Regional profiles

African Region



West Africa

Algeria Benin Burkina Faso Cabo Verde Côte d'Ivoire Gambia Ghana Guinea Guinea-Bissau

Liberia Mali Mauritania Niger Nigeria Senegal Sierra Leone Togo

Central Africa

Angola Burundi Cameroon Central African Republic Chad

Congo Democratic Republic of the Congo Equatorial Guinea Gabon Sao Tome and Principe

East Africa and areas of high transmission in southern Africa

Comoros Rwanda Eritrea South Sudan Ethiopia Uaanda United Republic of Kenya Madagascar Tanzania Malawi Zambia Mozambique

Countries with low transmission in southern Africa

Botswana Swaziland Namibia Zimbabwe South Africa

Region of the Americas



Argentina Belize Bolivia (Plurinational State of) Brazil Colombia Costa Rica Dominican Republic Ecuador El Salvador French Guiana, France Guatemala

Guyana Haiti Honduras Mexico Nicaragua Panama Paraguay Peru Suriname Venezuela (Bolivarian Republic of)

Eastern Mediterranean Region



Afghanistan Djibouti Iran (Islamic Republic of)

Pakistan Saudi Arabia Somalia Sudan Yemen

European Region



Azerbaijan Georgia Kyrgyzstan

Tajikistan Turkey Uzbekistan

South-East Asia Region



Bangladesh Bhutan Democratic People's Republic Thailand of Korea India Indonesia

Myanmar Nepal Sri Lanka Timor-Leste

Western Pacific Region



Cambodia China Lao People's Democratic Republic Malaysia Papua New Guinea

Philippines Republic of Korea Solomon Islands Vanuatu Viet Nam

West Africa

Population at risk: About 342 million people in the 17 countries of this subregion are at risk for malaria, with 289 million at high risk (reported incidence >1 per 1000) (Figure A). Malaria cases are almost exclusively due to *P. falciparum*. Among malaria endemic countries, 15 are focused on malaria control, while Cabo Verde is in the pre-elimination programme phase, and Algeria in the elimination phase.

Financing: Funding for malaria control rose substantially from US\$ 104 million in 2005 to US\$ 586 million in 2012, with a minimal increase to US\$ 637 million in 2014 (Figure B). In 2012-2014, funding per capita per year exceeded US\$ 4 in three countries (Cabo Verde, the Gambia and Liberia) (Figure C), was US\$ 1-3 in 12 countries, and was less than US\$ 1 in two countries (Mauritania and Niger).

Interventions: In 2014, the proportion of the at-risk population estimated to have access to an insecticide-treated mosquito net (ITN) in their household exceeded 50% in 11 countries (Burkina Faso, Côte d'Ivoire, the Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Senegal, Sierra Leone and Togo) (Figure D). Benin, Cabo Verde, the Gambia, Ghana, Mali and Senegal used indoor residual spraying (IRS), although this was limited to coverage of between 5% and 20% of the at-risk population. Liberia, Benin and Nigeria had implemented IRS on a limited scale and had stopped spraying in 2014. Algeria did not report on vector control coverage in 2014. All countries, except Guinea, Liberia, Mali and Togo delivered sufficient antimalarial medicines to treat more than 80% of patients attending public health facilities (Figure E). Côte d'Ivoire did not report on the delivery of antimalarial medicines.

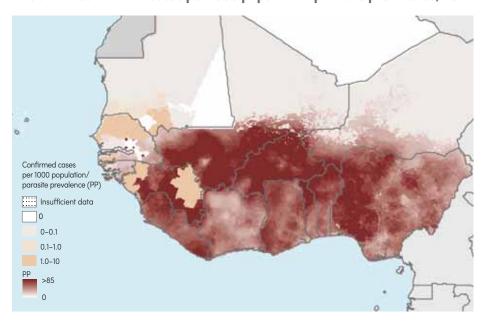
Insecticide resistance: Countries in West Africa, particularly Benin, Burkina Faso, Côte d'Ivoire and Ghana, have long been reporting high prevalence of insecticide resistance in malaria vectors. Since 2010, reports of pyrethroid and dichlorodiphenyltrichloroethane (DDT) resistance have been widespread, with increased reports of carbamate resistance. Organophosphate resistance has been reported in six of 11 countries, indicating the need to develop alternative insecticides.

Antimalarial drug efficacy: Fourteen countries in West Africa have adopted either artesunate-amodiaquine (AS-AQ) or artemether-lumefantrine (AL) as their first-line treatment. The therapeutic efficacy of both treatments remains high, with a median treatment failure rate of less than 10%.

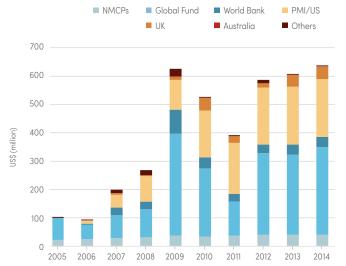
Trends in cases and deaths: Algeria exceeded the target of a 75% reduction in case incidence between 2000 and 2014 (Figure G). It reported 266 cases, of which 260 were imported. Cabo Verde achieved a 72% decrease in case incidence between 2000 and 2014. In 2014, it reported only 46 cases, of which 20 were imported, and two malaria deaths. In the remaining 14 countries, it was not possible to assess trends in case incidence or admissions, because of inconsistent reporting, or changes in diagnostic testing coverage (mostly increased testing) or access to health services. However, special studies undertaken to assess malaria trends shed some light on the situation in a few countries. For example, a review of trends in a sample of 83 hospitals nationwide in Ghana between 2005 and 2013 showed an increase in confirmed malaria cases, admissions and deaths in all age groups, although malaria deaths in children aged under 5 years fell by 29% (WHO, unpublished results). The increase in confirmed cases appeared to be related to expanded diagnostic testing and increased access to health services. The slide positivity rate (SPR) for all ages remained stable at 34%. Also, a review of trends in 186 hospitals in Nigeria between 2005 and 2013 indicated an increase, or no change, in confirmed malaria cases, admissions and deaths for all age groups, and a stable SPR (59%) (WHO, unpublished results). Subnational decreases in morbidity and mortality have been reported from Burkina Faso for 1999-2009 (1), Senegal for 1990-2012 (2,3) and Togo for 2005-2010 (4,5), but these findings are insufficient to draw conclusions about national trends.

Modelled estimates of case incidence fell by at least 75% between 2000 and 2015 in three countries (the Gambia, Guinea-Bissau and Senegal), and by 50-75% in three countries (Ghana, Liberia and Mauritania). The remaining eight countries had a decrease in case incidence of less than 50% (Figure F).

A. Confirmed malaria cases per 1000 population/parasite prevalence, 2014

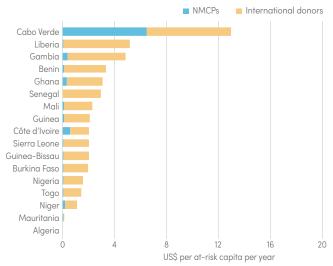


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

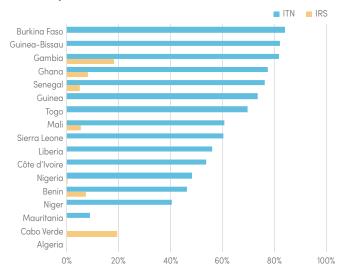


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012–2014

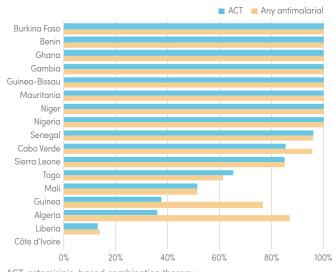


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



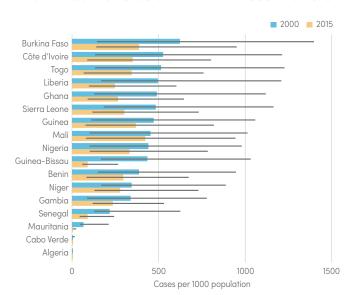
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

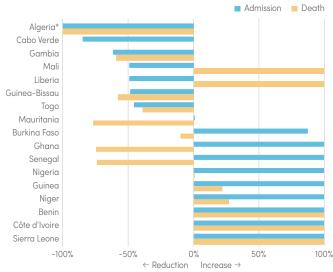


ACT, artemisinin-based combination therapy

F. Estimated incidence of malaria in 2000 and 2015



G. Change in admission and death rates, 2000–2014



* Changes in case incidence due to all species (\blacksquare) and due to P. vivax (\blacksquare)

Central Africa

Population at risk: About 158 million people in the 10 countries of this subregion are at some risk for malaria, with 145 million at high risk (Figure A). Cases are almost exclusively due to P. falciparum. All endemic countries in the subregion are in the control phase.

Financing: Funding for malaria control in the subregion rose from US\$ 81 million in 2005 to US\$ 300 million in 2013, but declined to US\$ 237 million in 2014 (Figure B). Malaria funding per capita per year during 2012-2014 was highest in Sao Tome and Principe at US\$ 13.8, was between US\$ 1 and US\$ 3 in six countries, and was less than US\$ 1 in the remaining three countries (Figure C).

Interventions: In 2014, the proportion of the at-risk population estimated to have access to an ITN in their household exceeded 50% in four countries (Burundi, Central African Republic, Chad, and Sao Tome and Principe) (Figure D). IRS was used to protect the at-risk population in two countries (Sao Tome and Principe, protecting >50%; and Equatorial Guinea, 20%). Five countries (Burundi, Central African Republic, Chad, Democratic Republic of the Congo and Gabon) reported distributing sufficient artemisininbased combination therapy (ACT) to treat more than 80% of estimated malaria cases attending public health facilities in 2014. Angola and Congo did not report on delivery of ACT (Figure E).

Insecticide resistance: Since 2010, there have been reports of resistance to pyrethroids and DDT for the eight countries tested, with no data reported for Gabon and Sao Tome and Principe. Also, carbamate resistance has been reported for Angola, Burundi and Cameroon. To date, no countries in the region have reported organophosphate resistance.

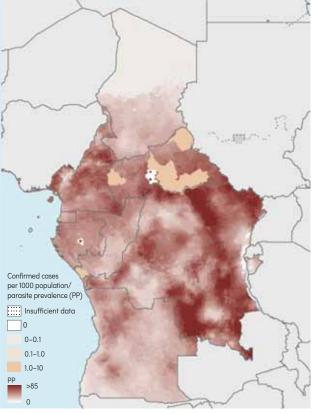
Antimalarial drug efficacy: All countries in central Africa have adopted either AS-AQ or AL as their first-line treatment. The therapeutic efficacy of both treatments remains high, with a median treatment failure rate of less than 10% observed for both medicines

Trends in cases and deaths: Between 2000 and 2014, only Sao Tome and Principe achieved at least 75% reduction in case incidence; it also reported decreases of more than 90% in malaria admission and death rates. Although the number of cases and admissions during 2011–2013 increased compared to the number in the previous 4 years, the number of cases fell from 9234 in 2013 to 1754 in 2014. Malaria admissions also fell from 1843 in 2013 to 417 in 2014, the lowest number reported for the country since 2000.

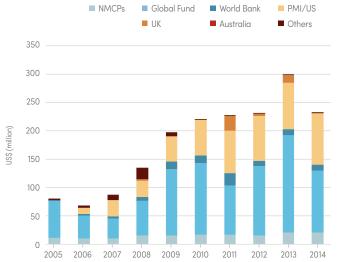
In the remaining nine countries, it was not possible to assess trends using routinely reported data, because of incomplete reporting, or changes in health service access or diagnostic testing. The number of confirmed malaria cases and admissions has increased in several countries in recent years, possibly reflecting improved reporting or improved access to health services (Figure G). Subnational decreases in malaria morbidity and mortality have been reported in Equatorial Guinea on Bioko Island (6), although high transmission persisted in some foci (7). Similar decreases occurred in the Mbakong district of Cameroon (8) between 2006 and 2012. However, no evidence of a decreased malaria burden was reported in both urban and rural settings of Gabon (9).

Estimates malaria case incidence inferred from surveys of parasite prevalence suggest that, between 2000 and 2015, four countries (Angola, Burundi, Congo and Democratic Republic of the Congo) had decreases in case incidence of 50–75% between 2000 and 2015, and the remaining five countries had decreases of less than 50% (Figure F).

A. Confirmed malaria cases per 1000 population/ parasite prevalence, 2014

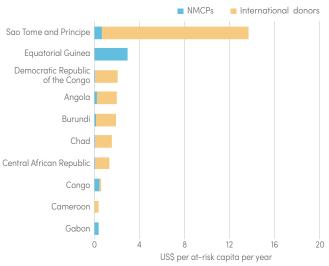


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

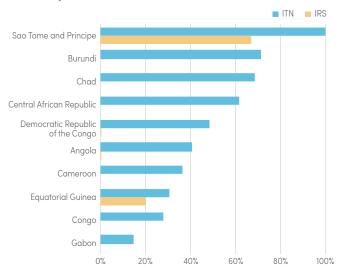


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012–2014

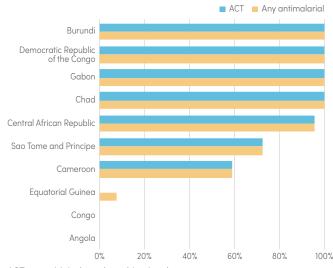


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



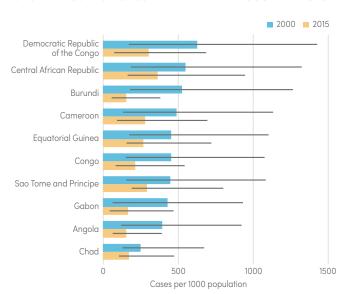
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

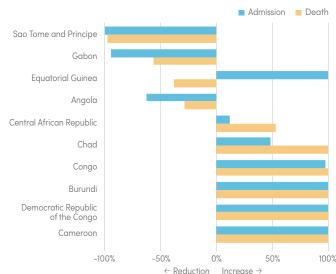


ACT, artemisinin-based combination therapy

F. Estimated incidence of malaria in 2000 and 2015



G. Change in admission and death rates, 2000–2014



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East Africa and areas of high transmission in southern Africa

Population at risk: About 313 million people in the 12 countries of the subregion are at some risk for malaria, with 254 million at high risk (Figure A). About 25% of the population of Ethiopia and Kenya live in areas that are free of malaria. P. falciparum is the predominant species, except in Eritrea and Ethiopia, where *P. vivax* accounts for about 31% and 26% of reported cases, respectively. All countries in the subregion are focused on malaria control

Financing: Funding for malaria control in the subregion increased from US\$ 206 million in 2005 to US\$ 803 million in 2013, but declined to US\$ 636 million in 2014 (Figure B). Malaria funding was less than US\$ 3 per capita per year during 2012-2014 in eight countries, and exceeded US\$ 3 per capita in four countries (Comoros, Malawi, Rwanda and Zambia) (Figure C).

Interventions: In 2014, the proportion of the at-risk population estimated to have access to an ITN in their household exceeded 50% in 10 countries (Comoros, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Rwanda, South Sudan, Uganda and Zambia), and in Zanzibar in the United Republic of Tanzania (Figure D). IRS was used in eight countries, with the protected proportion of the at-risk population exceeding 60% in Ethiopia. In 2014, all reporting countries except the Comoros distributed sufficient ACT to treat all patients attending public health facilities, although South Sudan and Uganda did not report (Figure E).

Insecticide resistance: Pyrethroid resistance is widespread in this subregion; since 2010, resistance has been confirmed in all reporting countries except the Comoros and Mayotte (France). DDT resistance is also common, but is yet to be confirmed for malaria vectors in Mozambique. Carbamate resistance has also been reported for at least one malaria vector in most countries, and organophosphate resistance has been reported for Ethiopia, Kenya, Mayotte (France), the United Republic of Tanzania and Zambia.

Antimalarial drug efficacy: All countries in the subregion have adopted either AS-AQ or AL as their first-line treatment policy. The therapeutic efficacy of both treatments remains high, with a median treatment failure rate of less than 10% observed for both treatments.

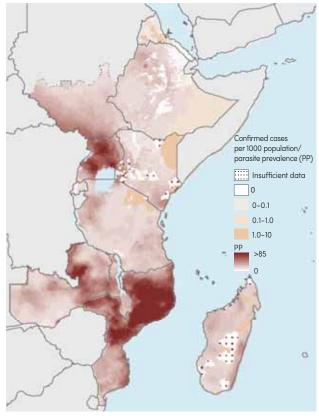
Trends in cases and deaths: Between 2000 and 2014, malaria admission rates declined by at least 75% in the Comoros, Eritrea, Rwanda, and Zanzibar in the United Republic of Tanzania, similar to rates in other studies (10,11). A 50-75% decrease in malaria admission rates by 2015 is projected for Zambia (Figure G). Although admission rates in Rwanda have decreased markedly since 2000, the country reported a tripling in confirmed malaria cases (from 483 000 to 1.6 million), and a doubling in admissions (from 5306 to 11138) between 2012 and 2014, which may be partially attributed to the inclusion of reports from health facilities in the private sector since 2011 (resulting in an increase in reporting health facilities from 428 in 2011 to 672 in 2014). In the Comoros, confirmed cases fell sharply from 53 156 in 2013 to 2203 in 2014 (96% decrease), and malaria admissions from 17 485 in 2013 to 1049 in 2014 (94% decrease) following mass drug administration with dihydroartemisinin-piperaquine (DHA-PPQ) plus primaquine, and large-scale distribution of long-lasting insecticidal nets (LLINs) in early 2014. In Madagascar, admission rates fell during 2000–2010, but subsequently rose. The admission rate in 2014 was 28% less than that in 2000. Decreases in malaria admissions also occurred in Mozambique between 2007 and 2012, but there were small increases in subsequent years; no comparable data from earlier than 2007 are available. For the remaining six countries (Ethiopia, Kenya, Malawi, South Sudan, Uganda and the United

Republic of Tanzania), it was not possible to assess trends between 2000 and 2014 because of inconsistent reporting, or changes in health service accessibility or diagnostic testing. In 2015, Uganda reported a sixfold increase in confirmed cases (compared to the average number of cases in 2012-2014) in districts in which IRS was withdrawn and where vector control subsequently relied solely on ITNs. Substantial increases also occurred in other districts (a threefold increase in confirmed cases in 2015 compared to the average number in 2012–2014) (WHO, unpublished results).

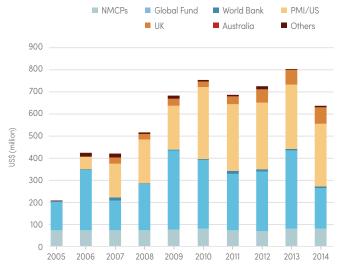
In Ethiopia, a study of 41 hospitals with complete data for analysis (of the total 62 hospitals below an altitude of 2000 metres) found a 66% decrease in confirmed cases between 2001 and 2011 (12), which is consistent with a 50-75% decrease in case incidence by 2015. Evidence of subnational reductions in morbidity and mortality have been reported in the Muheza district in the northeast of the United Republic of Tanzania between 1992 and 2012 (13); on the south coast of Kenya between 1996 and 2010 (14); and in northern Uganda between 2007 and 2011. The reductions follow introduction of IRS (15,16). However, these results are insufficient to make inferences about national trends.

Estimates of malaria case incidence inferred from surveys of parasite prevalence suggest that four countries had decreases in case incidence of more than 75% between 2000 and 2015 (Ethiopia, Madagascar, Rwanda, United Republic of Tanzania). Five countries (Malawi, Mozambique, South Sudan, Uganda and Zambia) had estimated decreases of 50-75% during the same period, and the remaining four countries had estimated decreases in case incidence of less than 50% (Figure F).

A. Confirmed malaria cases per 1000 population/ parasite prevalence, 2014

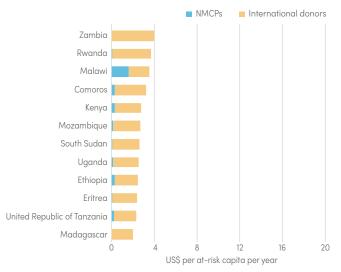


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

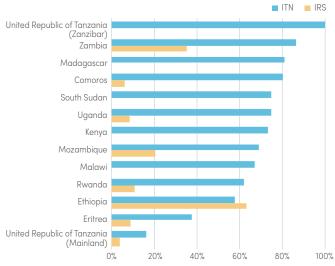


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C. US\$ spent per at-risk capita for malaria control, 2012–2014

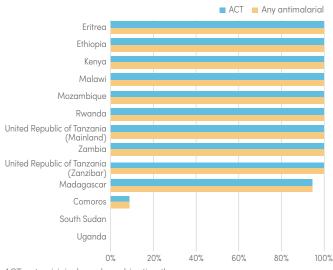


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

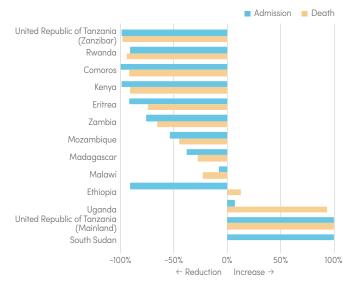


ACT, artemisinin-based combination therapy

F. Estimated incidence of malaria in 2000 and 2015

Uganda Mozambique Malawi Rwanda Zambia United Republic of Tanzania South Sudan Kenya Comoros Ethiopia Madagascar Eritrea 0 500 1000 1500 2000 Cases per 1000 population

G. Change in admission and death rates, 2000–2014



Countries with low transmission in southern Africa

Population at risk: About 21 million people in the five countries of this subregion are at some risk for malaria, with 8 million at high risk (**Figure A**). About 72%, or 54 million people, live in areas that are free of malaria. Countries in the subregion are focused on malaria control activities, although four have initiated some elimination activities. Malaria transmission is highly seasonal. Most malaria cases are caused by *P. falciparum*.

Financing: Funding for malaria control increased from US\$ 35 million in 2005 to US\$ 66 million in 2012, but declined to US\$ 51 million in 2014 (**Figure B**). During 2012–2014, funding exceeded US\$ 4 per capita per year in two countries (South Africa and Swaziland); in all other countries, funding was below US\$ 4 per capita per year (**Figure C**). Swaziland had by far the highest investment (US\$ 11 per capita per year), the majority of which was from international sources.

Interventions: In 2014, the proportion of the high-risk population estimated to have access to an ITN in their household exceeded 50% in Botswana, Namibia and Zimbabwe. IRS was also used extensively in Botswana (100%) and Zimbabwe (79%), indicating that ITNs and IRS were deployed together in most of the at-risk population in these countries. Only IRS was used in South Africa (100%) (Figure D). South Africa and Zimbabwe delivered sufficient antimalarial medicines to treat more than 80% of malaria cases attending public health facilities (Figure E). Botswana and Namibia did not report on antimalarial treatments delivered.

Insecticide resistance: Recent monitoring data are limited for countries in the subregion, with the exception of Zimbabwe and Namibia. Since 2010, pyrethroid resistance has been reported for Botswana and Zimbabwe, with reports of carbamate resistance in Zimbabwe, although the vectors remain susceptible to organophosphates. DDT resistance is yet to be confirmed.

Antimalarial drug efficacy: All countries in the subregion have adopted AL as their first-line treatment. The therapeutic efficacy

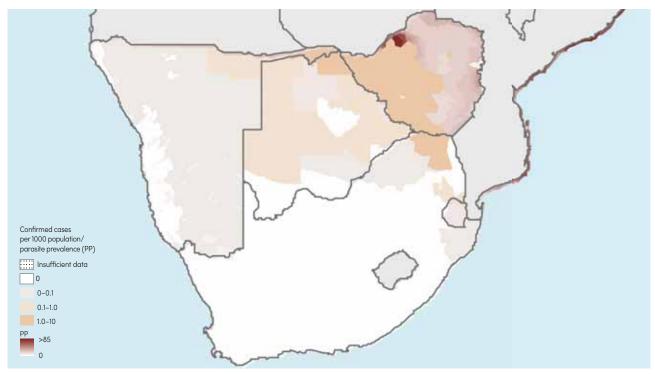
of both AS-AQ and AL remains high, with a median treatment failure rate of less than 10% observed for both treatments.

Trends in cases and deaths: Four countries in this subregion (Botswana, Namibia, South Africa and Swaziland) achieved a decrease of more than 50% in malaria admission rates between 2000 and 2014 (**Figure G**). Reported malaria mortality rates also fell by more than 75% in these countries. However, the number of reported cases in the four countries more than doubled between 2012 and 2014; between 2013 and 2014 alone, cases increased from 14 142 to 29 234 (52%), with increases of 224% in Botswana and 200% in Namibia.

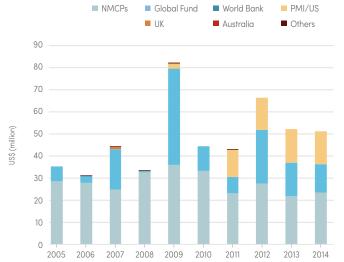
In Zimbabwe, the number of diagnostic tests performed increased fivefold between 2004 and 2014, with RDTs increasingly replacing microscopy. Thus, it is not possible to assess trends using nationally reported cases. However, a review of malaria admissions data from 45 hospitals indicated a reduction in malaria admission and mortality rates of 64% and 71%, respectively, between 2003 and 2012, which is consistent with a decrease in malaria admission rates and mortality rates of more than 75% between 2000 and 2015. A subnational study also showed a decrease in malaria case incidence in the Mutasa district between 2003 and 2011 (17).

The five countries in the subregion, together with Angola, Mozambique and Zambia, are signatories to the Elimination 8 (E8) regional initiative. Launched in March 2009, this initiative includes the goal of malaria elimination from four countries – Botswana, Namibia, South Africa and Swaziland – by 2020, and elimination from the region by 2030. Despite relatively low numbers of confirmed malaria cases in 2014, unconfirmed cases comprised 10% of total recorded cases in Botswana, 2% in South Africa and 5% in Swaziland. Thus, diagnostic testing needs further strengthening.

A. Confirmed malaria cases per 1000 population/parasite prevalence, 2014

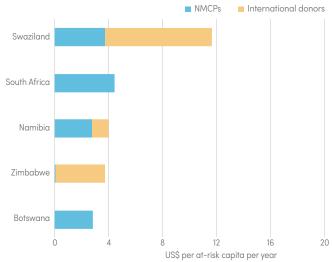


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

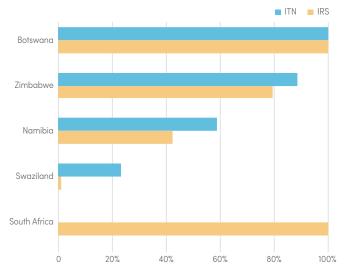


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C. US\$ spent per at-risk capita for malaria control, 2012–2014

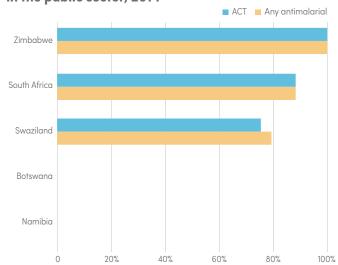


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



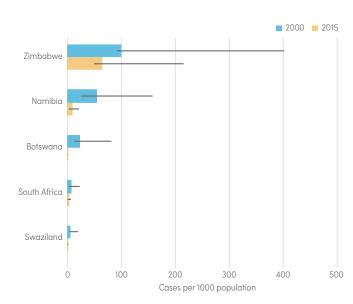
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

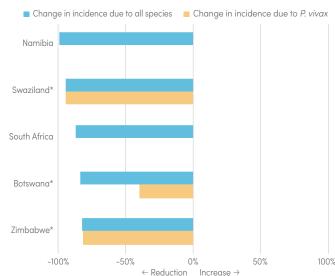


ACT, artemisinin-based combination therapy

F. Estimated incidence of malaria in 2000 and 2015



G. Change in case incidence of microscopically confirmed cases, 2000–2014



Region of the Americas

Population at risk: In the WHO Region of the Americas, about 112 million people in 21 countries and territories are estimated to be at some risk for malaria, with 20 million at high risk (reported incidence >1 per 1000 [Figure A]). P. vivax is responsible for more than 70% of reported malaria cases in the region, although P. falciparum malaria comprises more than 50% of cases in French Guiana (France) and Guyana, and essentially 100% of cases in the Dominican Republic and Haiti (Figure F). Belize, the Dominican Republic, Ecuador, El Salvador and Mexico are in the pre-elimination phase and three countries are in the elimination phase (Argentina, Costa Rica and Paraguay). The remainder are in the control phase.

Financing: Funding for malaria control in the region increased from US\$ 190 million in 2005 to US\$ 230 million in 2011, but fell to US\$ 151 million in 2014 (Figure B). For 2012-2014, funding for malaria control exceeded US\$ 4 per capita per year in seven of the 20 countries (Argentina, Costa Rica, El Salvador, Mexico, Panama, Paraguay and Suriname) (Figure C). In 2014, control was 100% domestically funded in 10 countries, of which five are in the pre-elimination phase and three are in the elimination phase.

Interventions: All 21 countries or territories in the region apply IRS or ITNs (or both) in focal areas with ongoing transmission. In 2012–2014, six countries distributed enough ITNs or applied IRS to protect more than 50% of the population at high risk. Nicaragua protected more than 70% of its at-risk population with LLINs and IRS, and the Bolivarian Republic of Venezuela protected 100% of its at-risk population with LLINs and IRS. (Figure D). Fourteen countries reported distribution of sufficient antimalarial medicines to treat more than 80% of malaria cases attending public health facilities (Figure E).

Insecticide resistance: Although most of the reports show susceptibility of the major vectors to the insecticides tested, resistance to the four main classes of insecticides has been reported within the Region. However, reported data are limited; since 2010, only Ecuador has reported data for the four classes. Nevertheless, since 2010, pyrethroid resistance has been reported in seven countries, with DDT resistance also reported in some areas of Colombia. Carbamate resistance was confirmed for at least one vector population in three countries (Ecuador, Nicaragua and Panama), as was organophosphate resistance in the Dominican Republic, Ecuador and Guatemala. Thus, although reported data are limited, insecticide resistance generally seems restricted in distribution.

Antimalarial drug efficacy: Therapeutic efficacy studies of AL and artesunate+mefloquine (AS+MQ) have demonstrated high treatment efficacy in the Region, with a median treatment failure rate of less than 10%.

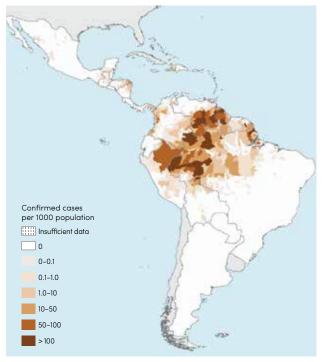
Trends in cases and deaths: The number of confirmed malaria cases in the region decreased from 1.2 million in 2000 to 390 000 in 2014. Three countries accounted for 77% of cases in 2013: Brazil (37%), Bolivarian Republic of Venezuela (23%) and Colombia (17%). Between 2000 and 2014, decreases of more than 75% in the incidence of microscopically confirmed malaria were reported in 15 of the 21 countries and territories that had ongoing transmission in 2000 (Argentina, Belize, Bolivia [Plurinational State of], Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana [France], Guatemala, Honduras, Mexico, Nicaragua, Paraguay and Suriname). The Dominican Republic is projected to achieve a 75% decrease in case incidence by 2015, and Guyana and Panama should achieve a 50-75% decrease. A decrease in case incidence of less than 25% by 2015 is projected for Peru. The Bolivarian Republic of Venezuela has reported an increase in case incidence every year since 2008, including more than 90 000 in 2014, the greatest number in 50 years. Overall, the incidence of microscopically confirmed cases in this country increased by 41% between 2000 and 2014. The worst affected areas are in the states of Bolivar and Amazonas, which border Guyana and Brazil in the east of the country. In Haiti, it is not possible to discern clear trends, because of differences in diagnostic testing and inconsistent reporting over time (Figure G). However, diagnostic and surveillance systems have improved in recent years.

The region reported 79 deaths due to malaria in 2014, an 80% decline compared with deaths in 2000. Brazil accounts for almost half of the deaths due to malaria in the region.

Argentina, which is in the elimination phase, has reported zero indigenous cases since 2011, and has initiated the process of certification for malaria elimination. Also, Paraguay has reported zero indigenous cases since 2012, and Costa Rica reported zero indigenous cases in 2013 and one relapsed case in 2014.

Four countries in the pre-elimination phase reported fewer than 1100 cases in total: Belize, 19 P. vivax cases; Ecuador, 368 P. vivax and P. falciparum cases; El Salvador, six P. vivax cases; and Mexico, 656 P. vivax cases. Ten countries in Central America and the Caribbean have joined a regional initiative that aims to eliminate malaria by 2020 (Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua and Panama).

A. Confirmed malaria cases per 1000 population, 2014

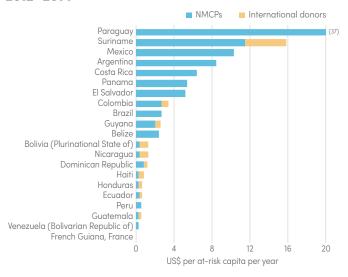


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

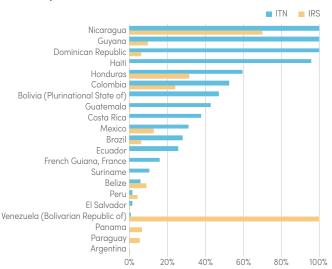


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012–2014

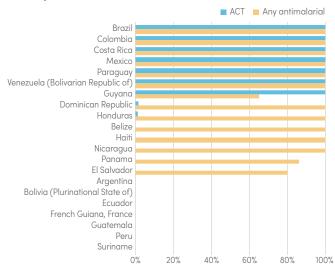


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



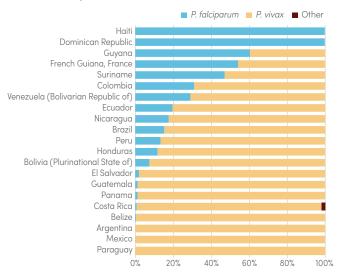
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of reported malaria cases in the public sector, 2014

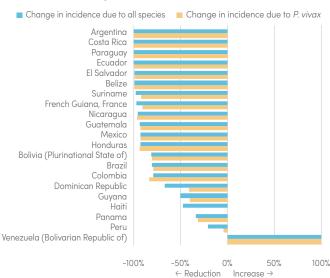


ACT, artemisinin-based combination therapy

F. Proportion of malaria cases due to *P. falciparum* and *P. vivax*, 2010–2014



G. Change in case incidence of microscopically confirmed cases, 2000–2014



Eastern Mediterranean Region

Population at risk: In 2014, about 276 million people in eight countries in the region were at some risk of malaria, with 108 million at high risk (reported incidence rates >1 per 1000 [Figure A]). Six countries have areas of high malaria transmission (Afghanistan, Djibouti, Pakistan, Somalia, Sudan and Yemen); transmission is focal in the Islamic Republic of Iran and Saudi Arabia in the two countries that are in the elimination phase. Most cases are due to *P. falciparum*, except in Afghanistan, Iran (Islamic Republic of) and Pakistan, where *P. vivax* predominates (**Figure F**).

Financing: Funding for malaria control in the region rose from US\$ 59 million in 2005 to US\$ 200 million in 2012, but fell to US\$ 120 million in 2014 (Figure B). During 2012-2014, funding per capita was highest in the Islamic Republic of Iran and Saudi Arabia (US\$ 29 and 25 per capita per year, respectively). Funding per capita per year was less than US\$ 4 in the other countries of the region (Figure C). In 2014, domestic funding for malaria control accounted for 100% of funding in Saudi Arabia and for 58% in the Islamic Republic of Iran.

Interventions: Afghanistan, Sudan and Yemen distributed sufficient ITNs in 2012–2014 to protect 100%, 54% and 82% of their high-risk populations, respectively (Figure D). Sudan and Yemen also used IRS to a limited extent. ITNs were used in targeted foci in the Islamic Republic of Iran and Saudi Arabia. The Islamic Republic of Iran and Saudi Arabia reported delivering sufficient antimalarial medicines (including ACT) to treat all cases attending public health facilities (Figure E). Data reported by other countries were incomplete.

Insecticide resistance: Since 2010, Afghanistan, the Islamic Republic of Iran, Somalia and Sudan have reported resistance to the four classes of insecticide, and Pakistan has reported resistance to the three classes tested (excluding carbamates). Pyrethroid and DDT resistance has also been detected in Yemen, with vectors still susceptible to carbamates. Resistance to carbamates has been detected in Djibouti, but vectors

remain susceptible to the other three classes of insecticide. Susceptibility to pyrethroids and organophosphates has been reported in Saudi Arabia.

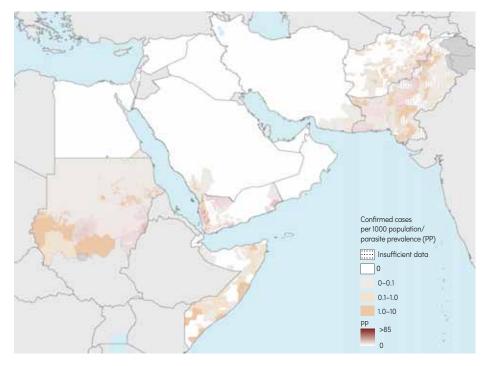
Antimalarial drug efficacy: All countries in the region have adopted artesunate+sulfadoxine-pyrimethamine (AS+SP) as their first-line treatments, except Djibouti where AL is the first-line treatment. A high rate of treatment failures has been observed with AS+SP in Somalia and Sudan. The treatment efficacy of AL remains high throughout the region.

Trends in cases and deaths: The number of confirmed malaria cases reported in the region decreased from 2 million in 2000 to 1.5 million in 2014. Two countries accounted for 91% of cases in 2014: Sudan (72%) and Pakistan (19%). Seven countries achieved more than 75% decrease in the incidence of microscopically confirmed cases between 2000 and 2014 (Afghanistan, Iraq, Islamic Republic of Iran, Morocco, Oman, Saudi Arabia and Syrian Arab Republic) (Figure G), although the current situation in the Syrian Arab Republic precludes verification of reported numbers. In 2014, the Islamic Republic of Iran and Saudi Arabia reported only 376 and 51 locally acquired cases, respectively. Assessment of trends was not possible for Djibouti, Pakistan, Somalia, Sudan and Yemen, due to inconsistent reporting.

The number of deaths in the region due to malaria fell from 2166 in 2000 to 960 in 2014. Two countries accounted for more than 90% of the deaths in 2014: Sudan (86%) and Pakistan (6%).

Four countries in the region are in the prevention of reintroduction phase (Egypt, since 1998; Iraq, since 2011; Oman, since 2004; and Syrian Arab Republic, since 2005). Morocco was certified as free of malaria in 2010. An outbreak in Egypt of 22 locally acquired cases in May-June 2014 was limited to a village 20 km north of Aswan, and was contained using preventive measures. Oman has been battling small outbreaks linked to importation of parasites since 2007; the country reported 984 imported and 15 introduced P. vivax cases in 2014. The Syrian Arab Republic reported 21 imported *P. falciparum* cases in 2014; however, the current situation in the country precludes verification of the number of malaria cases.

A. Confirmed malaria cases per 1000 population/parasite prevalence, 2014

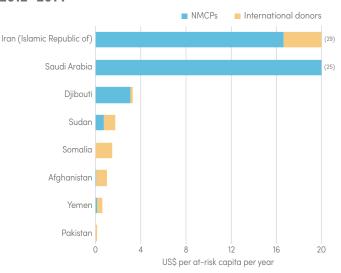


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

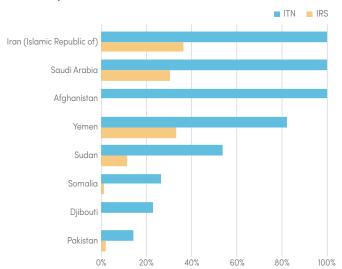


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012–2014

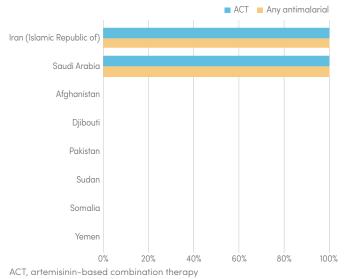


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014

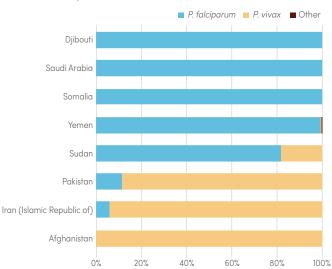


IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

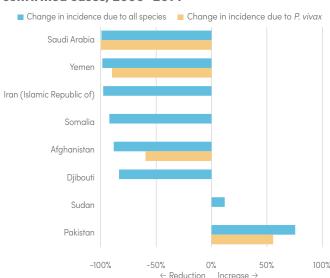
E. Antimalarial treatment courses distributed as a proportion of reported cases in the public sector, 2014



F. Proportion of malaria cases due to *P. falciparum* and *P. vivax*, 2010–2014



G. Change in case incidence of microscopically confirmed cases, 2000–2014



European Region

Population at risk: In 2000, eight countries in the WHO European Region (Armenia, Azerbaijan, Georgia, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan and Uzbekistan) had indigenous transmission of malaria; however, in 2014, indigenous transmission was confined to Tajikistan, in which 3 million people were living in areas with some risk for malaria. Turkey and Tajikistan are in the elimination phase, with the other countries in the prevention of reintroduction phase. In 2015, the WHO European Region reported zero indigenous cases for the first time.

Financing: Funding for malaria control in the region rose from about US\$ 42 million in 2005 to US\$ 58 million in 2009, but fell to US\$ 29 million in 2014 (Figure B). Between 2012 and 2014, funding per capita per year ranged from US\$ 1.5 in Tajikistan to US\$ 2566 in Turkey (Figure C).

Interventions: In all countries in the region, malaria is a notifiable disease. Each case and focus is epidemiologically investigated and classified; there are national quality assurance programmes for microscopy and for radical treatment of P. vivax cases, and there is adequate access to antimalarial medicines. IRS and ITNs are used in targeted focal areas.

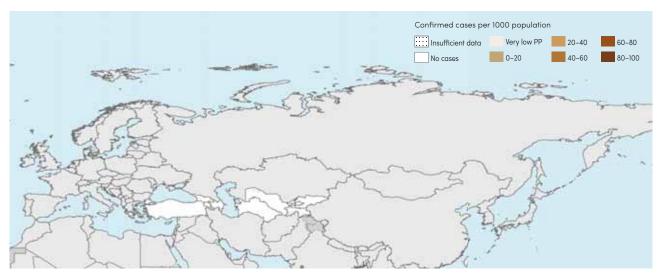
Insecticide resistance: Since 2010, data from standard bioassays have been reported for two countries only (Azerbaijan and Tajikistan), with susceptibility to pyrethroids confirmed in both countries, and susceptibility to organophosphates confirmed in Tajikistan. Continuous monitoring is necessary in the areas in which IRS and ITN use continues.

Trends in cases and deaths: All countries in the region achieved a 100% decrease in case incidence between 2000 and 2015 (Figure G). Among the eight countries with local transmission in 2000, the number of indigenous malaria cases declined from 32 405 in 2000, to 2 in 2014, and to zero in 2015. The two cases in 2014 were in Tajikistan, both *P. vivax* malaria. No indigenous cases have been reported in Tajikistan during 2015 (as of 1 December

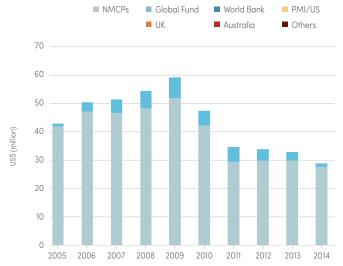
Two countries within the region have been certified as free of malaria (Turkmenistan, in 2010; and Armenia, in 2011). In 2014, Kyrgyzstan successfully passed the first of two WHO evaluations for certification as a malaria-free country. Azerbaijan has reported zero indigenous cases since 2012, and has moved to prevention of reintroduction. Greece, which had a resurgence of locally acquired *P. vivax* cases during 2009-2013 (mostly introduced cases), reported zero indigenous cases since 2013.

The region appears to have attained the goal of interruption of local malaria transmission by 2015, as set out in the 2005 Tashkent Declaration. However, although zero indigenous cases were reported in 2015, cases with a long incubation period might appear in 2016. Moreover, the region remains exposed to importation of cases, particularly along the border between Afghanistan and Tajikistan, and thus to potential re-establishment of transmission. In 2014, the region reported introduced cases in the Russian Federation and Spain and a relapse in Tajikistan. In 2015, Greece reported 6 introduced cases and Georgia an induced case. These events illustrate the need for constant vigilance to ensure that any reappearance of malaria in the WHO European Region is rapidly detected and contained.

A. Confirmed malaria cases per 1000 population, 2014

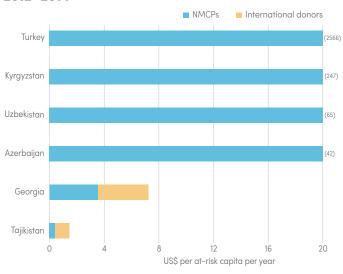


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

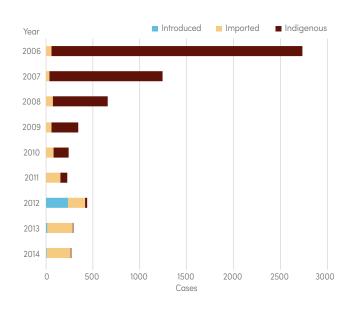


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

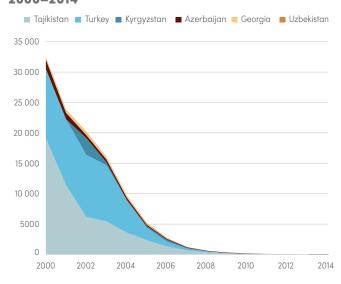
C. US\$ spent per at-risk capita for malaria control, 2012–2014



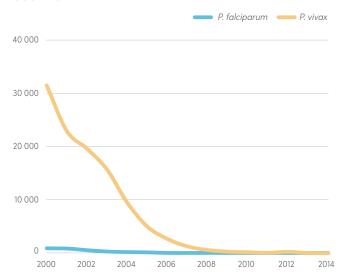
D. Reported malaria cases, 2006-2014



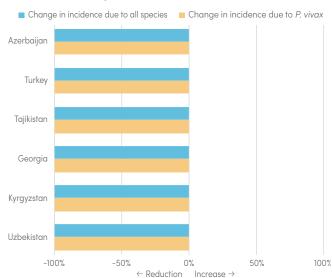
E. Reported number of indigenous malaria cases, 2000–2014



F. Number of local malaria cases reported by year, 2000–2014



G. Change in case incidence of microscopically confirmed cases, 2000–2014



South-East Asia Region

Population at risk: About 1.3 billion people are at some risk of malaria in 10 countries, with about 231 million at high risk (**Figure A**). The proportion of cases due to *P. falciparum* varies greatly within the region, from 15% to 79% in eight countries with transmission of more than one plasmodium species; cases are exclusively due to *P. vivax* in the Democratic People's Republic of Korea (**Figure F**). Bhutan and the Democratic People's Republic of Korea are in the pre-elimination phase. Sri Lanka has reported no locally acquired cases since October 2012, and is now in the prevention of reintroduction phase. Other countries in the region are in the control phase.

Financing: Funding for malaria control in the region increased from US\$ 125 million in 2005 to US\$ 262 million in 2010, but then fell to US\$ 187 million in 2014 (**Figure B**). In 2012–2014, funding exceeded US\$ 4 per capita per year only in Timor-Leste (**Figure C**). Funding is lowest in countries with the largest populations at risk, including India and Indonesia. This circumstance possibly occurs because of the challenge of providing adequate financing for such large populations, but also because populations at risk may be defined according to comparatively large administrative units in which the entire population is classified as high risk, even if malaria transmission is confined to a limited area.

Interventions: In 2012–2014, six countries (Bangladesh, Bhutan, Democratic People's Republic of Korea, Myanmar, Nepal and Timor-Leste) reported delivering sufficient ITNs or IRS to protect more than 60% of their populations at high risk (Figure D). IRS coverage was highest in Bhutan and in the Democratic People's Republic of Korea. In 2014, all countries, except India, Indonesia and Nepal, reported delivering sufficient quantities of antimalarial medicines (including ACT) to treat all reported cases in public health facilities (Figure E).

Insecticide resistance: In India, there is widespread resistance to DDT and pyrethroids, and areas with carbamate and organophosphate (malathion) resistance. Sri Lanka has reported resistance to the four insecticide classes. Since 2010, Bangladesh, Indonesia and

Myanmar have reported resistance to pyrethroids, with additional reports of DDT resistance in Myanmar, and carbamate resistance in Indonesia

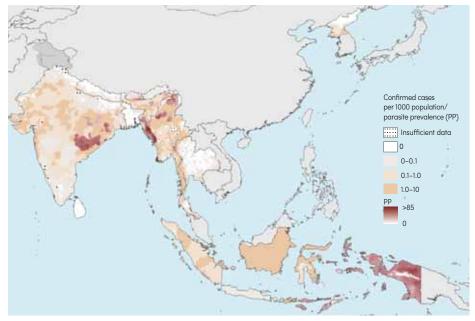
Antimalarial drug efficacy: AL remains effective throughout the Region. The efficacy of AS+SP is decreasing in northeast India, near the Myanmar border. Following high treatment failure rates with AS+MQ in Thailand, the national treatment policy was changed to DHA-PPQ in 2015. This is described in more detail in **Section 5.6**.

Trends in cases and deaths: The number of confirmed malaria cases reported in the region decreased from 2.9 million to 1.6 million between 2000 and 2014. Just three countries accounted for 96% of cases in 2014: India (70%), Indonesia (16%) and Myanmar (10%). Six countries reported more than 75% decrease in the incidence of confirmed cases between 2000 and 2014 (Bangladesh, Bhutan, Democratic People's Republic of Korea, Nepal, Timor-Leste and Sri Lanka) (Figure G). Two countries (India and Thailand) are projected to achieve a decrease of 50-75% in case incidence by 2015. The decline in Thailand may be underestimated, because the data since 2012 include cases reported by nongovernmental organizations working on the borders of Cambodia and Myanmar. Because of changes in diagnostic testing over time, the direction of trends in Myanmar before 2008 cannot be discerned, although the incidence of confirmed cases decreased by 68% between 2008 and 2015. Similarly, the direction of trends in Indonesia cannot be discerned due to inconsistent reporting.

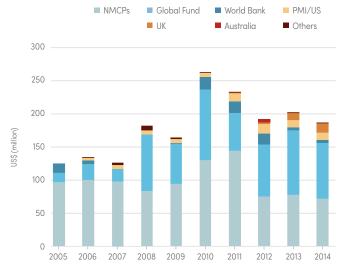
Reported malaria deaths in the region fell from 5482 to 812 between 2000 and 2014. No malaria-related deaths have been reported from Nepal since 2012, or from Bhutan since 2013.

Bhutan, which is in the pre-elimination phase, had 15 indigenous and 30 introduced cases in 2013, and 19 indigenous cases in 2014. Reported cases in the Democratic People's Republic of Korea, which is also in the pre-elimination phase, dropped sharply from 23 537 in 2012 to 10 535 in 2014 (55% decrease).

A. Confirmed malaria cases per 1000 population/parasite prevalence, 2014

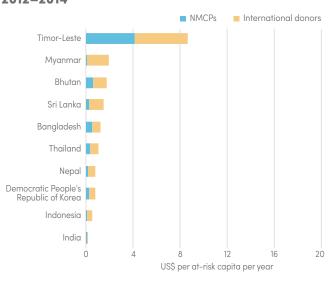


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

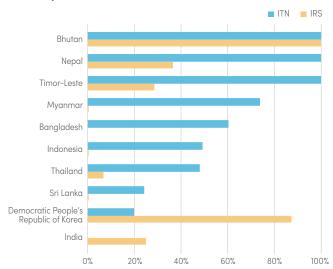


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012-2014

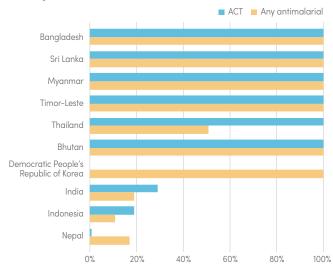


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



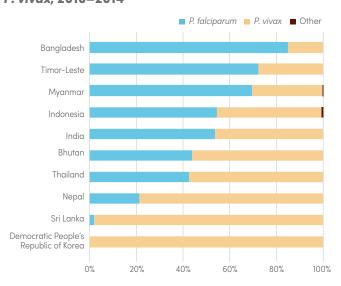
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

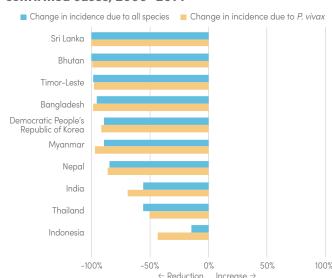


ACT, artemisinin-based combination therapy

F. Proportion of cases due to P. falciparum and P. vivax, 2010-2014



G. Change in case incidence of microscopically confirmed cases, 2000-2014



Western Pacific Region

Population at risk: About 730 million people in the region are at some risk for malaria, with 30 million at high risk (**Figure A**). Malaria transmission is highest in Papua New Guinea, the Solomon Islands and Vanuatu. In other countries in the region, transmission is much more focal, disproportionately affecting ethnic minorities and migrant workers. Both *P. falciparum* and *P. vivax* are prevalent, but cases are mostly due to *P. vivax* in the Republic of Korea (**Figure F**). Recently, *P. knowlesi* has increased in public health importance, particularly in Malaysia, where it accounted for 38% of the reported cases in 2014. Malaysia is in the pre-elimination phase, and China and the Republic of Korea are in the elimination phase. Other countries in the region are in the control phase.

Financing: Funding for malaria control in the region increased from US\$ 77 million in 2005 to US\$ 182 million in 2010. Funding then dropped to US\$ 112 million in 2011, but has been gradually increasing since, reaching US\$ 156 million in 2014 (**Figure B**). During 2012–2014, malaria funding per capita per year in the region was highest in Malaysia (US\$ 47), exceeded US\$ 5 in Vanuatu, and was less than US\$ 5 in the other eight countries (**Figure C**).

Interventions: In 2012–2014, the number of ITNs delivered was sufficient to protect more than 60% of the population at high risk in seven countries. In China, 100% of the at-risk population was protected with IRS. In Malaysia, more than 60% were protected with IRS and ITNs, although it is not clear whether both interventions were applied in the same area (Figure D). Nationally representative surveys in Papua New Guinea showed an increase in the proportion of the population with access to an LLIN in their household, from 44% in 2011 to 68% in 2014; the proportion of RDT-positive cases treated with ACT rose from 0% to 78%. The Republic of Korea reported low levels of vector control coverage (with the exception of the Korean Demilitarized Zone), possibly due to the focal nature of the disease. In 2014, all countries, except the Republic of Korea, reported delivering sufficient antimalarial medicines to treat more than 80% of patients attending public health facilities (Figure E).

Insecticide resistance: Since 2010, pyrethroid resistance has been reported in malaria vectors of local importance in Cambodia, China, Lao People's Democratic Republic, the Philippines and Viet Nam, with all countries but Viet Nam also reporting DDT resistance. Organophosphate resistance has been reported in China.

Antimalarial drug efficacy: Both AL and DHA-PPQ remain effective where those medicines are used as the first-line treatment. In Cambodia, efficacy studies conducted in areas where dihydroartemisinin-piperaquine (DP) is failing have found AS+MQ effec-

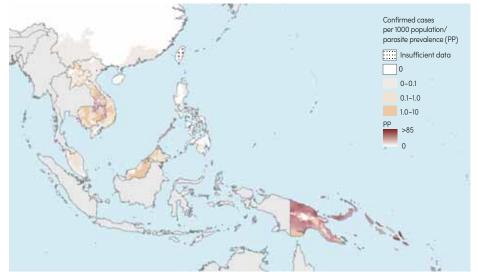
tive, and AS+MQ has since become the first-line treatment in these areas (see Section 5.6).

Trends in cases and deaths: Three countries accounted for 89% of reported confirmed cases in 2014: Papua New Guinea (71%), Lao People's Democratic Republic (12%) and Cambodia (6%). Eight of the 10 countries in the region achieved more than 75% reduction in the incidence of microscopically confirmed cases between 2000 and 2014 (Cambodia, China, Malaysia, Philippines, Republic of Korea, Solomon Islands, Vanuatu, Viet Nam) (Figure G). Cambodia is on track to achieve a 50-75% reduction in case incidence by 2015. In Vanuatu, reported cases dropped sharply from 2381 in 2013 to 982 in 2014 (58% decrease). Although the Lao People's Democratic Republic has reduced malaria incidence by 50% since 2000, case incidence has increased since 2011, with more than 48 000 cases reported in 2014. This increase is associated with an influx of migrant workers in the south of the country. Papua New Guinea has reported considerably more confirmed cases since 2012, due to an increase in diagnostic testing with RDTs. However, the incidence of malaria admissions to public health facilities decreased by more than 75% between 2000 and 2014, and nationally representative household surveys indicated a drop in parasite prevalence from 12.4% to 1.8% between 2009 and 2014.

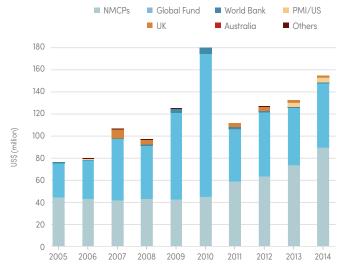
Reported malaria deaths in the region decreased from 2360 to 264 between 2000 and 2014. In 2014, two countries accounted for 86% of all reported deaths: Papua New Guinea (77%) and the Solomon Islands (9%). Vanuatu has reported no deaths from malaria since 2012.

Malaysia is in the pre-elimination phase, but the number of indigenous cases increased from 2921 in 2013 to 3147 in 2014, and the number of people living in active foci remains high (1.3 million). Malaria transmission occurs primarily in the districts of Sabah and Sarawak. In the Republic of Korea, which is in the elimination phase, the number of indigenous cases between 2013 and 2014 increased from 383 to 557. China reported only 56 locally acquired cases in 2014; six were caused by *P. falciparum* and 50 by *P. vivax*. China is aiming to eliminate malaria nationally by 2020. The Philippines is proceeding with a subnational elimination approach, with a focus on the provinces most affected by malaria: Maguindanao (Mindanao) and the islands of Palawan and Tawi-Tawi.

A. Confirmed malaria cases per 1000 population/parasite prevalence, 2014

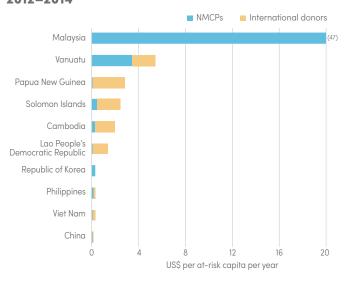


Data are only shown for countries and areas that had ongoing malaria transmission in year 2000

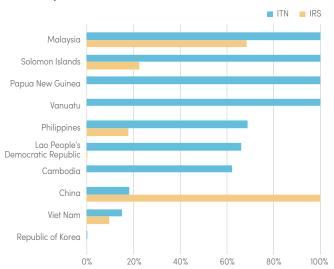


Global Fund, Global Fund to Fight AIDS, Tuberculosis and Malaria; NMCP, national malaria control programme; PMI/US, President's Malaria Initiative/United States; UK, United Kingdom of Great Britain and Northern Ireland

C. US\$ spent per at-risk capita for malaria control, 2012–2014

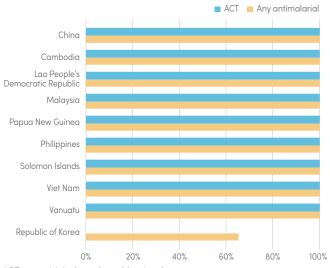


D. Proportion of high-risk population with distributed ITNs and proportion protected with IRS, 2014



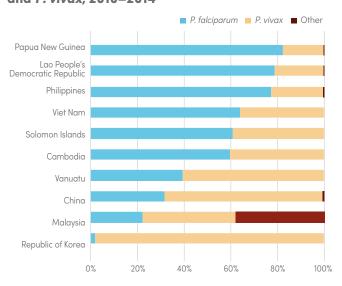
IRS, indoor residual spraying; ITN, insecticide-treated mosquito net

E. Antimalarial treatment courses distributed as a proportion of estimated malaria cases in the public sector, 2014

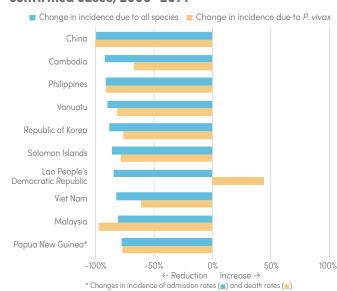


ACT, artemisinin-based combination therapy

F. Proportion of malaria cases due to *P. falciparum* and *P. vivax*, 2010–2014



G. Change in case incidence of microscopically confirmed cases, 2000–2014



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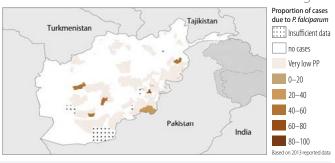
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Eastern Mediterranean Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	8 500 000	27
Low transmission (0–1 cases per 1000 population)	15 400 000	49
Malaria free (0 cases)	7 720 000	24
Total	31 600 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			95%) yrcanus, An. pulcherrimus, An. culici	facies, An. fluviatilis
Programme phase:	Control			
Reported confirmed cases:		61 362	Estimated cases, 2013:	[180 000-350 000]
Reported confirmed cases at	community level:	22558		
Reported deaths:	,	32	Estimated deaths, 2013:	[46-210]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2010 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2012
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2000 2000
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Yes Yes	2003 2014 2010 2010 2010
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	2012 - - - -

Antimalaria treatment policy	Medicine	Adopted		
First-line treatment of unconfirmed malaria	CQ	-		
First-line treatment of P. falciparum	AS+SP+PQ	2014		
Treatment failure of P. falciparum	=	-		
Treatment of severe malaria	AM; AS; QN	-		
Treatment of P. vivax	CQ+PQ(8w)	-		
Dosage of primaquine for radical treatment of P. vivax	0.25 mg/kg (14 d),	0.25 mg/kg (14 d), 0.75/kg (8 w)		
Type of RDT used	P. f + all spe	P.f + all species (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine Year Min Median Max Follow-up No. of st

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+SP	2005-2013	0	0	1	28 days	8	P. falciparum
CQ	2007-2009	0	0	0	28 days	4	P. vivax

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. stephensi, An. superpictus,
					other



ALGERIA African Region





I. Epidemiological profile

Population	2014	%
Number of active foci	=	
Number of people living within active foci	0	0
Number of people living in malaria free areas	38 900 000	100
Total	38 900 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:		3%), P. vivax (0%) n. labranchiae, An. sergentii, An. his	spaniola	
Programme phase:	Elimination			
Total confirmed cases, 2014:	266	Total deaths, 2014:	0	
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0	
Introduced cases 2014:	0			

II. Intervention policies and strategies

II. IIIter	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	No No	-
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1980 -
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	-	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	– Yes	- 1968
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	– Never allowed Yes Yes No Yes s Yes	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. wwx cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes No No No No Yes Yes	- - - - - 1968

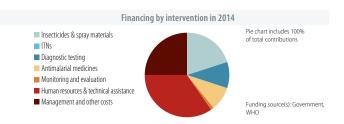
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	-	=
Treatment failure of P. falciparum	-	=
Treatment of severe malaria	-	-
Treatment of P. vivax	CQ	=
Dosage of primaquine for radical treatment of <i>P. vivax</i>	0.2	25 mg/kg (14 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

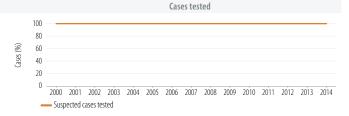
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
-	-	-	-	-	-	-	-

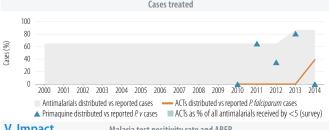
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	-	-	-	-	-

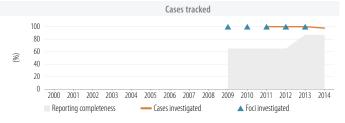


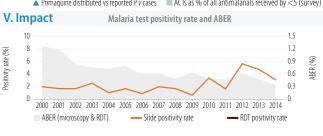


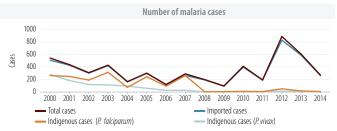




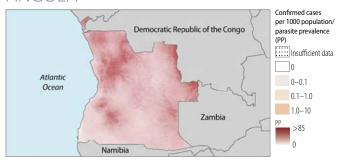


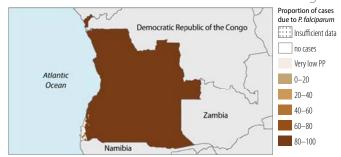






African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	24 200 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	24 200 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (10 An. gambiae, An			
Programme phase:	Control			
Reported confirmed cases:		2 298 979	Estimated cases, 2013:	[2000000-5100000]
Reported deaths:		5714	Estimated deaths, 2013:	[8900-20,000]

II. Intervention policies and strategies

	ention poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2001
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2003
Larval contro	Use of larval control recommended	Yes	2009
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 2006
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes are allowed No Yes Yes No Yes	2006 - 2006 2006 - 2006
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2006
First-line treatment of P. falciparum	AL	2006
Treatment failure of P. falciparum	QN	2006
Treatment of severe malaria	AS; QN	2006
Treatment of P. vivax	_	_
Dosage of primaquine for radical treatment of P. vivax	0.2	5 mg/kg (14 d)
Type of RDT used	P. f + P. v sp	ecific (Combo).

The rapeutic efficacy tests (clinical and parasitological failure, %)

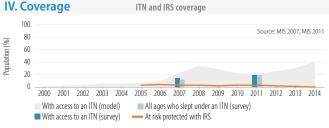
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2013-2013	2.7	7.2	11.7	28 days	2	P. falciparum
DHA-PPQ	2013-2013	0	0	0	28 days	2	P. falciparum

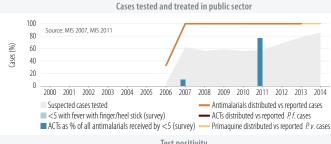
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	Yes	No	An. coustani, An. gambiae s.l.





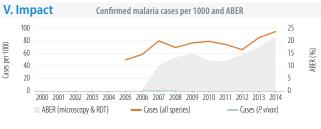
No data reported for 2014

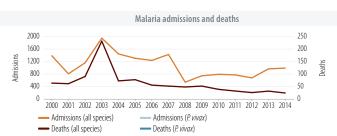












Impact: Insufficiently consistent data to assess trends





I. Epidemiological profile

Population	2014	%
Number of active foci	=	
Number of people living within active foci	=	-
Number of people living in malaria free areas	43 000 000	100
Total	43 000 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		%), P. vivax (0%) tipennis, An. darlingi	
Programme phase:	Elimination		
Total confirmed cases, 2014:	4	Total deaths, 2014:	0
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0	-	

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	No	-
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	2013
	DDT is authorized for IRS	No	-
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
	Malaria diagnosis is free of charge in the public sector	Yes	1980
Treatment	ACT is free for all ages in public sector	Yes	-
	Sale of oral artemisinin-based monotherapies	-	
	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	Yes	-
	Primaquine is used for radical treatment of P. vivax	Yes	-
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	Yes	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	-
Surveillance		Yes	-
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	Yes	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	-
	Uncomplicated P. vivax cases routinely admitted	No	-
	Foci and case investigation undertaken	Yes	-
	Case reporting from private sector is mandatory	Yes	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL+PQ	-
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	=-	=
Treatment of P. vivax	CQ+PQ	-
Dosage of primaquine for radical treatment of <i>P. vivax</i>	0	.25 mg/kg (14 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

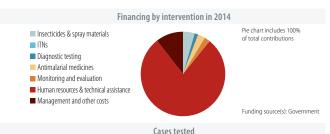
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

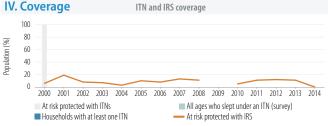
 $In secticide \ susceptibility \ bioassays \ (reported \ resistance \ to \ at \ least \ one \ in secticide \ for \ any \ vector \ at \ any \ locality)$

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

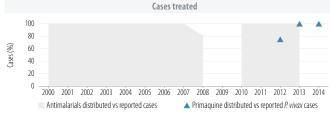
 2010–2014



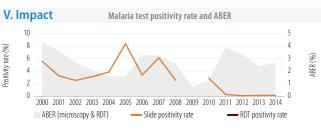


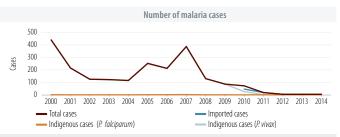


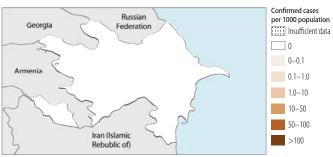














I. Epidemiological profile

Population	2014	%
Number of active foci	-	
Number of people living within active foci	0	0
Number of people living in malaria free areas	9630000	100
Total	9630000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (09 An. sacharovi, Ar		
Programme phase:	Elimination		
Total confirmed cases, 2014:	2	Total deaths, 2014:	0
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0		

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2009
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	1930
	DDT is authorized for IRS	No	-
Larval contro	Use of larval control recommended	Yes	1930
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
	Malaria diagnosis is free of charge in the public sector	Yes	1930
Treatment	ACT is free for all ages in public sector	Yes	2009
	Sale of oral artemisinin-based monotherapies	-	
	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	No	-
	Primaquine is used for radical treatment of P. vivax	Yes	1956
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	Yes	1956
	System for monitoring of adverse reactions to antimalarials exists	Yes	1956
Surveillance	ACD for case investigation (reactive)	Yes	1930
	ACD of febrile cases at community level (pro-active)	Yes	1930
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	1998
	Uncomplicated P. vivax cases routinely admitted	Yes	1998
	Foci and case investigation undertaken	Yes	1930
	Case reporting from private sector is mandatory	Yes	2008

Medicine	Adopted
AS+SP	2008
AS+SP	2008
QN+CL	2008
AS; QN	2008
CQ+PQ(14d)	_
0.25	mg/kg (14 d)
	AS+SP AS+SP QN+CL AS; QN CQ+PQ(14d)

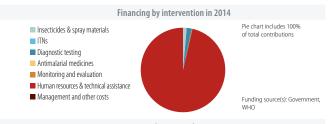
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

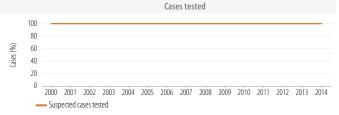
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010	No	-	-	-	An. maculipennis, An. sacharovi



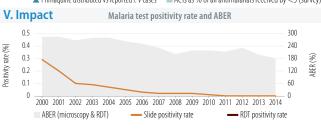


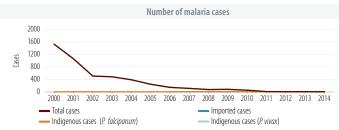












BANGLADESH South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4230000	3
Low transmission (0–1 cases per 1000 population)	12 300 000	8
Malaria free (0 cases)	142 600 000	90
Total	159 100 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			(9%) nensis, An. sundaicus, An. albimanu	s, An. annularis
Programme phase:	Control			
Reported confirmed cases:			Estimated cases, 2013:	[500 000-1 000 000]
Reported confirmed cases at	community level:	36885		
Reported deaths:		45	Estimated deaths, 2013:	[69-3200]

II. Intervention policies and strategies

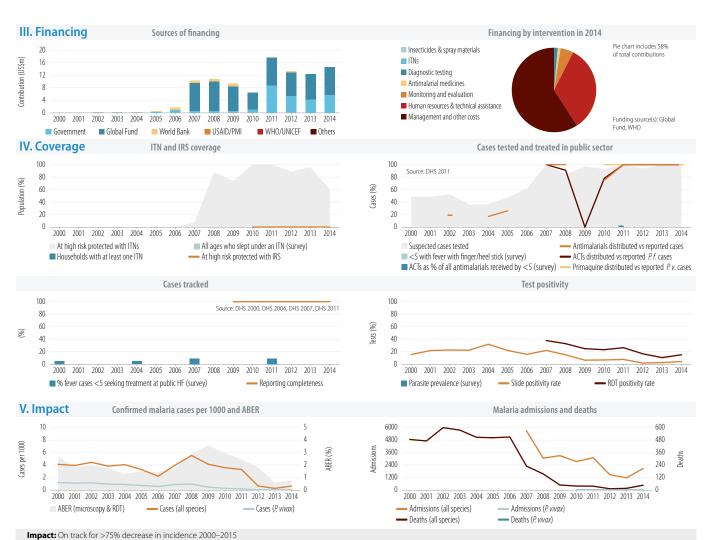
	ention poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008 2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2008 1993
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2008 2008
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No No	2008 - 2008 - - 2008
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	2008 2008 - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN+D; QN+T	2004
Treatment of severe malaria	AM; QN	2004
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + P. v, P. o,	P. m (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2006-2014 11.1 28 days P. falciparum 0 0 10 QN+DX 2008-2009 0 0 0 28 days P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2012-2014	Yes	-	-	-	An. annularis, An. philippinensis,
					An. vaaus







I. Epidemiological profile

Population	2014	%
Number of active foci	8	
Number of people living within active foci	8590	2
Number of people living in malaria free areas	343 000	98
Total	351 590	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (0% An. albimanus, Al		
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	19	Total deaths, 2014:	0
Indigenous cases, 2014:	19	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0	-	

II. Intervention policies and strategies

II. IIItel V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	_
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Never allowed Yes Yes No Yes S No	2010 d - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. wax</i> cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes No Yes No No Yes Yes	- - - - -

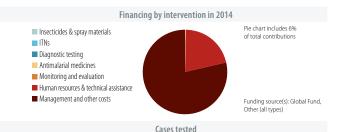
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	CQ+PQ (1d)	-
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	AL; QN	_
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of <i>P. vivax</i>	0.2	5 mg/kg (14 d)

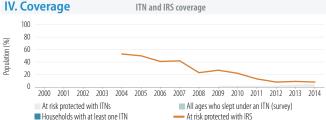
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

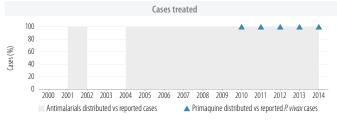
Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested

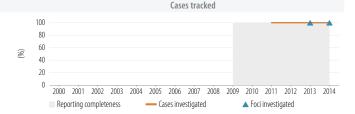


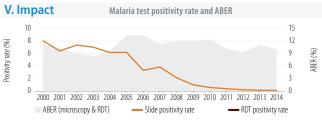


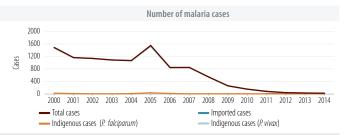












BENIN African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	10 600 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	10600000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100%), An. gambiae, An. fune			
Programme phase:	Control			
Reported confirmed cases:	1 044	1235	Estimated cases, 2013:	[2300000-4000000]
Reported confirmed cases a	community level: 86	5323		
Reported deaths:		1869	Estimated deaths, 2013:	[4400-8200]

II. Intervention policies and strategies

Yes/No A	1
	ldopted
Yes No	2007
Yes No	2006
No	-
Yes	2005
Yes Yes	2011 2008
No Is banned No No – No Yes	- - - - - 2005
- Yes No Yes No	- - - - -
	No Yes

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; QN	2004
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		_

merapeutic	enicacy tests (cii	ilical alli	i parasituluy	icai iaiiui	2, 70)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2011	0	0.75	6.5	28 days	6	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. coluzzii, An. gambiae s.l.,
					other

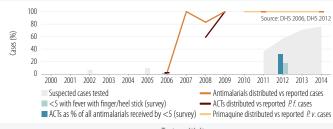




No data reported for 2014

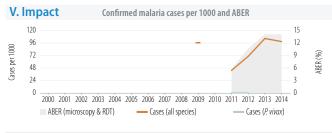
Cases tested and treated in public sector

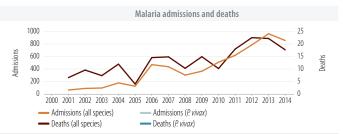






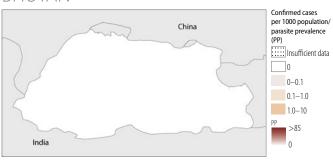


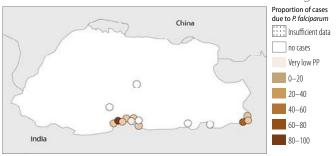




Impact: Insufficiently consistent data to assess trends

South-East Asia Region





I. Epidemiological profile

Population	2014	%
Number of active foci	_	
Number of people living within active foci	121 000	16
Number of people living in malaria free areas	644 000	84
Total	765 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:		%), P. vivax (65%) n. maculatus, An. philippiensis, An	. annularis	
Programme phase:	Pre-elimination			
Total confirmed cases, 2014:	41	Total deaths, 2014:	0	
Indigenous cases, 2014:	19	Indigenous deaths, 2014:	0	
Introduced cases 2014:	0			

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2006
	ITNs/LLINs distributed to all age groups	Yes	2006
IRS	IRS is recommended	Yes	1964
	DDT is authorized for IRS	No	_
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	_
Diagnosis	Patients of all ages should receive diagnostic test	Yes	1964
_	Malaria diagnosis is free of charge in the public sector	Yes	1964
Treatment	ACT is free for all ages in public sector	Yes	2006
	Sale of oral artemisinin-based monotherapies	Never allow	ed
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	2012
	Primaquine is used for radical treatment of P. vivax	Yes	-
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaguine is undertaken	No	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	2012
Surveillance	ACD for case investigation (reactive)	Yes	2013
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	Yes	2011
	Uncomplicated P. falciparum cases routinely admitted	Yes	2012
	Uncomplicated P. vivax cases routinely admitted	Yes	2012
	Foci and case investigation undertaken	Yes	2012
	Case reporting from private sector is mandatory	No	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL	2006
Treatment failure of P. falciparum	QN	2006
Treatment of severe malaria	AM; QN	2006
Treatment of P. vivax	CQ+PQ(14d)	2006
Dosage of primaquine for radical treatment of P. vivax	0.2	5 mg/kg (14 d)

 $\underline{ The rapeutic \ efficacy \ tests \ (clinical \ and \ parasitological \ failure, \%)}$

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2011	0	0	0	28 days	23	P. falciparum
CQ	2005-2011	0	0	0	28 days	22	P. vivax

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

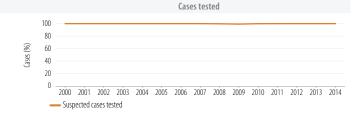
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2012	No	-	-	=	An. pseudowillori

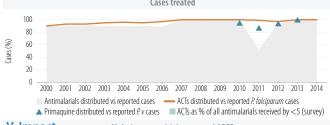




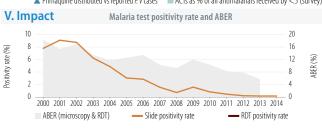
No data reported for 2014

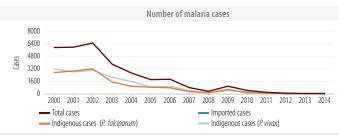












BOLIVIA (PLURINATIONAL STATE OF)

Peru Brazil Chile Argentina

I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	265 000	2
Low transmission (0–1 cases per 1000 population)	4 540 000	43
Malaria free (0 cases)	5 790 000	55
Total	10600000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (5%), P. vivax (An. darlingi, An. pseudopun		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[7800-20 000] <10

II. Intervention policies and strategies

II. Interv	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1959 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2000 1996
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No No	2003 - 1998 - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes No No	- - 1998 - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AS+MQ+PQ	2001
Treatment failure of P. falciparum	QN+CL	-
Treatment of severe malaria	QN	2001
Treatment of P. vivax	CQ+PQ(7d)	2001
Dosage of primaquine for radical treatment of P. vivax		0.50 mg/kg (7 d)
Type of RDT used		-

merapeutic emicacy tests (clinical and parasitological failure, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CQ	2006-2011	0	8.1	10.4	28 days	4	P. vivax

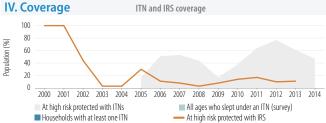
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

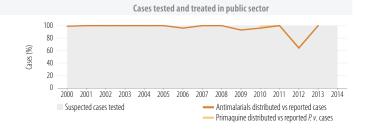
Yea	r	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
201	3	Yes	-	-	-	An. darlingi





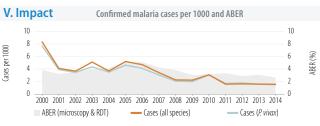
No data reported for 2014

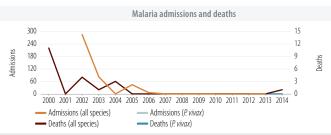












African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	93 500	4
Low transmission (0–1 cases per 1000 population)	1 380 000	62
Malaria free (0 cases)	748 000	34
Total	2 220 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. arabiensis, An. gambiae		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[530-2100] <10

II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	1950 -
Larval contro	Use of larval control recommended	Yes	2012
IPT	IPT used to prevent malaria during pregnancy	-	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 1974
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	– No No	2007 2007 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes – No No	2012 2012 2012 - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2007
First-line treatment of P. falciparum	AL	2007
Treatment failure of <i>P. falciparum</i>	QN	2007
Treatment of severe malaria	QN	2007
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only

merapeutic en	merapeutic emicacy tests (chinical and parasitological failule, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

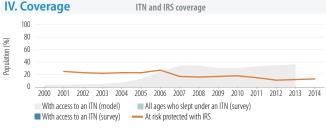
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2013	Yes	No	No	-	An. aambiae s.l.

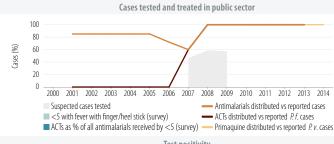




Financing by intervention in 2014

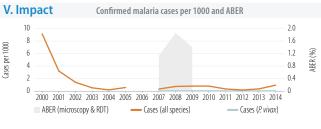
No data reported for 2014

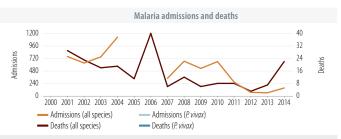
















I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4740000	2
Low transmission (0–1 cases per 1000 population)	37 100 000	18
Malaria free (0 cases)	164 300 000	80
Total	206 100 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (169 An. darlingi, An. a		
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at	community level	Estimated cases, 2013:	[200 000-260 000]
Reported deaths:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Estimated deaths, 2013:	<50

II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2007 2007
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1945 –
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1972 1972
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Never allowed Yes Yes No No S	2006 3 2011 1972 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes Yes Yes	- - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	_	-	
First-line treatment of P. falciparum	AL+PQ(1d); AS+MQ+PQ(1d)	2012	
Treatment failure of P. falciparum	QN+D+PQ	-	
Treatment of severe malaria	AM+CL; AS+CL; QN+CL	-	
Treatment of P. vivax	CQ+PQ(7d)	2006	
Dosage of primaquine for radical treatment of P. vivax	0.50 m	ng/kg (7 d)	
Type of RDT used	P.f + all species (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2005-2007 0 0 0 28 days P. falciparum AS+MO 2005-2007 0 0 42 days P. falciparum CQ+PQ 2005-2014 28 days P. vivax

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

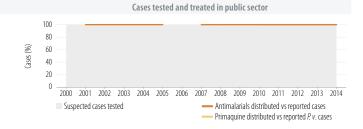
 2011–2014
 Yes
 An. albitarsis, An. darlingi, other



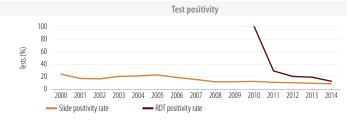


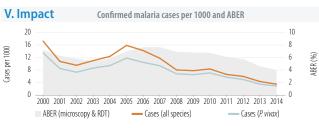
No data reported for 2014

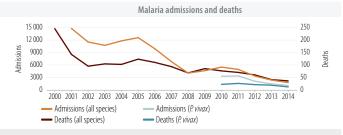




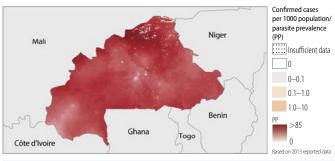








BURKINA FASO African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	17600000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	17 600 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viv An. gambiae, An. funestus,		
Programme phase:	Control		
Reported confirmed cases:	5 428 655	Estimated cases, 2013: [4	4700000-10000000]
Reported deaths:	5632	Estimated deaths, 2013:	[12 000-32 000]

II. Intervention policies and strategies

Policies/strategies		
rollcles/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2007 1998
IRS is recommended DDT is authorized for IRS	Yes No	2006
Use of larval control recommended	Yes	2012
IPT used to prevent malaria during pregnancy	Yes	2005
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2009 2009
Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	No No No	- - - - - 2009
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No Yes No	- - - -
	ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed to all age groups IRS is recommended IRS is recommended IRS is recommended IVes IDT is authorized for IRS INS on IUse of larval control recommended IVES IPT used to prevent malaria during pregnancy IPT used to prevent malaria diagnossis is free of charge in the public sector IPT used to prevent malaria diagnossis is free of charge in the public sector IPT used to prevent malaria diagnossis is free of charge in the public sector IPT used to prevent malaria diagnossis is free of charge in the public sector IPT used to prevent malaria diagnossis is used for adical treatment of P. vivax INS used in the prevent malaria is used for radical treatment of P. vivax INS used in the public sector INS used in the public

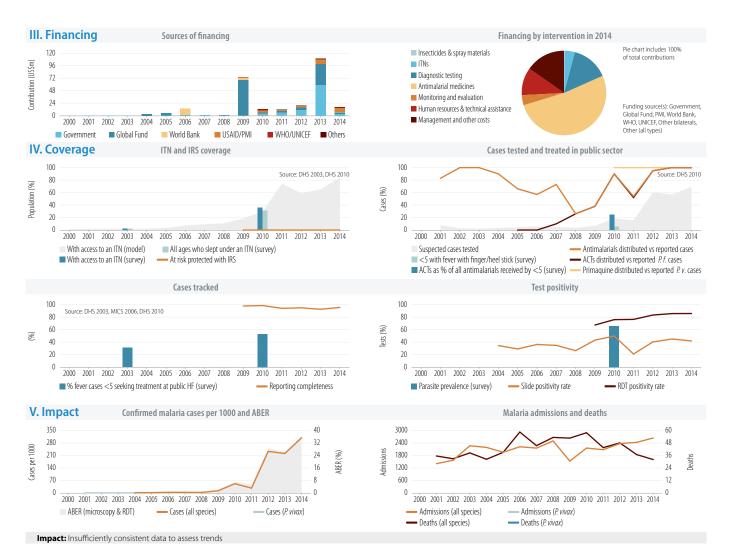
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL; AS+AQ	2005
First-line treatment of P. falciparum	AL; AS+AQ	2005
Treatment failure of P. falciparum	QN	_
Treatment of severe malaria	AS; QN	-
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %)

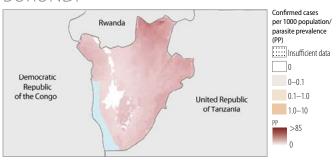
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2012	0	6.15	12.5	28 days	9	P. falciparum
AS+AQ	2006-2012	0	5.05	21.5	28 days	6	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. arabiensis, An. coluzzii, An.
					aambiae s.l.



BURUNDI African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	10 800 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	10800000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. funestus, A		
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at		Estimated cases, 2013:	[990 000-2 000 000]
Reported deaths:	2974	Estimated deaths, 2013:	[1700-5600]

II. Intervention policies and strategies

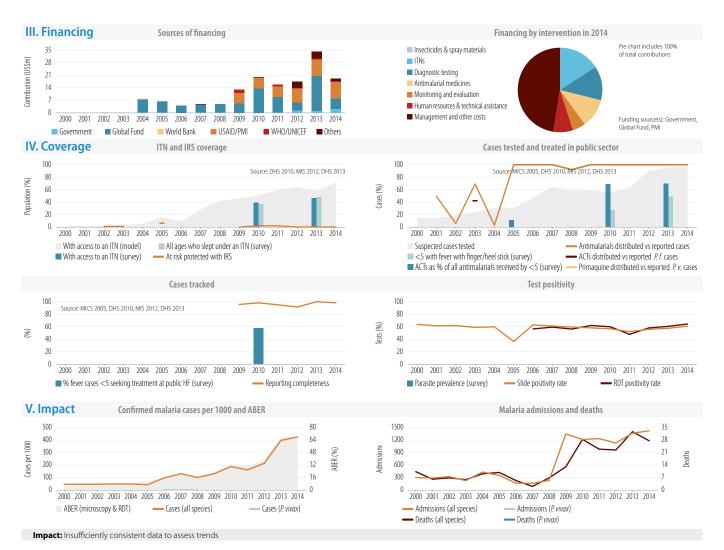
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2004
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2000
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2012 -
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No - No No No	2009 2003 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No Yes	- - - 2003 -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+AQ	2003	
First-line treatment of P. falciparum	AS+AQ	2003	
Treatment failure of P. falciparum	QN	2003	
Treatment of severe malaria	AS; QN	2003	
Treatment of P. vivax	_	_	
Dosage of primaquine for radical treatment of P. vivax		-	
Type of RDT used	P.f + all species (Combo).		

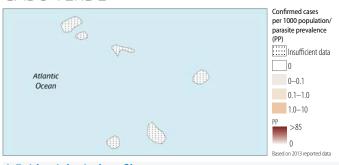
Therapeutic efficacy tests (clinical and parasitological failure, %)

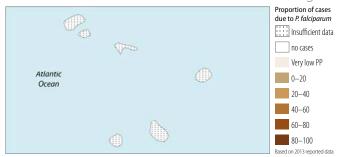
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+AQ	2005-2006	2.9	5.2	7.5	28 days	2	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2014	Yes	Yes	Yes	No	An. gambiae s.l.



CABO VERDE African Region





I. Epidemiological profile

Population	2014	%
Number of active foci	10	
Number of people living within active foci	483 000	94
Number of people living in malaria free areas	30 900	6
Total	513 900	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (10 An. arabiensis	0%), <i>P. vivax</i> (0%)	
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	46	Total deaths, 2014:	2
Indigenous cases, 2014:	26	Indigenous deaths, 2014:	2
Introduced cases, 2014:	20		

II. Intervention policies and strategies

	3		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	No	_
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	1998
	DDT is authorized for IRS	No	-
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	1998
_	Malaria diagnosis is free of charge in the public sector	Yes	1975
Treatment	ACT is free for all ages in public sector	Yes	2008
	Sale of oral artemisinin-based monotherapies	are allowed	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	-
	Primaguine is used for radical treatment of P. vivax	No	-
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	Yes	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	2007
Surveillance	ACD for case investigation (reactive)	Yes	2001
	ACD of febrile cases at community level (pro-active)	Yes	2001
	Mass screening is undertaken	Yes	2001
	Uncomplicated P. falciparum cases routinely admitted	Yes	2007
	Uncomplicated P. vivax cases routinely admitted	No	-
	Foci and case investigation undertaken	Yes	-
	Case reporting from private sector is mandatory	Yes	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2007
First-line treatment of P. falciparum	AL	2007
Treatment failure of P. falciparum	QN	-
Treatment of severe malaria	QN	_
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		-

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested 2010-2014

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Imported cases

— Indigenous cases (P. vivax)



ABER (%) 15

5

120 Cases 80

40

— Indigenous cases (P. falciparum)

Impact: On track for >75% decrease in incidence 2000–2015

ABER (microscopy & RDT)

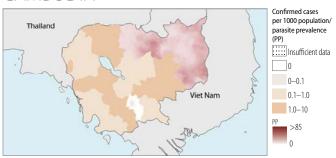
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

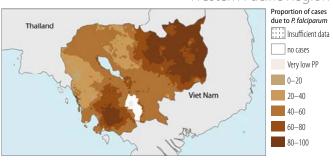
— Slide positivity rate

1.5

0.5

CAMBODIA Western Pacific Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	7 360 000	48
Low transmission (0–1 cases per 1000 population)	3 460 000	23
Malaria free (0 cases)	4 480 000	29
Total	15 300 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			(36%) maculatus, An. sundaicus	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:		Estimated cases, 2013:	[62 000-95 000]
Reported deaths:	,	18	Estimated deaths, 2013:	[10-220]

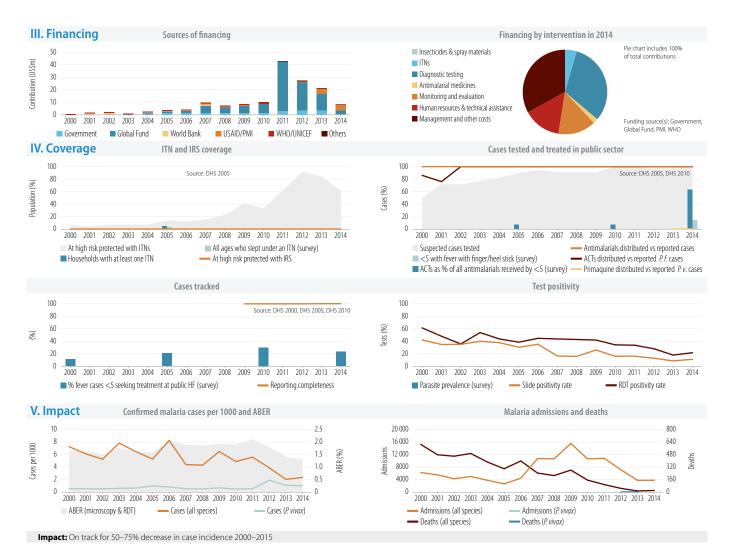
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2000 2000
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2000 2000
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes Yes No Yes	2000 2008 - 2013 2012 - 2010
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No Yes No No	- 2010 - -

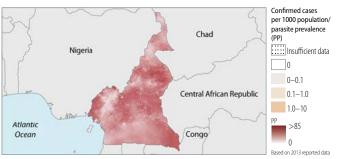
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	AS+MQ; DHA-PPQ+PQ	2000
Treatment failure of P. falciparum	QN+T	2000
Treatment of severe malaria	AM; AS; QN	-
Treatment of P. vivax	DHA-PPQ	2011
Dosage of primaquine for radical treatment of P. vivax	0.25 m	ıg/kg (14 d)
Type of RDT used	<i>P. f + P. v</i> specif	ic (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %) Medicine Median Max Year Min Follow-up No. of studies Species AS+MQ 2005-2011 3.15 19.4 42 days 14 P. falciparum DHA-PPO 2008-2015 8.1 62.5 42 days 25 P. falciparum DHA-PPQ 2010-2014 28 days P. vivax

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2014	Yes	Yes	-	-	An. dirus. An. minimus, other



CAMEROON African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	16 200 000	71
Low transmission (0–1 cases per 1000 population)	6 600 000	29
Malaria free (0 cases)	0	0
Total	22 800 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			x (0%) , An. funestus, An. mouche	ti, An. nili
Programme phase:	Control			
Reported confirmed cases:			Estimated cases, 2013:	[3400000-7500000]
Reported confirmed cases at Reported deaths:	community level:	0 4398	Estimated deaths, 2013:	[5200-14000]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2004
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	2007
	DDT is authorized for IRS	No	-
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test	Yes	2011
_	Malaria diagnosis is free of charge in the public sector	No	-
Treatment	ACT is free for all ages in public sector	No	-
	Sale of oral artemisinin-based monotherapies	Is banned	
	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	No	-
	Primaquine is used for radical treatment of P. vivax	No	-
	G6PD test is a requirement before treatment with primaquine	-	-
	Directly observed treatment with primaquine is undertaken	-	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	2004
Surveillance	ACD for case investigation (reactive)	_	-
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated <i>P. vivax</i> cases routinely admitted	No	-

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+AQ	2004	
First-line treatment of P. falciparum	AS+AQ	2004	
Treatment failure of P. falciparum	QN	2004	
Treatment of severe malaria	AS, AM; QN	2004	
Treatment of P. vivax	=	-	
Dosage of primaquine for radical treatment of P. vivax		-	
Type of RDT used	P. f + all species (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+AQ	2005-2013	0	3.7	8.7	28 days	15	P. falciparum
AL	2006-2013	0	1.9	5	28 days	12	P. falciparum

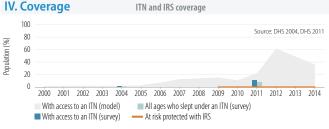
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

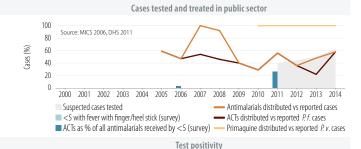
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	No	An. aambiae s.s.





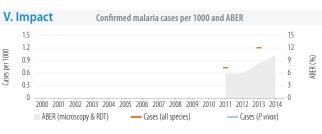
No data reported for 2014

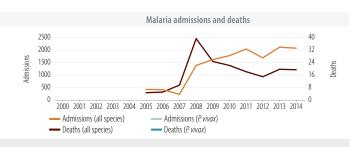






No data reported for 2014

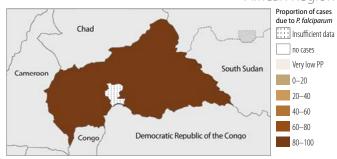




CENTRAL AFRICAN REPUBLIC

African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4800000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	4800000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viv An. gambiae, An. funestus,		
Programme phase:	Control		
Reported confirmed cases:	295 088	Estimated cases, 2013:	[870 000-2 400 000]
Reported deaths:	635	Estimated deaths, 2013:	[2700-4900]

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2012 -
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	=
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No No	2010 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No - -	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2005
First-line treatment of P. falciparum	AL	-
Treatment failure of P. falciparum	QN	-
Treatment of severe malaria	AS, AM; QN	2005
Treatment of P. vivax	_	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

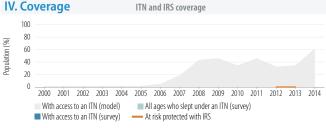
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2008-2010	0	3.8	7.6	28 days	2	P. falciparum
AS+AQ	2008-2010	0	3.4	6.8	28 days	2	P. falciparum

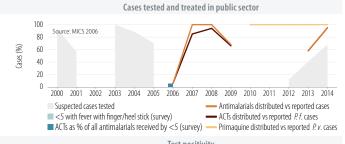
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2014	Yes	Yes	No	No	An. gambiae s.l.



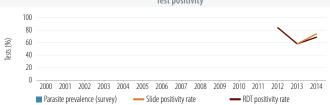


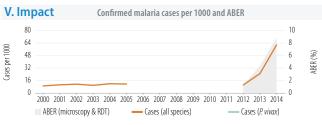
No data reported for 2014

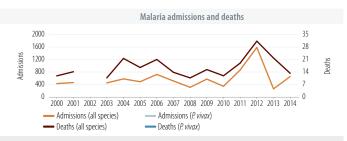






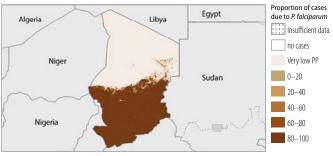






CHAD African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	9 160 000	67
Low transmission (0–1 cases per 1000 population)	4 290 000	32
Malaria free (0 cases)	149 000	1
Total	13600000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. vivo An. arabiensis, An. funestus		
Programme phase:	Control		
Reported confirmed cases:	914032	Estimated cases, 2013:	[710 000-3 300 000]
Reported deaths:	1720	Estimated deaths, 2013:	[3300-11000]

II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	- -
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	_ 2012 _ _ _ _ _ _
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	– No – Yes –	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL; AS+AQ	_
First-line treatment of P. falciparum	AL; AS+AQ	-
Treatment failure of P. falciparum	QN	-
Treatment of severe malaria	AS,QN	2014
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		
Type of RDT used		P. f only.

 Therapeutic efficacy tests (clinical and parasitological failure, %)

 Medicine
 Year
 Min
 Median
 Max
 Follow-up
 No. of studies
 Species

 AS+AQ
 2009–2011
 0
 1.8
 28 days
 3
 P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2011–2014
 Yes
 Yes
 No
 No
 An. gambiae s.l.



Deaths (all species)

— Deaths (P. vivax)





I. Epidemiological profile

0.4

0.2

ABER (microscopy & RDT)

Impact: On track for >75% decrease in incidence 2000–2015

Population	2014	%
Number of active foci	56	
Number of people living within active foci	47 900	0
Number of people living in malaria free areas	1 377 200 000	100
Total	1 377 247 900	

Parasites and vectors				
Major plasmodium species: Major anopheles species:		%), P. vivax (88%) anthropophagus, An. dirus, An. mi	nimus	
Programme phase:	Elimination			
Total confirmed cases, 2014:	2921	Total deaths, 2014:	24	
Indigenous cases, 2014:	56	Indigenous deaths, 2014:	0	
Introduced cases 2014:	0			

II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2003 2000
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2000
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2000
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No Yes Yes	2006 2013 1970 - 1970 1970
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes Yes Yes No No Yes Yes	2010 2010 2010 - - 2010 1956

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Slide positivity rate

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	ART+NQ; ART-PPQ; AS+AQ;	DHA-PPQ 2009
Treatment failure of P. falciparum		_
Treatment of severe malaria	AM; AS; PYR	2009
Treatment of P. vivax	CQ+PQ(8d)	2006
Dosage of primaquine for radical treatment of P. vivax		0.75mg/kg(8 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CQ+PQ	2008-2010	0	0	0	28 days	2	P. vivax
CQ	2008-2013	0	0	4.3	28 days	11	P. vivax
DHA-PPQ	2012-2014	0	0	6	42 days	5	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2010-2012	Yes	Yes	-	Yes	An. sinensis. An. vaaus	



2000

1000

0

RDT positivity rate

8000

0

Total cases

— Indigenous cases (P. falciparum)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Imported cases

— Indigenous cases (P. vivax)

Region of the Americas

40 - 0





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	2 150 000	5
Low transmission (0–1 cases per 1000 population)	8 470 000	18
Malaria free (0 cases)	37 200 000	78
Total	47 800 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		c (50%) neztovari, An. neivai, An. punctimacul	la, An. pseudopunctipennis
Programme phase:	Control		
Reported confirmed cases:	40 768	Estimated cases, 2013:	[57 000-100 000]
Reported deaths:	17	Estimated deaths, 2013:	<100

II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1958 -
Larval control	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1984 1958
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes are allowed No Yes No No Yes	2008 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falaipanum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	1998 - - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL	2006
Treatment failure of P. falciparum	QN+CL	2004
Treatment of severe malaria	AS; AL	-
Treatment of P. vivax	CQ+PQ	1960s
Dosage of primaquine for radical treatment of P. vivax	0.2	5 mg/kg (14 d)
Type of RDT used	P. f + P. v sp	ecific (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CQ+PQ	2006-2011	0	0	0	28 days	2	P. vivax
AL	2007-2009	0	0.6	1	28 days	3	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011–2014	Yes	Yes	-	No	An. albimanus, An. darlingi, other

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Deaths (P. vivax)

- Admissions (P. vivax)



160

Admissions (all species)

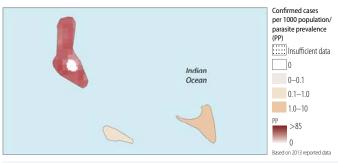
Deaths (all species)

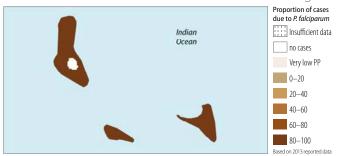
ABER (microscopy & RDT)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Cases (all species)

COMOROS African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	366 000	48
Low transmission (0–1 cases per 1000 population)	404 000	52
Malaria free (0 cases)	0	0
Total	770 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100% An. gambiae, An. fu		x (0%)	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases a	t community level	2203 0	Estimated cases, 2013:	[82 000-180 000]
Reported deaths:	ic community level.	-	Estimated deaths, 2013:	[10-660]

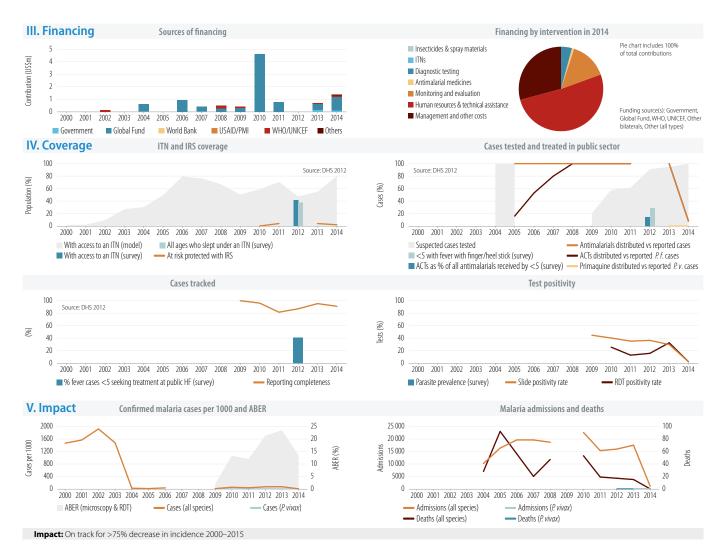
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	2010
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1997 2011
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No	2010 2005 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes Yes No	2013 - 2010 - -

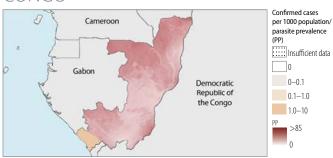
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2003
First-line treatment of <i>P. falciparum</i>	AL	2003
Treatment failure of P. falciparum	QN	2003
Treatment of severe malaria	QN	2003
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		
Type of RDT used	P. f + all sp	ecies (Combo)

merapeutic	enicacy tests (till	iicai aiic	i parasituluy	icai iaiiui e	e, 70)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2013	0	0	3.2	28 days	16	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2014-2015	No	-	-	-	An. gambiae s.l.



CONGO African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4500000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	4500000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			ax (0%) An. nili, An. moucheti	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	66 323 0	Estimated cases, 2013:	[500 000-1 200 000]
Reported deaths:	, , , , , , , , , , , , , , , , , , , ,	271	Estimated deaths, 2013:	[300-2300]

II. Intervention policies and strategies

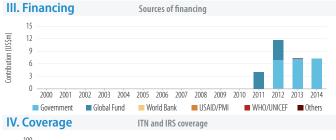
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2011 2011
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2007 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2006
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	=
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No Is banned No No No No	_ 2006 _ _ _ _ _ _
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	_
First-line treatment of P. falciparum	AS+AQ	-
Treatment failure of P. falciparum	AL	-
Treatment of severe malaria	QN	-
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

 $\underline{\textbf{Therapeutic efficacy tests (clinical and parasitological failure, \%)}}$

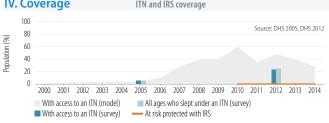
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+AQ	2005-2014	0	2.7	5.6	28 days	3	P. falciparum
AL	2006-2014	0	2.8	3.6	28 days	3	P. falciparum

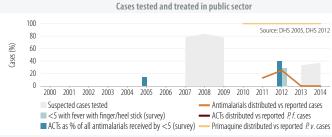
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2013-2014	Yes	Yes	No	No	An. aambiae s.l.	

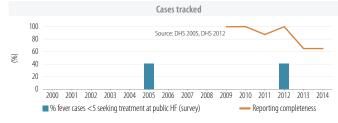




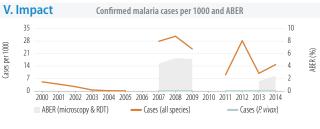
No data reported for 2014

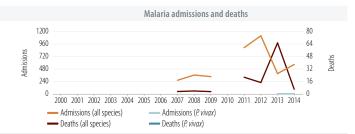
















I. Epidemiological profile

Population	2014	%
Number of active foci	-	
Number of people living within active foci	0	0
Number of people living in malaria free areas	4760000	100
Total	4760000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (0' An. albimanus	%), P. vivax (0%)	
Programme phase:	Elimination		
Total confirmed cases, 2014:	6	Total deaths, 2014:	0
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0
Introduced cases 2014:	0		

II. Intervention policies and strategies

	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1957 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	_ 1957
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No - Yes Yes No Yes Yes	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes Yes No Yes Yes Yes	- - - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	_
First-line treatment of P. falciparum	CQ+PQ(1d)	-
Treatment failure of P. falciparum	AL	-
Treatment of severe malaria	QN	_
Treatment of P. vivax	CQ+PQ(7d); $CQ+PQ(14d)$	-
Dosage of primaquine for radical treatment of P. vivax	0.50 mg/kg (7 d), 0.25 m	g/kg (14 d)

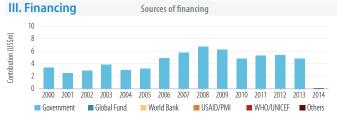
 $\underline{ The rapeutic \ efficacy \ tests \ (clinical \ and \ parasitological \ failure, \%)}$

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	_	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

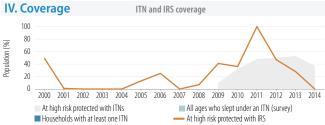
 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

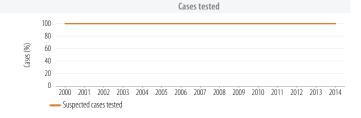
 2010–2014



Financing by intervention in 2014

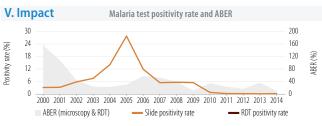
No data reported for 2014

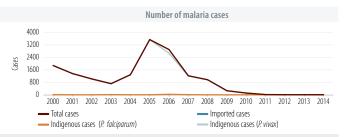












CÔTE D'IVOIRE

African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	22 200 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	22 200 000	

Parasites and vectors			
	2611	(00)	
Major plasmodium species:		ix (0%)	
Major anopheles species:	An. gambiae, An. funestus		
Programme phase:	Control		
Reported confirmed cases:	3712831	Estimated cases, 2013:	[6 400 000-11 000 000]
Reported confirmed cases a	community level: 55 015		
Reported deaths:	2069	Estimated deaths, 2013	: [12 000-20 000]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2008
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	No	-
	DDT is authorized for IRS	No	-
Larval control	Use of larval control recommended	-	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
_	Malaria diagnosis is free of charge in the public sector	Yes	2012
Treatment	ACT is free for all ages in public sector	Yes	-
	Sale of oral artemisinin-based monotherapies	Is banned	
	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	No	_
	Primaquine is used for radical treatment of P. vivax	-	-
	G6PD test is a requirement before treatment with primaquine	-	-
	Directly observed treatment with primaquine is undertaken	-	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	-
Surveillance	ACD for case investigation (reactive)	No	-
	ACD of febrile cases at community level (pro-active)	-	-
	Mass screening is undertaken	-	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	-
	Uncomplicated P. vivax cases routinely admitted	No	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2003
First-line treatment of P. falciparum	AS+AQ	2003
Treatment failure of P. falciparum	AL	2003
Treatment of severe malaria	QN	2003
Treatment of P. vivax	-	-
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		-

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine Year Min Median Max Follow-up No. of

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2014	0	1.5	7.4	28 days	12	P. falciparum
AS+AQ	2007-2014	0	0	1.3	28 days	7	P. falciparum

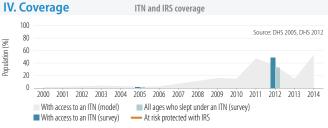
 $\underline{Insecticide\ susceptibility\ bioassays\ (reported\ resistance\ to\ at\ least\ one\ insecticide\ for\ any\ vector\ at\ any\ locality)}$

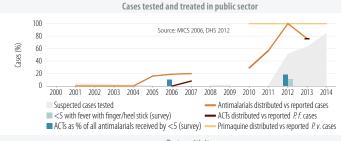
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2013	Yes	Yes	Yes	Yes	An. coluzzii, An. gambiae s.l., An.
					aambiae s.s.





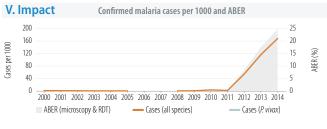
No data reported for 2014

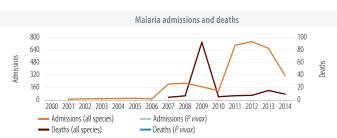












DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

South-East Asia Region





I. Epidemiological profile

Population	2014	%
Number of active foci	-	
Number of people living within active foci	11700000	47
Number of people living in malaria free areas	13 300 000	53
Total	25 000 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (0% An. sinensis), P. vivax (100%)	
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	10535	Total deaths, 2014:	0
Indigenous cases, 2014:	10535	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0	-	

II. Intervention policies and strategies

Policies/strategies ITNs/LLINs distributed free of charge	Yes/No	Adopted
ITNs/LLINs distributed free of charge		
	Yes Yes	2002 2002
IRS is recommended DDT is authorized for IRS	Yes -	2005
Use of larval control recommended	Yes	2002
IPT used to prevent malaria during pregnancy	N/A	_
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1953 1953
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	No Yes No Yes	2000 - 2000 2000 2002
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	No Yes No No No No	_ 2012 _ _ _ _ _ _
	ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax GPD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken	ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Lise of larval control recommended Pes authorized for IRS IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Wes Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector ACT is free for all ages in public sector ACT is free for all ages in public sector Never allower Single dose of primaquine is used as gametocidal medicine for P. folciparum No Primaquine is used for radical treatment of P. vivax Yes G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken No Uncomplicated P. falciparum cases routinely admitted No No Foci and case investigation undertaken No

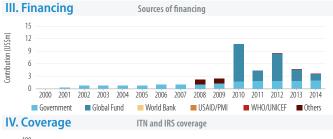
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	=	-
Treatment failure of P. falciparum	=	-
Treatment of severe malaria	=	_
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)

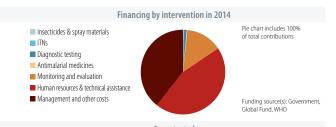
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	_	-	

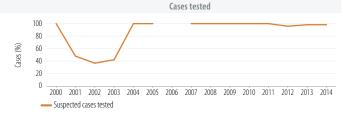
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

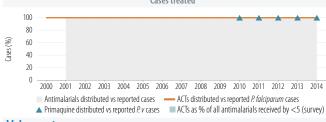
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2011-2014	No	No	-	No	Anopheles spp.	

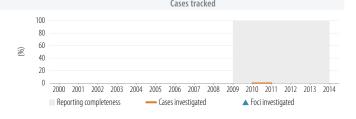


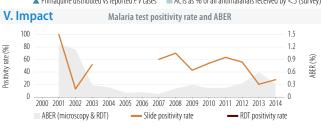


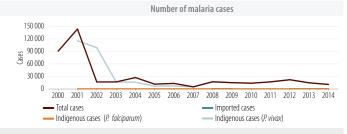




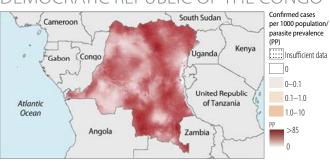








DEMOCRATIC REPUBLIC OF THE CONGO





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	72 700 000	97
Low transmission (0–1 cases per 1000 population)	2 200 000	3
Malaria free (0 cases)	0	0
Total	74 900 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. funestus, A		
Programme phase:	Control		
Reported confirmed cases:	9 9 6 8 9 8 3	Estimated cases, 2013:[16	000 000-26 000 000]
Reported confirmed cases at	community level: 319536		
Reported deaths:	25 502	Estimated deaths, 2013:	[33 000-72 000]

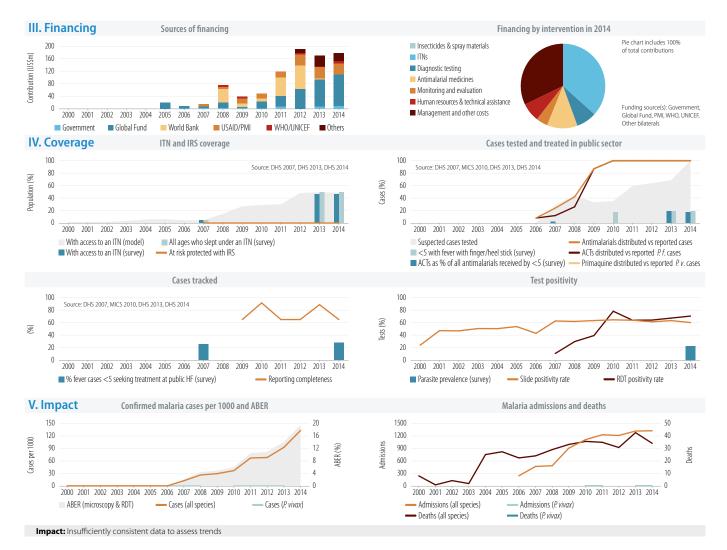
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adontod
	163/110	Adopted
ITNs/LLINs distributed free of charge	Yes	2006
ITNs/LLINs distributed to all age groups	Yes	2008
IRS is recommended	Yes	2007
DDT is authorized for IRS	No	-
Use of larval control recommended	Yes	1998
IPT used to prevent malaria during pregnancy	Yes	2004
Patients of all ages should receive diagnostic test	Yes	2010
Malaria diagnosis is free of charge in the public sector	Yes	2010
ACT is free for all ages in public sector	Yes	2005
	Is banned	2009
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i>	No	-
Primaquine is used for radical treatment of P. vivax	No	-
G6PD test is a requirement before treatment with primaquine	No	-
Directly observed treatment with primaquine is undertaken	No	-
System for monitoring of adverse reactions to antimalarials exists	Yes	2010
ACD for case investigation (reactive)	-	-
ACD of febrile cases at community level (pro-active)	Yes	2010
Mass screening is undertaken	No	-
Uncomplicated P. falciparum cases routinely admitted	No	-
Uncomplicated P. vivax cases routinely admitted	No	-
	ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes DDT is authorized for IRS No Use of larval control recommended Yes IPT used to prevent malaria during pregnancy Yes Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes ACT is free for all ages in public sector Yes Sale of oral artemisinin-based monotherapies Is banned Single dose of primaquine is used or syametocidal medicine for P. falicparum No Primaquine is used for radical treatment of P vivax No G6PD test is a requirement before treatment with primaquine No Directly observed treatment with primaquine is undertaken No System for monitoring of adverse reactions to antimalarials exists Yes ACD of febrile cases at community level (pro-active) Yes ACD of febrile cases at community level (pro-active) Yes Mass screening is undertaken No Uncomplicated P falizparum cases routinely admitted No

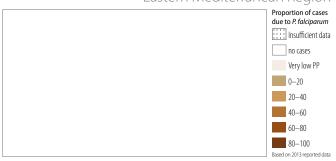
Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+AQ	2005	
First-line treatment of P. falciparum	AS+AQ	2005	
Treatment failure of P. falciparum	QN	2005	
Treatment of severe malaria	AS, QN	2005	
Treatment of P. vivax	_	-	
Dosage of primaquine for radical treatment of P. vivax		-	
Type of RDT used	P.f + all species (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species AS+AQ 2005-2012 4.2 6.9 28 days P. falciparum 0 ΑL 2005-2013 0 2.4 9.2 28 days 10 P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	No	No	An. gambiae s.l.







I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	0	0
Low transmission (0–1 cases per 1000 population)	438 000	50
Malaria free (0 cases)	438 000	50
Total	876 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. vivo An. gambiae, An. arabiensi		
Programme phase:	Control		
Reported confirmed cases:	9439	Estimated cases, 2013:	[1000-17000]
Reported deaths:	28	Estimated deaths, 2013:	<50

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2006
Larval contro	I Use of larval control recommended	Yes	2008
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 2007
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist:	Yes Never allowe Yes Yes No No No	2007 d 2014 2014 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2014
First-line treatment of P. falciparum	AL+PQ	2014
Treatment failure of P. falciparum	AS+AQ	2014
Treatment of severe malaria	QN	=
Treatment of P. vivax	CQ+PQ (14 d)	=
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used		-

inerapeutic emcacy tests (clinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

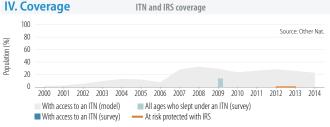
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011	No	No	-	No	An. gambiae s.l.

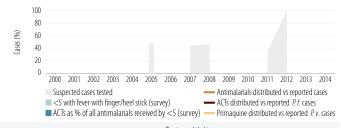




No data reported for 2014

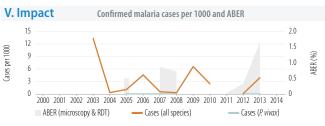
Cases tested and treated in public sector

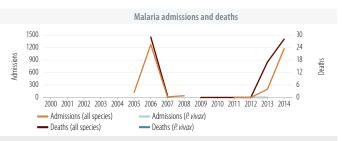












DOMINICAN REPUBLIC

Region of the Americas





I. Epidemiological profile

Population	2014	9/
High transmission (>1 case per 1000 population)	96 200	
Low transmission (0–1 cases per 1000 population)	4910000	47
Malaria free (0 cases)	5 390 000	52
Total	10 400 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		x (1%)	
Programme phase:	Pre-elimination		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[650–980] <10

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008 2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1946 –
Larval contro	Use of larval control recommended	Yes	1964
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1964 1964
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No - Yes Yes No Yes No	- 1964 1964 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	- 1964 1964 - -

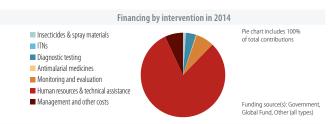
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	CQ+PQ(1d)	_
Treatment failure of P. falciparum	CQ; QN	-
Treatment of severe malaria	CQ; QN	_
Treatment of P. vivax	CQ+PQ(14d)	_
Dosage of primaquine for radical treatment of P. vivax	0.2	5 mg/kg (14 d)
Type of RDT used		P. f only.

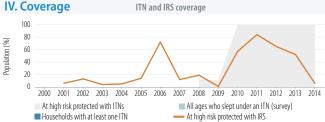
Therapeutic emicacy tests (chinical and parasitological familie, 70)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	-	-	

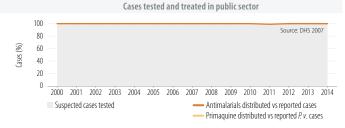
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2012-2014	Yes	No	-	Yes	An. albimanus

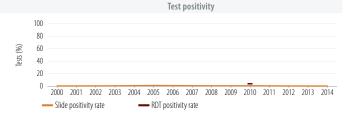


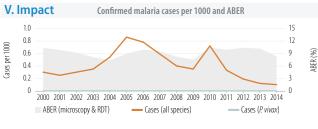


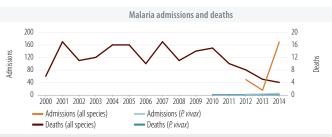
















I. Epidemiological profile

Population	2014	%
Number of active foci	=	
Number of people living within active foci	_	-
Number of people living in malaria free areas	15 900 000	100
Total	15 900 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		%), P. vivax (80%) n. punctimacula, An. pseudopunctipennis	
Programme phase:	Pre-elimination		
Total confirmed cases, 2014: Indigenous cases, 2014: Introduced cases, 2014:	241 241	Total deaths, 2014: Indigenous deaths, 2014:	-

II. Intervention policies and strategies

II. IIIter	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2005 -
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	_
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1956 1956
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists.	Yes Never allowe Yes Yes No Yes	2005 ed – – – –
Surveillance	·	Yes Yes No No No No Yes	- - - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	AL+PQ	2012
Treatment failure of P. falciparum	QN+CL	2004
Treatment of severe malaria	QN	2004
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax		0.50 mg/kg (7 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2006	0	0	0	28 days	1	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011-2012	Yes	No	Yes	Yes	An. albimanus





Region of the Americas





I. Epidemiological profile

Population	2014	%
Number of active foci	2	
Number of people living within active foci	92 700	2
Number of people living in malaria free areas	6 020 000	98
Total	6112700	

Parasites and vectors			
Major plasmodium species: Major anopheles species:), P. vivax (100%) n. pseudopunctipennis	
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	8	Total deaths, 2014:	0
Indigenous cases, 2014:	6	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0		

II. Intervention policies and strategies

Adopted
-
_
-
_
2010 -
- - - - -
- - - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	CQ+PQ(1d)	_
Treatment failure of P. falciparum	AL	_
Treatment of severe malaria	QN	2012
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)

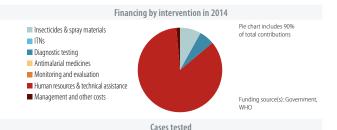
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

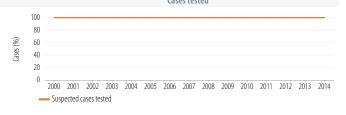
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	-	-	-	-	-



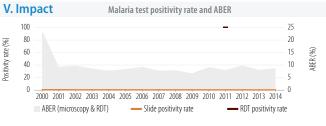


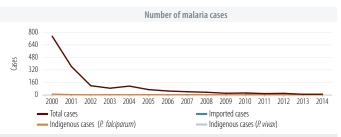
















I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	821 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	821 000	

Parasites and vectors	
Major plasmodium species:	P. falciparum (100%), P. vivax (0%)
Major anopheles species:	An. gambiae, An. melas
Programme phase:	Control
Reported confirmed cases:	20417 Estimated cases, 2013: [68 000 – 290 000]
Reported deaths:	- Estimated deaths, 2013: [160 – 440]

II. Intervention policies and strategies

II. IIItel V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2008
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	2004 2015
Larval control	Use of larval control recommended	Yes	2013
IPT	IPT used to prevent malaria during pregnancy	-	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 2007
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No No	2010 2014 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No Yes Yes	- - - -

Antimalaria treatment policy	Medicine	Adopted		
First-line treatment of unconfirmed malaria	AS+AQ	2004		
First-line treatment of P. falciparum	AS+AQ	2004		
Treatment failure of P. falciparum	QN	2004		
Treatment of severe malaria	ÁS	2004		
Treatment of P. vivax	-	_		
Dosage of primaquine for radical treatment of P. vivax		_		
Type of RDT used	P. f + all sp	P.f + all species (Combo).		

merapeutic	enicacy tests (cii	ilicai alic	i parasituluy	icai iaiiui e	, 70)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
ΛS L ΛΩ	2006 2011	Λ	2.3	5	28 days	5	D falcinaru

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

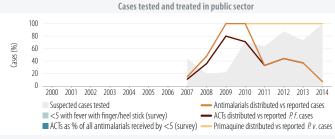
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	No	No	An. coluzzii, other

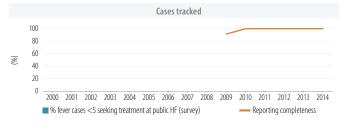


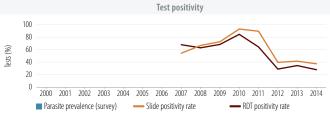


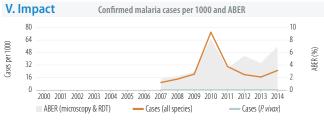
No data reported for 2014

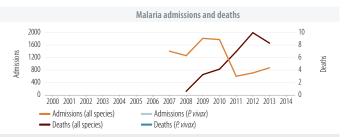












ERITREA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	3 630 000	71
Low transmission (0–1 cases per 1000 population)	1 480 000	29
Malaria free (0 cases)	0	0
Total	5 1 1 0 0 0 0	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (73% An. arabiensis), P. vivax	(26%)	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:		Estimated cases, 2013:	[42 000-120 000]
Reported deaths:	,	15	Estimated deaths, 2013:	[10-270]

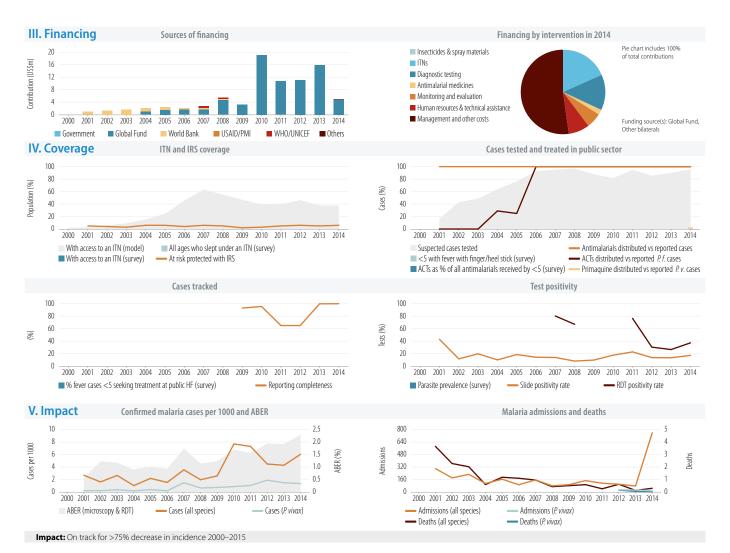
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2002 2002
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1995 –
Larval control	Use of larval control recommended	Yes	1995
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1997 1997
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No No	2007 - 2002 - - 2013
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+AQ	2007	
First-line treatment of <i>P. falciparum</i>	AS+AQ	2007	
Treatment failure of <i>P. falciparum</i>	QN	2002	
Treatment of severe malaria	QN	2002	
Treatment of P. vivax	AS+AQ+PQ	2007	
Dosage of primaquine for radical treatment of P. vivax	0.25 mg/kg (14 d)		
Type of RDT used	P. f + P. v specific (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Follow-up No. of studies Median Max Medicine Year Species P. falciparum AS+AQ 2006-2012 2.25 9.3 28 days 0 16

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	No	No	An. funestus s.l., An. gambiae s.l.



ETHIOPIA African Region





I. Epidemiological profile

2014	%
26 400 000	27
39600000	41
31 000 000	32
97 000 000	
	26 400 000 39 600 000 31 000 000

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (59%), P. An. arabiensis, An. pho		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[790 000-7 900 000] [240-19 000]

II. Intervention policies and strategies

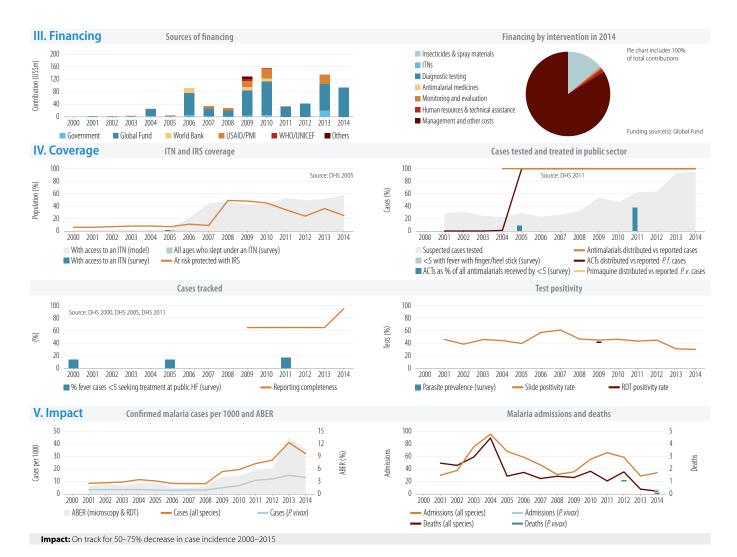
II. Interv	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2004
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1960 –
Larval contro	Use of larval control recommended	Yes	1960
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1960 1960
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist:	Yes Never allowed No No No No S	2004 2004 - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. faiciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AL	2004	
First-line treatment of P. falciparum	AL	2004	
Treatment failure of P. falciparum	QN	2004	
Treatment of severe malaria	AS; AM; QN	2004	
Treatment of P. vivax	CQ	2004	
Dosage of primaquine for radical treatment of P. vivax		-	
Type of RDT used	P. f + P. v specific (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
QN	2006-2006	10	10	10	28 days	1	P. falciparum
CQ	2006-2010	3.8	7.05	13.7	28 days	4	P. vivax
AL	2006-2013	0	1.1	7.5	28 days	17	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. arabiensis, An. gambiae s.l.



FRENCH GUIANA, FRANCE

Suriname Brazil

I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	223 000	86
Low transmission (0–1 cases per 1000 population)	37 800	14
Malaria free (0 cases)	0	0
Total	261 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (47%), P. viva. An. darlingi	x (52%)	
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[940-3400] <10

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2012 2012
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	-
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Yes No	- ed - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No Yes Yes	- - - -

Medicine	Adopted
_	_
AL	-
AQ+PG	-
Artesunate IV + relais AL	-
CQ+ PQ après dosage G6PD	-
0.50 mg	/kg (14 d)
P. f + all species	(Combo).
	AL AQ+PG Artesunate IV + relais AL CQ+ PQ après dosage G6PD 0.50 mg

Therapeutic enicacy tests (chinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

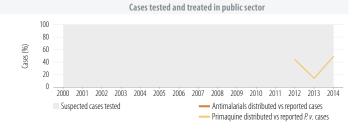
 2010–2014



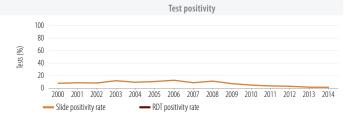


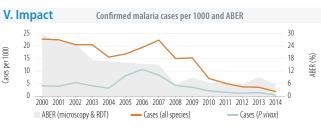
No data reported for 2014

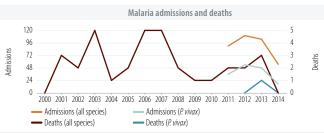












GABON African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	1 690 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	1 690 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (94% An. funestus, An. ga			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	31 900 0	Estimated cases, 2013:	[110 000-630 000]
Reported deaths:	,	159	Estimated deaths, 2013:	[96–510]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	No Yes	2005 2007
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2013
Larval control	Use of larval control recommended	Yes	2013
IPT	IPT used to prevent malaria during pregnancy	Yes	2003
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No Is banned No No No No No	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2003
First-line treatment of <i>P. falciparum</i>	AS+AQ	2003
Treatment failure of P. falciparum	AL	2003
Treatment of severe malaria	AS; AM; QN	2003
Treatment of <i>P. vivax</i>		_
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		PAN-only.

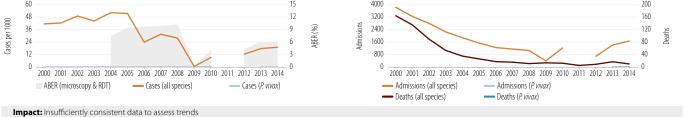
merapeutic emicacy tests (chinical and parasitological failure, 70)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

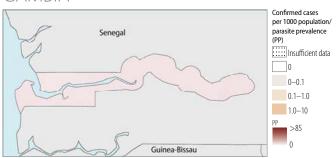
 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

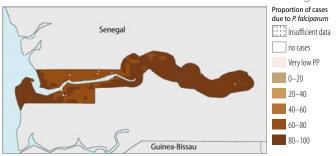
 2010–2014





GAMBIA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	1 930 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	1 930 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		x (0%) . An. melas, An. pharoensis	, An. funestus, An. nili
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at	community level:	Estimated cases, 2013:	[330 000-560 000]
Reported deaths:	, , , , , ,	Estimated deaths, 2013:	[120-930]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2000 1998
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	2008 2007
Larval contro	Use of larval control recommended	-	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2002
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2009 1998
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes are allowed – – – –	2008 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	- - - -	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2005
First-line treatment of P. falciparum	AL	2005
Treatment failure of P. falciparum	QN	2005
Treatment of severe malaria	QN	2005
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

 Therapeutic efficacy tests (clinical and parasitological failure, %)

 Medicine
 Year
 Min
 Median
 Max
 Follow-up
 No. of studies
 Species

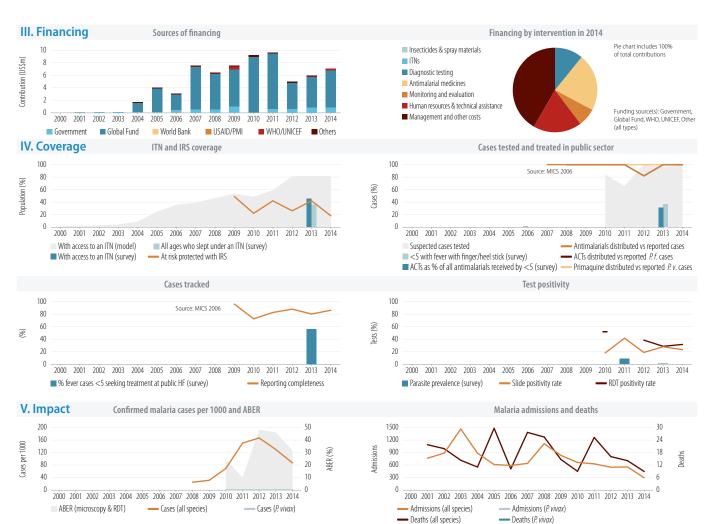
 AL
 2007–2013
 0
 1.6
 11.9
 28 days
 7
 P. falciparum

nt 2007 2013 0 1.0 11.7 20 days 7 1.10(c)pululii

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2010–2014



GHANA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	26 800 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	26 800 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viv An. gambiae, An. funestus,		
Programme phase:	Control		
Reported confirmed cases:	3415912	Estimated cases, 2013: [5 800 000-11 000 000]
Reported confirmed cases a	community level: 0		
Reported deaths:	2200	Estimated deaths, 2013:	[5900-18 000]

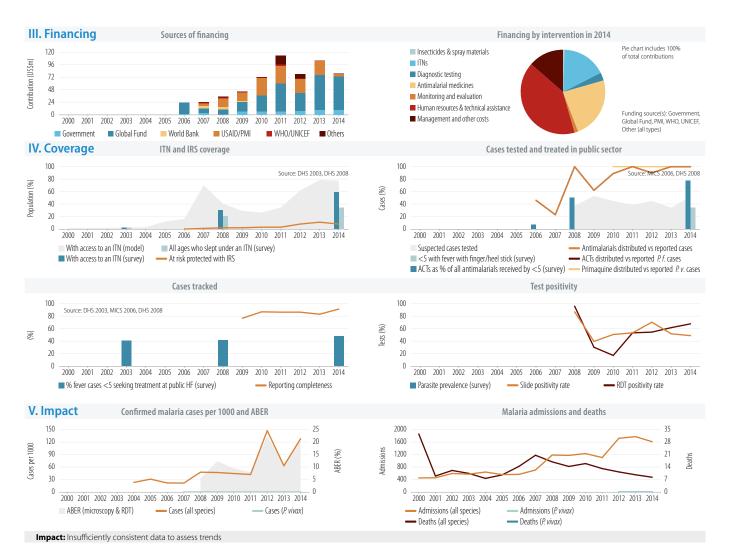
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2010
IRS is recommended DDT is authorized for IRS	Yes No	2005 -
Use of larval control recommended	Yes	1999
IPT used to prevent malaria during pregnancy	Yes	2003
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2008
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No Is banned No No No No Yes	2006 - - - - - 2001
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended IRS is resolved in the present in the public sector IRS is recommended IRS is recommen

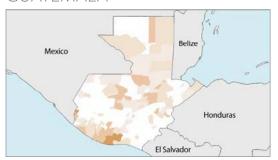
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2004
First-line treatment of P. falciparum	AL; AS+AQ	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; AM; QN	2004
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2005-201 13.8 28 days P. falciparum 0 AS+AQ 2005-2011 0 3.15 14 28 days 12 P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	No	An. gambiae s.l.



Region of the Americas





I. Epidemiological profile

Population	2014	9
High transmission (>1 case per 1000 population)	3 980 000	2
Low transmission (0–1 cases per 1000 population)	8 290 000	52
Malaria free (0 cases)	3 720 000	2
Total	16 000 000	

Parasites and vectors			
Major plasmodium species: P. falciparum (2%), P. vivax (98%) Major anopheles species: An. albimanus, An. pseudopunctipennis, An. darlingi			
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[6600-23 000] <10

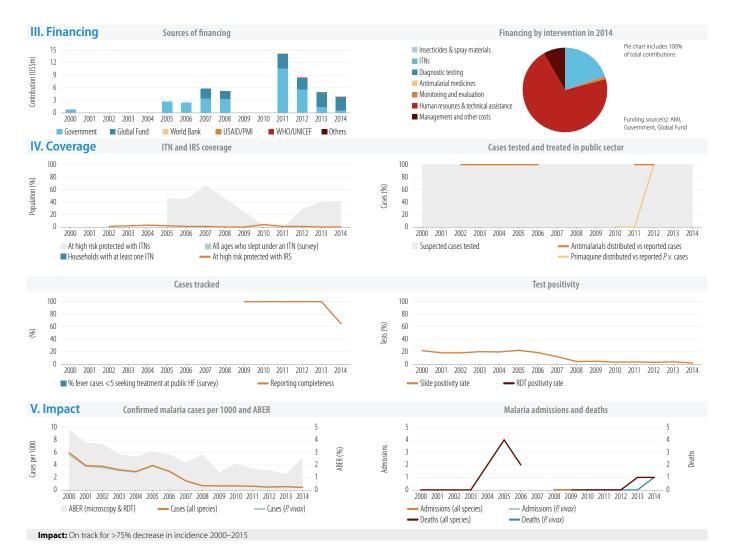
II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2006
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval contro	Use of larval control recommended	Yes	2005
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exis	Yes No No	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	CQ+PQ(3d)	_
Treatment failure of <i>P. falciparum</i>	=	_
Treatment of severe malaria	QN	-
Treatment of P. vivax	CQ+PQ(14d)	_
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + P. v spe	cific (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %) Median Max Medicine Year Min Follow-up No. of studies Species

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011	No	-	No	Yes	An. albimanus, An. darlingi, An.
					vestitinennis



GUINEA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	12 300 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	12 300 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			x (0%) An. melas, An. arabiensis	
Programme phase:	Control			
Reported confirmed cases:		660 207	Estimated cases, 2013:	[3800000-6000000]
Reported confirmed cases at	community level:	67799		
Reported deaths:	,	1067	Estimated deaths, 2013:	[7400-13 000]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2013 -
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2012 2012
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2010 - - - - - 2009
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No Yes No	- - - 2009 -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	-
First-line treatment of P. falciparum	AS+AQ	-
Treatment failure of P. falciparum	QN	
Treatment of severe malaria	AS	-
Treatment of P. vivax	-	=
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	<i>P. f</i> + all sp	ecies (Combo).
	- (2	

inerapeutic emicacy tests (clinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

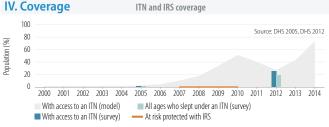
 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

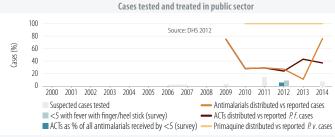
 2012–2014
 Yes
 Yes
 Yes
 An. gambiae s.l.



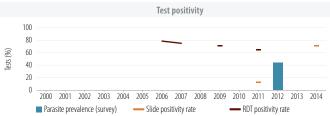


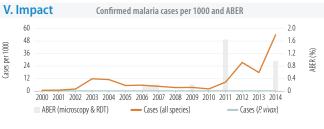
No data reported for 2014

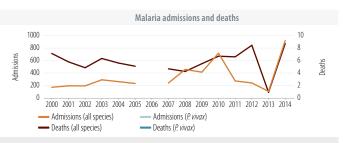
















I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	1 800 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	1 800 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viv An. gambiae, An. funestus	ax (0%)	
Programme phase:	Control		
Reported confirmed cases:	93 431	Estimated cases, 2013:	[70 000-370 000]
Reported deaths:	357	Estimated deaths, 2013:	[160-990]

II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2005
IRS	IRS is recommended DDT is authorized for IRS	No No	-
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2008 2008
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No Is banned No No No No Yes	_ 2006 _ _ _ _ _ _
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No - -	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	-
First-line treatment of P. falciparum	AL	-
Treatment failure of P. falciparum	QN	-
Treatment of severe malaria	AS; QN	-
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2008	3.6	3.6	3.6	28 days	1	P. falciparum

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2010–2014



GUYANA

Region of the Americas





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	267 000	35
Low transmission (0–1 cases per 1000 population)	443 000	58
Malaria free (0 cases)	53 500	7
Total	764 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (42%), P. vivax An. darlingi, An. aquasalis	(58%)	
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[45 000–90 000] [10–190]

II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1946 1946
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No Yes	2005 d – – – – –
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL+PQ(1d)	2004
Treatment failure of P. falciparum	QN+T	2004
Treatment of severe malaria	AM	=-
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax	0.2	5 mg/kg (14 d)
Type of RDT used		-

illerapeutic e	ilicacy tests (cil	ilical alic	i parasitulug	icai iaiiui c	, /0)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CQ	2006-2006	32.4	32.4	32.4	28 days	1	P. vivax

utic officacy tosts (clinical and parasitological failure %)

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2010–2014

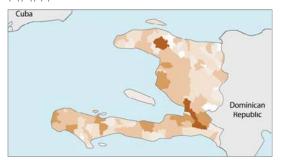


d on 2013 reported data



HAITI

Region of the Americas





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	5 6 2 0 0 0 0	53
Low transmission (0–1 cases per 1000 population)	4 980 000	47
Malaria free (0 cases)	0	0
Total	10600000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		ax (0%)	
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[62 000-170 000] [10-600]

II. Intervention policies and strategies

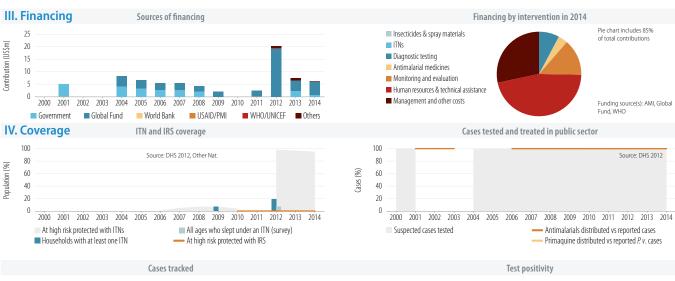
II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2012 2012
IRS	IRS is recommended DDT is authorized for IRS	No No	-
Larval contro	Use of larval control recommended	Yes	2011
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1988 2011
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	No No No	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

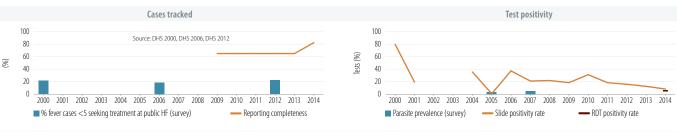
Medicine	Adopted
=	_
CQ+PQ(1d)	-
MQ; SP	-
QN	-
CQ+PQ(14d)	-
0.2	5 mg/kg (14 d)
	_
	CQ+PQ(1d) MQ; SP QN CQ+PQ(14d)

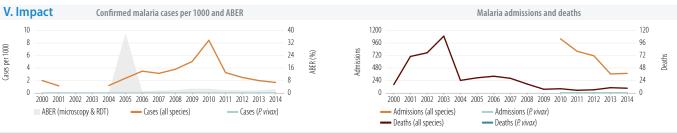
illerapeutic eili	cacy tests (c	iiiiicai aiiu	parasitulug	icai iaiiui e	, 70)			
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2013-2014	No	No	-	No	An. albimanus







HONDURAS

Region of the Americas





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	371 000	- 5
Low transmission (0–1 cases per 1000 population)	4670000	59
Malaria free (0 cases)	2 920 000	37
Total	7 960 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		x (83%) ennis, An. darlingi, An. cruzii, An. argyritars	is
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[8200-15 000] <10

II. Intervention policies and strategies

Impact: On track for >75% decrease in incidence 2000–2015

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	_
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
Treatment	ACT is free for all ages in public sector Sale of oral arternisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No No	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	- - - -

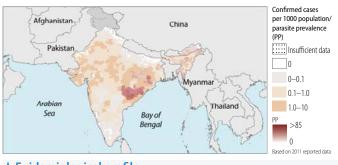
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	CQ+PQ(1d)	-
Treatment failure of P. falciparum	SP	2011
Treatment of severe malaria	QN	_
Treatment of P. vivax	CQ+PQ(14d)	_
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + P. v spe	cific (Combo).

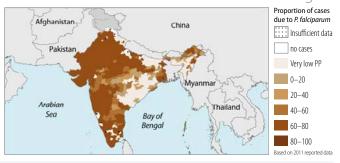
Therapeutic emcacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CO	2008_2000	Λ	0	0	28 days	1	P falcinarum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2013-2014	Yes	-	No	-	An. albimanus



INDIA South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	181 300 000	14
Low transmission (0–1 cases per 1000 population)	997 400 000	77
Malaria free (0 cases)	116600000	9
Total	1 295 300 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		r (34%) phensi, An. minimus, An. dirus, An. ar	nnularis
Programme phase:	Control		
Reported confirmed cases:	1 102 205	Estimated cases, 2013:[10	000 000-26 000 000]
Reported deaths:	561	Estimated deaths, 2013:	[2300-55 000]

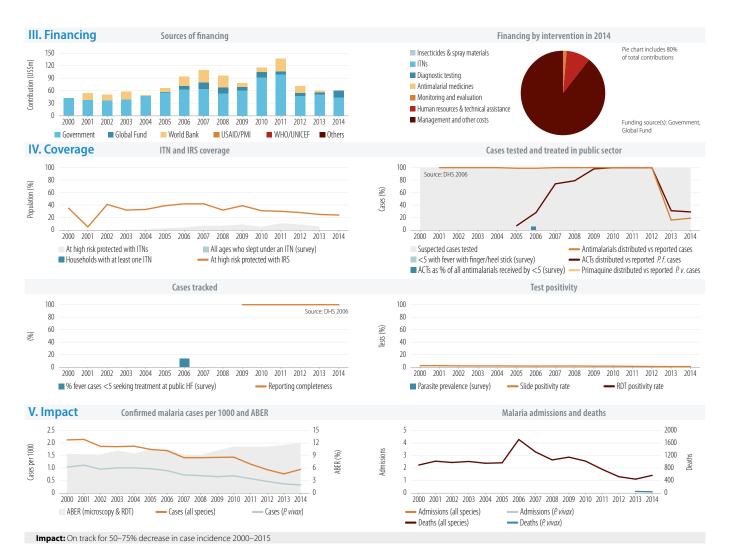
II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2001 2001
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	1953 1953
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1958 1953
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No No Yes	2006 2009 1982 1982 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No Yes Yes No No	- - - -

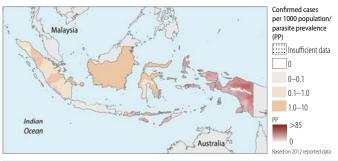
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	CQ	2007
First-line treatment of P. falciparum	AS+SP+PQ	2007
Treatment failure of P. falciparum	QN+D; QN+T	_
Treatment of severe malaria	AM; AS; QN	2007
Treatment of P. vivax	CQ+PQ(14d)	2007
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used $P.f + P.v$ specifi		

Therapeutic efficacy tests (clinical and parasitological failure, %) Median Max Follow-up No. of studies Medicine Year Min Species P. falciparum AS+SP 2005-2012 0 25.9 28 days 0 36

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	Yes	Yes	An. culicifacies s.l., An. fluviatilis



INDONESIA South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	30 000 000	12
Low transmission (0–1 cases per 1000 population)	36 500 000	14
Malaria free (0 cases)	188 000 000	74
Total	254 500 000	

Parasites and vectors					
Major plasmodium species: P. falciparum (57%), P. vivax (43%) Major anopheles species: An. sundaicus, An. balabacensis, An. maculatus, An. farauti, An. subpictus, An. subpictus					
Programme phase:	Control				
Reported confirmed cases: Reported confirmed cases at	community levels		Estimated cases, 2013:	[3 200 000-5 300 000]	
Reported deaths:	community level.		Estimated deaths, 2013:	[540-12 000]	

II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2004
IRS is recommended DDT is authorized for IRS	Yes No	1959 –
Use of larval control recommended	Yes	1990
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 1959
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	Yes Yes No No	2004 2010 2004 2004 - -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes Yes Yes	1965 1965 1965 1990 1990
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge Yes ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes IRS is recommended No IRS No IVS of larval control recommended Yes IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used as gametocidal medicine for P. falciparum Yes Yes G6PD test is a requirement before treatment with primaquine No Directly observed treatment with primaquine is undertaken No System for monitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken Yes Uncomplicated P. falciparum cases routinely admitted

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

ABER (microscopy & RDT)

Impact: Insufficiently consistent data to assess trends

Antimalaria treatment policy	Medicine	Adopted		
First-line treatment of unconfirmed malaria	-	_		
First-line treatment of P. falciparum	DHA-PP+PQ	2008		
Treatment failure of P. falciparum	QN+D+PQ	2004		
Treatment of severe malaria	AM; AS; QN	2004		
Treatment of P. vivax	AS+AQ; DHA-PP+PQ(14d) 20			
Dosage of primaquine for radical treatment of P. vivax	cal treatment of <i>P. vivax</i> 0.25 mg/kg (14			
Type of RDT used P. f + all species (Combo				

Therapeutic enicacy tests (chinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
-	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Deaths (P. vivax)

- Admissions (P. vivax)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011-2014	Yes	No	Yes	No	An. subpictus s.l., An. sundaicus
					s.l. other



100 000

Admissions (all species)

Deaths (all species)

200

IRAN (ISLAMIC REPUBLIC OF) Confirmed cases Turkmenistan Caspian per 1000 population/ parasite prevalence (PP) Insufficient data 0 Afghanistan 0-0.1 0.1-1.0 1.0-10 Pakistan Saudi Arabia

>85

0

Eastern Mediterranean Region



I. Epidemiological profile

Population	2014	%
Number of active foci	319	
Number of people living within active foci	606 000	1
Number of people living in malaria free areas	77 500 000	99
Total	78 106 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		6), P. vivax (93%) . culicifacies, An. fluviatilis, An. su	uperpictus
Programme phase:	Elimination		
Total confirmed cases, 2014:	1243	Total deaths, 2014:	0
Indigenous cases, 2014:	358	Indigenous deaths, 2014:	0
Introduced cases, 2014:	7	_	

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2005
	ITNs/LLINs distributed to all age groups	Yes	2005
IRS	IRS is recommended	Yes	1949
	DDT is authorized for IRS	No	-
Larval control	Use of larval control recommended	Yes	1949
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
	Malaria diagnosis is free of charge in the public sector	Yes	1949
Treatment	ACT is free for all ages in public sector	Yes	2005
	Sale of oral artemisinin-based monotherapies	Never allowed	l
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	1949
	Primaquine is used for radical treatment of P. vivax	Yes	1949
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	Yes	1949
	System for monitoring of adverse reactions to antimalarials exist	s Yes	1949
Surveillance	ACD for case investigation (reactive)	Yes	1949
	ACD of febrile cases at community level (pro-active)	Yes	1949
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated P. vivax cases routinely admitted	No	-
	Foci and case investigation undertaken	Yes	2010
	Case reporting from private sector is mandatory	Yes	1949

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	AS+SP; AS+SP+PQ	2010
Treatment failure of P. falciparum	AL; AL+PQ	2010
Treatment of severe malaria	AS; QN+D	_
Treatment of P. vivax	CQ+PQ(14d & 8w)	_
Dosage of primaquine for radical treatment of P. vivax	0.75	mg/kg (8 w)

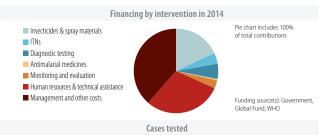
Therapeutic efficacy tests (clinical and parasitological failure, %)

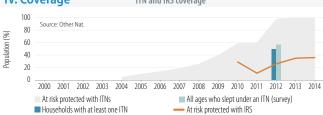
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+SP	2005-2012	0	0	1	28 days	15	P. falciparum
CQ+PQ	2008-2011	0	0	0	28 days	4	P. vivax

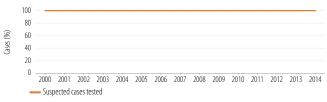
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2012	Yes	Yes	Yes	Yes	An. stephensi, An. culicifacies,



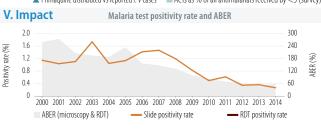


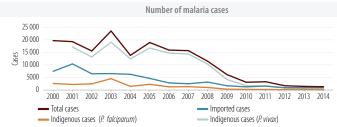




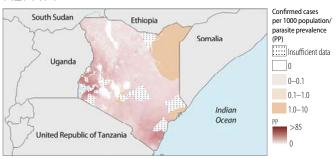








KENYA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	31 500 000	70
Low transmission (0–1 cases per 1000 population)	13 400 000	30
Malaria free (0 cases)	0	0
Total	44 900 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. arabiensis		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: [Estimated deaths, 2013:	

II. Intervention policies and strategies

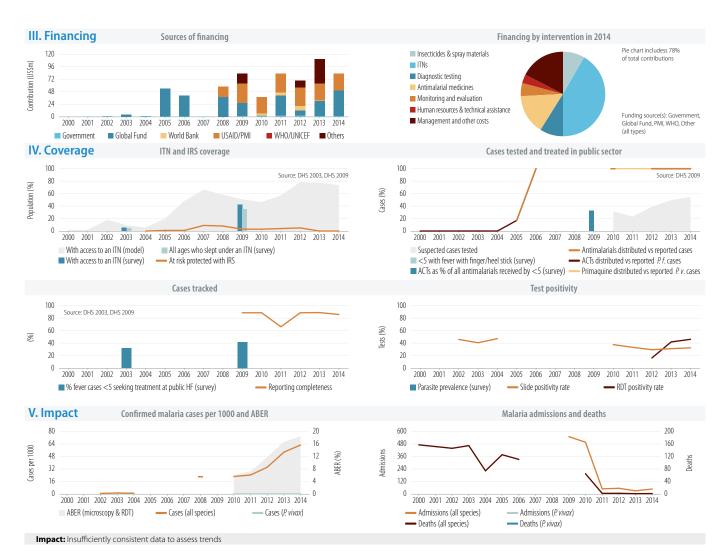
III III CCI V	remaion poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2003
Larval contro	Use of larval control recommended	No	_
IPT	IPT used to prevent malaria during pregnancy	Yes	2001
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No - - - Yes	2006 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; AM; QN	2004
Treatment of P. vivax	=	_
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2011	0	1.65	6.6	28 days	16	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	Yes	Yes	An. arabiensis, An. funestus s.l.,
					An. aambiae s.l.



LAO PEOPLE'S DEMOCRATIC REPUBLIC

China per 1000 population/ parasite prevalence (PP) Insufficient data 0 0-0.1 South 0.1-1.0 China Sea 1.0-10 Thailand >85 0

Western Pacific Region Proportion of cases due to *P. falciparum* China Insufficient data no cases Very low PP 0-20 South 20-40 China Sea 40-60 60-80 80-100

I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	2 090 000	31
Low transmission (0–1 cases per 1000 population)	4110000	61
Malaria free (0 cases)	494 000	7
Total	6 6 9 0 0 0 0	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			(38%) maculatus, An. jeyporiensis	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:		Estimated cases, 2013:	[72 000-120 000]
Reported deaths:	,	4	Estimated deaths, 2013:	[10-340]

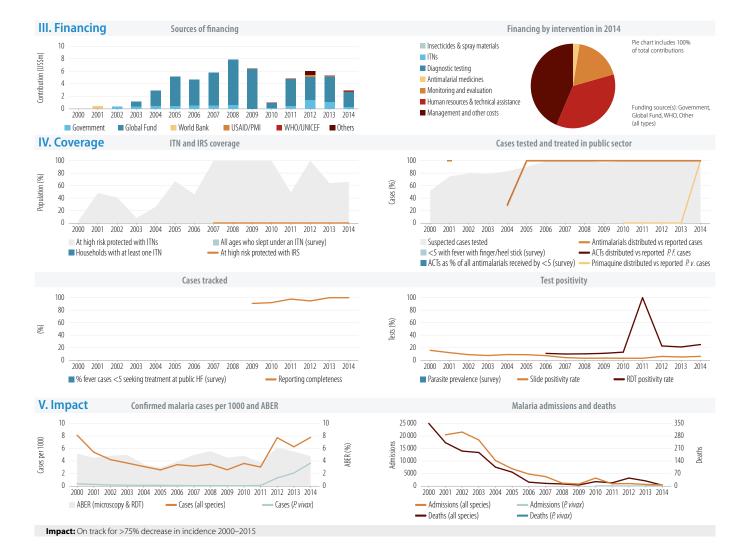
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2003 2000
IRS is recommended DDT is authorized for IRS	Yes No	2010 -
Use of larval control recommended	No	-
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2003 2005
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of prinaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes Yes No No	2005 2005 - - 2010 -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No Yes Yes	2012 2012 - - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended IRS INS INS INS INS INS INS INS INS INS IN

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	AL	2001
Treatment failure of P. falciparum	QN+D	2001
Treatment of severe malaria	AS+AL	2001
Treatment of P. vivax	CQ+PQ(14d)	2001
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + P. v spe	cific (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
ΛI	2005 2015	Λ	2.4	18.1	28 days	13	D falcinarum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2013-2014	Yes	Yes	-	-	An. dirus. An. minimus. other



LIBERIA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4 400 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	4400000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100 An. gambiae)%), P. viva	x (0%)	
Programme phase:	Control			
Reported confirmed cases:		864204	Estimated cases, 2013:	[1 100 000-2 100 000]
Reported confirmed cases at	community level:	: 17020		
Reported deaths:		2288	Estimated deaths, 2013:	[1200-2900]

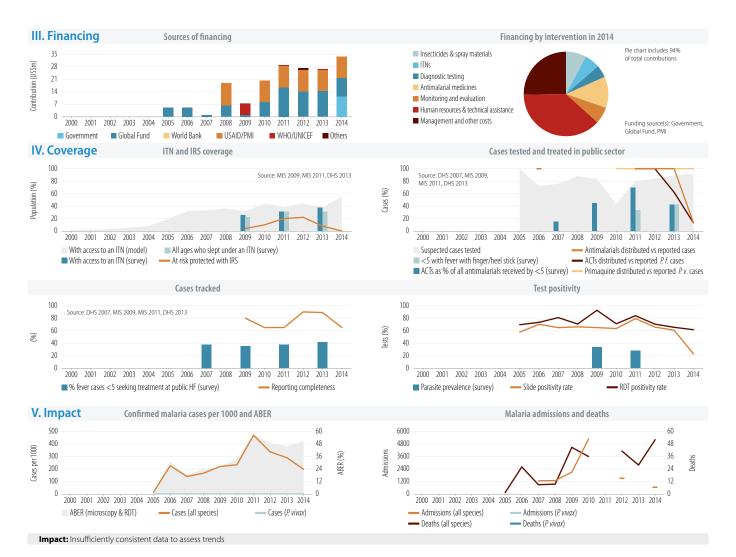
II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2009 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2005 2005
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2005 2011 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2004
First-line treatment of P. falciparum	AS+AQ	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; AM; QN	2004
Treatment of P. vivax	=	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Inerapeutic	emcacy tests (cii	nicai and	i parasitolog	icai tailure	2, %)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+AO	2007-2011	0	0	1	28 days	4	P falcinarum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	No	An. gambiae s.l.



MADAGASCAR African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	20 700 000	88
Low transmission (0–1 cases per 1000 population)	2890000	12
Malaria free (0 cases)	0	0
Total	23 600 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (96%), P. vivax An. funestus, An. gambiae,		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[750 000–2 100 000] [87–7400]

II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1993 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2006
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2006 2006
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes No No Yes Yes	2006 2006 2015 - - - 2008
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes Yes No	2003 1993 2003 2006 –

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2006
First-line treatment of P. falciparum	AS+AQ	2006
Treatment failure of P. falciparum	QN	2006
Treatment of severe malaria	QN	2006
Treatment of P. vivax	-	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	P. f + P. v sp	ecific (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2006	1.7	1.7	1.7	28 days	1	P. falciparum
AS+AQ	2006-2013	0	0	8.7	28 days	18	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	Yes	No	An. funestus s.l., An. gambiae s.l.,
					An mascarensis



Impact: Less than 50% change in incidence projected, 2000–2015

MALAWI African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	16700000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	16700000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. funestus, An. gambiae,		
Programme phase:	Control		
Reported confirmed cases:	2905310	Estimated cases, 2013:	[2700000-4500000]
Reported confirmed cases a	t community level: 13 523		
Reported deaths:	4490	Estimated deaths, 2013:	[2500-11 000]

II. Intervention policies and strategies

	Yes/No	Adopted
		Auopteu
ge roups	Yes Yes	2006 2010
	Yes No	2007 -
ed	No	-
g pregnancy	Yes	1993
diagnostic test in the public sector	Yes No	2011 –
ctor notherapies metocidal medicine for <i>P. falciparum</i> trment of <i>P. vivax</i> treatment with primaquine primaquine is undertaken reactions to antimalarials exists	Yes Is banned No No No No No Yes	2007 2011 - - - - - 2007
re) y level (pro-active) s routinely admitted ely admitted	No No No No	- - - -
	in the public sector ctor notherapies metocidal medicine for <i>P. falciparum</i> tment of <i>P. vivax</i> treatment with primaquine primaquine is undertaken reactions to antimalarials exists ve) y level (pro-active) s routinely admitted	in the public sector No ctor Yes notherapies Is banned metocidal medicine for <i>P. falciparum</i> thement of <i>P. vivax</i> No treatment with primaquine primaquine is undertaken vereactions to antimalarials exists vere) No y level (pro-active) No s routinely admitted No

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2007
First-line treatment of P. falciparum	AL	2007
Treatment failure of P. falciparum	AS+AQ	2007
Treatment of severe malaria	AS; QN	2007
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only

Therapeutic efficacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2012	0	4.45	19.5	28 days	8	P. falciparum
AS+AQ	2005-2012	0	1.7	3.6	28 days	3	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

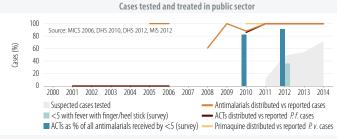
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	No	Yes	No	An. funestus s.l., An. funestus s.s.,
					An. aambiae s.l.

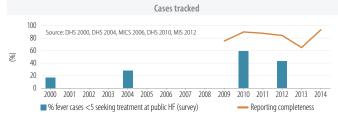




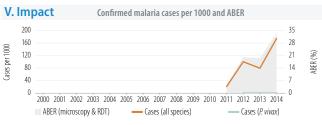
No data reported for 2014

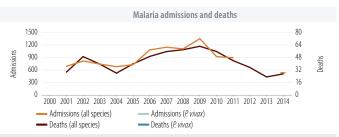












Impact: Insufficiently consistent data to assess trends





Population	2014	%
Number of active foci	-	
Number of people living within active foci	1 300 000	4
Number of people living in malaria free areas	28 600 000	96
Total	29 900 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:), P. vivax (8%) An. donaldi, An. maculatus, Al	n. sundaicus, An. flavirostris
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	3923	Total deaths, 2014:	9
Indigenous cases, 2014:	3147	Indigenous deaths, 2014:	4
Introduced cases 2014:	8	-	

II. Intervention policies and strategies

III III CCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1995 1995
IRS	IRS is recommended DDT is authorized for IRS	– No	-
Larval contro	Use of larval control recommended	Yes	1901
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	- 1967
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Yes Yes	2013 1993 1993 - 2003
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes Yes Yes Yes Yes Yes Yes	1965 1965 1965 2013 2013 1995 1988

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AS+MQ	-
Treatment failure of P. falciparum	QN+T	-
Treatment of severe malaria	QN+T	-
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of <i>P. vivax</i>		0.50 mg/kg (14 d)

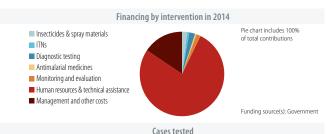
Therapeutic efficacy tests (clinical and parasitological failure, %)

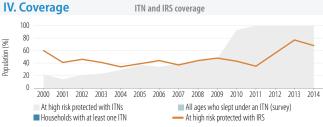
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

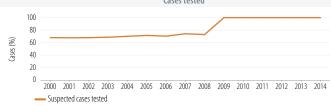
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

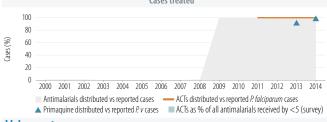
Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested 2010-2014

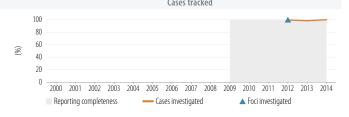


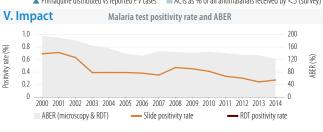


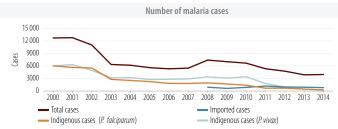




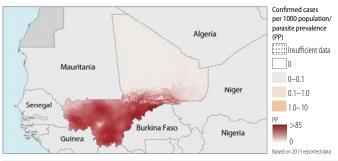








MALI African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	15 400 000	90
Low transmission (0–1 cases per 1000 population)	1710000	10
Malaria free (0 cases)	0	0
Total	17 100 000	

Parasites and vectors			
Major plasmodium species:			
Major anopheles species:	An. gambiae, An. funestus,	An. funestus, An. funestus	
Programme phase:	Control		
Reported confirmed cases:	2039853	Estimated cases, 2013:	[5 900 000-8 800 000]
Reported confirmed cases at	community level: 181 103		
Reported deaths:	2309	Estimated deaths, 2013:	[15 000-25 000]
Programme phase: Reported confirmed cases: Reported confirmed cases at	Control 2039853 community level: 181103	Estimated cases, 2013:	

II. Intervention policies and strategies

Policies/strategies ITNs/LLINs distributed free of charge	Yes/No	Adopted
ITNs/LLINs distributed free of charge		
ITNs/LLINs distributed to all age groups	Yes No	2005 -
IRS is recommended DDT is authorized for IRS	Yes No	2007
Use of larval control recommended	No	-
IPT used to prevent malaria during pregnancy	Yes	2003
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2008 2008
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	No Is banned No No - No Yes	- - - - - 2010
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No Yes No Yes	- 2008 - 1993 -
	IRS is recommended DDT is authorized for IRS I Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	IRS is recommended DDT is authorized for IRS Use of larval control recommended No IUse of larval control recommended No Patients of all ages should receive diagnostic test Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax No G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) No ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2007
First-line treatment of P. falciparum	AL; AS+AQ	2007
Treatment failure of P. falciparum	AL	2007
Treatment of severe malaria	QN	_
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	P. f + all sp	ecies (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+AQ	2005-2007	0	2.25	7.6	28 days	4	P. falciparum
AL	2005-2014	0	1.75	3.8	28 days	10	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. gambiae s.l.



>85

0



I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	2780000	70
Low transmission (0–1 cases per 1000 population)	1 190 000	30
Malaria free (0 cases)	0	0
Total	3 970 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. arabiensis		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[40 000-120 000] [240-1500]

II. Intervention policies and strategies

II. Interv	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	1998 -
IRS	IRS is recommended DDT is authorized for IRS	No No	- -
Larval contro	Use of larval control recommended	Yes	2013
IPT	IPT used to prevent malaria during pregnancy	Yes	2008
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2011 2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes Yes No Yes	2009 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	- Yes Yes Yes	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	_
First-line treatment of P. falciparum	AL; AS+AQ	
Treatment failure of P. falciparum	_	_
Treatment of severe malaria	QN	-
Treatment of P. vivax	=	-
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		-
Therangutic efficacy tests (clinical and parasitological failure	06)	

Therapeutic emeacy tests (emilical and parasitological failure, 70)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
AS+AQ	2012-2012	1.8	1.8	1.8	28 days	2	P. falciparum	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

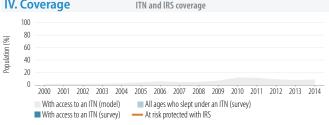
 2010–2014

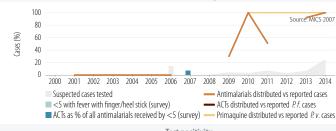




No data reported for 2014

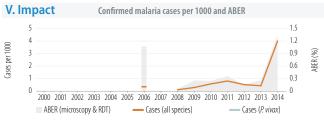
Cases tested and treated in public sector

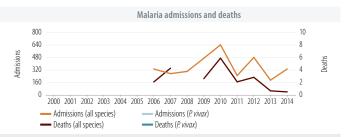












Impact: Insufficiently consistent data to assess trends





Population	2014	%
Number of active foci	1	
Number of people living within active foci	59 100	26
Number of people living in malaria free areas	169 000	74
Total	228 100	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (10 An. funestus, An		
Programme phase:	Elimination		
Total confirmed cases, 2014:	15	Total deaths, 2014:	0
Indigenous cases, 2014:	1	Indigenous deaths, 2014:	0

II. Intervention policies and strategies

III III CCI V	rention poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2010 2010
IRS	IRS is recommended DDT is authorized for IRS	– No	-
Larval control	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	No Yes	-
Treatment	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	– Never allowed No Yes Yes Yes s Yes	- - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes No No Yes Yes Yes Yes	- - - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	AL	-
Treatment failure of P. falciparum	QN	-
Treatment of severe malaria	=	-
Treatment of P. vivax	CQ+PQ	-
Dosage of primaquine for radical treatment of P. vivax		-

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	_	-

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2011	No	No	No	Yes	An. gambiae s.s

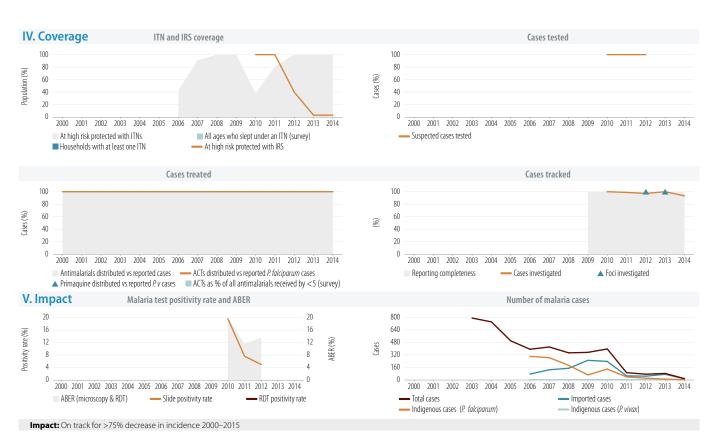
III. Financing

Sources of financing

Financing by intervention in 2014

No data reported for 2014

No data reported for 2014



Region of the Americas





I. Epidemiological profile

Population	2014	%
Number of active foci	56	
Number of people living within active foci	3 450 000	3
Number of people living in malaria free areas	121 900 000	97
Total	125 350 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:), P. vivax (100%) nis, An. albimanus, An. darlingi, An. punc	timacula, An. punctimacula
Programme phase:	Pre-elimination		
Total confirmed cases, 2014:	664	Total deaths, 2014:	0
Indigenous cases, 2014:	656	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0	_	

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2012 2012
IRS	IRS is recommended DDT is authorized for IRS	No No	_
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No Yes	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivox cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes Yes Yes Yes Yes Yes Yes	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	_
First-line treatment of P. falciparum	CQ+PQ	-
Treatment failure of P. falciparum	AL+QN	-
Treatment of severe malaria	AL	=-
Treatment of P. vivax	CQ+PQ	=-
Dosage of primaquine for radical treatment of <i>P. vivax</i>		0.25 mg/kg (14 d)

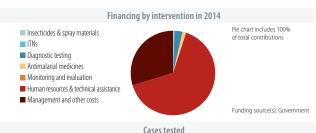
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	_	-	

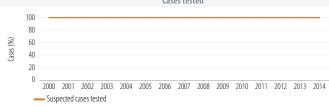
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

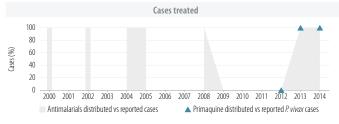
Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested 2010-2014



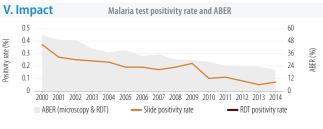


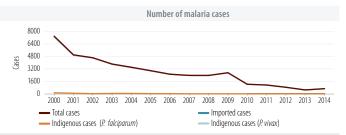




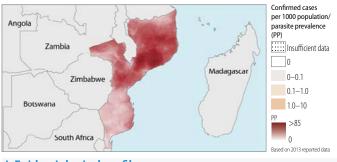








MOZAMBIQUE African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	27 200 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	27 200 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. funestus, An. gambiae,		
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases a		Estimated cases, 2013: [7	200 000-12 000 000]
Reported deaths:	3245	Estimated deaths, 2013:	[9400-21 000]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2006
	ITNs/LLINs distributed to all age groups	Yes	2008
IRS	IRS is recommended	Yes	1992
	DDT is authorized for IRS	Yes	2006
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2006
Diagnosis	Patients of all ages should receive diagnostic test	Yes	2006
	Malaria diagnosis is free of charge in the public sector	Yes	2006
Treatment	ACT is free for all ages in public sector	Yes	2009
	Sale of oral artemisinin-based monotherapies	Never allowed	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	No	-
	Primaquine is used for radical treatment of P. vivax	-	-
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	No	-
	System for monitoring of adverse reactions to antimalarials exist	ts Yes	-
Surveillance	ACD for case investigation (reactive)	No	-
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated P. vivax cases routinely admitted	No	

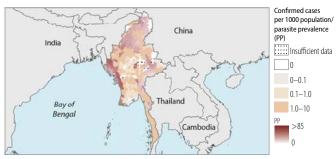
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	=	_
Treatment of severe malaria	AS, QN	2004
Treatment of P. vivax	_	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic emeacy tests (chinical and parasitological failure, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2012	0	3.1	5.8	28 days	9	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	No	Yes	No	An. funestus s.l., An. gambiae s.l.,
					other



MYANMAR South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	8 440 000	16
Low transmission (0–1 cases per 1000 population)	23 300 000	44
Malaria free (0 cases)	21 600 000	40
Total	53 400 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (75% An. minimus, An. o	(25%)	
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at	community level:	Estimated cases, 2013:	[680 000-1 900 000]
Reported deaths:	,	Estimated deaths, 2013:	[120-5000]

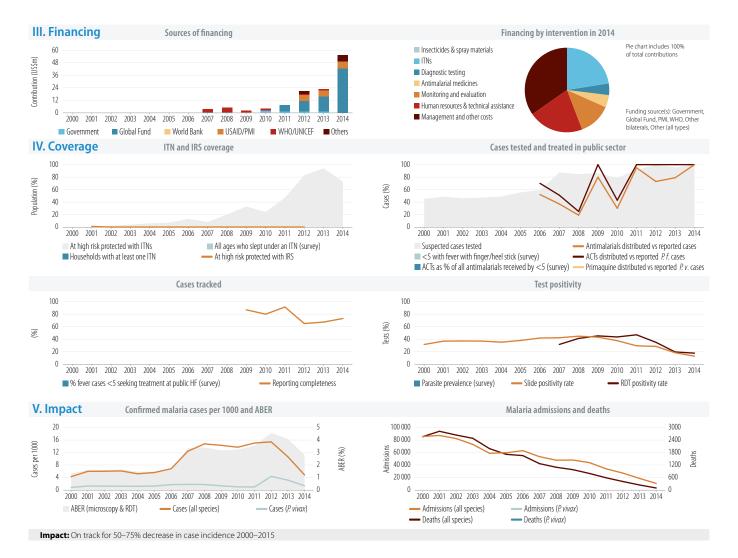
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2000 2000
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1957 –
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1962 1962
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No Yes Yes	2003 2012 2002 1951 - 2014
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	1983 1983 - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	AL; AM; AS+MQ; DHA-PPQ; PQ	2008
Treatment failure of P. falciparum	AS+D; AS+T	2008
Treatment of severe malaria	AM; AS; QN	2008
Treatment of P. vivax	CQ+PQ(14d)	2008
Dosage of primaquine for radical treatment of P. vivax	0.25 mg	/kg (14 d)
Type of RDT used	P. f + all species	(Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %) Median Max Follow-up No. of studies Medicine Year Min Species CQ 2006-2015 0 11.9 28 days P. vivax 19 ΑI 2007-2014 0 6 28 days 22 P. falciparum AS+MQ 2011-2013 42 days P. falciparum

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2011-2014	Yes	Yes	-	No	An. dirus, An. minimus, other



NAMIBIA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	1110000	46
Low transmission (0–1 cases per 1000 population)	797 000	33
Malaria free (0 cases)	495 000	21
Total	2 400 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (1009 An. arabiensis, An.			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	15914 0	Estimated cases, 2013:	[6800-11 000]
Reported deaths:	,	61	Estimated deaths, 2013:	<50

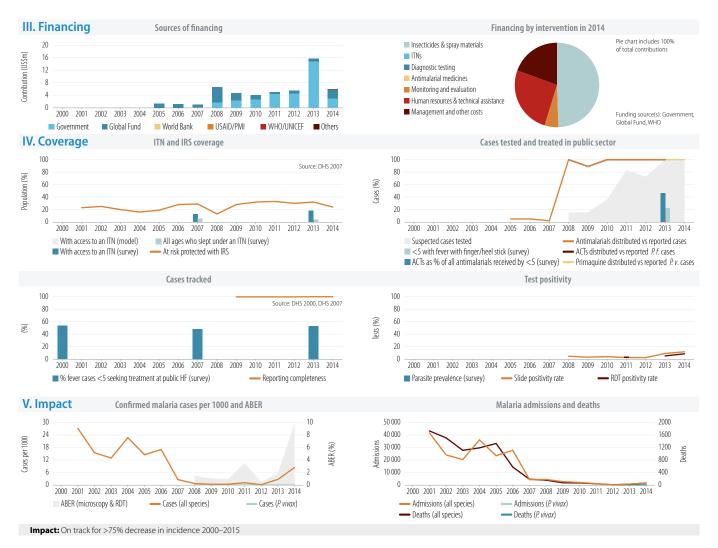
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1998 2014
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	1965 1965
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2005 1990
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No Yes	2005 2015 2015 - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes No –	2012 - - - -

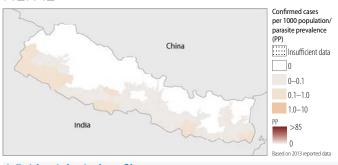
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2006
First-line treatment of P. falciparum	AL	2006
Treatment failure of P. falciparum	QN	2006
Treatment of severe malaria	QN	2006
Treatment of P. vivax	AL	2006
Dosage of primaquine for radical treatment of P. vivax		0.75 mg/kg (8 w)
Type of RDT used	P. f + P. v,	P. o, P. m (Combo).

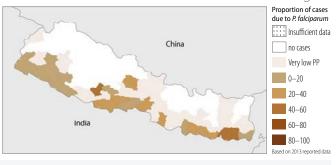
Therapeutic eff	ncacy tests (c	linical and	l parasitologi	ical failure	!, %)			
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	_	-	-	_	-	-	-	

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	No	No	-	-	An. arabiensis



NEPAL South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	1 020 000	4
Low transmission (0–1 cases per 1000 population)	12 500 000	44
Malaria free (0 cases)	14700000	52
Total	28 200 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (21%), P. vivax An. fluviatilis, An. annularis,		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[10 000-22 000] <10

II. Intervention policies and strategies

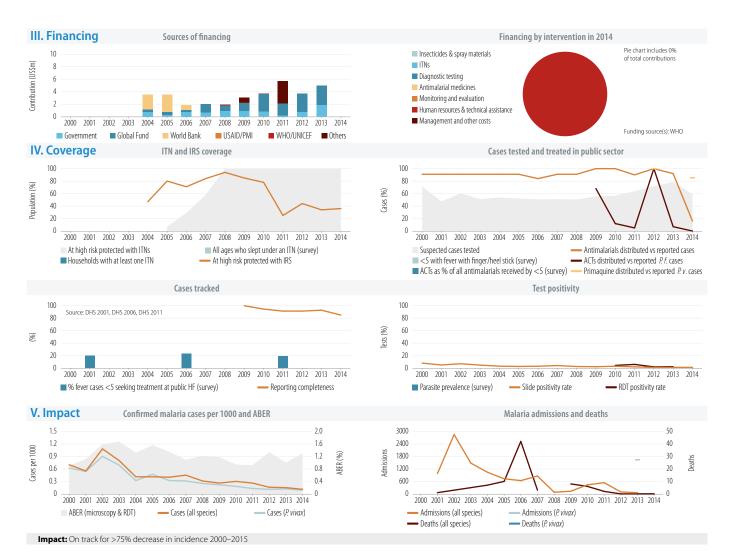
III III CCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2007 2007
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1962 -
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	_
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2009 1962
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exis	Yes Yes No	2005 d - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	CQ	_
First-line treatment of P. falciparum	AL+PQ	2004
Treatment failure of P. falciparum	AS; QN	_
Treatment of severe malaria	AS; QN	-
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax	0.25 mg/kg (14 d), 3.75 - 15r	ng/day (14 d)
Type of RDT used	P. f + P. v spe	cific (Combo).

The rapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2014	0	0	6.3	28 days	10	P. falciparum
CQ	2008-2011	0	0	0	28 days	8	P. vivax

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2014	-	Yes	No	No	An. annularis, An. fluviatilis, other



NICARAGUA

Region of the Americas





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	78 100	1
Low transmission (0–1 cases per 1000 population)	2 940 000	49
Malaria free (0 cases)	2 990 000	50
Total	6010000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (14%), An. albimanus, An. p			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	1163 0	Estimated cases, 2013:	[1900-3000]
Reported deaths:	•	0	Estimated deaths, 2013:	<10

II. Intervention policies and strategies

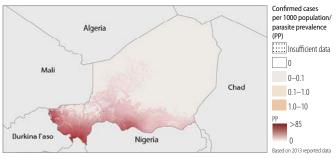
II. IIItei	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1959 –
Larval contro	I Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	_
_	Malaria diagnosis is free of charge in the public sector	Yes	-
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies	Yes Never allow	ed
	Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i>	Yes Yes	2013
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes No	_
Surveillance	ACD for case investigation (reactive)	Yes	-
	ACD of febrile cases at community level (pro-active)	Yes	-
	Mass screening is undertaken	Yes	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	-
	Uncomplicated <i>P. vivax</i> cases routinely admitted	No	-

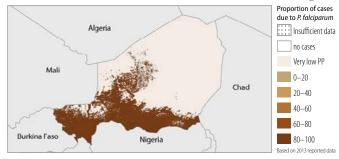
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	_
First-line treatment of P. falciparum	CQ+PQ(1d)	-
Treatment failure of P. falciparum	AS+MQ; AS+SP	-
Treatment of severe malaria	QN	-
Treatment of P. vivax	CQ+PQ(7d)	-
Dosage of primaquine for radical treatment of P. vivax	0.50) mg/kg (7 d)
Type of RDT used	P. f + P. v spec	ific (Combo).
урс от пот озео	7.7 1 7. ¥ Spec	(0011100

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CQ	2005-2006	0	0	0	28 days	1	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	No	-	Yes	No	An. albimanus, An. pseudopunc-
					tinennis, other







Population	2014	%
High transmission (>1 case per 1000 population)	10 100 000	53
Low transmission (0–1 cases per 1000 population)	7 830 000	41
Malaria free (0 cases)	1 150 000	6
Total	19 100 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100% An. gambiae, An. fu			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at Reported deaths:		57 180	Estimated cases, 2013: Estimated deaths, 2013:	

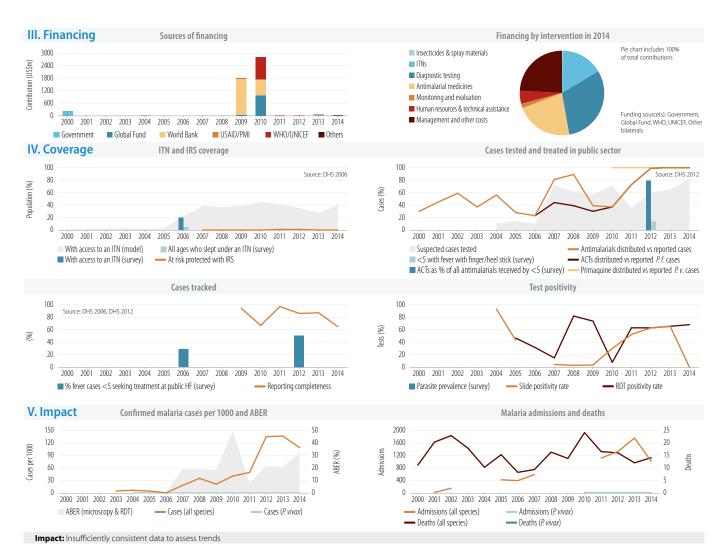
II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2005
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	2003
	DDT is authorized for IRS	Yes	-
Larval contro	Use of larval control recommended	Yes	2010
IPT	IPT used to prevent malaria during pregnancy	Yes	2005
Diagnosis	Patients of all ages should receive diagnostic test	Yes	2010
_	Malaria diagnosis is free of charge in the public sector	Yes	_
Treatment	ACT is free for all ages in public sector	No	-
	Sale of oral artemisinin-based monotherapies	Is banned	2007
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	No	-
	Primaquine is used for radical treatment of P. vivax	No	-
	G6PD test is a requirement before treatment with primaquine	-	_
	Directly observed treatment with primaquine is undertaken	No	_
	System for monitoring of adverse reactions to antimalarials exists	Yes	-
Surveillance		No	_
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	-
	Uncomplicated P. vivax cases routinely admitted	No	-

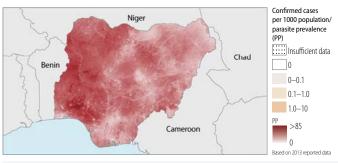
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2005
First-line treatment of P. falciparum	AL	2005
Treatment failure of P. falciparum	QN	2005
Treatment of severe malaria	AS; QN	2005
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		P. f only.

inerapeutic emcacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
ΔΙ	2005_2011	3.7	5 55	10.4	28 days	6	P falcinarum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2013	Yes	Yes	No	No	An. coluzzii



NIGERIA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	135 600 000	76
Low transmission (0–1 cases per 1000 population)	41 900 000	24
Malaria free (0 cases)	0	0
Total	177 500 000	

Parasites and vectors		
Major plasmodium species: Major anopheles species:		ax (0%) An. arabiensis, An. moucheti, An. melas, An. nili
Programme phase:	Control	
Reported confirmed cases: Reported deaths:		Estimated cases, 2013:[42 000 000–78 000 000] Estimated deaths, 2013: [81 000–150 000]

II. Intervention policies and strategies

Impact: Insufficiently consistent data to assess trends

II. IIIter	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2001 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2007
Larval contro	Use of larval control recommended	Yes	2010
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2009 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL; AS+AQ	2004
First-line treatment of P. falciparum	AL; AS+AQ	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; AM; QN	2004
Treatment of P. vivax	=	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2005-201 12.7 28 days P. falciparum 0 AS+AQ 2005-2011 0 0.8 13.7 28 days 20 P. falciparum

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. coluzzii, An. gambiae s.l.







Population	2014	%
High transmission (>1 case per 1000 population)	53 500 000	29
Low transmission (0–1 cases per 1000 population)	128 400 000	69
Malaria free (0 cases)	3 120 000	2
Total	185 000 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (129 An. culicifacies, Ai		
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at	community level	Estimated cases, 2013:	[1 000 000-2 100 000]
Reported deaths:		Estimated deaths, 2013:	[250-2000]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1961 –
Larval contro	Use of larval control recommended	Yes	1961
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2011 1961
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes Yes No No	2009 2008 2012 2009 2009
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. foliciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	CQ	-
First-line treatment of P. falciparum	AS+SP+PQ	2013
Treatment failure of P. falciparum	AL; QN	2013
Treatment of severe malaria	AS; QN	2007
Treatment of P. vivax	CQ+PQ(14d)	2007
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + all spe	cies (Combo).

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species AS+SP 2007-2012 1.5 1.2 28 days P. falciparum 0 ΑL 2012-2013 0 0.6 28 days P. falciparum

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2011-2013	Yes	Yes	-	Yes	An. culicifacies s.l., An. stephensi







Population	2014	%
High transmission (>1 case per 1000 population)	170 000	4
Low transmission (0–1 cases per 1000 population)	11 100	0
Malaria free (0 cases)	3 690 000	95
Total	3 870 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (1%), P. vivax (An. albimanus, An. pseudopunctipe		lis, An. darlingi
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[740-890] 0

II. Intervention policies and strategies

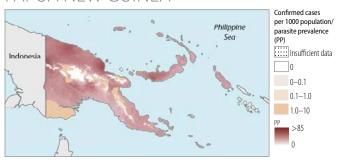
III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2012
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1957 –
Larval contro	Use of larval control recommended	Yes	1957
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1957 1957
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No No No	- - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	AL+PQ(1d)	2012
Treatment failure of P. falciparum	=	-
Treatment of severe malaria	QN	-
Treatment of P. vivax	CQ+PQ(7d); $CQ+PQ(14d)$	-
Dosage of primaquine for radical treatment of P. vivax	0.25 m	g/kg (14 d)
Type of RDT used	P. f + P. v, P. o, P. r	n (Combo).

Therapeutic emcacy tests (clinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	-	-	

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011	_	-	Yes	-	An. albimanus







Population	2014	%
High transmission (>1 case per 1000 population)	7 0 1 0 0 0 0	94
Low transmission (0–1 cases per 1000 population)	448 000	6
Malaria free (0 cases)	0	0
Total	7 460 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (56% An. punctulatus, A.			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at			Estimated cases, 2013:	[800 000-2 000 000]
Reported deaths:	,	203	Estimated deaths, 2013:	[110-6900]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2000
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2010
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 2004
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes No No Yes	2010 _ 2009 _ _ 2000
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	-	-	
First-line treatment of P. falciparum	AL	2008	
Treatment failure of P. falciparum	DHA-PPQ	2008	
Treatment of severe malaria	AM; AS	2008	
Treatment of P. vivax	AL+PQ	2009	
Dosage of primaquine for radical treatment of P. vivax	7.5 m	g - adult (14 d)	
Type of RDT used	P. f + P. v, P. o, P. m (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
DHA-PPQ	2005-2007	12	12	12	42 days	1	P. falciparum
AL	2005-2013	1	1.85	2.7	28 days	2	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

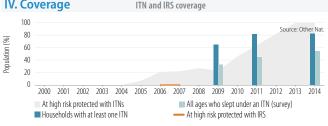
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	-	-	-	-	An. farauti s.l., An. punctulatus,
					other

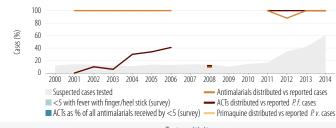




No data reported for 2014

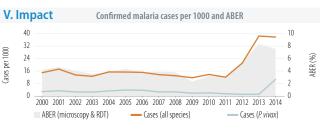
Cases tested and treated in public sector

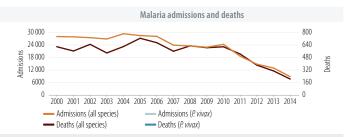
















Population	2014	%
Number of active foci	8	
Number of people living within active foci	497 000	8
Number of people living in malaria free areas	6 060 000	92
Total	6557000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (09 An. darlingi, An.		
Programme phase:	Elimination		
Total confirmed cases, 2014:	8	Total deaths, 2014:	0
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0		

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	No	-
	ITNs/LLINs distributed to all age groups	No	-
IRS	IRS is recommended	Yes	1957
	DDT is authorized for IRS	No	-
Larval control	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	1957
	Malaria diagnosis is free of charge in the public sector	Yes	1957
Treatment	ACT is free for all ages in public sector	Yes	2005
	Sale of oral artemisinin-based monotherapies	Never allowe	d
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	-
	Primaquine is used for radical treatment of P. vivax	Yes	1957
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	Yes	-
	System for monitoring of adverse reactions to antimalarials exist	s Yes	-
Surveillance	ACD for case investigation (reactive)	Yes	1957
	ACD of febrile cases at community level (pro-active)	Yes	1957
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	1957
	Uncomplicated P. vivax cases routinely admitted	Yes	1957
	Foci and case investigation undertaken	Yes	1957
	Case reporting from private sector is mandatory	No	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL+PQ	=
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	AS	_
Treatment of P. vivax	CQ + PQ	=
Dosage of primaquine for radical treatment of <i>P. vivax</i>		0.25 mg/kg (14 d)

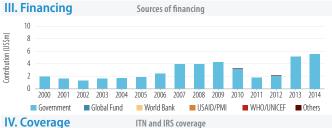
Therapeutic efficacy tests (clinical and parasitological failure, %)

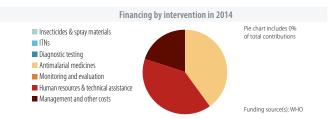
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

 $In secticide \ susceptibility \ bioassays \ (reported \ resistance \ to \ at \ least \ one \ in secticide \ for \ any \ vector \ at \ any \ locality)$

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2010–2014



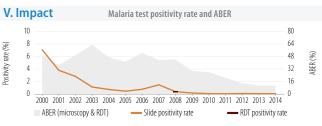


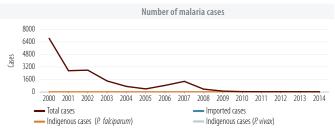












Region of the Americas





I. Epidemiological profile

Population	2014	9
High transmission (>1 case per 1000 population)	1 550 000	
Low transmission (0–1 cases per 1000 population)	10600000	34
Malaria free (0 cases)	18 800 000	6
Total	31 000 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (16%), P. vivax An. pseudopunctipennis, Ar		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[75 000–120 000] <10

II. Intervention policies and strategies

ention policies and strategies		
Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	-
IRS is recommended DDT is authorized for IRS	Yes No	-
Use of larval control recommended	No	-
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	Yes Yes No Yes	- - - - - -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes Yes Yes	- - - -
	Policies/strategies ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	Policies/strategies Yes/No ITNs/LLINs distributed free of charge Yes ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes DDT is authorized for IRS No Use of larval control recommended No IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes ACT is free for all ages in public sector Yes Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used or sgametocidal medicine for P. folciparum Yes Frimaquine is used for radical treatment of P. vivax Yes G6PD test is a requirement before treatment with primaquine No Directly observed treatment with primaquine is undertaken Yes ACD for case investigation (reactive) Yes ACD of febrile cases at community level (pro-active) Yes Mass screening is undertaken Yes Uncomplicated P. folicparum cases routinely admitted Yes

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Impact: Less than 50% change in incidence projected, 2000–2015

— Cases (all species)

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AS+MQ	2001
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	AS+MQ	=-
Treatment of P. vivax	CQ+PQ	=-
Dosage of primaquine for radical treatment of P. vivax		0.50 mg/kg (7 d)
Type of RDT used		_

Therapeutic efficacy tests (clinical and parasitological failure, %) Medicine Min Median Max Follow-up No. of studies Year Species AS+MQ 2005–2006 28 days P. falciparum CQ+PQ 2006-2008 0.5 0.6 1.1 28 days P. vivax

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

 2013
 Yes
 An. albimanus, An. darlingi

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Deaths (P. vivax)

- Admissions (P. vivax)

- Admissions (all species)

Deaths (all species)



ABER (microscopy & RDT)

PHILIPPINES Western Pacific Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	6530000	7
Low transmission (0–1 cases per 1000 population)	53 900 000	54
Malaria free (0 cases)	38 700 000	39
Total	99 100 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			(17%) us, An. balabacensis, An. litoralis	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at community level:		4903 1184	Estimated cases, 2013:	[12 000-21 000]
Reported deaths:	, , , , , , , , , , , , , , , , , , , ,	10	Estimated deaths, 2013:	<50

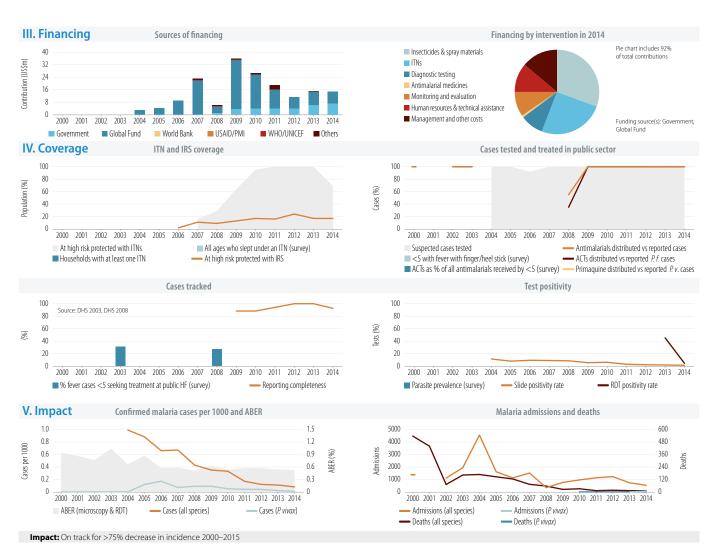
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2000
IRS is recommended DDT is authorized for IRS	Yes No	2002
Use of larval control recommended	Yes	-
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2004 2003
Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Yes Yes Yes	2003 2006 2007 2011 2010 2009
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes No No	2009 - 2009 - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge TNs/LLINs distributed to all age groups Yes Yes IRS is recommended Yes IRS is recommended Yes DDT is authorized for IRS No Use of larval control recommended Yes IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used as gametocidal medicine for P foliciparum Yes Single dose of primaquine is used as gametocidal medicine for P foliciparum Yes G6PD test is a requirement before treatment with primaquine Yes System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) Yes ACD of febrile cases at community level (pro-active) No Mass screening is undertaken Yes Yes Uncomplicated P foliciparum cases routinely admitted

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AL	2009	
First-line treatment of P. falciparum	AL+PQ	2009	
Treatment failure of P. falciparum	QN+CL; QN+D; QN+T	2002	
Treatment of severe malaria	QN+T; QN+D; QN+CL	2002	
Treatment of P. vivax	CQ+PQ(14d)	2002	
Dosage of primaquine for radical treatment of P. vivax	0.5 m	ng/kg (14 d)	
Type of RDT used	P. f + all species (Combo).		

Therapeutic emcacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
CO	2005_2010	Λ	0	0	28 days	2	P vivav

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011-2015	Yes	Yes	-	No	An. flavirostris, An maculatus s.l.,
					other







Population	2014	%
Number of active foci	27	
Number of people living within active foci	6 900 000	14
Number of people living in malaria free areas	43 200 000	86
Total	50 100 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (09 An. sinensis	6), <i>P. vivax</i> (100%)	
Programme phase:	Elimination		
Total confirmed cases, 2014: Indigenous cases, 2014: Introduced cases, 2014:	638 557	Total deaths, 2014: Indigenous deaths, 2014:	0

II. Intervention policies and strategies

III III CCI I	remaion pondes and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2001
	ITNs/LLINs distributed to all age groups	Yes	2001
IRS	IRS is recommended	-	-
	DDT is authorized for IRS	No	-
Larval contro	Use of larval control recommended	Yes	2001
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
	Malaria diagnosis is free of charge in the public sector	Yes	2001
Treatment	ACT is free for all ages in public sector	-	-
	Sale of oral artemisinin-based monotherapies	-	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	No	-
	Primaquine is used for radical treatment of P. vivax	Yes	2001
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	No	-
	System for monitoring of adverse reactions to antimalarials exists	Yes	2011
Surveillance	ACD for case investigation (reactive)	No	-
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated P. vivax cases routinely admitted	Yes	2001
	Foci and case investigation undertaken	Yes	2001
	Case reporting from private sector is mandatory	Yes	2001

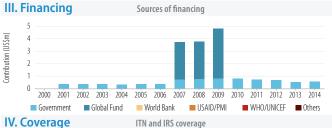
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	CQ	_
First-line treatment of P. falciparum	-	-
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	=	-
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of P. vivax	0).25 mg/kg (14 d)

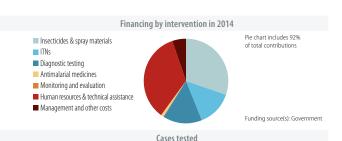
Therapeutic efficacy tests (clinical and parasitological failure, %)

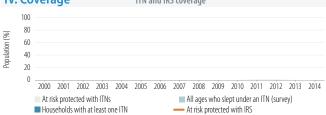
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

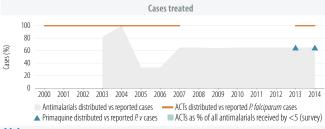
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2010-2014	-	-	-	-	-	







No data reported for 2014





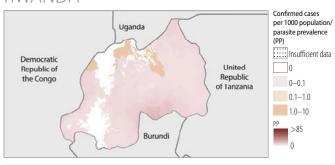
V. Impact

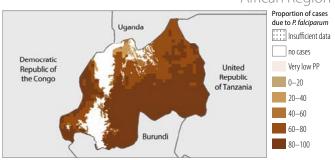
Malaria test positivity rate and ABER

Number of malaria cases 5000 4000 3000 Cases 2000 1000 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 ■ Total cases Imported cases — Indigenous cases (P. falciparum) — Indigenous cases (P. vivax)

No data reported for 2014

RWANDA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	11 300 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	11 300 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. funestus,		
Programme phase:	Control		
Reported confirmed cases: Reported confirmed cases at		Estimated cases, 2013:	[1 100 000-1 700 000]
Reported deaths:	496	Estimated deaths, 2013:	[400-4600]

II. Intervention policies and strategies

III III CI I	rention poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2009
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	No Never allowed No No No No s No	- 0 - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2005
First-line treatment of P. falciparum	AL	2005
Treatment failure of P. falciparum	QN	2005
Treatment of severe malaria	AS; QN	2012
Treatment of P. vivax	_	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	P. f + all sp	ecies (Combo).

merapeutic emicacy tests (clinical and parasitological failure, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2009	0	1.3	4.5	28 days	3	P. falciparum

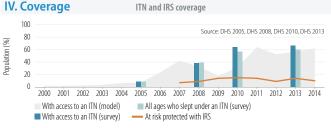
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

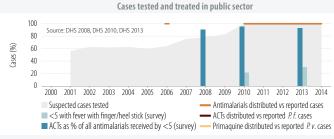
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2015	Yes	Yes	Yes	No	An. chrysti, An. coustani, An.
					aambiae s.l.



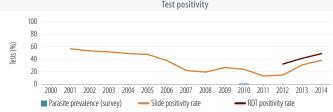


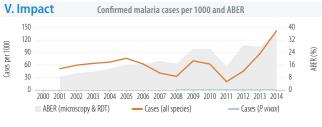
No data reported for 2014

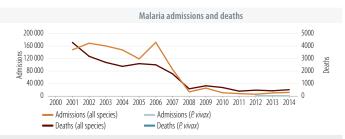
















Population	2014	%
High transmission (>1 case per 1000 population)	186 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	186 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100% An. gambiae), P. vivo	ıx (0%)	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases a	t community level:	1754 0	Estimated cases, 2013:	[12 000-25 000]
Reported deaths:		0	Estimated deaths, 2013:	<100

II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2008
IRS is recommended DDT is authorized for IRS	Yes No	2003
Use of larval control recommended	Yes	2004
IPT used to prevent malaria during pregnancy	Yes	2004
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2001 2008
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned Yes Yes No Yes Yes	2008 2004 2013 2013 - 2013 2004
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	2008 2013 2014 –
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended IRS is resolved in the probleman is resolved in the public sector IRS is refer of all ages in public sector IRS is refer of all ages in public sector IRS is de for all artemisinin-based monotherapies Is banned Is solved for in the public sector INS is banned Is banned is used for addical treatment of P. Valorarum Indication is used for addical treatment of P. Valorarum Indication is used for addical treatment of P. Valorarum Indication is used for addical treatment with primaquine Indication is a requirement before treatment with primaquine Indication is a requirement with primaquine is undertaken Indication is undertaken INS is received in the primaguline is undertaken I

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2004
First-line treatment of P. falciparum	AS+AQ	2004
Treatment failure of P. falciparum	AL	2004
Treatment of severe malaria	QN	2004
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	P. f + all sp	ecies (Combo).

merapeatic em	cacy icsis (c	iiiiicai aiia	parasitorog	icai iaiiuic	., /0)			
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	_	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested 2014-2015 No An. gambiae s.s.



SAUDI ARABIA

Eastern Mediterranean Region





I. Epidemiological profile

Population	2014	%
Number of active foci	20	
Number of people living within active foci	41 400	0
Number of people living in malaria free areas	30 800 000	100
Total	30 841 400	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		00%), P. vivax (0%) rgentii, An. stephensi, An. superpictus, An. d`	thali, An. multicolor
Programme phase:	Elimination		
Total confirmed cases, 2014:	2305	Total deaths, 2014:	0
Indigenous cases, 2014:	30	Indigenous deaths, 2014:	0
Introduced cases 2014:	21		

II. Intervention policies and strategies

III III CCI I	rention poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	1980
	ITNs/LLINs distributed to all age groups	Yes	1980
IRS	IRS is recommended	Yes	1963
	DDT is authorized for IRS	No	-
Larval contro	I Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	-
_	Malaria diagnosis is free of charge in the public sector	Yes	1963
Treatment	ACT is free for all ages in public sector	Yes	1963
	Sale of oral artemisinin-based monotherapies	Never allowed	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	1985
	Primaquine is used for radical treatment of P. vivax	Yes	-
	G6PD test is a requirement before treatment with primaquine	Yes	1985
	Directly observed treatment with primaquine is undertaken	No	-
	System for monitoring of adverse reactions to antimalarials exist	s Yes	1990
Surveillance	ACD for case investigation (reactive)	Yes	1980
	ACD of febrile cases at community level (pro-active)	Yes	1980
	Mass screening is undertaken	Yes	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated P. vivax cases routinely admitted	No	-
	Foci and case investigation undertaken	Yes	1990
	Case reporting from private sector is mandatory	Yes	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AS+SP+PQ	2012
Treatment failure of P. falciparum	AL	2007
Treatment of severe malaria	AS; AM; QN	2007
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of P. vivax		0.25 mg/kg (14 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	_	-	-	-	_	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested	
2010-2014	No	-	-	=	An. arabiensis	

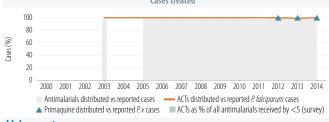




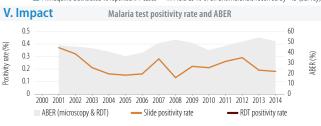
No data reported for 2014

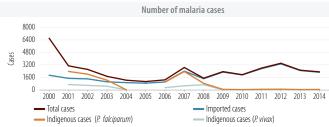












SENEGAL African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	14 100 000	96
Low transmission (0–1 cases per 1000 population)	600 000	4
Malaria free (0 cases)	0	0
Total	14700000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			x (0%) An. funestus, An. pharoen	sis, An. melas
Programme phase:	Control			
Reported confirmed cases:	26	5 624	Estimated cases, 2013:	[1 100 000-2 800 000]
Reported confirmed cases a	community level: 5	1642		
Reported deaths:		500	Estimated deaths, 2013:	[650-6200]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1998 1998
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2005
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2003
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 2007
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	No No No	2010 - - - - - 2007
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	2012 2012 - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2005
First-line treatment of P. falciparum	AL; AS+AQ	2005
Treatment failure of P. falciparum	_	-
Treatment of severe malaria	AS; QN	2005
Treatment of P. vivax	=	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2004-2014 0.9 3.9 28 days P. falciparum 0 16 AS+AQ 2004-2014 0 0.25 1.7 28 days 12 P. falciparum

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. arabiensis, An. gambiae s.l.



SIERRA LEONE African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	6320000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	6 3 2 0 0 0 0	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. funestus,		
Programme phase:	Control		
Reported confirmed cases:	1 374 476	Estimated cases, 2013:	[1700000-3400000]
Reported confirmed cases at	community level: 97 908		
Reported deaths:	2848	Estimated deaths, 2013:	[5700-11000]

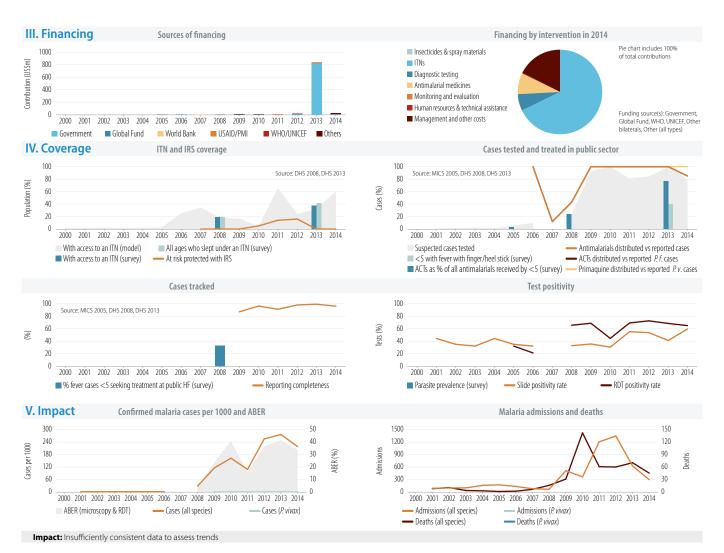
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2002 2010
IRS is recommended DDT is authorized for IRS	Yes No	2010 -
Use of larval control recommended	No	-
IPT used to prevent malaria during pregnancy	Yes	2005
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 2010
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2010 2004 - - - - - 2005
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended IRS is reserved is responsible to the problem of the proble

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2004
First-line treatment of P. falciparum	AL; AS+AQ	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; AM; QN	2004
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2011–201 28 days P. falciparum 0 AS+AQ 2011-2011 0 0 0 28 days P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010	No	No	No	No	An. gambiae s.l.







Population	2014	%
High transmission (>1 case per 1000 population)	566 000	99
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	5720	1
Total	572 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (54% An. farauti, An. pur			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	18 404 0	Estimated cases, 2013:	[35 000-49 000]
Reported deaths:	, , , , , , , , , , , , , , , , , , , ,	23	Estimated deaths, 2013:	<50

II. Intervention policies and strategies

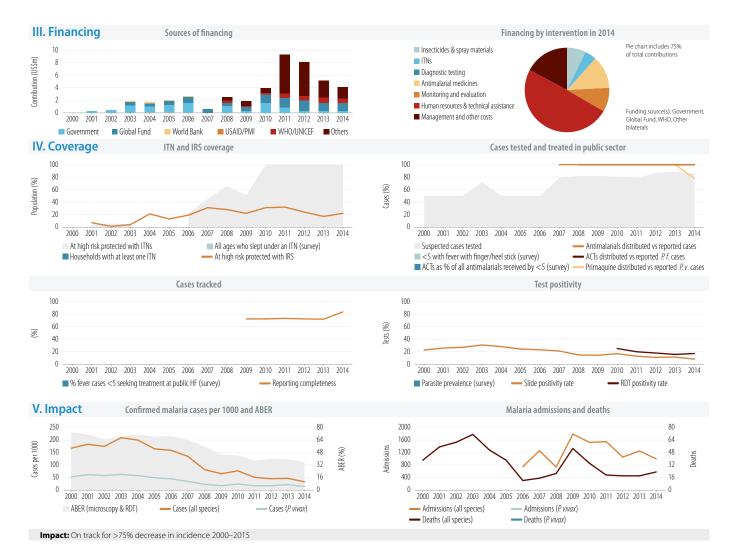
Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2009 1996
IRS is recommended DDT is authorized for IRS	Yes No	- 1969
Use of larval control recommended	Yes	2014
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1968 2007
Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	No Yes Yes No	2008 - 2009 2009 - -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	1990 2013 - - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P: falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P: falciparum cases routinely admitted	ITNs/LLINs distributed free of charge TNs/LLINs distributed to all age groups Yes Yes IRS is recommended Yes IRS is recommended Yes DDT is authorized for IRS No Use of larval control recommended Yes IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used as gametocidal medicine for P foliciparum No Primaquine is used for sadical treatment of P vivax Yes G6PD test is a requirement before treatment with primaquine Ves System for monitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken No System for monitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken No System for molitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken No System for molitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken No System for molitoring of adverse reactions to ACD of febrile cases at community level (pro-active) Yes Mass screening is undertaken No

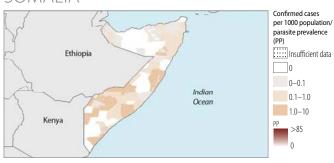
Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2009
First-line treatment of P. falciparum	AL	2009
Treatment failure of P. falciparum	QN	2009
Treatment of severe malaria	AL; AS	2009
Treatment of P. vivax	AL+PQ(14d)	2009
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used	P. f + P. v spe	cific (Combo).

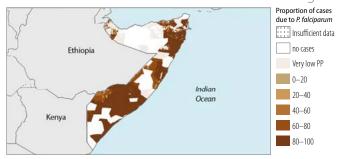
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2008-2013	0	0	6.3	28 days	3	P. falciparum
AL	2008-2013	4	5.1	31.6	28 days	3	P. vivax

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2013	No	No	-	-	An. farauti s.l.







Population	2014	%
High transmission (>1 case per 1000 population)	5 340 000	51
Low transmission (0–1 cases per 1000 population)	5 160 000	49
Malaria free (0 cases)	0	0
Total	10500000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (-), P. An. arabiensis, An.			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	11 001 0	Estimated cases, 2013:	[310 000-1 300 000]
Reported deaths:	,	14	Estimated deaths, 2013:	[42-4800]

II. Intervention policies and strategies

Impact: Insufficiently consistent data to assess trends

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2004
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2006 2006
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes are allowed No No No No No	2006 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	2006 - - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+SP	2011	
First-line treatment of P. falciparum	AS+SP	2011	
Treatment failure of P. falciparum	AL	2011	
Treatment of severe malaria	AS; QN	2006	
Treatment of P. vivax	-	2006	
Dosage of primaquine for radical treatment of P. vivax		-	
Type of RDT used	P.f + all species (Combo).		

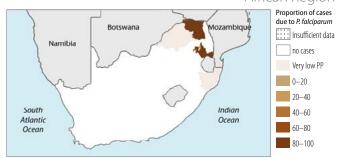
Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species AS+SP 2005-201 22.2 28 days P. falciparum 0 ΑL 2013-2013 0 0.5 28 days P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2013	Yes	Yes	No	Yes	An. arabiensis, An. funestus s.l.



African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	2 160 000	4
Low transmission (0–1 cases per 1000 population)	3 240 000	6
Malaria free (0 cases)	48 600 000	90
Total	54 000 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (1009 An. arabiensis, An.		ıx (0%)	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	0	Estimated cases, 2013:	[14000-24000]
Reported deaths:		1/4	Estimated deaths, 2013:	[120–120]

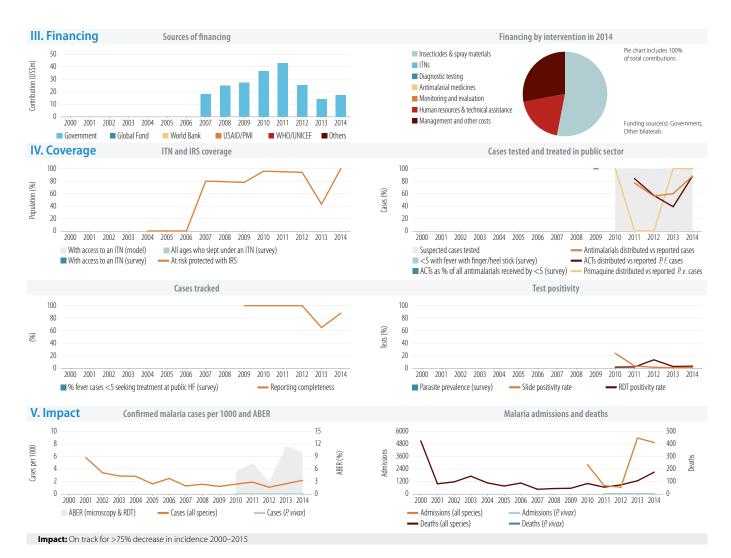
II. Intervention policies and strategies

	crition poncies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	No No	-
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	1930 –
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	No	_
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	- 1997
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	No Yes No	2001 2001 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	_
First-line treatment of P. falciparum	AL; QN+CL; QN+D	2001
Treatment failure of P. falciparum	AS; QN	2001
Treatment of severe malaria	QN	2001
Treatment of P. vivax	AL+PQ; CQ+PQ	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

Therapeutic emicacy tests (chinical and parasitological failure, 70)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	No	Nο	Nο	_	An arabiensis An merus



SOUTH SUDAN African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	11 900 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	11 900 000	

Parasites and vectors			
Major plasmodium species:	P. falciparum (100%), P. v	vivax (0%)	
Major anopheles species:	An. gambiae, An. arabier	nsis, An. funestus, An. nili	
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		- Estimated cases, 2013: - Estimated deaths, 2013:	[880 000-2 900 000] [1500-7200]

II. Intervention policies and strategies

II. IIICEI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008 2008
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2006 -
Larval contro	Use of larval control recommended	Yes	2013
IPT	IPT used to prevent malaria during pregnancy	Yes	2006
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2013 2005
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes No No No No No No No	2006 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2006
First-line treatment of P. falciparum	AS+AQ	2006
Treatment failure of P. falciparum	AL	2006
Treatment of severe malaria	AM; AS; QN	2004
Treatment of P. vivax	AS+AQ+PQ	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		-

Therapeutic emcacy tests (clinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

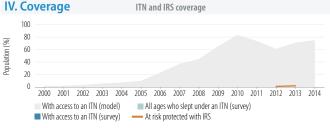
 2010–2014

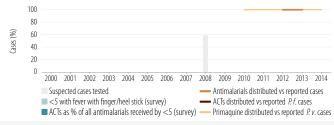


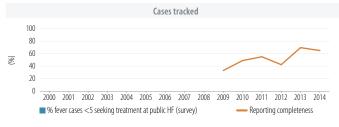


No data reported for 2014

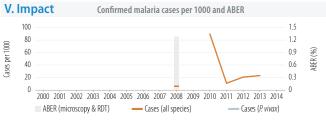
Cases tested and treated in public sector



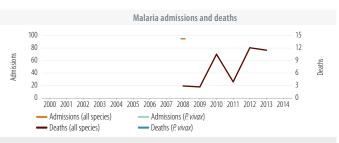




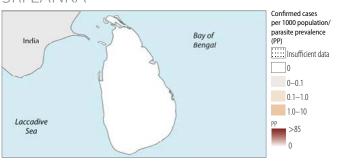




Impact: Insufficiently consistent data to assess trends



WORLD MALARIA REPORT 2015 ●·····





Population	2014	%
Number of active foci	_	
Number of people living within active foci	0	0
Number of people living in malaria free areas	20 600 000	100
Total	20 600 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:		%), P. vivax (0%) An. subpictus, An. annularis, An. varu	ına	
Programme phase:	Prevention of Re	eintroduction		
Total confirmed cases, 2014:	49	Total deaths, 2014:	0	
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0	
Introduced cases, 2014:	0	-		

II. Intervention policies and strategies

citabil policies and strategies		
Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1992 2004
IRS is recommended DDT is authorized for IRS	Yes No	1945 –
Use of larval control recommended	Yes	-
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	- 1911
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Yes Yes Yes	- - - - -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken Case reporting from private sector is mandatory	Yes Yes Yes Yes Yes Yes	- - 2008 2014 1958 -
	Policies/strategies ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax GPP test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken	Policies/strategies Yes/No ITNs/LLINs distributed free of charge Yes ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes DDT is authorized for IRS No Use of larval control recommended Yes IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnoss is free of charge in the public sector Yes ACT is free for all ages in public sector Never allowed Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used as gametocidal medicine for P. falciparum Yes Primaquine is used for radical treatment of P. vivax Yes GFPD test is a requirement before treatment with primaquine Yes System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) Yes ACD of febrile cases at community level (pro-active) Yes Mass screening is undertaken Yes Uncomplicated P. vivax cases routinely admitted Yes Uncomplicated P. vivax cases routinely admitted Yes

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL+PQ	2008
Treatment failure of P. falciparum	-	-
Treatment of severe malaria	AS	2014
Treatment of P. vivax	CQ+PQ(14d)	2008
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)

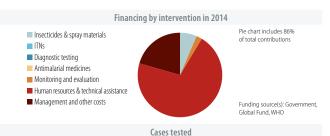
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
-	-	-	-	-	-	-	-

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

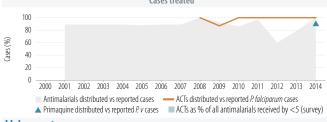
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2013	Yes	Yes	Yes	Yes	An culicifacies, An. subpictus, other



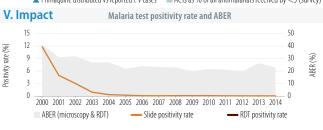


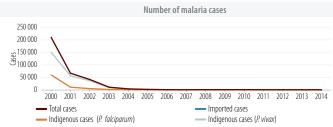


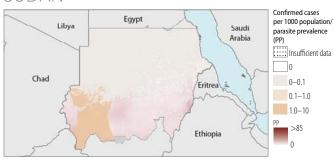


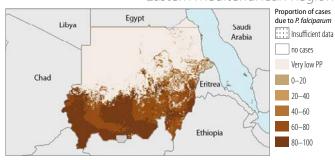












Population	2014	%
High transmission (>1 case per 1000 population)	34 200 000	87
Low transmission (0–1 cases per 1000 population)	5 200 000	13
Malaria free (0 cases)	0	0
Total	39 400 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (95%), P. vivax An. arabiensis, An. funestus,		haroensis
Programme phase:	Control		
Reported confirmed cases:	1 068 506	Estimated cases, 2013:	[940 000-1 800 000]
Reported deaths:	823	Estimated deaths, 2013:	[120-6500]

II. Intervention policies and strategies

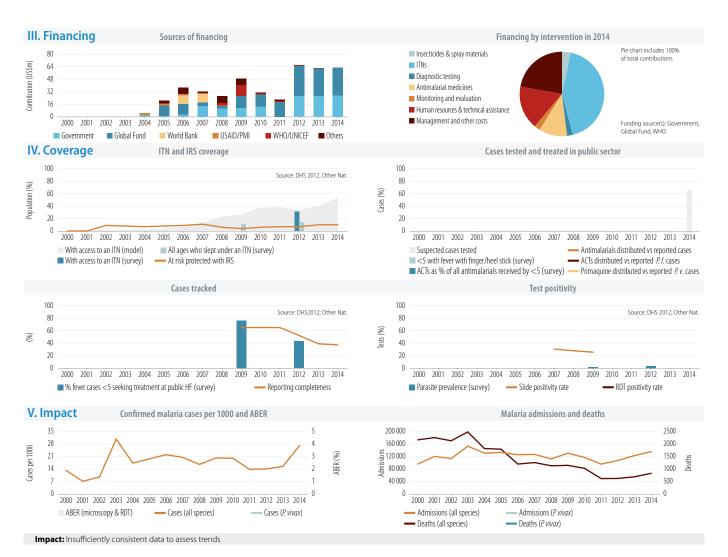
II. IIIterv	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1956 –
Larval control	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes No No No	2005 2004 - 2005 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. foliciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	AS+SP	2005	
First-line treatment of P. falciparum	AS+SP	2005	
Treatment failure of P. falciparum	AL	2005	
Treatment of severe malaria	AM; QN	2011	
Treatment of P. vivax	AL+PQ(14d)	2011	
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)	
Type of RDT used	P. f + P. v specific (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2015	0	0	4.5	28 days	18	P. falciparum
AS+SP	2005-2015	0	2	18.1	28 days	18	P. falciparum
AL	2011-2011	0	0	0	28 days	1	P. vivax

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. arabiensis



SURINAME

Region of the Americas





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	84 500	16
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	454 000	84
Total	538 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (43%), P. vivax An. darlingi, An. nuneztoval		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[780-2000] <10

II. Intervention policies and strategies

	ention ponicies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2006
IRS	IRS is recommended DDT is authorized for IRS	No No	2006
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1955 1955
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist:	Yes Never allowe Yes Yes No No	2004 ed 2004 2004 – –
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falcipanum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes No No	2000 2000 2000 –

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	_	-	
First-line treatment of P. falciparum	AL+PQ	2004	
Treatment failure of P. falciparum	AS+MQ	2004	
Treatment of severe malaria	AS	-	
Treatment of P. vivax	CQ+PQ(14d)	2004	
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)	
Type of RDT used	P. f + all species (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine Year Min Median Max Follow-up No. of s

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2011	0	2.35	4.7	28 days	2	P. falciparum

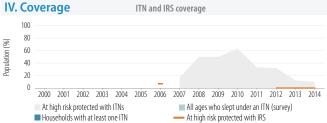
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

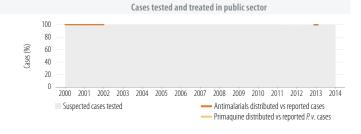
Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2013	-	-	-	No	An. aquasalis	



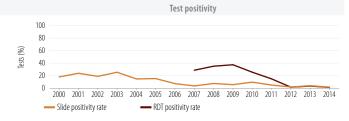


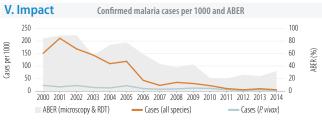
No data reported for 2014

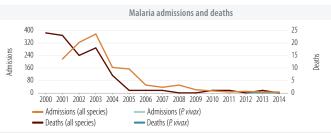




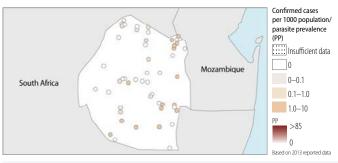


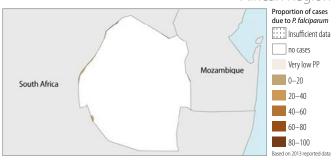






SWAZILAND African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	77	0
Low transmission (0–1 cases per 1000 population)	356 000	28
Malaria free (0 cases)	914 000	72
Total	1 270 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. arabiensis, An. gambiae		
Programme phase:	Pre-elimination		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[450-890] <10

II. Intervention policies and strategies

II. IIIter	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2002 2002
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	1946 –
Larval contro	Use of larval control recommended	No	-
IPT	IPT used to prevent malaria during pregnancy	No	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 2009
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes are allowed Yes No No Yes Yes	2010 2010 2014 - - 2014 2010
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes – No	2010 2010 2010 – –

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	_
First-line treatment of P. falciparum	AL	2009
Treatment failure of P. falciparum	QN	2009
Treatment of severe malaria	AS	-
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		-

Therapeutic efficacy tests (clinical and parasitological failure, %)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	_	-	_	-	_	_	_	

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011	No	No	-	-	An. gambiae s.s.







Population	2014	%
Number of active foci	130	
Number of people living within active foci	613 000	7
Number of people living in malaria free areas	7 680 000	93
Total	8 293 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:		%), P. vivax (100%) An. pulcherrimus	
Programme phase:	Elimination		
Total confirmed cases, 2014:	7	Total deaths, 2014:	0
Indigenous cases, 2014:	2	Indigenous deaths, 2014:	0
Introduced cases, 2014:	0	-	

II. Intervention policies and strategies

	on the point of the party of th		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2006
	ITNs/LLINs distributed to all age groups	Yes	2006
IRS	IRS is recommended	Yes	1997
	DDT is authorized for IRS	No	_
Larval contro	Use of larval control recommended	Yes	1998
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test	Yes	_
_	Malaria diagnosis is free of charge in the public sector	Yes	1997
Treatment	ACT is free for all ages in public sector	Yes	-
	Sale of oral artemisinin-based monotherapies	Never allowed	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	Yes	2004
	Primaquine is used for radical treatment of P. vivax	Yes	1997
	G6PD test is a requirement before treatment with primaquine	Yes	2014
	Directly observed treatment with primaquine is undertaken	Yes	2004
	System for monitoring of adverse reactions to antimalarials exist	s Yes	1997
Surveillance	ACD for case investigation (reactive)	Yes	2004
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	Yes	1997
	Uncomplicated P. vivax cases routinely admitted	No	-
	Foci and case investigation undertaken	Yes	2009
	Case reporting from private sector is mandatory	Yes	2000

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AL	2008
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	QN	2004
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax	0.	25 mg/kg (14 d)

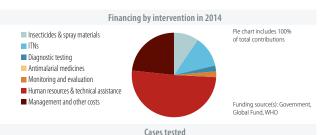
Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

 $\underline{Insecticide \, susceptibility \, bioassays \, (reported \, resistance \, to \, at \, least \, one \, insecticide \, for \, any \, vector \, at \, any \, locality)}$

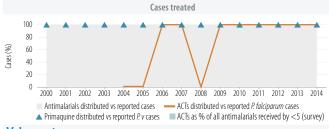
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2011–2012	No	-	-	No	An. pulcherrimus, An. superpictus



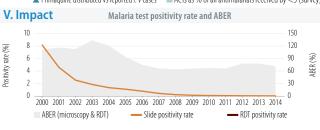


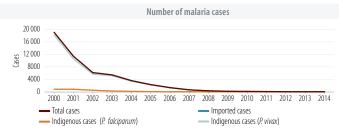












THAILAND South-East Asia Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	5 4 2 0 0 0 0	8
Low transmission (0–1 cases per 1000 population)	28 400 000	42
Malaria free (0 cases)	33 900 000	50
Total	67 700 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:			(54%) maculatus, An. sundaicus	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	37 921 3297	Estimated cases, 2013:	[37 000-390 000]
Reported deaths:	,	38	Estimated deaths, 2013:	<50

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1992 1992
IRS	IRS is recommended DDT is authorized for IRS	Yes No	1953 –
Larval contro	Use of larval control recommended	Yes	1953
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1991 1953
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes Never allowed Yes Yes No Yes s No	1995 1995 1995 1965 - 2008
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes Yes Yes	1958 1958 1958 1995 1995

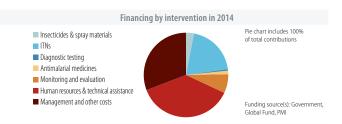
Medicine	Adopted
-	_
AS+MQ	2007
QN+D	2007
QN+D	2007
CQ+PQ(14d)	2007
0.25	mg/kg (14 d)
P.f + all specific	ecies (Combo).
	AS+MQ QN+D QN+D QN+D CQ+PQ(14d)

merapeutic emicacy tests (cinical and parasitological familie, 70)								
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	-	-	-	

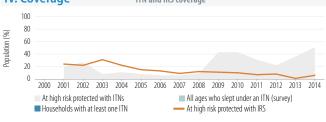
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

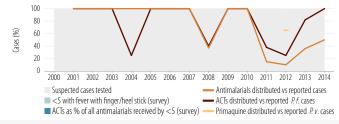
Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested





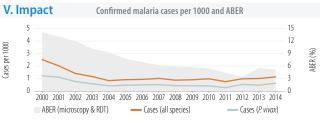
Cases tested and treated in public sector

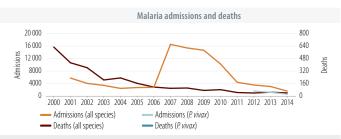




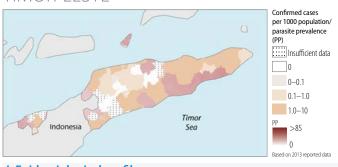








Impact: On track for 50–75% decrease in case incidence 2000–2015





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	391 000	34
Low transmission (0–1 cases per 1000 population)	650 000	56
Malaria free (0 cases)	119 000	10
Total	1 160 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (59%), An. subpictus, An. ba			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at	community level:	342 64	Estimated cases, 2013:	[37 000-120 000]
Reported deaths:	,	1	Estimated deaths, 2013:	[10-270]

II. Intervention policies and strategies

Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2010
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2006
Larval control	Use of larval control recommended	Yes	2007
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 2000
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist	Yes No No	2007 - 2006 - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	2002 2009 - - -

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	-	_	
First-line treatment of P. falciparum	AL	_	
Treatment failure of P. falciparum	QN+D	_	
Treatment of severe malaria	AM; AS; QN	-	
Treatment of P. vivax	CQ+PQ(14d)	_	
Dosage of primaquine for radical treatment of P. vivax		_	
Type of RDT used	P. f + P. v specific (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species CQ 2011-2013 17.5 17.5 28 days P. vivax AL 2012-2013 0 0 0 28 days P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	No	No	No	No	An. barbirostris, An. subpictus s.l.,
					An sundaicus s l



0-0.1

0.1-1.0

1.0-10

>85

0

Nigeria



I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	7 120 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	7 120 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. viva An. gambiae, An. funestus, A		
Programme phase:	Control		
Reported confirmed cases:	1130251	Estimated cases, 2013:	[2 100 000-3 100 000]
Reported confirmed cases at	community level: 394 088		
Reported deaths:	1205	Estimated deaths, 2013:	[3100-5900]

II. Intervention policies and strategies

	citation poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2004 2011
IRS	IRS is recommended DDT is authorized for IRS	No -	- -
Larval contro	Use of larval control recommended	No	_
IPT	IPT used to prevent malaria during pregnancy	Yes	2003
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2010 2012
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No - - Yes	2013 2011 - - - - - 2009
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No Yes No Yes No	_ 2013 _ 2007 _

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Cases (all species)

ABER (microscopy & RDT)

Impact: Insufficiently consistent data to assess trends

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL; AS+AQ	_
First-line treatment of P. falciparum	AL; AS+AQ	_
Treatment failure of P. falciparum		_
Treatment of severe malaria	AS; AM; QN	_
Treatment of P. vivax	=	_
Dosage of primaguine for radical treatment of P. vivax		_
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2013	0	1.4	4.4	28 days	11	P. falciparum
AS+AQ	2005-2013	0	0	6	28 days	11	P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011-2013	Yes	Yes	Yes	No	An. gambiae s.l.

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Deaths (P. vivax)

---- Admissions (P. vivax)

Admissions (all species)

Deaths (all species)







I. Epidemiological profile

Population	2014	%
Number of active foci	-	
Number of people living within active foci	0	0
Number of people living in malaria free areas	77 500 000	100
Total	77 500 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:		%), P. vivax (100%) n. superpictus, An. maculipennis		
Programme phase:	Elimination			
Total confirmed cases, 2014:	249	Total deaths, 2014:	1	
Indigenous cases, 2014:	0	Indigenous deaths, 2014:	0	
Introduced cases 2014:	E			

II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge	No	-
ITNs/LLINs distributed to all age groups	No	-
IRS is recommended	Yes	1926
DDT is authorized for IRS	No	-
Use of larval control recommended	Yes	1926
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test	Yes	-
Malaria diagnosis is free of charge in the public sector	Yes	1926
ACT is free for all ages in public sector	-	-
Sale of oral artemisinin-based monotherapies	Never allowe	ed
Single dose of primaquine is used as gametocidal medicine for P. falciparum	No	-
Primaquine is used for radical treatment of P. vivax	Yes	1926
	No	-
Directly observed treatment with primaquine is undertaken	Yes	2007
System for monitoring of adverse reactions to antimalarials exist	ts No	-
ACD for case investigation (reactive)	Yes	2010
ACD of febrile cases at community level (pro-active)	Yes	1946
Mass screening is undertaken	Yes	1946
Uncomplicated P. falciparum cases routinely admitted	No	-
Uncomplicated P. vivax cases routinely admitted	No	-
Foci and case investigation undertaken	Yes	1926
Case reporting from private sector is mandatory	Yes	1930
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax GFD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted Uncomplicated P. vivax cases routinely admitted Foci and case investigation undertaken	ITNs/LLINs distributed free of charge No ITNs/LLINs distributed to all age groups No ITNs/LLINs distributed to all age groups No IRS is recommended Yes DT is authorized for IRS No Use of larval control recommended Yes IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnosis is free of charge in the public sector Yes ACT is free for all ages in public sector Yes allowed Single dose of primaquine is used as gametocidal medicine for P. falciparum No Yes GFD test is a requirement before treatment with primaquine No Directly observed treatment with primaquine is used of ora dical treatment of P. vivax Yes System for monitoring of adverse reactions to antimalarials exists No ACD for case investigation (reactive) Yes Mass screening is undertaken Yes Sunders of the Primagunine is undertaken Yes Uncomplicated P. falciparum cases routinely admitted No Uncomplicated P. vivax cases routinely admitted No Foci and case investigation undertaken Yes

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	_	-
First-line treatment of P. falciparum	=	_
Treatment failure of P. falciparum	=	_
Treatment of severe malaria	=	-
Treatment of P. vivax	CQ+PQ(14d)	-
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
_	-	-	-	-	-	-	-

 $\underline{Insecticide\,susceptibility\,bioassays\,(reported\,resistance\,to\,at\,least\,one\,insecticide\,for\,any\,vector\,at\,any\,locality)}$

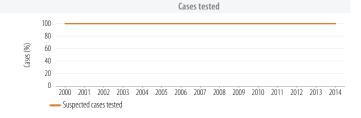
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested	
2010-2014	-	-	-	-	-	

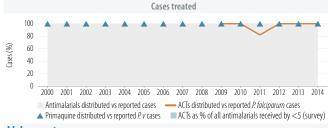


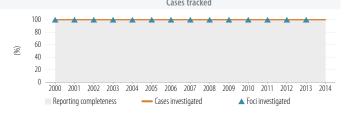
Financing by intervention in 2014

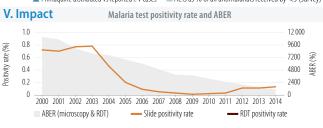
No data reported for 2014

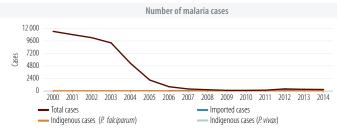






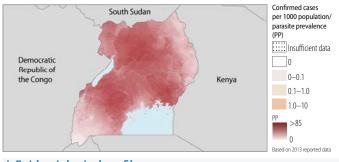






Impact: On track for >75% decrease in incidence 2000–2015

UGANDA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	37 800 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	37 800 000	

Parasites and vectors				
Major plasmodium species:				
Major anopheles species:	An. gambiae, A	n. funestus, i	An. funestus	
Programme phase:	Control			
Reported confirmed cases:		3 6 3 1 9 3 9	Estimated cases, 2013:	[4 400 000-12 000 000]
Reported confirmed cases at	community lev	vel: 0		
Reported deaths:		5921	Estimated deaths, 2013:	[5300-17000]

II. Intervention policies and strategies

Impact: Insufficiently consistent data to assess trends

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2006 2013
IRS	IRS is recommended DDT is authorized for IRS	Yes Yes	2005 2008
Larval contro	Use of larval control recommended	Yes	2011
IPT	IPT used to prevent malaria during pregnancy	Yes	1998
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2012 2001
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2005 2009 - - - - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS, QN	2004
Treatment of P. vivax	=	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

illerapeutic eli	icacy tests (c	iiiiicai aiic	i parasitulug	icai iaiiui c	, /0)			
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
_	-	-	-	-	_	-	-	

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2011-2014	Yes	Yes	Yes	No	An. funestus s.l., An. gambiae s.l.,
					An. aambiae s.s.



African Region

24

12





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	50 400 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	50 400 000	

Parasites and vectors	
Major plasmodium species: Major anopheles species:	P. falciparum (100%), P. vivax (0%) An. gambiae, An. arabiensis, An. funestus
Programme phase:	Control
Reported confirmed cases:	678 207
Reported deaths:	5368

II. Intervention policies and strategies

II. IIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes No	2014
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2006 -
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2001
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2009 -
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	_ 2006 _ _ _ _ _ _ _
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	No No No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS, AM; QN	2004
Treatment of P. vivax	-	-
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used	P. f + P. v spe	ecific (Combo)

Median Max Medicine Year Min Follow-up No. of studies Species

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Deaths (P. vivax)

- Admissions (P. vivax)

Year Pyrethroid DDT Carbamate Organophosphate Species/complex tested 2010-2015 Yes Yes Yes An. arabiensis, An. gambiae s.l. Yes



800

400

Admissions (all species)

Deaths (all species)

8

ABER (microscopy & RDT)

32

16

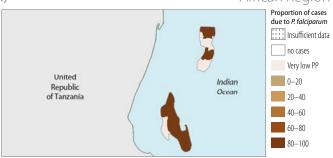
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Cases (all species)

UNITED REPUBLIC OF TANZANIA (ZANZIBAR)

African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	901 000	61
Low transmission (0–1 cases per 1000 population)	569 000	39
Malaria free (0 cases)	0	0
Total	1 470 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100% An. gambiae), <i>P. vivax</i> (0%)	
Programme phase:	Control		
Reported confirmed cases:		2600	
Reported confirmed cases a	community level:	0	
Reported deaths:	,	5	

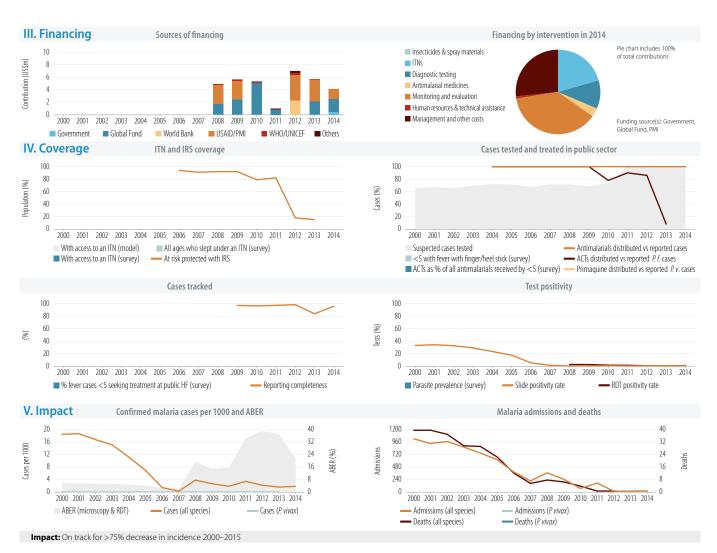
II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2008
IRS is recommended DDT is authorized for IRS	Yes No	2006 -
Use of larval control recommended	Yes	2012
IPT used to prevent malaria during pregnancy	Yes	2004
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2007 2004
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2003 2012 - - - - - 2003
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	2008 2011 2011 - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended IRS is resolved in the probleman is resolved in the probleman is resolved in the probleman is resolved in the public sector IRS is refer of all ages in public sector is refer of reference in the public sector IRS is banned Insert of Palaiparum is sued as gametocidal medicine for Palaiparum is sued for an adical treatment of Paviax IRS is a requirement before treatment with primaquine is used for an adical treatment of Paviax IRS is a requirement before treatment with primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in adverse reactions to antimalarials exists IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the primaquine is undertaken IRS is a requirement in the public sector IRS is a recommended IRS

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+AQ	2004
First-line treatment of P. falciparum	AS+AQ	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	AS; QN	2004
Treatment of P. vivax	_	-
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used	P. f + all sp	ecies (Combo).

merapeutic	enicacy tests (cir	iicai aiic	i parasitulug	icai iaiiui	c, /0)		
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2007	0	0	0	28 days	2	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested	
2010-2015	Yes	-	No	No	An. gambiae s.l.	



VANUATU Western Pacific Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	225 000	87
Low transmission (0–1 cases per 1000 population)	33 900	13
Malaria free (0 cases)	0	0
Total	259 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (12%), An. farauti	P. vivax	(88%)	
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases a	t community level:	982 332	Estimated cases, 2013:	[5800-10000]
Reported deaths:	, , , , , , , , , , , , , , , , , , , ,	0	Estimated deaths, 2013:	<10

II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2008 1990
IRS is recommended DDT is authorized for IRS	Yes No	2008
Use of larval control recommended	Yes	2010
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes No	2009
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	Yes Yes Yes Yes	2009 2012 2014 2009 2009 2009
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	2013 2013 2013 –
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups ITNs/LLINs distributed to all age groups ITNs/LLINs distributed to all age groups IRS is recommended IRS is recommended IRS is recommended IVse of larval control recommended IVse of larval control recommended IPT used to prevent malaria during pregnancy IPT used to prevent malaria diagnossis is free of charge in the public sector IPT ves Sale of oral artemisinin-based monotherapies IPT used to prevent malarial diagnosmic is used for radical treatment of P. vivax IPT used to prevent malarial vest allowed is used for radical treatment of P. vivax IPT used to prevent malarial exists IPT used to

Antimalaria treatment policy	Medicine	Adopted	
First-line treatment of unconfirmed malaria	-	_	
First-line treatment of P. falciparum	AL	2007	
Treatment failure of P. falciparum	QN	2007	
Treatment of severe malaria	AS	2014	
Treatment of P. vivax	AL+PQ(14d)	2007	
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)	
Type of RDT used	P.f + P.v specific (Combo).		

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species	
AL	2011-2012	2.8	2.8	2.8	28 days	1	P. vivax	

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

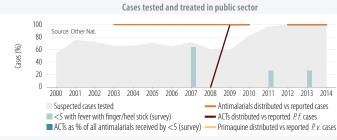
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2013	No	-	-	-	An. farauti s.l., An. punctulatus, other



Financing by intervention in 2014

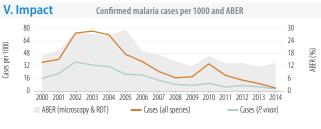
No data reported for 2014

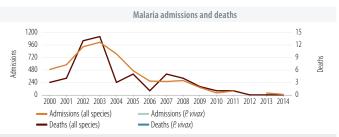












Impact: On track for >75% decrease in incidence 2000–2015

VENEZUELA (BOLIVARIAN REPUBLIC OF)

Colombia

I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	798 000	3
Low transmission (0–1 cases per 1000 population)	4 970 000	16
Malaria free (0 cases)	24 900 000	81
Total	30 700 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (31%), P. vivax An. darlingi, An. aquasalis,		nsis, An. albitarsis
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[86 000-310 000] [20-350]

II. Intervention policies and strategies

III. IIIICCI V	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 2005
IRS	IRS is recommended DDT is authorized for IRS	Yes No	-
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1936 1936
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exis	Yes No Yes	2004 ed – – – –
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes Yes No No	- - - -

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	-	-
First-line treatment of P. falciparum	AS+MQ+PQ	2004
Treatment failure of P. falciparum	_	2004
Treatment of severe malaria	AM; QN	2004
Treatment of P. vivax	CQ+PQ(14d)	2004
Dosage of primaquine for radical treatment of P. vivax		0.25 mg/kg (14 d)
Type of RDT used		-

Therapeutic enfeacy tests (chinical and parasitological failure, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AS+MQ	2005-2006	0	0	0	28 days	2	P. falciparum

tic officacy tosts (clinical and parasitological failure %)

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

 Year
 Pyrethroid
 DDT
 Carbamate
 Organophosphate
 Species/complex tested

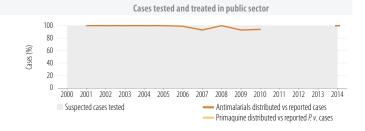
 2010–2014



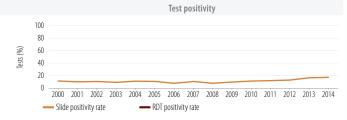


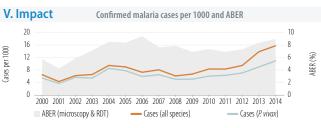
No data reported for 2014

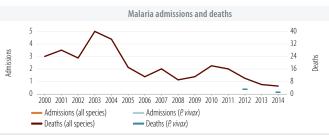






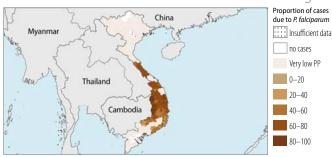






Impact: Increase in incidence, 2000–2015





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	6 280 000	7
Low transmission (0–1 cases per 1000 population)	61 800 000	67
Malaria free (0 cases)	24 300 000	26
Total	92 400 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (54%), P. vivax An. minimus, An. dirus, An.		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[20 000-27 000] <50

II. Intervention policies and strategies

Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	1992 1992
IRS is recommended DDT is authorized for IRS	Yes No	1958 -
Use of larval control recommended	No	-
IPT used to prevent malaria during pregnancy	N/A	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	1958 1958
Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken	Yes No No	2003 2013 2003 1960 - - 1980
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes Yes No No No	1958 1958 - - -
	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P: falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exist ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	ITNs/LLINs distributed free of charge Yes ITNs/LLINs distributed to all age groups Yes ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes IRS is recommended No IVS of larval control recommended No IPT used to prevent malaria during pregnancy N/A Patients of all ages should receive diagnostic test Yes Malaria diagnossis is free of charge in the public sector Yes ACT is free for all ages in public sector Yes Sale of oral artemisinin-based monotherapies Never allowed Single dose of primaquine is used as gametocidal medicine for Pfaliaprarum Yes Yrimaquine is used for ardical treatment of Pfaliaprarum Yes G6PD test is a requirement before treatment with primaquine No Directly observed treatment with primaquine is undertaken No System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) Yes Mass screening is undertaken No Moster Mass screening is undertaken No Moster Mass screening is undertaken No No No Moster Mass screening is undertaken No No Moster Mass screening Mass screening is undertaken No No Moster Mass screening M

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	DHA-PPQ	_
First-line treatment of P. falciparum	DHA-PPQ	-
Treatment failure of P. falciparum	QN+CL; QN+D	2013
Treatment of severe malaria	AS; QN	2013
Treatment of P. vivax	CQ+PQ(14d)	2013
Dosage of primaquine for radical treatment of P. vivax	0.25 mg/kg (14 d)	, 15mg (14 d)
Type of RDT used	P. f + P. v spec	cific (Combo).

The rapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
DHA-PPQ	2006-2010	0	0	2.1	28 days	13	P. falciparum
DHA-PPQ	2006-2014	0	0	3.4	42 days	16	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2013	Yes	No	-	-	An. minimus, An. philippinensis,
					other



30

ABER (microscopy & RDT)

Impact: Insufficiently consistent data to assess trends





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	6570000	25
Low transmission (0–1 cases per 1000 population)	13 800 000	53
Malaria free (0 cases)	5 790 000	22
Total	26 200 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (99%), P. vivax An. arabiensis, An. culicifaci		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:		Estimated cases, 2013: Estimated deaths, 2013:	[290 000-710 000] [35-2500]

II. Intervention policies and strategies

II. IIIter	rention policies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2002 2009
IRS	IRS is recommended DDT is authorized for IRS	Yes No	2001
Larval contro	Use of larval control recommended	Yes	2002
IPT	IPT used to prevent malaria during pregnancy	N/A	-
Diagnosis	Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	2001 2002
Treatment	ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No Yes Yes No No	2009 - 2001 2009 - -
Surveillance	ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No Yes No No	2006 - 2001 - -

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Cases (all species)

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AS+SP	2009
First-line treatment of P. falciparum	AS+SP	2009
Treatment failure of P. falciparum	AL	2009
Treatment of severe malaria	AM; QN	2009
Treatment of P. vivax	CQ+PQ(14d)	_
Dosage of primaquine for radical treatment of P. vivax	0.25	mg/kg (14 d)
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %) Min Median Max Follow-up No. of studies Medicine Year Species 2007-2013 28 days P. falciparum 0 0 AS+SP 2007-2013 0 0 28 days P. falciparum

Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

— Deaths (P. vivax)

- Admissions (P. vivax)

Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	No	-	An. arabiensis, An. culicifacies s.l.



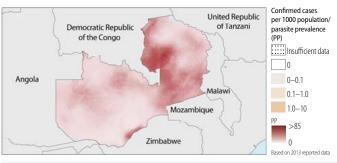
700

Admissions (all species)

Deaths (all species)

20

ZAMBIA African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	15 700 000	100
Low transmission (0–1 cases per 1000 population)	0	0
Malaria free (0 cases)	0	0
Total	15 700 000	

Parasites and vectors			
Major plasmodium species: Major anopheles species:	P. falciparum (100 An. gambiae, An.		
Programme phase:	Control		
Reported confirmed cases: Reported deaths:	2	Estimated cases, 2013: Estimated deaths, 2013:	

II. Intervention policies and strategies

rention policies and strategies		
Policies/strategies	Yes/No	Adopted
ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups	Yes Yes	2005 1998
IRS is recommended DDT is authorized for IRS	Yes Yes	_
Use of larval control recommended	Yes	-
IPT used to prevent malaria during pregnancy	Yes	-
Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector	Yes Yes	-
ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for <i>P. falciparum</i> Primaquine is used for radical treatment of <i>P. vivax</i> G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists	Yes Is banned No No No No Yes	2003 2003 - - - - -
ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated <i>P. falciparum</i> cases routinely admitted Uncomplicated <i>P. vivax</i> cases routinely admitted	Yes No No No No	- - - -
	Policies/strategies ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups IRS is recommended DDT is authorized for IRS Use of larval control recommended IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for radical treatment of P. vivax G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken System for monitoring of adverse reactions to antimalarials exists ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted	Policies/strategies Yes/No ITNs/LLINs distributed free of charge ITNs/LLINs distributed to all age groups Yes ITNs/LLINs distributed to all age groups Yes IRS is recommended Yes DDT is authorized for IRS Yes Use of larval control recommended Yes IPT used to prevent malaria during pregnancy Patients of all ages should receive diagnostic test Malaria diagnosis is free of charge in the public sector ACT is free for all ages in public sector Sale of oral artemisinin-based monotherapies Single dose of primaquine is used as gametocidal medicine for P. falciparum Primaquine is used for sacilical treatment of P. vivax No G6PD test is a requirement before treatment with primaquine Directly observed treatment with primaquine is undertaken No System for monitoring of adverse reactions to antimalarials exists Yes ACD for case investigation (reactive) ACD of febrile cases at community level (pro-active) No Mass screening is undertaken Uncomplicated P. falciparum cases routinely admitted

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2002
First-line treatment of P. falciparum	AL	2002
Treatment failure of P. falciparum	QN	2002
Treatment of severe malaria	AS; AM; QN	2002
Treatment of P. vivax	_	_
Dosage of primaquine for radical treatment of P. vivax		_
Type of RDT used		P. f only.

Therapeutic efficacy tests (clinical and parasitological failure, %)

Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2005-2012	0	0	6.7	28 days	12	P. falciparum

Year	Pyrethroid	DDT	Carbamate	Organophosphate	Species/complex tested
2010-2014	Yes	Yes	Yes	Yes	An. funestus s.l., An. gambiae s.l.,
					An. gambiae s.s.



ZIMBABWE African Region





I. Epidemiological profile

Population	2014	%
High transmission (>1 case per 1000 population)	4350000	29
Low transmission (0–1 cases per 1000 population)	7 620 000	50
Malaria free (0 cases)	3 230 000	21
Total	15 200 000	

Parasites and vectors				
Major plasmodium species: Major anopheles species:	P. falciparum (100 An. arabiensis, An.			
Programme phase:	Control			
Reported confirmed cases: Reported confirmed cases at			Estimated cases, 2013:	[640 000-1 600 000]
Reported deaths:	,	406	Estimated deaths, 2013:	[71-5700]

II. Intervention policies and strategies

III III CCI I	remaion poneies and strategies		
Intervention	Policies/strategies	Yes/No	Adopted
ITN	ITNs/LLINs distributed free of charge	Yes	2009
	ITNs/LLINs distributed to all age groups	Yes	2009
IRS	IRS is recommended	Yes	1947
	DDT is authorized for IRS	Yes	2004
Larval contro	Use of larval control recommended	Yes	-
IPT	IPT used to prevent malaria during pregnancy	Yes	2004
Diagnosis	Patients of all ages should receive diagnostic test	Yes	2009
_	Malaria diagnosis is free of charge in the public sector	Yes	2009
Treatment	ACT is free for all ages in public sector	Yes	2009
	Sale of oral artemisinin-based monotherapies	Never allowed	
	Single dose of primaquine is used as gametocidal medicine for P. falciparum	No	_
	Primaquine is used for radical treatment of P. vivax	No	_
	G6PD test is a requirement before treatment with primaquine	No	-
	Directly observed treatment with primaquine is undertaken	No	-
	System for monitoring of adverse reactions to antimalarials exist	ts Yes	-
Surveillance	ACD for case investigation (reactive)	Yes	2012
	ACD of febrile cases at community level (pro-active)	No	-
	Mass screening is undertaken	No	-
	Uncomplicated P. falciparum cases routinely admitted	No	-
	Uncomplicated P. vivax cases routinely admitted	No	-

Antimalaria treatment policy	Medicine	Adopted
First-line treatment of unconfirmed malaria	AL	2004
First-line treatment of P. falciparum	AL	2004
Treatment failure of P. falciparum	QN	2004
Treatment of severe malaria	QN	2004
Treatment of P. vivax	-	_
Dosage of primaquine for radical treatment of P. vivax		-
Type of RDT used		P. f only.

incrapeutic emeacy tests (chinear and parasitological famure, 70)							
Medicine	Year	Min	Median	Max	Follow-up	No. of studies	Species
AL	2006-2014	0	2.15	14.3	28 days	34	P. falciparum

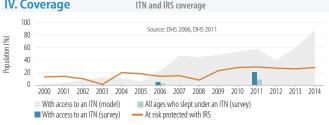
Insecticide susceptibility bioassays (reported resistance to at least one insecticide for any vector at any locality)

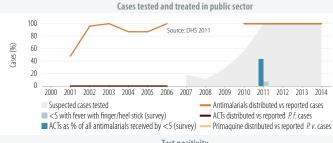
Year	Pyrethroid	וטט	Carbamate	Organophosphate	Species/complex tested
2011-2015	Yes	No	Yes	No	An. funestus s.l., An. gambiae s.l.

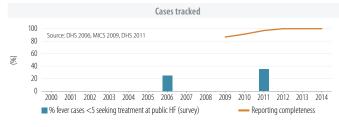




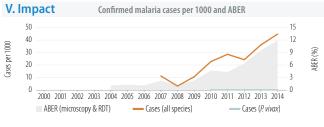
No data reported for 2014

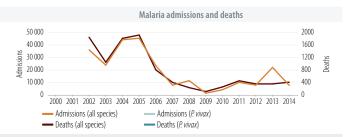












Impact: On track for >75% decrease in incidence 2000–2015