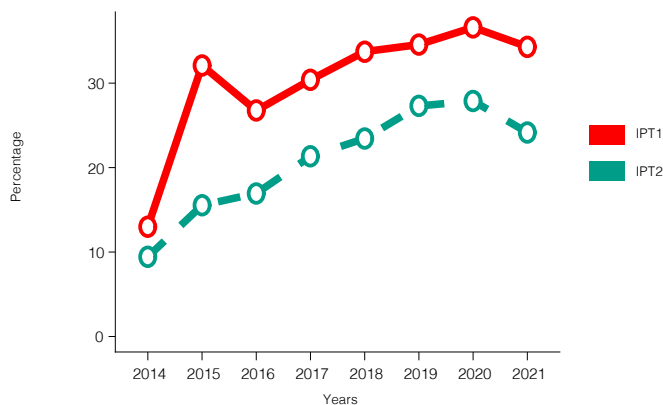
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Taraba State is located in the North-Eastern Region of Nigeria. It borders Nasarawa and Benue to the west, Plateau to the north-west, Bauchi and Gombe to the north, Adamawa to the north-east, and the Republic of Cameroon to the south. The State’s estimated population was 3.3 million in 2019 (1) and 3.6 million in 2022.

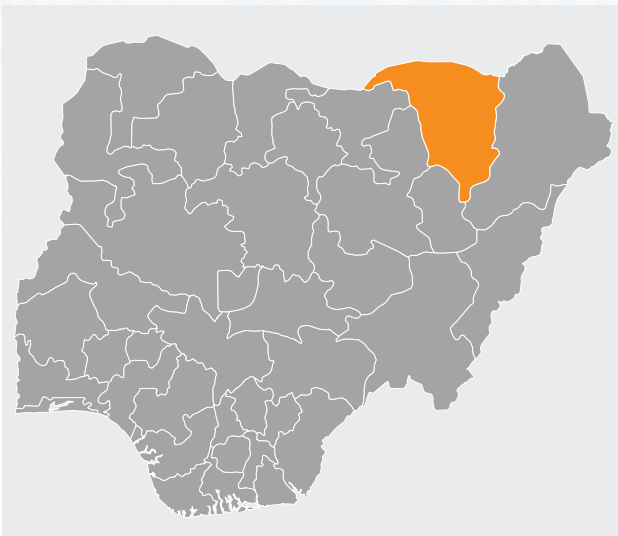
The State experiences two distinct seasons: the dry season (November to April) and the rainy season (May to October) (9), with annual rainfall averaging around 1,446.6 millimeters (3).

The State contributed an estimated 1.5% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1 million, the estimated incidence increased from 290.6 to 299.9 per 1000 population (4). Malaria prevalence by microscopy decreased from 42.7% in 2015 to 17.9% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 2.9 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys increased from 27.3% in 2015 to 38.2% in 2021. Care seeking among children with fever in the State decreased from 50.6% in 2015 to 46.8% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 28.5% in 2015 to 47.4% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy increased from 15.5% in 2015 to 24.2% in 2021 (5).

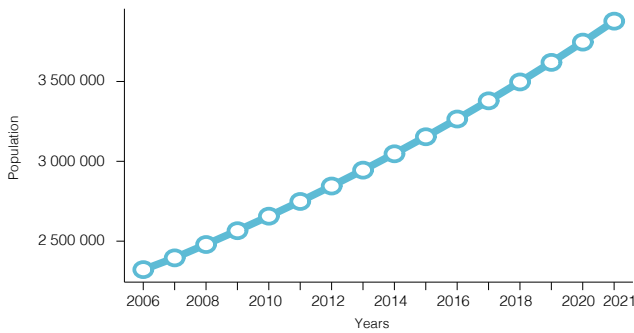
An estimated 0.9 million cases were averted between 2009 and 2015, and 2.9 million between 2009 and 2021.

YOBE STATE

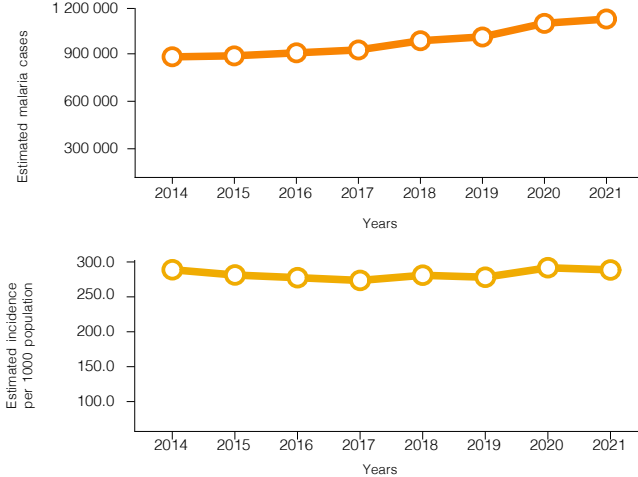


INDICATORS	VALUE	UNIT
Estimated population in 2021	3 878 000	
Malaria prevalence according to RDT	62.5	%
Malaria prevalence according to microscopy	20.5	%
Estimated malaria cases in 2021	1 119 000	
Estimated incidence per thousand population in 2021	288.7	/1000
Year of most recent ITN campaign	2019	
Year of preceding ITN campaign	2011	
Persons with access to an ITN	51.2	%
Existing ITNs used last night	76.6	%
Population who slept under an ITN the night before the survey	42.7	%
Children under 5 who slept under any net	41.3	%
Children under 5 who slept under an ITN	40.7	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	45.3	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	53	%

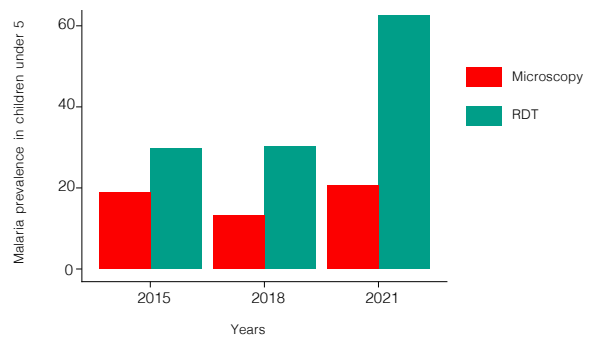
Population count



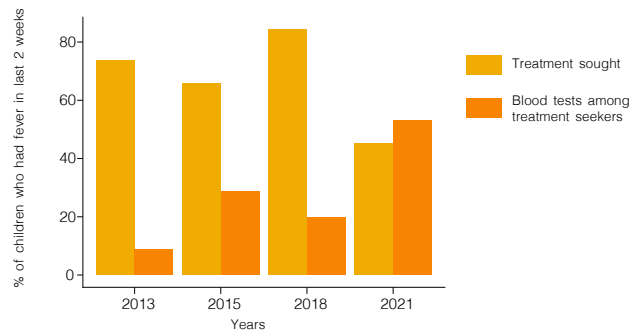
Estimated malaria cases and incidence



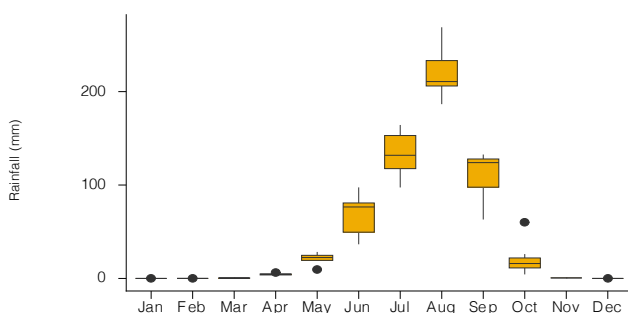
Malaria prevalence in children under 5 years



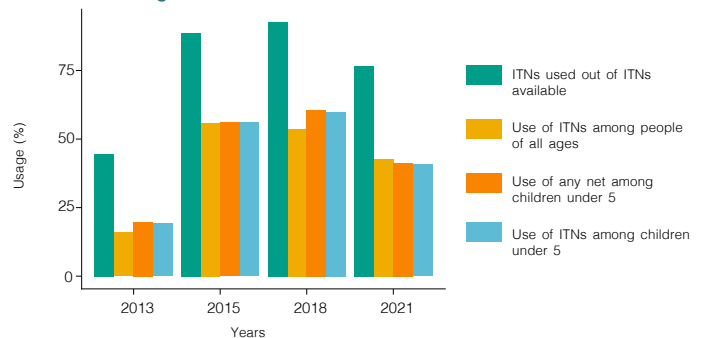
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

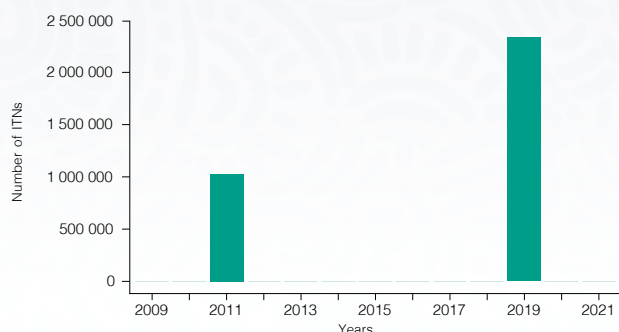


Access, coverage and use of ITNs

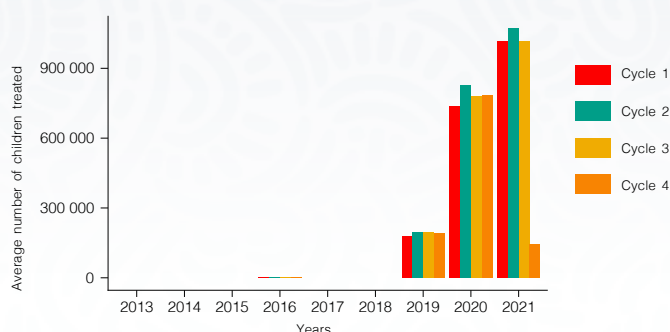


03 | Profiles of Nigeria states

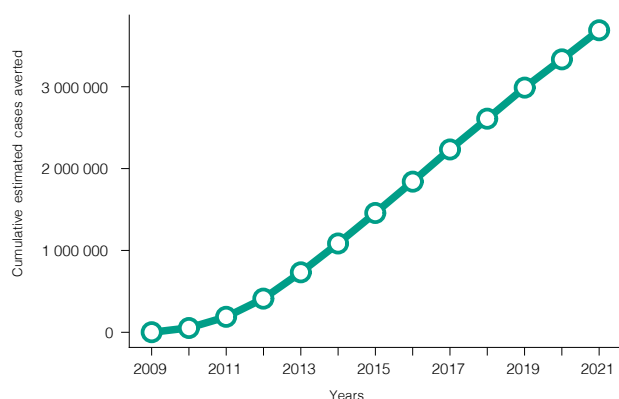
Insecticide treated nets - mass campaign distribution



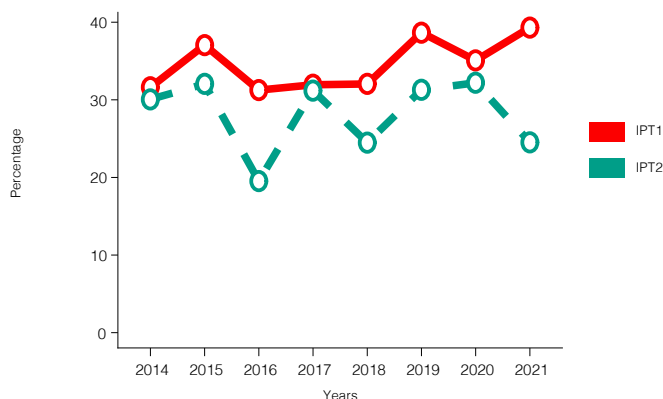
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Yobe State is located in the North-Eastern Region of Nigeria. It borders the Republic of Niger to the north, Borno and Adamawa to the east and south. The State's estimated population was 3.4 million in 2019 (1) and 4.0 million in 2022.

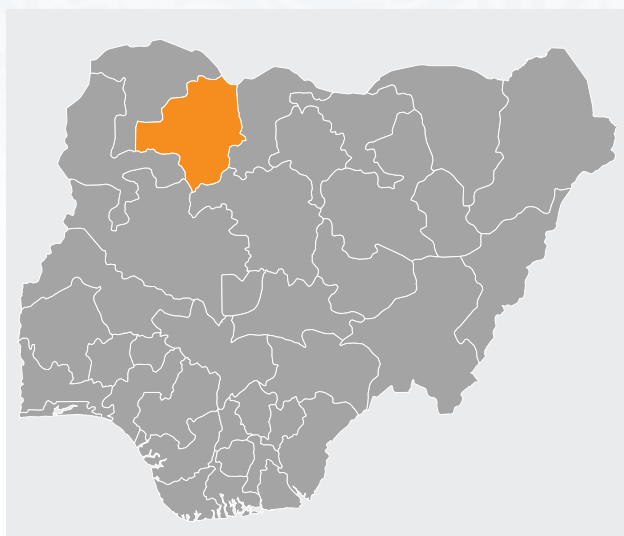
The State experiences two distinct seasons: the dry season (October/November to April/May) and the rainy season (May/June to September/October) (9), with annual rainfall averaging around 547.2 millimeters (3).

The State contributed an estimated 1.8% of Nigeria's 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.1 million, the estimated incidence increased from 280.9 to 288.7 per 1000 population (4). Malaria prevalence by microscopy increased from 18.9% in 2015 to 20.5% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2019. Since 2009, over 3.4 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 55.9% in 2015 to 42.7% in 2021. Care seeking among children with fever in the State decreased from 65.8% in 2015 to 45.3% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 28.6% in 2015 to 53.0% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 32.0% in 2015 to 24.5% in 2021 (5).

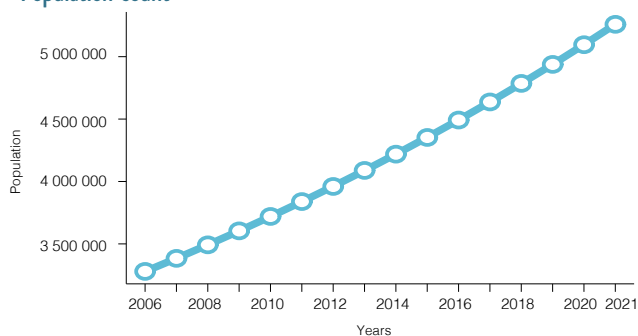
An estimated 1.5 million cases were averted between 2009 and 2015, and 3.7 million between 2009 and 2021.

ZAMFARA STATE

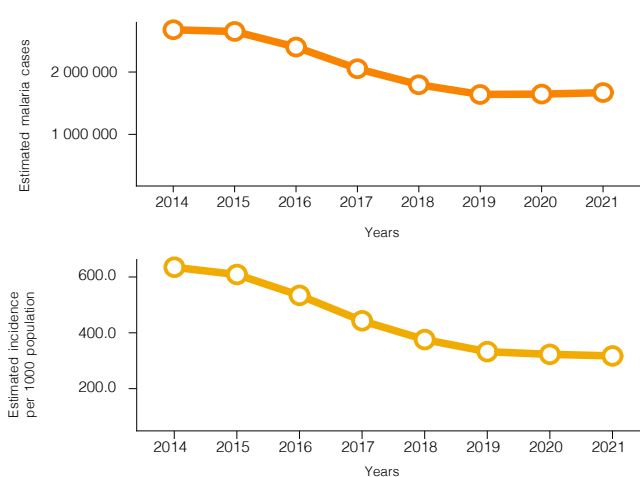


INDICATORS	VALUE	UNIT
Estimated population in 2021	5 259 000	
Malaria prevalence according to RDT	59.7	%
Malaria prevalence according to microscopy	36.6	%
Estimated malaria cases in 2021	1 669 000	
Estimated incidence per thousand population in 2021	317.3	/1000
Year of most recent ITN campaign	2020	
Year of preceding ITN campaign	2015	
Persons with access to an ITN	43.7	%
Existing ITNs used last night	90.8	%
Population who slept under an ITN the night before the survey	40.2	%
Children under 5 who slept under any net	46.2	%
Children under 5 who slept under an ITN	46.1	%
Proportion of febrile children in past 2 weeks for whom treatment was sought	51.7	%
Proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis	63.6	%

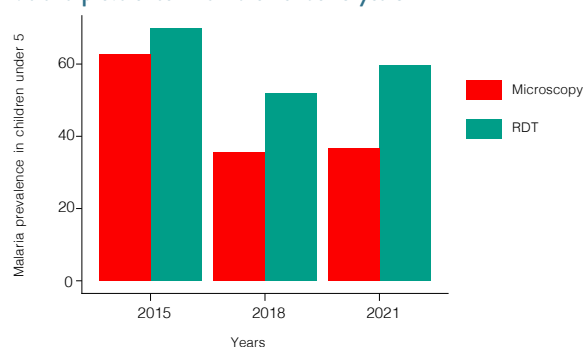
Population count



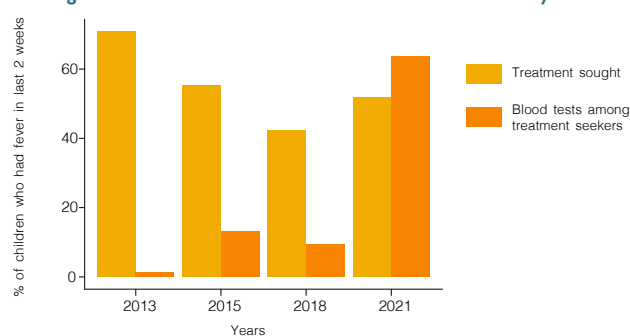
Estimated malaria cases and incidence



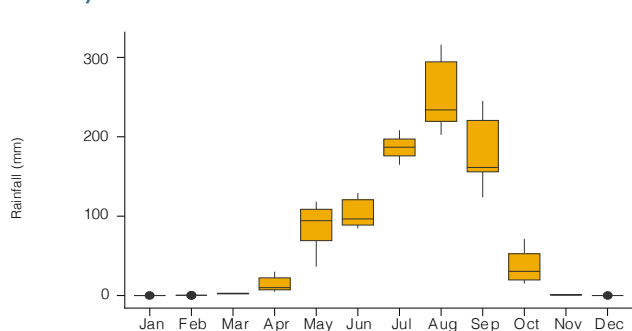
Malaria prevalence in children under 5 years



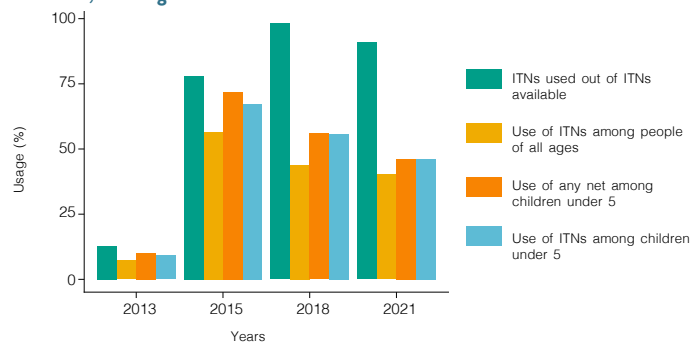
Diagnosis and treatment for malaria in children under 5 years



Monthly rainfall

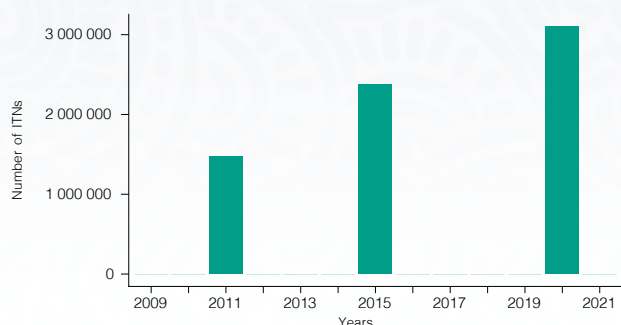


Access, coverage and use of ITNs

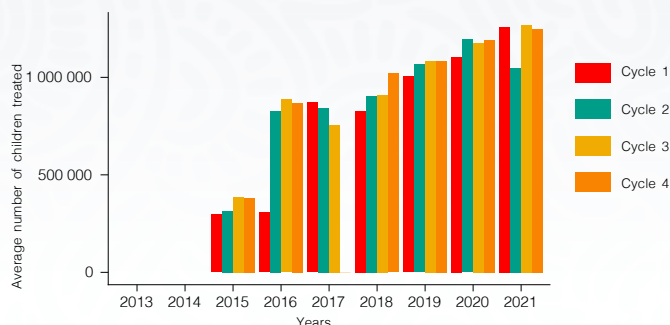


03 | Profiles of Nigeria states

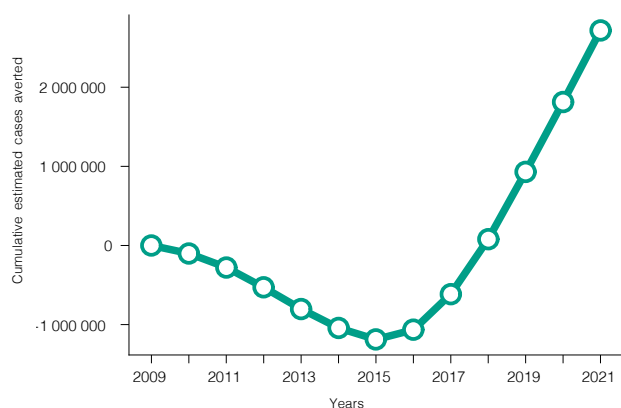
Insecticide treated nets - mass campaign distribution



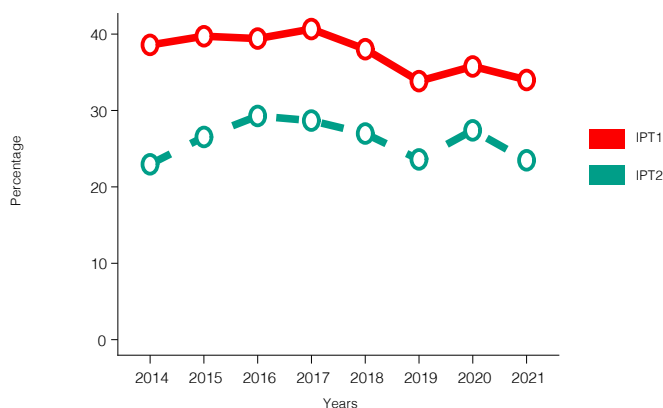
Average number of children treated with seasonal malaria chemoprevention



Cumulative estimated cases averted



IPT1 and IPT2 coverage



Key points

Zamfara State is located in the North-Western Region of Nigeria. It borders the Republic of Niger to the north, Kaduna to the south, Katsina to the east, and Sokoto, Kebbi and Niger States to the west. The State’s estimated population was 5.3 million in 2019 (1) and 5.4 million in 2022.

The State experiences two distinct seasons: the dry season (October to April) and the rainy season (May to September) (9), with annual rainfall averaging around 813.6 millimeters (3).

The State contributed an estimated 2.5% of Nigeria’s 68 million malaria cases in 2021 (2,3). From 2018 to 2021, estimated cases remained at around 1.7 million, the estimated incidence decreased from 375.6 to 317.3 per 1000 population (4). Malaria prevalence by microscopy decreased from 62.6% in 2015 to 36.6% in 2021 (5).

The State conducted its most recent round of insecticide treated nets (ITN) through a mass campaign in 2020. Since 2009, over 6.9 million ITNs have been distributed through mass distribution. The proportion of those who slept under ITNs the night before the surveys decreased from 56.6% in 2015 to 40.2% in 2021. Care seeking among children with fever in the State decreased from 55.2% in 2015 to 51.7% in 2021. The proportion of febrile children for whom treatment was sought and who received a finger or heel prick for malaria diagnosis increased from 13.0% in 2015 to 63.6% in 2021. The coverage of two or more doses of SP for intermittent preventative treatment of malaria during pregnancy decreased from 26.5% in 2015 to 23.5% in 2021 (5).

The cumulative estimated cases averted between 2009 and 2015 was negative as there was an increase in cases during this period, and 2.7 million between 2009 and 2021.

References

1. Harry S. Demographics Statistics Bulletin [Internet]. Nigeria: National Bureau of Statistics; 2020. Available from: <https://nigerianstat.gov.ng/download/1241121>
2. Ugwuibe CO, Onah FN, Olise CN. Chapter 23 – Flood disasters in Aba North Local Government Area of Abia State, Nigeria: policy options. Chaiechi T, editor. *Economic Effects of Natural Disasters*. Academic Press. 2021;373–80. doi.org/10.1016/B978-0-12-817465-4.00023-6.
3. Funk C, Peterson P, Landsfeld million, Pedreros D, Verdin J, Shukla S, et al. The climate hazards infrared precipitation with stations—a new environmental record for monitoring extremes. *Sci Data*. 2015 Dec 8;2 (1):150066. doi.org/10.1038/sdata.2015.66.
4. World malaria report 2022. Geneva: World Health Organization; 2022 (<http://apps.who.int/iris/handle/10665/365169>, accessed 11 April 2023).
5. National Malaria Elimination Programme, National Population Commission, The DHS Program. Nigeria Malaria Indicator Survey 2021 Final Report. Abuja, Nigeria, and Rockville, Maryland, USA; 2022.
6. NMEP/Nigeria NMEP, NPopC/Nigeria NPC, NBS/Nigeria NB of S, ICF. Nigeria Malaria Indicator Survey 2015. 2016 Aug 1 (<https://dhsprogram.com/publications/publication-mis20-mis-final-reports.cfm>, accessed 11 April 2023).
7. Npc NPC, ICF. Nigeria Demographic and Health Survey 2018 to Final Report. 2019 Oct 1 (<https://dhsprogram.com/publications/publication-fr359-dhs-final-reports.cfm>, accessed 11 April 2023).
8. Girei AA, Giroh DY. Analysis of the factors affecting sugarcane (*saccharum officinarum*) production under the out growers scheme in Numan Local Government Area Adamawa State, Nigeria. *J Educ Pract*. 2012;3.
9. Ituen E. Farm mechanization challenges and prospects in Akwa Ibom state of Nigeria. *J Agric Eng Technol JAET*. 2009;17 (2):69–75.
10. Nnadi OI, Liwenga ET, Lyimo JG, Madukwe MC. Impacts of variability and change in rainfall on gender of farmers in Anambra, Southeast Nigeria. *Heliyon*. 2019 Jul 1;5 (7):e02085.
11. Ibrahim AA, Ati F, Adebayo AA. Effect of climate on the growth and yield of sorghum (*sorghum bicolor*) in Wailo, Ganjuwa local government area, Bauchi state. *ResearchJournalofEnvironmentalandEarthSciences*. 2011;3 (5):469–72.
12. Overview of Bayelsa – Niger Delta Budget Monitoring Group (<https://www.nigerdeltabudget.org/overview-of-bayelsa/>, accessed 11 April 2023).
13. Aondoakaa SC, Jewitt S. Effects of seasonality on access to improved water in Benue State, Nigeria. *Environ Monit Assess*. 2022;194:1–16.
14. Binbol NL. Climate change, rainfall variability and meteorological droughts in Borno State, Nigeria ([https://irepos.unijos.edu.ng/jspui/bitstream/123456789/1400/1/Climate%20Change0001%20\(5%20files%20merged\).pdf](https://irepos.unijos.edu.ng/jspui/bitstream/123456789/1400/1/Climate%20Change0001%20(5%20files%20merged).pdf), accessed 11 April 2023).
15. Uyigue E, Agho M. Coping with climate change and environmental degradation in the Niger Delta of southern Nigeria. *Community Res Dev Cent Niger CREDC*. 2007;1 (30).
16. ONU EO. Application of indigenous flood coping strategies as a panacea for flood mitigation in developing countries: a case study of Ebonyi State, Nigeria. *Adeleke Univ J Eng Technol*. 2020;3 (1):49–60.
17. Saliu million, Komolafe K. Investigating the effect of dolomite exploitation on groundwater condition of Ikpeshi, Akoko-Edo, Edo State, Nigeria. *J Earth Sci Geotech Eng*. 2014;4 (3):137–47.
18. Odekunle T. Rainfall and the length of the growing season in Nigeria. *Int J Climatol J R Meteorol Soc*. 2004;24 (4):467–79.

19. weatherspark. Climate and average weather year round in Gombe (<https://weatherspark.com/y/68815/Average-Weather-in-Gombe-Nigeria-Year-Round>, accessed 11 April 2023).
20. Koko F, Han Z, Wu Y, Abubakar G, Bello M. Spatiotemporal land use/land cover mapping and prediction based on hybrid modeling approach: a case study of Kano Metropolis, Nigeria (2020–2050). *Remote Sens.* 2022 Nov 30;14:6083.
21. Akpenpuun TD, Busari RA. Impact of climate on tuber crops yield in Kwara State, Nigeria. *Am Int J Contemp Res.* 2013 Oct;3 (10).
22. Kolawole IS, Alaga TA, Ogunyemi SA, Popoola OS, Oloko-Oba MO. Street mapping of Ife Metropolis, Osun State, Nigeria. *J Geogr Inf Syst.* 2016;08 (03):387.

Methods

The annual rainfall was extracted from the Climate Hazards group Infrared Precipitation with Stations (CHIRPS) dataset, starting from 2014 to 2022, and annual rainfall averages were extracted per state (3). The estimated cases for each state were calculated as a function of the modeled incidence estimates and the projected population for that state, as described in the *World malaria report 2022* (4). The population estimates used in this report are based on projections by the state of the 2006 Nigeria national census. The total population is different from the population used in the *World malaria report 2022* which is based on UN national population projections, affecting the overall estimates of cases.

Estimated cases averted over the period 2009–2021 were computed by comparing estimates for each year since 2009 with the malaria case incidence rates from 2009, adjusting for population growth. The year 2009 was selected as the baseline (or counterfactual in the absence of interventions) considering that this was the year when the first mass insecticide-treated nets (ITN) campaigns were implemented.

Data on distribution of ITNs and SMC were provided by the NMEP. Malaria prevalence, treatment seeking, diagnosis and ITN coverage indicators were extracted from the household survey reports. Health facility level monthly IPTp data were extracted from DHIS2. The number of first and second doses of IPTp and the total number of first antenatal care visits were aggregated to calculate the national and state level coverage of IPTp1 and IPTp2 per year. Coverage was calculated by dividing the number of IPTp1 or IPTp2 doses by the total number of first antenatal care visits. Reports that had missing data for one or more of the data elements were excluded from the analysis. Data were checked for consistencies and outliers, and corrected when appropriate, to improve data quality.

Annex. Population estimates

Population denominator for case incidence and estimated malaria cases per state and per year

	2000	2006	2010	2015	2021
Abia	2 425 032	2 845 380	3 165 352	3 616 381	4 243 233
Adamawa	2 677 882	3 178 950	3 564 061	4 111 706	4 881 061
Akwa Ibom	3 192 785	3 902 051	4 460 413	5 272 028	6 443 191
Anambra	3 539 907	4 177 828	4 665 766	5 356 592	6 321 894
Bauchi	3 807 290	4 653 066	5 318 894	6 286 719	7 683 291
Bayelsa	1 435 848	1 704 515	1 911 007	2 204 647	2 617 167
Benue	3 562 357	4 253 641	4 787 510	5 550 036	6 627 034
Borno	3 412 933	4 171 104	4 767 966	5 635 544	6 887 460
Cross River	2 436 993	2 892 988	3 243 456	3 741 838	4 441 986
Delta	3 404 253	4 112 445	4 664 648	5 460 310	6 596 226
Ebonyi	1 844 544	2 176 947	2 431 197	2 791 167	3 294 159
Edo	2 755 701	3 233 366	3 596 968	4 109 498	4 821 825
Ekiti	1 997 424	2 398 957	2 710 548	3 157 551	3 792 297
Enugu	2 736 762	3 267 837	3 677 979	4 263 786	5 091 183
Federal Capital Territory	824 780	1 406 239	2 006 964	3 130 693	5 337 791
Gombe	1 957 763	2 365 040	2 682 608	3 140 188	3 793 446
Imo	3 251 209	3 927 563	4 454 940	5 214 833	6 299 681
Jigawa	3 673 618	4 361 002	4 889 312	5 640 591	6 696 022
Kaduna	5 119 962	6 113 503	6 880 801	7 976 734	9 524 638
Kano	7 737 228	9 401 288	10 705 048	12 591 870	15 300 026
Katsina	4 858 735	5 801 584	6 529 733	7 569 751	9 038 678
Kebbi	2 711 468	3 256 541	3 679 520	4 286 319	5 147 976
Kogi	2 775 458	3 314 043	3 729 984	4 324 074	5 163 171
Kwara	1 980 945	2 365 353	2 662 225	3 086 249	3 685 142
Lagos	7 544 179	9 113 605	10 337 344	12 100 615	14 617 922
Nasarawa	1 565 573	1 869 377	2 104 000	2 439 112	2 912 428
Niger	3 235 923	3 954 772	4 468 416	5 180 119	6 185 333
Ogun	3 087 175	3 751 140	4 271 344	5 024 191	6 104 752
Ondo	2 898 430	3 460 877	3 895 247	4 515 659	5 391 933
Osun	2 828 535	3 416 959	3 875 774	4 536 877	5 480 689
Oyo	4 566 469	5 580 894	6 379 489	7 540 299	9 215 350
Plateau	2 732 831	3 206 531	3 567 115	4 075 392	4 781 807
Rivers	4 253 758	5 198 716	5 942 623	7 023 942	8 584 285
Sokoto	3 100 932	3 702 676	4 167 394	4 831 152	5 768 648
Taraba	1 916 275	2 274 836	2 550 419	2 942 310	3 492 856
Yobe	1 921 588	2 321 339	2 656 068	3 154 576	3 877 779
Zamfara	2 714 228	3 278 873	3 719 147	4 353 533	5 259 204

